



Evaluation Study on Rural Telephony States Specific Reports (Volume - II)

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Programme Evaluation Organisation
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Evaluation Study on Rural Telephony

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State Report - 1

ANDHRA PRADESH



Andhra Pradesh

Andhra Pradesh lies between 12°41' and 22° longitude and 77° and 84°40' latitude. Madhya Pradesh and Orissa in the north, the Bay of Bengal in the east, Tamil Nadu and Karnataka in the south and Maharashtra in the west, bound Andhra Pradesh. Andhra Pradesh is the fifth largest state in India. It is the biggest and most populous state in the south of India.

There are three main regions in Andhra Pradesh - (1) Northern Circars or coastal Andhra comprising Srikakulam, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Ongole and Nellore districts; (2) Rayalaseema or Ceded districts comprising Kurnool, Cuddapah, Chittoor and Anantapur districts; and (3) Telangana comprising Khammam, Nalgonda, Warangal, Karimnagar, Medak, Nizamabad, Adilabad, Mahabubnagar, Ranga Reddy and Hyderabad districts. The Circars or Coastal districts are well developed and enjoy a greater degree of affluence than the other two regions; Rayalaseema is close to the coastal districts and here rainfall is less than in the coastal districts and drought conditions prevail sometimes, and the Telangana region is of the former princely state of Nizam's Hyderabad, which is close to Maharashtra's Marathwada region and some parts of Karnataka.



The state of Andhra Pradesh has an area of 275,045 sq. km. and a population of 76.21 million. There are 23 districts, 1128 blocks and 28123 villages. The State has population density of 277 per sq. km. (as against the national average of 312). The decadal growth rate of the state is 14.59% (against 21.54% for the country) and the population of the state is growing at a slower rate than the national rate. The Sex Ratio in the State is 978 (as compared to 933 for the country).

Demographic and socio-economic indicators of Andhra Pradesh

Sl. No.	Item	Andhra Pradesh	India
1	Total population (Census 2001) (in million)	76.21	1028.61
2	Decadal Growth (Census 2001) (%)	14.59	21.54
3	Sex Ratio (Census 2001)	978	933
4	Population below Poverty line (%)	15.77	26.10
5	Scheduled Caste population (in million)	12.34	166.64
6	Scheduled Tribe population (in million)	5.02	84.33
7	Female Literacy Rate (Census 2001) (%)	50.4	53.7

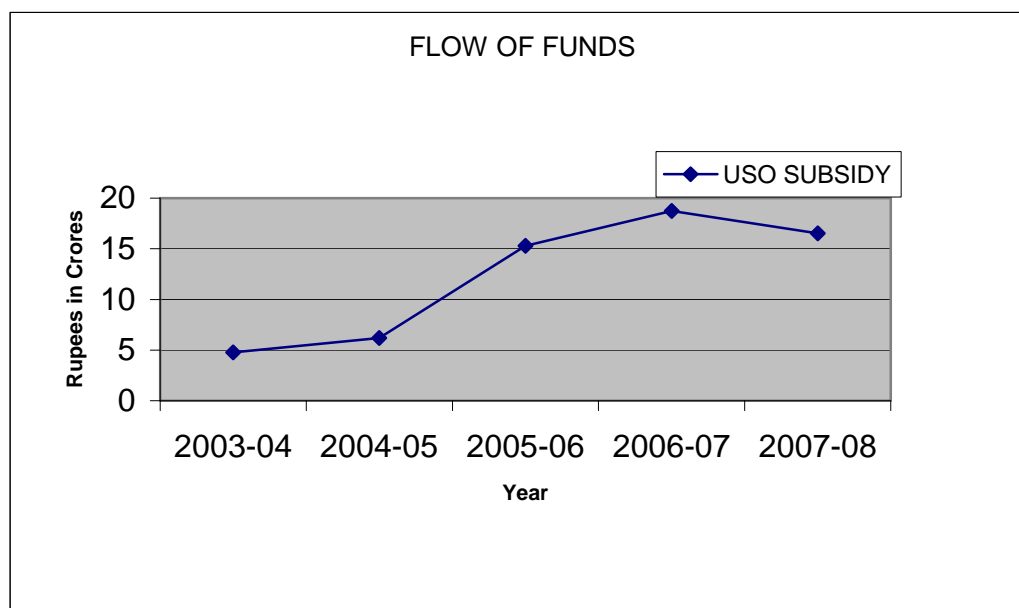
The Chief General Manager heads the BSNL Andhra Pradesh Telecom circle. Under him there are two Principal General Managers followed by General Managers for each section like planning, marketing etc. and each district is respectively headed by General Manager. The Deputy General Manager looks after the VPTs at the state level. In Andhra Pradesh, the BNP scheme started in the year 2004. So far 675 villages are provided with VPTs by BSNL and 340 villages are covered by the TATA group. The identification of villages is done as per 1991 Census and the National Telecom Policy is followed for sanctioning the VPT. As per the targets the VPT connections are provided and the villages that are inhabited and which are not feasible due to naxals problems are left out.

There are no extended services for the VPTs. The village public telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund.

Details of Physical Targets & Achievements (No. of newly connected Villages / VPTs) for the last five years are as below as per the information provided by CGM office.

Years	Physical Performance (Newly connected Villages / VPTs)			
	Target	Achievement	Reasons for	Action taken up to
	No. of VPTs	No. of VPTs	shortfall, if any	overcome the shortfalls
2004-05	140	180	-	
2005-06	462	244	218	
2006-07	218	115	91	
2007-08	91	66	25	
2008-09	25	10	15 not feasible due to naxal infected	Informed to Corporate Office, New Delhi

The USO subsidy for state level VPTs is Rs. 4.77 crore in 2003-04 at the beginning year of the scheme. The subsidy however increased in the following years (2004-05, 2005-06) with the increase in the number of VPTs. A slight fall is noticed in the USO subsidy for the year 2007-08; this may be due to non-functioning of the VPTs (i.e. disconnection due to non-payment of the monthly bills). The same can be seen in the following graph.



The income from the billing too has declined in the subsequent years. In the year 2005-06 the income was Rs. 10.1 crore whereas it declined to Rs. 8.9 and Rs. 5.7 in 2006-07 and 2007-08, respectively. The decline in the income clearly indicates that the more number of VPTs are under disconnection. No separate account for expenditure on VPTs is maintained. The concerned officials were of the view that they consider VPTs as part of BSNL. With regard to the staff, there are no exclusive staff recruited and maintained for VPT. The concerned lineman at the village level will attend in case of faults and repairs. The monitoring and supervision is taken by the BSNL itself, there is no outsourcing. The total staff in the A P circle is 30,649. The sample district total staff break-up for Chittoor Telecom district and Srikakulam Telecom district is 1118 and 564, respectively. The share percentage of the staff for the Chittoor is 3.65 and for Srikakulam is 1.84.

The officials opined that the following are their strengths: (a) major role played by BSNL for VPT connections, (b) provision of better communication in rural areas, (c) covering entire state, (d) service and repair at the door-step, and (e) payment is made after utilizing the service. Whereas, the non-acceptance of taking custody of VPT at village is seen as weakness, less commission and non-payment of user charges by the villagers and at times the custodian-using phone as sole owner without allowing others are also considered as weakness.

More so, the officials feel that the provision of the following facilities will help them to provide better and uninterrupted services: (a) provision of separate vehicle for quick repairs and maintenance, (b) the facility of mobile cash collection counters, (c) allotment of free calls to avoid the disconnection for non-payment, and (d) provision of life long subsidy for VPTs. Further for the improvement of VPT function, they add that, VPTs are to be maintained on

priority basis, the reverse billing should be applied and contribution from the content provider will certainly improve the usage and functioning of the VPTs in the state.

DISTRICT : CHITTOOR

Chittoor district is a part of Rayalaseema and lies in the extreme south of the state approximately between 12°37' - 14°8' north latitudes and 78°3' - 79°55' east longitudes. It is bounded on the north by Anantapur and Cuddapah districts, on the east by Nellore and Chengai-Anna districts of Tamilnadu, on the south by North Arcot Ambedkar & Dharmapuri district of Tamilnadu and on the west by Kolar District of Karnataka state. The Chittoor town is the district Head Quarters.

The district occupies an area of 15,152 Sq. Km. with density of population of 246 per sq. km. The total population of the district is 3745875 of which 2934845 is rural and 811030 is urban. The percentage of rural population in the district is 78.30 while that of urban population is 21.70. The Scheduled Caste population in the district is 7.02 lakhs, while Scheduled Tribe accounts for 1.28 lakhs. Of the 210 towns in the state, 13 are located in this district.

The total workforce in Chittoor District comes to 46.85% and the non-workers are worked out to 53.15 %, where as State average under non-workers is 54.46 %. Out of total workers, the percentage of working force under cultivators category is 30.48 % when compared to state level of 22.67 %.

The Chittoor SSA, the General Manager, Telecom District, is the Head of the implementing department. At the district level, the in charge officer is Sub-Divisional Engineer (OP). The VPT scheme is being implemented since early 1990s. So far 1469 villages are covered. Where as, the Bharat Nirman programme scheme is being implemented from 2004 onwards. As on date 62 villages are covered with VPTs. The criteria for identifying and selecting the villages for installation of VPTs are based on the Census of 1991 and 2001. The main objectives of the VPT scheme at district level are (a) providing communication facilities to the nook and corner of the district, and (b) to pull out the remote village into the mainstream for development. The maintenance of VPTs under BNP is given first priority. The Circle Office at state prepares the action plans and will send to the concerned district for executing. Every year action plans are prepared and executed to achieve the targets.

No extended services are provided to these VPTs (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. There is no separate account with respect to flow of funds and the expenditure on VPTs.

Details about the revenue generated from all the VPTs installed till now are available. All the VPTs are billed together. There is no separate account maintained for BNY VPTs. The revenue from VPTs declined from Rs. 3781307 in 2006-07 to Rs. 2098581 in 2007-08 and there was increase of 59 percent i.e. Rs. 3546178 in 2008-09. This is shown in the above graph.

With respect to the availability of staff, there is no separate recruitment for the VPTs. The VPTs were treated as part of BNSL. However, officials say there is shortage of staff both under technical and administrative staff. The total district staff is 1250. All the sanctioned posts are filled as of now. With regard to monitoring and supervision of VPTs daily routine tests are done at SSA level and the faulty VPT numbers (if any) are intimated to the concerned section for immediate action without any further delay.

There are no charges collected for repairing and maintenance. The Junior Telecom Officer (JTO) and Telecom Technical Assistant (TTA) at the Mandal level are in charge for monitoring and supervision on a monthly basis. At the village level, TTA, RM / DRM is in charge of monitoring. Repairs and maintenance of VPTs are solely done by the BSNL. The work distribution is based on area wise location of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff.

BSNL officials opined; the staff and particularly linemen are over burdened, as they are in charge of more two villages. There is no technology involved in the VPT maintenance. In the last three months, a total of 75 faults were reported and were rectified. BSNL does not charge for repairs and maintenance. There is no direct competition for VPT from other service providers since BSNL is still the only provider of Village Public Telephone (free of cost and rent free). However, during the fieldwork it was observed that the availability of mobile connections and STD/PCOS, coin box facilities of both BSNL and other service providers with better quality of service are leading to low patronage of VPT. Earlier, people used to depend only on VPT, as no other alternate was available. However, in the recent past, because of the introduction of mobiles and especially with various attractive schemes, including BSNL (such as Student SIM cards), the patronage for VPTs has reduced drastically.

The skills of the existing staff were upgraded by the trainings such as behaviour and attitudinal, familiarization with computers and customer relation and management etc. were provided with duration of one week to two week depending to topic for about 520 staff of different levels.

Strengths of VPTs as per BSNL officials;

- The VPTs are helpful in remote villages,
- Useful incase of any emergency,
- Helps in getting latest information through communication

With regard to **weakness** they feel;

- Non-payment of VPT bills by the custodian for months together.
- Often the custodians using the VPT as personal phone.
- The custodians not allowing certain people to use the services of VPT

And finally with regard to the **constraints** they say

- The installation of VPTs at remote areas is a difficult and challenging task.
- In addition, lack of awareness among villagers with regard to the availability of VPT within the village is further restricting the use of VPT.
- Non-availability of signals/cable in some particular areas.
- Limited staff and the vast area to cover.
- Sometimes delay in reaching and repairing the VPTs in forest areas.

The overall opinion the district GM is as follows; The VPTs are useful the development of villages. Earlier covering the remote villages was difficult, but now after the introduction of CDMA technology it is not that difficult. No particular trained staff is required for the maintenance of VPTs as no major technology is involved. Regular bills payment by the custodians had become the major concern.

DISTRICT : SRIKAKULAM

Srikakulam District is the extreme Northeastern District of Andhra Pradesh situated within the geographic co-ordinates of 18°-20' and 19°-10' of Northern latitude and 83°-50' and 84°-50' of Eastern longitude. The District is skirted to a distance by Kandivalasagedda, Vamsadhara and Bahuda at certain stretches of their courses while a line of heights of the great Eastern Ghats run from North East. Vizianagaram District flanks in the south and west while Orissa bounds it on the north and Bay of Bengal on the East .The total area of the District is 5837 Sq. Kms. It has a population of 2537593 persons according to the 2001 Census.

The Srikakulam District was carved out in 1950 by bifurcating from Visakhapatnam District; it remained unaffected in its territorial jurisdiction for quite sometime. But in November 1969 the District lost 63 Villages from Saluru Taluk and 44 Villages from Bobbili Taluk on account of their transfer to the then newly constituted Gajapathinagaram Taluk of Visakhapatnam District. Again in May 1979, the District had undergone major territorial changes on account of the formation of new District with headquarters at Vizianagaram, which involved transfer of Salur, Bobbili, Parvathipuram and Cheepurupalli Taluks to the new District.

The population of Srikakulam District is 2537593 (2001 census). Of the population the male population is 1260020 while the female population is 1277573. The decennial growth rate from 1991 to 2001 is 9.33 per cent for the District as against 14.44 percent for the State, and it is significantly lower than the state average regarding sex ratio in the state. The population density for the District is 435 (persons per Sq. Km) as against the State average of 277. The Scheduled Caste and Scheduled Tribe population of the District is 229609 and 151249, respectively. This forms 9.05 percent and 5.96 percent respectively in the total population of the District as per 2001 census. There are 731778 male literates and 485881

female literates. The literacy rate is 67.19 percent among males and 43.68 percent among female population of the District. The urban population in the District is 278659, which works out to 11 percent of the total population as against 27.35 percent for the state.

The Srikakulam SSA is headed by the General Manager, Telecom District, who is the chief of the implementing department. At the district level, the in charge officer is Sub-Divisional Engineer (OP). The VPT scheme being implemented since early 1990s, so for altogether 1488 villages are covered. Where as, the Bharat Nirman Yojana is being implemented from 2004 onwards. As on date 38 villages are covered with VPTs. The criteria for identifying and selecting the villages for installation of VPTs are based on the Census of 1991 and 2001. The main objective of the VPT scheme at district level is ‘(a) providing communication facilities to the nook and corner of the district, and (b) to pull out the remote village in to the mainstream for development. The maintenance of VPTs under BNP is given first priority. The Circle Office at state prepares the action plans and will send to the concerned district for executing. Every year action plans are prepared and executed to achieve the targets.

No extended services are provided to these VPTs (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. There is no separate account is maintained with respect to flow of funds and the expenditure on VPTs of BNY. With respect to the availability of staff, there is no separate recruitment for the VPTs. The VPTs are treated as part of BNSL. However, officials say there is shortage of staff both under technical and administrative staff. All the sanctioned posts are filled as of now. With regard to monitoring and supervision of VPTs daily routine tests are done at SSA level and the faulty VPT numbers (if any) are intimated to the concerned section for immediate action without any further delay.

The VPT maintenance and repairs are not charged by the BSNL. The Junior Telecom Officer (JTO) & Telecom Technical Assistant (TTA) at the Mandal level, are in charge for monitoring and supervision on a monthly basis. At the village level, TTA, RM/DRM is in charge of monitoring. Repairs and maintenance of VPTs are solely done by the BSNL. The work distribution is based on area wise location of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff.

BSNL officials opined; the staff and particularly linemen are over burdened, as they are in charge of more two villages. There is no technology involved in the VPT maintenance. In the last three months a total of 75 faults were reported and were rectified. BSNL does not charge for repairs and maintenance. There is no direct competition for VPT from other service providers since BSNL is still the only provider of Village Public Telephone (free of cost and rent free). However, during the fieldwork it was observed that the availability of mobile connections and STD/PCOS, coin box facilities of both BSNL and other service providers with better quality of service are leading to low patronage of VPT. Earlier, people used to depend

only on VPT, as no other alternate was available. However, in the recent past, because of the introduction of mobiles and especially with various attractive schemes, including BSNL (such as Student SIM cards), the patronage for VPT had reduced drastically.

The skills of the existing staff were upgraded by the trainings such as behaviour and attitudinal, familiarization with computers and customer relation and management etc. were provided with duration of one week to two week depending to topic for about 436 staff of different levels.

Strengths of VPTs as per BSNL officials;

- The VPTs in the villages are the bridges for development
- The VPTs are helpful in case of any emergency,
- There is no delay in passing or getting the information

With regard to **weakness** they feel;

- Disconnection of VPTs due to non-payment of bills (by the custodian).
- The custodians are the sole in charge of the VPT in the village.

And finally with regard to the **constraints** they say

- In addition, lack of awareness among villagers with regard to the availability of VPT within the village is further restricting the use of VPT.
- Non-availability of signals/cable in some particular areas.
- Limited staff and the vast area to cover.
- Sometimes delay in reaching and repairing the VPTs in forest areas.

The overall opinion of the District GM of Srikakulam is as follows; The VPTs are useful the development of villages and bring the village into mainstream. The availability of CDMA / GSM technology has further helped in effective functioning of VPTs. Regular bills payment by the custodians has become the major concern.

THE PERFORMANCE OF VILLAGE TELEPHONES (VPTs) : AN ANALYSIS

In order to assess the performance of VPTs in the rural areas, the present study included two districts in Andhra Pradesh – Chittoor and Srikakulam. In Chittoor 101 VPT users and in Srikakulam 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users - the particulars about their home, details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users :** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum per cent belong to OBC (65.3 %) in Chittoor and 71 % in Srikakulam districts of Andhra Pradesh.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Chittoor	General	32	31.7
	OBC	66	65.3
	SC	3	3.0
	Total	101	100.0
Srikakulam	General	4	4.0
	OBC	71	71.0
	SC	5	5.0
	ST	20	20.0
	Total	100	100.0

Description of gender specification depicts that 84 % and 83 % females in Chittoor and Srikakulam districts, respectively, were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Chittoor	84	17	101
Srikakulam	83	17	100

Regarding their primary occupation data revealed that majority 81 % were homemakers in Chittoor and also 77 % homemakers in Srikakulam. Educational qualification of VPT shows 13 % users were functional literates in Chittoor and 44 % were not literates in Srikakulam in current study.

Table I.A.3. Primary Occupation & Educational Qualification

Sl. No.	Primary Occupation (Self)	Chittoor	Srikakulam
1	Agriculture	7	6
2	Agriculture Casual Labour	1	6
3	Own Business	1	2
4	Salaried work	3	0
5	Homemaker	81	77
6	Students	4	7
7	Others	4	1
	Total	101	100
	Educational Qualification		
1	Not literate	25	44
2	Functional literate	31	24
3	Primary	13	7
4	Upper Primary	9	9
5	High School	13	6
6	Intermediate	4	5
7	Graduate	4	5
8	Above Graduation	1	0
	Total	101	100

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned pucca houses in Chittoor (65.3 %) and semi-pucca houses in Srikakulam (49 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Chittoor	Kucha House	5	5.0
	Semi-pucca House	30	29.7
	Pucca House	66	65.3
	Total	101	100.0
Srikakulam	Kucha House	6	6.0
	Semi-pucca House	49	49.0
	Pucca House	45	45.0
	Total	100	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that majority are having electricity in their houses (99 % in Chittoor and Srikakulam).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Chittoor	Electricity not available	1	1.0
	Electricity available	100	99.0
	Total	101	100.0
Srikakulam	Electricity not available	1	1.0
	Electricity available	99	99.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road:** Looking at the proximity of their houses to pucca roads data revealed that 40.6 % of respondents in Chittoor and 70 % in Srikakulam were situated at the distance of more than 100 meters but less than 1 km.

Table I.B.3. Distance of house of Users from Pucca Road

Telecom District	Distance	No. of Users	Percent
Chittoor	100 metres or less	20	19.8
	More than 100 metres but less than 1 km	41	40.6
	More than 1 km	40	39.6
	Total	101	100.0
Srikakulam	More than 100 metres but less than 1 km	70	70.0
	More than 1 km	30	30.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway, it was revealed that 60.4 % respondents were staying at more than 2 but less than 10 kms. in Chittoor and 52 % in Srikakulam district of the state of Andhra Pradesh.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Chittoor	More than 2 but less than 10 km	61	60.4
	More than 10 km	40	39.6
	Total	101	100.0
Srikakulam	Upto 2 km	23	23.0
	More than 2 but less than 10 km	52	52.0
	More than 10 km	25	25.0
	Total	100	100.0

C. Details of Telephone Connectivity

C.1. Telephone availability at home: Majority (59 %) respondents in Chittoor district were having telephone at their home whereas in Srikakulam 65 % were not having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Chittoor	Telephone Not available	41	40.6
	Telephone available	60	59.4
	Total	101	100.0
Srikakulam	Telephone Not available	65	65.0
	Telephone available	35	35.0
	Total	100	100.0

C.2. Type of Telephone: Among telephone owners at their home maximum 87.3 % were having mobiles in Chittoor and 86.1 % in Srikakulam.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent
Chittoor	Landline	8	12.7
	Mobile	55	87.3
	Total	63	100.0
Srikakulam	Landline	3	8.3
	Mobile	31	86.1
	Others	2	5.6
	Total	36	100.0

C.3. Details of Service Provider: Regarding the details about service providers to the respondents, Airtel was found to provide services to maximum respondents in Chittoor (71.4 %) and 41.7 % in Srikakulam.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
Chittoor	BSNL	5	7.9
	Airtel	45	71.4
	Vodafone	3	4.8
	Idea	7	11.1
	Reliance Communications	2	3.2
	Others	1	1.6
	Total	63	100.0

Srikakulam	BSNL	9	25.0
	Airtel	15	41.7
	Idea	9	25.0
	Reliance Communications	3	8.3
	Total	36	100.0

II. USAGE OF VPT

A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 57.4 % VPT beneficiaries in Chittoor have used VPT more than 6 times for local calls in last 60 days. In Srikakulam 28 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Chittoor	No calls	2	2.0	3	3.0
	2 or less	12	11.9	10	9.9
	3 to 4	41	40.6	8	7.9
	5 to 6	36	35.6	22	21.8
	More than 6	10	9.9	58	57.4
	Total	101	100.0	101	100.0
Srikakulam	No calls	20	20.0	14	14.0
	2 or less	27	27.0	12	12.0
	3 to 4	31	31.0	20	20.0
	5 to 6	20	20.0	26	26.0
	More than 6	2	2.0	28	28.0
	Total	100	100.0	100	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that 79.2 % VPT beneficiaries have not made any STD call in Chittoor and 85 % in Srikakulam district. This shows that VPT usage for STD call is very low in both the districts of Andhra Pradesh.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Chittoor	No calls	88	87.1	80	79.2
	2 or less	10	9.9	13	12.9
	3 to 4	1	1.0	4	4.0
	5 to 6	2	2.0	1	1.0
	More than 6	-	-	3	3.0
	Total	101	100.0	101	100.0
Srikakulam	No calls	87	87.0	85	85.0
	2 or less	6	6.0	6	6.0
	3 to 4	6	6.0	6	6.0
	5 to 6	1	1.0	2	2.0
	More than 6	-	-	1	1.0
	Total	100	100.0	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 71.3 % in Chittoor district were residing within 200-500 mts. distance and in Srikakulam this was found to be 66 %. That suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Chittoor	Within 200 mts from residence	18	17.8
	200-500 mts from residence	72	71.3
	More than 500 mts	11	10.9
	Total	101	100.0
Srikakulam	Within 200 mts from residence	15	15.0
	200-500 mts from residence	66	66.0
	More than 500 mts	19	19.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Chittoor district 99 % and in Srikakulam district 86 % users were not involved in the decision which means peoples' participation is very less.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Chittoor	No	100	99.0
	Yes	1	1.0
	Total	101	100.0
Srikakulam	No	86	86.0
	Yes	14	14.0
	Total	100	100.0

B.1. Availability of VPT Service: It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Chittoor district VPTs were mostly found reliable as respondents communicated that in 78.2 % cases no fault, 87.1 % available (not busy), 91.1 % open and 77.2 % not engaged during last month. Similarly, Table shows that in Srikakulam district also VPT service were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Chittoor	0	79	78.2	0	88	87.1	0	92	91.1	0	78	77.2
	1	9	8.9	1	9	8.9	1	5	5.0	1	21	20.8
	2	9	8.9	2	3	3.0	2	3	3.0	2	1	1.0
	3	4	4.0	3	1	1.0	3	1	1.0	6	1	1.0
	Total	101	100.0	Total	101	100.0	Total	101	100.0	Total	101	100.0
Srikakulam	0	94	94.0	0	98	98.0	0	95	95.0	0	90	90.0
	1	4	4.0	1	2	2.0	1	4	4.0	1	10	10.0
	2	2	2.0	2	0	0	2	1	1.0			
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Andhra Pradesh in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Chittoor	0	73	72.3	0	87	86.1	0	90	89.1	0	81	80.2
	1	12	11.9	1	4	4.0	1	2	2.0	1	17	16.8
	2	6	5.9	2	2	2.0	2	4	4.0	2	3	3.0
	3	9	8.9	3	6	5.9	3	2	2.0			
	5	1	1.0	5	2	2.0	4	2	2.0			
							5	1	1.0			
	Total	101	100.0	Total	101	100.0	Total	101	100.0	Total	101	100.0
Srikakulam	0	99	99.0	0	100	100.0				0	92	92.0
	1	1	1.0				0	99	99.0	1	8	8.0
							1	1	1.0			
	Total	100	100.0				Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following Table. Majority VPTs in both the districts were not displaying tariff and toll free numbers. Only 30 % were displaying in Srikakulam districts and no one was having book for complaint registration in both the districts.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Chittoor	No	10	100.0	10	100.0	10	100.0	10	100.0
Srikakulam	No	7	70.0	7	70.0	7	70.0	10	100.0
	Yes	3	30.0	3	30.0	3	30.0	-	-
	Total	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPTS

- A.** Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation was found convenient (50 %) and very convenient in Chittoor. In Srikakulam district 7 % VPT expressed as not at all convenient as they were located in shops or houses but 87 VPTs were found convenient.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Chittoor	Post office	-	3	7	10
	Others	-	48	43	91
	Total	-	51	50	101
Srikakulam	Anganwadi	-	5	-	5
	Open space	-	8	2	10
	Shop	1	21	-	22
	Others	6	53	4	63
	Total	7	87	6	100

- B. Convenience of technology used in VPT:** In Chittoor district reflects that almost all VPT users found the technology used in VPT convenient. 80 % VPTs are using landline technology in this district. In Srikakulam district 98 % users felt the VPT technology convenient in which 50 % were using landline technology in their VPTs.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Chittoor	Landline	1	78	1	80
	Mobile	-	20	1	21
	Total	1	98	2	101
Srikakulam	Landline	2	48	-	50
	Mobile	-	50	-	50
	Total	2	98	-	100

- C. Wireless Technology:** Table below indicates information related to wireline technology in VPT. Total 78 users in Chittoor shared that WLL FT technology used in their VPTs is convenient and total 97 users in all were feeling the technologies convenient. In Srikakulam district 98 users in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of convenience			Total
		Not at all convenient	Convenient	Very convenient	
Chittoor	WLL FX	-	1	-	1
	WLL FT	1	78	3	82
	COR-DECT	-	1	-	1
	OTHERS	-	17	-	17
	Total	1	97	3	101
Srikakulam	WLL FT	-	51	-	51
	OTHERS	1	47	1	49
	Total	1	98	1	100

- D. Level of convenience with type of instrument:** It is showed in following Table that confirms that almost all felt convenient about the instrument used in VPT.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Chittoor	Dial Key Board	-	1	-	1
	Others	1	97	2	100
	Total	1	98	2	101
Srikakulam	Others	-	99	1	100
	Total	-	99	1	100

- E. Clarity of Voice:** It is an important indicator of quality assessment of VPTs installed. In Chittoor district 66 VPT users had expressed that clarity of voice is always convenient. Same way in Srikakulam 69 users were having same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Chittoor	Rarely	-	10	-	10
	Often	1	21	2	24
	Always	-	66	1	67
	Total	1	97	3	101
Srikakulam	Rarely	1	2	-	3
	Often	3	22	-	25
	Always	-	69	3	72
	Total	4	93	3	100

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. Ninety six per cent users in district Chittoor and 94 % users in Srikakulam district of Andhra Pradesh shared that connectivity of VPT service is reliable. Although 4 % users in Chittoor and 3 % users in Srikakulam district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Chittoor	Not reliable	1	1.0
	Reliable	96	95.0
	Highly reliable	4	4.0
	Total	101	100.0
Srikakulam	Not reliable	3	3.0
	Reliable	94	94.0
	Highly reliable	3	3.0
	Total	100	100.0

V. TIMELINESS OF VPT

A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 91 % respondents in Chittoor and 93 % in Srikakulam district found VPT always available in their area. Similarly, VPT was never closed in both the districts of Andhra Pradesh.

Table V.A. Timeliness availability of the service (working hours)

Telecom District	Timings	No. of Users	Percent
Chittoor	During day time	10	9.9
	Always	91	90.1
	Total	101	100.0
Srikakulam	During day time	7	7.0
	Always	93	93.0
	Total	100	100.0

VI. OTHER ASPECTS

A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 98 % users in Chittoor were paying in case of VPT usage, 74.3 % were paying cash and maximum 66 % were quite regular in payment. In Srikakulam district 96 % users were paying, 84 % were paying cash and 70 % were found quite regular. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Chittoor	No	3	3.0
	Yes	98	97.0
	Total	101	100.0
Srikakulam	No	4	4.0
	Yes	96	96.0
	Total	100	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of Payment	No. of Users	Percent
Chittoor	Cash	75	74.3
	Credit	4	3.9
	Partly cash, partly credit	19	18.8
	Non Payment	3	2.9
	Total	101	100.0
Srikakulam	Cash	84	84.0
	Credit	1	1.0
	Partly cash, partly credit	15	15.0
	Non payment	4	4.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Chittoor district there is no social restriction but in Srikakulam district, 8 % VPT users expressed some social restriction. Particularly users belonging to SC face restriction in VPT use.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of users	Percent
Chittoor	No	101	100.0
Srikakulam	No	92	92.0
	Yes	8	8.0
	Total	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPTs in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Chittoor district was less than Rs 250 in 60% cases of VPT whereas in Srikakulam ARPU was between Rs 250-500 in 30% VPTs of the district.

Table VI. B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No. of VPT	Percent
Chittoor	Less than 250	6	60.0
	250-500	4	40.0
	Total	10	100.0
Srikakulam	Less than 250	7	70.0
	250-500	3	30.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPTs would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Chittoor	No	101	100.0
Srikakulam	No	98	98.0
	Yes	2	2.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPTs use had increased their income and what is the percentage change in income of VPT users.

In Chittoor district (100 %) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Srikakulam) of the state it was observed that 2 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Chittoor	No change reported	101	100.0
Srikakulam	No change reported	2	100.0

Further enquiring about the percent change in income revealed that 2 % of users expressed upto 5 % increase in their household income.

- B. Improvement in connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Chittoor	No improvement	-	100 (99.0)	101 (100.0)
	Marginal Improvement	48 (47.5)	1 (1.0)	-
	Significant improvement	53 (52.5)	-	-
	Total	101 (100.0)	101 (100.0)	-
Srikakulam	No improvement	-	99 (99.0)	99 (99.0)
	Marginal Improvement	69 (69.0)	1 (1.0)	1 (1.0)
	Significant improvement	31 (31.0)	-	-
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Chittoor	No improvement	-	101 (100.0)	101 (100.0)	101 (100.0)
	Marginal Improvement	101 (100.0)	-	-	-
	Significant improvement		-	-	-
	Total	101 (100.0)	101 (100.0)	101 (100.0)	101 (100.0)
Srikakulam	No improvement	93 (93.0)	101 (100.0)	100 (100.0)	100 (100.0)
	Marginal Improvement	6 (6.0)	-	-	-
	Significant improvement	1 (1.0)	-	-	-
	Total	100 (100.0)	101 (100.0)	101 (100.0)	101 (100.0)

		Chittoor	Srikakulam
a.	Personal communication	53 % Significant	31 % Significant
b.	Business networking	1 % Marginal	1 % Marginal
c.	Emergency Management		
	1. Medical	100 % No improvement	6 % Marginal
	2. Fire	100 % No improvement	100 % No improvement
	3. Police	100 % No improvement	100 % No improvement
	4. Natural Calamities	100 % No improvement	100 % No improvement
d.	Official Purposes	100 % No improvement	1 % Marginal

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Chittoor					Srikakulam				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	101 (100.0)	-	-	-	-	100 (100.0)	-	-	-	-
b.	Market	101 (100.0)	-	-	-	-	99 (99.0)	-	1 (1.0)	-	100 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	101 (100.0)	-	-	-	-	97 (97.0)	1 (1.0)	2 (2.0)	-	100 (100.0)
2.	Education	101 (100.0)	-	-	--	-	97 (97.0)	-	2 (2.0)	1 (1.0)	100 (100.0)
3.	Related to Agriculture	101 (100.0)	-	-	-	-	100 (100.0)	-	-	-	-
4.	Others	101 (100.0)	-	-	-	-	97 (97.0)	1 (1.0)	2 (2.0)	-	100 (100.0)
d.	Natural Calamity / Weather forecasting	101 (100.0)	-	-	-	-	100 (100.0)	-	-	-	-
e.	Rail / Road transport	101 (100.0)	-	-	-	-	100 (100.0)	-	-	-	-
f.	Health Services	87 (86.1)	10 (9.9)	4 (4.0)	-	101 (100.0)	82 (82.0)	13 (13.0)	5 (5.0)	-	100 (100.0)
g.	Agri. related	99 (98.0)	1 (1.0)	1 (1.0)	-	101 (100.0)	99 (99.0)	1 (1.0)	-	-	100 (100.0)
h.	Business related	98 (97.0)	3 (3.0)	-	-	101 (100.0)	99 (99.0)	-	1 (1.0)	-	100 (100.0)
i.	Others (specify)	-	-	-	-	-	-	-	-	-	-

Table revealed that VPTs are not being used as expected by policy planners of India for access to information regarding different aspects (refereed in the Table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 53.5 % users in Chittoor and Satisfactory by 65 % in Srikakulam district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Chittoor	Satisfactory	47	46.5
	Highly satisfactory	54	53.5
	Total	101	100.0
Srikakulam	Not satisfactory	14	14.0
	Satisfactory	65	65.0
	Highly satisfactory	21	21.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 100 % users in Chittoor and 100 % also in Srikakulam district.

Table VIII.B. VPT Accessibility

Telecom District	Level of Satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Chittoor	Not satisfactory	1	1.0	2	2.0
	Satisfactory	100	99.0	99	98.0
	Highly satisfactory	-	-	-	-
	Total	101	100.0	101	100.0
Srikakulam	Not satisfactory	-	-	3	3.0
	Satisfactory	100	100.0	97	97.0
	Highly satisfactory	-	-	-	-
	Total	100	100.0	100	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair and maintenance opined satisfactory by 94 % users in Chittoor and 93 % in Srikakulam.

Table VIII.C. Level of satisfaction about repair and maintenance - Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Chittoor	Not satisfactory	7	6.9	6	5.9
	Satisfactory	94	93.1	95	94.1
	Highly Satisfactory	-	-	-	-
	Total	101	100.0	101	100.0
Srikakulam	Not satisfactory	7	7.0	4	4.0
	Satisfactory	93	93.0	93	93.0
	Highly Satisfactory	-	-	3	3.0
	Total	100	100.0	100	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 55 % users in Chittoor and satisfactory among 81 % users of Srikakulam.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Chittoor	Satisfactory	46	45.5
	Highly satisfactory	55	54.5
	Total	101	100.0
Srikakulam	Satisfactory	81	81.0
	Highly satisfactory	19	19.0
	Total	100	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed 95 % satisfaction in Chittoor as well as in Srikakulam.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Chittoor	Not satisfactory	5	5.0
	Satisfactory	96	95.0
	Total	101	100.0
Srikakulam	Not satisfactory	2	2.0
	Satisfactory	95	95.0
	highly satisfactory	3	3.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all most all the custodian of VPT were making payment regularly in the both the districts

Table IX. Regularity in payment

Telecom District	Regularity	No. of Users	Percent
Chittoor	No	1	10.0
	Yes	9	90.0
	Total	10	100.0
Srikakulam	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 100 % users in Chittoor district have resolved problems about VPT location internally and in Srikakulam 100 % VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Chittoor	Internally	100	99.0
	Not aware	1	1.0
	Total	101	100.0
Srikakulam	Internally	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 100 % internally in Chittoor and 96 % in Srikakulam district. Problem solution of quality accessibility was also viewed solved internally among 99 % users in Chittoor and 96 % in Srikakulam.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Chittoor	Internally	100	99.0	100	99.0
	Externally	-	-	-	-
	Not resolved	-	-	-	-
	Not aware	1	1.0	1	1.0
	Total	101	100.0	101	100.0

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Srikakulam	Internally	96	96.0	96	96.0
	Externally	-	-	-	-
	Not resolved	-	-	-	-
	Not aware	4	4.0	4	4.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 80 % and 88 % users were not aware in Chittoor and Srikakulam districts, respectively. Similarly in the case of the problem of quality repair & maintenance 80 % and 88 % of VPT users were not aware in Chittoor and Srikakulam districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of sers	Percent
Chittoor	Internally	20	19.8	20	19.8
	Externally	1	1.0	1	1.0
	Not aware	80	79.2	80	79.2
	Not resolved	-	-	-	-
	Total	101	100.0	101	100.0
Srikakulam	Internally	12	12.0	12	12.0
	Externally	-	-	-	-
	Not resolved	-	-	-	-
	Not aware	88	88.0	88	88.0
	Total	100	100.0	100	100.0

- D. Problem resolution about the payments to the custodians**

The problem of payment to custodian solved internally was viewed by 100 % users in Chittoor and 98 % in Srikakulam district.

Table X.D. Problem resolution related to payments to custodians

Telecom District		No. of Users	Percent
Chittoor	Internally	101	100.0
Srikakulam	Internally	98	98.0
	Not aware	2	2.0
	Total	100	100.0

E. Problem resolution about the other alternate service providers

About the problem resolution 94 % VPT users in Chittoor and 95 % in Srikakulam were not found aware.

Table X.E. Problem resolution related to alternate service providers

Telecom District		No. of Users	Percent
Chittoor	Internally	6	5.9
	Not aware	95	94.1
	Total	101	100.0
Srikakulam	Internally	5	5
	Not aware	95	95
	Total	100	100.0

SWOT ANALYSIS

DISTRICT: CHITTOOR

(1) Village Kammappalli

The village Kammappalli is named after the dominant Kamma caste as all the inhabitants belong to the same Kamma caste, which is a forward caste. Kammappalli village of Pulicharla mandal is 9 KMs away from the national high (NH 205). From mandal head quarters the distance to village is 3 km. There are about 50 households and all are forward caste people except one OBC family. The main occupation is Agriculture and Dairy. Mostly Groundnut, Sugarcane and Mangoes are grown. Few people do cultivate paddy. An Airtel coin box was installed in the village. For the last six months the coin box is not functioning. There about 10 (individual) Land line and WLL phone connections. In recent years the private service providers like Idea and Airtel are covering the village. And now nearly about 100 people own mobiles.

Strengths

- The VPT is given to one of the villager and being used by all the villagers as and when required.
- People who do not have mobiles are using the VPT regularly.
- Located within the village and accessible to all the villagers.
- People are receiving incoming calls. The custodian informs when the people when they receive incoming calls.
- Neighboring village people also use VPT here.
- VPT Services are available all the time. There are no time restrictions.

Weakness

- There is no display board of VPT in front of his house.
- No time display or billing machine is provided by the BSNL. Too costly to be purchased by the custodian.
- No awareness creation about VPT in the village by the BSNL.
- Great confusion in calculating the time duration and bill.

Opportunities

- Provision of the VPT display board with all the emergency phone numbers.
- Awareness creation with regard to the availability of VPT within the village.
- Provision of billing machine will help the villagers to pay bill without any doubt.

Threats

- Due to non-availability of billing machine is forcing the custodian to rethink to keep the VPT as it is putting financial burden.

- Less use or some time no use VPT because of no clarity in payment.
- Got deceived by the people. (Some youngsters paid call bill though they made STD and Mobile calls).
- Limited use of VPT as the entry of other service providers (recently Airtel cell phone tower has come, It is said that more than half of the villagers have purchased mobiles)

(2) Village Kasireddygaripalli

The Kasireddygaripalli village is a hamlet of Vagalla Gram Panchayat under K.V. Palli (Kambamvari Palli) mandal limits. There is no transport facility to this village. From this village to pucca road is 2km and for national highway 18 km. There are about 10-15 households and belong to forward caste. The main occupation is cultivation and dairy.

Strengths

- The VPT has been given to a villager who resides in the heart of the village, and accessible to all. The VPT is being use by all the villagers.
- Calls can be made at any from this VPT, as it is available all the time round the clock.
- The custodian is cooperative and informs people when they receive incoming calls.
- Until now there are no major repairs.

Weakness

- The BSNL officials have provided no display board.
- No awareness has been created with regard to availability of VPT in the village. (Till to day few people think it is their individual phone).
- Non-availability of billing machine or call duration display device.
- Non-functioning of VPT in the absence of power (Battery back last only for 2-3 hours, power cuts are for longer duration in the villages).

Opportunities

- Provision of Billing machine or call duration device.
- Supply of quality battery, which lasts for longer hours. (At least 10-12 hours, says custodian).
- Provision of display board with all the emergency phone numbers. Installation of

Threats

- Few people do not pay for using the VPT service, as they are relatives or because of their proximity.
- Recently some people have purchased mobiles. (Airtel network is available in this village).
- Calls are roughly calculated and charged on duration of time.

- This is an interior village. There is no pucca road to this village and there is no transport facility.
- The BSNL Officials have given VPT to K. Reddappareddy, but the VPT is being maintaining another person (fellow villager) called Chandrashaker Reddy.
- The Official custodian resides at Panchayat Head quarters Vogalla. He tried to keep the VPT with him at Vogalla village but Officials have not agreed (as the VPT was sanctioned to Kasireddipalle hamlet.) But sometimes he takes the VPT and keeps with him at the Panchayat Head quarters.

(3) Village Yerlampalli (Palem)

Yerlampalli (also known as Palem) a remote hamlet under the Gram Panchayat limits of Sorakayalapeta in KV Palli mandal. There is no approach road to this village one has to walk (3 km), through agriculture fields and rocks, to reach the village. There are 15 households in this hamlet and mostly dominated by backward people. Few households belong to forward caste. The Major livelihood is agriculture and agriculture labour. Paddy and Groundnut are the major crops. Yerlampalli is 3 km away to pucca road and 18 km., away to national highway.

Strengths

- The VPT is accessible to all the villagers as it is a small hamlet. The VPT is being use by all the villagers.
- The VPT is available all the time round the clock. People make calls as and when required.
- The custodian is cooperative and informs people when they receive incoming calls.
- Until now there are no major repairs. All are aware of availability of VPT.

Weakness

- The BSNL officials have provided no display board.
- Non-availability of billing machine or call duration display device.
- In case of power cut the VPT won't work, because of the battery (weak back up) problem.
- Non availability of STD facility

Opportunities

- Provision of Billing machine or call duration device.
- Supply of quality battery, which lasts for longer hours. (At least 10-12 hours, says custodian).
- Provision of display board with all the emergency phone numbers.
- No coin box phone in this village.
- Provision of STD facility.

Threats

- Recently (some three months back) few have people purchased mobile phones. (In this village Airtel network is available).
- Calls are roughly calculated and charged on duration of time.
- An interior village. There is no pucca road to this village and there is no transport facility.
- VPT is mainly for personal communications

(4) Village Bugga Agraharam

Bugga Agraharam, a roadside village under the Nagari Mandal limits. This village is relatively developed with about 250 households and appears to be a mini town. It has good transport and pucca road facility. The distance from this village to national highway is 4 km. The main occupation is agriculture and agriculture labour. They cultivate sugarcane, sunflower. Secondary occupation is Dairy; some people started their own business. There are number of telephones. Coin boxes and cell phones are working. All the private cell towers are installed.

Strengths

- VPT is installed in a bicycle repair shop on the main road. People who pass through frequently use this VPT. And also being used by the near by people.
- The custodian is cooperative and informs in case of any incoming calls.
- The Shop is located in the bus stop centre on the main road and more accessible to the people who pass through.
- People pay for the VPT calls they make without any delay.
- In case of any fault the concerned lineman of the technician is attending without any delay as the exchange is just beside the shop.
- Available through the day, right from the morning 6 am to night 9 pm.
- Since the installation only 2 to 3 times minor repairs.

Weakness

- The BSNL officials have not provided the display board.
- There is no STD facility to this VPT.
- There is no billing machine or call duration display machine.
- Most of the villagers are not aware of the VPT installed in the village.

Opportunities

- The Provision of STD facility by the BSNL officials to the VPT.
- The VPT display board should be provided with important phone numbers and call tariff etc.

- BSNL officials have to create awareness among the villager with regard to availability of the VPT within the village.
- Provision of the billing machine or the call duration display device.

Threats

- Non-availability of STD restricts the use of VPT.
- Entry of the private service providers in the village makes people not the use this VPT. (Coin boxes).
- Private cell phone towers are installed, most of the people purchased mobile phones. (The usage of VPT is being less).

(5) Village Tattineri Gollapalli

T. Gollapalli is located in Vadamalapeta mandal; there are 75 households in this village. In this village people belong to backward caste (Yadavas, Baliyas). This village has a pucca road and 4km away from National highway. The main occupation is agriculture. In this village some people own mobile phones and some of them have landline connections.

Strengths

- The VPT has been installed at the residence of one of the villager.
- The nearby and surrounding households mostly use the VPT.
- The custodian is cooperative and informs in case of incoming calls.
- Beneficiaries are paying bill always. The place of installation of VPT is convenient to the people.
- The working condition of VPT is good.

Weakness

- Majority are not aware of the VPT in the village and the few people who are using the VPT too are not aware that particular phone is VPT.
- No billing machine, amount is charged on the duration of call approximately.
- BSNL officials have not provided any display board.
- For the last three months onwards custodian is not paying bills (due to the financial problem).

Opportunities

- Provision of the billing machine or the call duration display device.
- Awareness creation with regard to availability of the VPT within the village.
- Provision the display board with all the emergency important phone numbers.

Threats

- For the last three months onwards people slightly reduced the use of VPT as most of them have purchased of mobiles.
- Being use by only those who don't have any phone connection.
- Most of the people have purchased mobiles. Private network services like Idea, Vodaphone, and Reliance are available

(6) Village A.N. Kandriga

A.N. Kandriga falls in the 6th ward of Nagiri municipal limits. This village is located at 4.5 km., distance from Nagiri Mandal head quarters and 6 km from the National Highway. There are about 130 households in this village. Most the households belong to Forward and Backward castes. The main occupation is agriculture and dairy. Three Airtel coin boxes are working, of which one is located in SC colony (Harijanawada). People feel that private service network signals are good (Airtel, Idea, Tata indicom and Vodafone).

Strengths

- The services of VPT are available always. Some times people used to come at 10 pm in the night to make calls. They used to come here to make local calls as well cell phone calls.
- Now neighbors and other surrounding people are using VPT for incoming calls.
- Mostly custodian's wife looks after the VPT, she too informs people when they get call from outside.
- People avail the VPT services day and night.

Weakness

- Though located in the village people do not know that this is VPT. In fact people not aware of VPT.
- There is no STD facility for this VPT.
- BSNL officials have not provided any display board.
- This VPT is working on WLL technology and does not work in the absence of power.

Opportunities

- Located very close to Mandal head quarter easy to monitor. Often BSNL officials come for check up.
- Awareness creation with regard to the availability of phone
- Provision of display board.
- Provision of billing machine.

Threats

- Three Airtel coin box found in the village and one in right at the custodians residence.
- It was found that the usage of VPT quite reduced.
- Quite often there was problem in the phone (clarity of voice).
- Some people are not aware of VPT.
- All most all-private service providers are available.

(7) Village Erragunta (Venkatapuram)

Erragunta (popularly known as Venkatapuram) VPT sample village falls under Renigunta Mandal limits. There are six hamlets under this village namely, Venkatapuram, Annaswamy Polly, Allimitta, Thimmayah gunta, Ankanayunipalli and Renigunta Agraharam. In Erragunta there are about 100 households, altogether in this Panchayat there around 600 households are there, among them BC community is dominating. Few belong to SC and ST. The primary occupation is agriculture and non-agriculture labour is secondary occupation. And some people are working in private companies too.

Strengths

- The custodian is Mr. M.G. Venkatamuni (B.Tech Civil), an engineer by qualification, is also vice president of the village.
- He belongs to BC Community. He is active in the politics. He is much aware about society. He says BSNL people asked him to take the custody of VPT.
- Custodian is Vice President of the village.

Weakness

- VPT is being used as a private individual phone.
- Custodian does not have good relation with the people.
- Frequent line problem is there no clarity in voice.
- Most of the villagers are not aware of VPT installed in the village.
- The BSNL officials have not provided any display board.
- Not having any billing machine or the call duration display device.

Opportunities

- Provision of display board with all emergency phone numbers.
- Awareness creation with regard to VPT availability in the village.
- Installation of VPT at another custodian's residence, which is accessible.

Threats

- The Custodian always out of village / busy with his own works.
- There are private towers all installed near by this village. Most the people have mobiles.
- Less use of VPT by the villagers, as they are not aware.

- Available only in the morning hours the VPT is not available during the daytime.
- It was observed that people who move freely with custodian are making use of VPT.
- Few people opine that the custodian cannot run the VPT successfully.

(8) Village Vallivetivaripalli

Vallivetivaripalli hamlet comes under Rayavaripalli Gram Panchayat of pulicharla mandal. In this village there are 30 households. Majority of them are BCs, SCs and few households belong to Muslim community. The primary occupation is Agriculture. The secondary occupation is dairy. An Airtel tower is installed near this village in 2007. There are about 10 cell phone users in this village.

Strengths

- The VPT located within the village (in custodian's residence).
- STD facility has been provided to this VPT.
- Most of the people are using the VPT.
- The custodian's wife is a DWCRA group leader and quite active. Most of the beneficiaries are DWCRA group members
- People are quite happy with the custodian and with the VPT services.

Weakness

- During power cut this VPT won't work, as the battery backup duration is very less.
- The BSNL officials have not provided any display board
- Non-provision of the billing machine
- Few people are not aware of VPT

Opportunities

- Provision of billing machine, to both the customer and the custodian.
- Provision of display board with all the emergency phone numbers.
- Awareness creation with regard to the availability of VPT.

Threats

- Airtel network service is available within the village.
- Less or non-use of VPT as some people have purchased mobiles.
- Non-provision of long standing battery.

(9) Village Merlacheruvvu

Merlacheruvvu is a VPT village comes under Piler mandal. Under this village 13 hamlets are there. This VPT is running in the post office and all postal services are available here. Total

100 households are there. OCs, SCs and BC communities are there. Primary occupation of the villagers' is cultivation. This village is located 20 km., away from state highway.

Strengths

- The VPT has been kept with postmaster Sri. Venkataswami Reddy. It is residence cum village post office.
- VPT is available as round the clock.
- The VPT located in the post office, and convenient to all the people.
- Most of the people are aware of VPT and using the services of the VPT.
- People pay and use the VPT. Few people do receive the incoming calls.
- VPT bills are paid regularly.

Weakness

- People are making use of this VPT mostly for personal communication.
- Most of the time people are facing connectivity and voice clarity problem.
- Three coin boxes are there (1 Vodafone, 1 Airtel)
- The BSNL officials have not provided the display board.
- Non-provision of billing machine of the call duration device.
- Very frequently the VPT goes off. (Custodian says that concerned BSNL people / officials are very negligent).

Opportunities

- Provision of the VPT display board with all emergency numbers.
- Provision of the billing machine.
- Quality and timely repair by the concerned BSNL officials.
- BSNL has to overcome them and try their level best to render good services

Threats

- Vodafone tower installed within the village.
- About 50 cell phones are there in this village.
- Frequent problem with VPT may discourage the use of VPT.
- All the beneficiaries opined that the private service providers are quite dominant than BSNL.

(10) Village U.K. Marripalli

Uttarapu Kandriga Marripalli is a hamlet of Bommaiapalli under Vedurukuppam mandal. There are about 50 households in the village. Among them 40 households belong to OC and the rest of them belong to backward castes. The primary occupation pursued in this is agriculture farming and agriculture labour. In this village only few people aware of VPT.

Strengths

- The custodian moves very close with the villagers.
- The VPT is available round the clock.
- Availability of STD facility.
- The custodian is cooperative and informs in case of any incoming calls

Weakness

- Only some people are happy with the location of VPT.
- No display board found here, no complaint book available with the custodian.
- No billing machine is available with the custodian.
- During the power cut VPT won't work.
- Sometimes beneficiaries are telling that they would pay later on. The custodian also never bothers about it.

Opportunities

- Provision of the display board with all emergency phone numbers.
- Provision of the billing machine of the call duration display device.

Threats

- Few people are not happy with the location and opined that it would have been good if the VPT installed at the public meeting place in the village.
- Private service providers are dominations particularly (Airtel).
- Most of the people particularly youngsters are using mobiles.
- The usage of VPT is reduced as few have purchased mobiles.
- Few people are using VPT for incoming calls.

DISTRICT : SRIKAKULAM

(1) Village Kanugulavanipeta

Kanugulavanipeta is a VPT village, which located 12 km away from Srikakulam town and falls under Srikakulam rural mandal. It has three hamlets under its limits. They are namely – (1) Muguthumpalem, (2) Gollapeta, and (3) Mithanapeta. This village has 400 households. Among them 80 % households belong to Thurpukapu communities (BC). The remaining households belong to Yadava, Shetti, Matri communities. These also come under OBC. The main occupation of the villagers' is cultivation. Dairy, coconut bondam selling are secondary occupations. Five coin boxes are available among which three are Airtel service, one is Reliance and other one belongs to Tata indicom. The Airtel tower is located near village. The Vodafone tower set up in Balijawada and the Reliance is located in Ippili village. Around 1200 cell phones are there in this village.

Strengths

- The VPT installed in a grocery shop.
- Majorities are using the VPT as it is installed in the grocery shop.
- Custodian moves freely with all the villagers and also informs for incoming calls.
- In times of need, he helps the villagers by giving the required provisions.
- Paying the bills regularly.

Weakness

- No STD facility available with the VPT.
- No billing machine has been provided.
- The BSNL officials have provided no display board.
- No complaint book was found.

Opportunities

- Provision of STD facility to the VPT
- Provision of billing machine to avoid confusion in payment
- Provision of the display board by the BSNL with emergency phone numbers.

Threats

- Non-availability of STD facility with the VPT.
- Entry of private mobile service providers.
- Easy availability of mobile services.

(2) Village Vijayaramapuram

Vijayaramapuram is a VPT village and a Gram Panchayat. It has two hamlets under its limits. Those are Konajamnapeta and Kothapeta. It is located 4 km., way from state highway, which falls under Sarubujjili Mandal. Around 130 households are in this village. Among them 100 households belong to Kalingulu, which covers under OBCs. The remaining 30 households belong to SCs. Primary occupation is cultivation. Secondary occupation is agriculture labour. Approximately 30 cell phones are available with various private services. Airtel and Idea are quite dominative in service providing. Out of the 30, five cells belong to BSNL. Three coin boxes are available which are running with Airtel service.

Strengths

- The STD facility is available with the VPT.
- People are using the VPT as and when required.
- Monthly bills are paid regularly without any delay.

Weakness

- Caste discrimination found. The custodian belongs to BC community and not allowing SCs to make use of VPT.
- People are not aware much about VPT
- Few people are making use of the STD services.
- Only neighbors are aware of VPT availability.
- Few beneficiaries are unhappy with the location of VPT. As it is located in the interior room of the custodian.

Opportunities

- Most of the villagers have opined that it would be more useful if it is installed in open place
- Awareness creation with regard to the availability of VPT within the village.
- Provision of the display board with all the emergency phone numbers.

Threats

- Due to the non-payments the custodian is not allowing people to use the VPT services.
- The services of VPT are permitted to only few people.
- Observed that it is not at all convenient for SCs.
- Most of the beneficiaries have opined that the private service providers are giving good services.

(3) Village Dabarsingi

Dabarsingi is scattered, interior tribal hamlet falls under the Bogavanda gram panchayat of Mandasa mandal. It is located on the hills with poor transport facility. This hamlet is located 20 Km., away from Mandal head quarters. It is a ST hamlet, which belongs to Jatapu sub tribe. This is border village to Orissa. Although this hamlet belongs to Andhra Pradesh these people speak Oriya. They do not know Telugu. A few people speak Telugu language. Around 20 households belong to Jatapu community one of the sub-tribe of ST. Primary occupation is cultivation and the secondary occupation is agriculture labour. This hamlet has some other hamlets called konte shai, kumarshai, kurmarshai from which people do come for making calls.

Strengths

- Based on the collective decision the VPT was installed at the residence of Anganwadi Teacher.
- She gets good co-operation with the villagers and she too moves with harmony.
- As this village located on the hills VPT is very much useful to this villagers as well as surrounding villagers.
- People are well aware of this VPT (as the village is small in size).

- This VPT is rendering good services to these villagers.
- People of this village saved more transport charges because of this phone.
- Round the clock the VPT services are available to the people.

Weakness

- No display board has been provided.
- Non-functioning of the VPT in the absence of the power.
- No STD facility is available.

Opportunities

- Provision of the display board, with all emergency phone numbers.
- Provision of STD facility to the VPT.
- Provision of long standing battery.
- No private services are available here.

Threats

- A remote hamlet located in the thick forest.
- No approach road, one has to walk 5 kms., to catch a bus.

(4) Village Venkatapuram

Venkatapuram is a scattered tribal foot hills hamlet falls under Harshwada Gram Panchayat of Nandigama mandal Located in a nature 10 Km away from Mandal headquarters. It doesn't have even the kutch road facility to their village. Around 13 households are in the village, all of them belong to ST Savara sub tribe. Most of them are illiterates. A stranger cannot find this village during his first visit in such an interior place. Primary occupation of Savaras is cultivation. The secondary occupation is agriculture labour every day the villagers go to Nimmidi village for their livelihood. Only a few houses were found pucca. The remaining is semi pucca. Since Savaras are not literates they are well aware about the education. It was found that from each family at least two school going or college going children are there. Collective decision-making was observed.

Strengths

- A remote tribal village.
- All are aware of VPT availability.
- People are using the VPT as and when required.
- Custodian is help full and informs people in case any incoming call.
- The location of VPT is convenient to all in the village.
- The services are available round the clock.

Weakness

- No approach road one has to walk through agriculture fields to reach the village.
- Low battery back up, VPT does not work in the absence of power.
- No display board has been provided.
- No billing machine.
- No STD facility available.

Opportunities

- Provision of the VPT display board with all the emergency phone numbers.
- Provision of the long-standing battery.
- Provision of billing machine.
- Provision of STD facility, as this is remote tribal village.

Threats

- Non-availability of approach road, delays the repair work.
- Non-availability of STD facility restricts/limits the usage of VPT services.

(5) Village Kallada

Kallada is a VPT village and it self is a Gram Panchayat. It is having 6 hamlets under its limits those are Jandiripeta, Kailaja Maliveedu, Thoturu, and Madanapuram. It falls under Nadigam Mandal. This is located 10 Km away from state highway. This village has around 100 households. All are belong to Teluga Community, which covers under OC category. Cultivation is the Primary occupation. The secondary occupation is agriculture labour. Around 10 households have migrated to Madras in search of livelihood. No private services are available. Around 15 cell phones are working here. All belong to Idea service only. Airtel services are available if the antenna installed on the top of the House. Five coin boxes are installed here. Among them 3 BSNL and the remaining two belong to Airtel.

Strengths

- Almost all villagers have made calls from this VPT. Only few people are paying for the use of VPT services.
- Custodian says that, (as he was ex president) he won't insist the people for the bill.
- Custodian is happy with the response of BSNL officials (he says they are quite cooperative).
- People are making use of VPT more for incoming calls.
- The location of VPT is convenient to all people.
- The battery back up is good, VPT functions in the absence of power.
- Regular in bill Payments.
- The VPT is available round the clock.

Weakness

- Non-supply of display board by the BSNL officials
- No billing machine.
- People are using VPT services without payments

Opportunities

- Provision of the display board with all the emergency phone numbers.
- Provision of billing machine.
- Motivating people for regular and prompt payment.

Threats

- They are using the VPT without paying calls charges.
- Entry of private mobile service providers

(6) Village Limbugam

Limbugam is a VPT hamlet, which comes under Ambugam Panchayat of Mandasa Mandal. The village is located 5 km away from state highway. The village is having around 200 households. All the 200 households belong to same community called yadavas, which comes under OBC. The primary occupation of the people is cultivation, agricultural labour. And secondary is live stock management. Airtel tower is set up in the neighboring village called Laharbandh. Good Airtel signals are available here. Idea and Reliance signal are also available. Around 300 cell phones are working here, majority of them belong to Airtel. One Airtel coin box is also working here. Only 2 BSNL WLL Phones are here. Among them one is VPT. BSNL services are available here though low signals are found. Nearly 30 households are migrating every year to Gujarat. These migrated families stay there up to 6 months there in various locations to earn. They earn Rs. 6000 to 9000 thousands per month.

Strengths

- The VPT has, been installed in a grocery shop, run by G. Krishna Rao.
- The location of the VPT is convenient and available to all.
- The custodian is cooperative and allows people to call on credit also (as per beneficiaries information).
- People are happy with VPT and no problem with the location. Mostly using VPT for personal communication.
- Custodian is quite helpful and informs incase of incoming calls too.
- He also runs grocery shop; people do come for buying grocery requirements and make calls.
- People have migrated to various places from this village. They make calls to their relatives. No kind of discrimination is shown.

Weakness

- People are not aware about VPT.
- Few Villagers are using VPT more for incoming calls only.
- Non-payment of the call charges to the custodian.
- Non-provision of VPT display board.
- Battery back up problem in the absence of power.

Opportunities

- Provision of display board by the BSNL officials.
- Awareness creation with regard to the availability of the VPT within the village.
- Motivating people for the prompt payment of call charges with delay.
- Provision of the long-standing battery.

Threats

- People are not paying for VPT calls; the custodian is collecting money once in month or in two months.
- Non-payment of the call charges may become burden for the custodian; as a result they will be thinking to surrender the VPT.

(7) Village Veeragunnapuram

Veeragunnamapuram is a VPT well set up grampanchayat falls under Mandasa Mandal. This village is located 4km away from NH 205. The village has all facilities / service centers like Z.P High school, post office, and veterinary hospital. Around 500 households are there. Among them kalingas (BC) communities is the dominated one. Both forward and backward caste people are there in this village. The villagers say that the many people are in high positions in government departments. After BSNL the Airtel services are good in this village. Around a hundred cell phone, are working in this village. Most of them are using Airtel. About 20 landline phones (BSNL) are working. Agriculture and agriculture labour are the primary occupations in this village.

Strengths

- Custodian has a grocery shop. VPT has given to him since he is having grocery shop.
- The custodian maintains good rapport with the BSNL officers.
- This is a coin box VPT provided by the BSNL. (Usually coin box is not provided).
- The VPT is installed in open place and quite convenient for the people.
- This particular VPT has STD facility; people make calls to distant places like Chennai, Bangalore.
- All the villagers are well aware of VPT. All most all are using VPT. So far there were no problems

- People say, that custodian allows people to make calls during night times also as per their necessary.
- The villagers opined that BSNL officer's quite cooperative and said that they are getting good response and prompt actions from BSNL.

Weakness

- The BSNL officials have not provided any display.

Opportunities

- Provision of the, display board with all emergency phone numbers.
- Supply of coin box to this particular village has increased the use of VPT.

Threats

- Entry of other private service provider may restrict the use of VPT.
- During long power cuts and rainy season, the line becomes noisy and disturbed.

(8) Village Buddivalasa

Buddivalasa is a hamlet comes under Chingkagithapalli Gram Panchayat of Sarabujjili Mandal located 4 km., away from state highway. There are about 70 households. Among them one household belongs to dhobi community, one household to barber, and another Shetty community. Few households belong to SC community. The remaining belongs to BC community. Primary occupation of the people is cultivation. The secondary occupation is agricultural labour. In this village a few families have migrated to Hyderabad to earn money. They are working in various factories. In this village there is one coin box is working private service providers are quite dominative. In order Idea, Airtel, Reliance, BSNL have come nearly 30 cell phones are working with various private services. Still work is in progress of Airtel tower in Veerabadrapuram in near by village.

Strengths

- The VPT has been given one of the villagers who run a petty grocery shop.
- The VPT location is convenient to all the villagers.
- People do use the VPT services.
- This VPT is available through out the day.
- Local and regional call facility available.
- Majority of the villagers are aware of VPT availability.
- Though people have cell phones they are using VPT.
- One of the beneficiaries says it is running with out any repair no private service can beat with this. People have a positive opinion on the VPT.

- People giving much importance to the government (BSNL) phone compared to the private services. Some people say that VPT is more useful for some people only.

Weakness

- No STD facility available. Most of the people are aware of VPT.
- This VPT is being used more for incoming calls.
- The BSNL officials have not provided any display board.
- Non-availability of billing machine.

Opportunities

- Provision of the billing machine.
- Provision of the, display board with emergency phone numbers.
- Provision of STD facility to the VPT. (One of the beneficiaries requested the team to provide STD facility to this VPT).

Threats

- The VPT services are not available to the scattered household people.
- Since it is landline frequent repairs are taking place.
- Less use of VPT as many people have purchased mobiles.

(9) Village Ranganathapuram

Ranganathapuram is a hamlet fall under Baluga gram Panchayat of Mandasa Mandal. This village is located 1.4 km away from state highway. This village has around 70 households. Two communities are found in the village called Pallis and Jangalu and they belong to BC category. The primary occupation is agriculture (i.e., raising cashew garden and coconut trees. Most of the people from this village migrated to other places like Guwahathi, Andaman, Assam etc for their livelihood. They stay there up to one year. In this village there is one BSNL coin box was installed later on it disconnected due to non-payment. Right now, one Airtel coin box is working. BSNL, Airtel and Reliance network services are widely available.

Strengths

- The custodian is one of the villagers and VPT is installed at his residence.
- The custodian is quite cooperative and moves freely with all the villagers.
- The VPT is functioning on landline technology.
- This VPT has STD facility.
- The services are available throughout the day.
- Mostly, Women make more calls to their relatives who are staying away - to their home.

Weakness

- Only few people aware of the VPT availability.
- This VPT is using more for their incoming calls. Of late it reduced of usage due to private services providers are quite dominative.
- The BSNL officials have not provided any display board.
- Non-availability of billing machine or the call duration display device.

Opportunities

- Provision of the VPT display board with all emergency phone numbers.
- Provision of the billing machine to solve the problem calls charges.
- Awareness creation among the villagers with regard to the availability VPT within the village.

Threats

- Few villagers are purely using the VPT for incoming purpose.
- Majority are depending on Airtel coin box for outgoing calls, because of non-availability of billing machine with BSNL VPT.
- The other private network service phones are working good and able to reach many places.
- The VPT usage is less compared to private services.

(10) Village Kondabheemapuram

Kondabheemapuram is a VPT hamlet, which covers under Shasanam Gram Panchayat of Tekkali mandal. The village is located 5km away from the mandal headquarters. It is very close to national highway 205. There are about 150 households in this village. All belong to Yadava community, which, comes under OBC category, except two families who belong to other community. The primary occupation is cultivation. A few are sheep and cattle rearing. Earlier people use to go for stone cutting, work in near by villages. In this village one Airtel coin box is working and one WLL (BSNL) phone is working.

Strengths

- The custodian has good public relation in the village.
- The beneficiaries who are using this particular VPT are quite happy.
- The VPT is available round the clock.

Weakness

- Most of the people are not aware of the VPT availability in the village.
- Non-availability of STD facility with this VPT.

- Frequent repairs of the battery making the custodian to visit the BSNL office on his own transport cost.
- Quite often custodian has been rushing to BSNL office at Tekkali Mandal headquarters to get battery repaired.
- Poor signals are resulting in non-connectivity and call disconnection in between.
- The BSNL officials have not provided any display board.

Opportunities

- The concerned officials should provide the display board with all the emergency phone numbers.
- Provision of STD facility may increase the use of VPT.
- Provision of billing machine or the call duration display device.

Threats

- The People who have used the VPT are fed up with frequent repairs.
- No voice clarity. Facing (low) signal problem. Because of this most of the people are going to other alternatives like Airtel coin box.
- All private services are providing good network, so many are purchasing mobile phones.

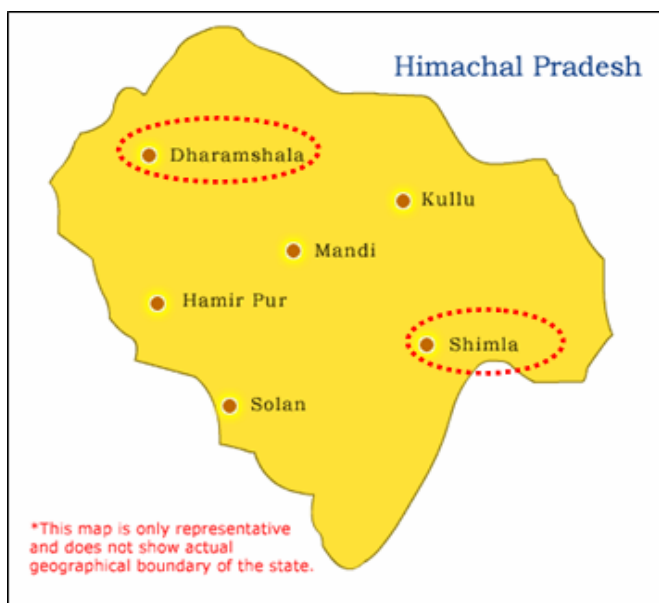
State Report - 2

HIMACHAL PRADESH



Himachal Pradesh

Himachal Pradesh is one of the most dynamic hill states of India with high scores in indicators of human development. With an area of 55673 sq km, it is not only one of the smallest states in India with respect to area but also in terms of population with a density of population of 109 (as per Census 2001). There are wide variations in area and population of the districts and the district-wise density varies from 2 persons per sq. kilometre in Lahaul and Spiti to 369 persons in Hamirpur district. Himachal Pradesh has the highest percentage of rural population (90.2%) among all the States of the country. In urban areas, the largest settlement is the Shimla Town with a population of 1,42,161 and the smallest one, is Narkanda with a population of 712. Nevertheless, the sex ratio of females per thousand males has been rising continuously in Himachal Pradesh since 1951 census but declined from 976 in 1991 census to 968 in 2001 census. The decline is pronounced in the 0-6 year's age group and is a matter of concern for policy planners. In terms of literacy, Himachal Pradesh ranks 11th in the country with every eight out of ten persons being literate in the state. For administrative purposes, the state has been divided into twelve districts – Kangra, Mandi, Shimla, Solan, Sirmaur, Chamba, Una, Hamirpur, Bilaspur, Kullu, Kinnaur, Lahaul and Spiti.



Nevertheless, Himachal Pradesh BSNL Circle is divided into six SSAs – Shimla, Solan, Daramsala, Hamirpur, Mandi and Kullu. Shimla SSA covers the districts of Shimla, Kinnaur, Lahaul & Spiti and parts of Kullu. Hamirpur SSA has jurisdiction over the districts of Hamirpur, Bilaspur and Una while Daramsala SSA covers Kangra and Chamba. Solan SSA covers the districts of Solan and Sirmour.

In each SSA, the General Manager, Telecom District is the head of the implementing department. The in-charge officer for the implementation of VPT at the district level is either Divisional Engineer or Sub-Divisional Engineer. The scheme was implemented in the State in all SSAs from November 2004 under the Bharat Nirman programme. A total of 1002 VPTs were to be installed under different SSAs. In Shimla, out of the 383 envisaged 355 were installed by 2009-09, while in Mandi 398 out of 403 and 75 out of 93 in Kullu were achieved.

In Daramsala (308), Solan (100) and Hamirpur (17), the cent percent of targets were achieved (Table 1). In terms of revenue, the income from billing declined from Rs. 72,71,672 to Rs. 63,31,475 in 2008-09 (Table 2).

Table 1 : Physical Performance of VPT in Himachal Pradesh

Years	SHIMLA		SOLAN		Dharamsala		Hamirpur		KULU		MANDI	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
2003-04	-	-	-	-	-	-	-	-	-	-	403	47
2004-05	-	-	8	8	50	53	0	1	93	2	356	52
2005-06	-	-	16	16	120	152	4	7	91	0	304	19
2006-07	383	81	19	19	70	84	5	5	91	10	285	69
2007-08	383	361	10	10	15	15	4	4	81	5	216	33
2008-09	383	355	31	31	4	4	0	0	76	35	183	167
2009-10	-	-	16	16					41	23	16	11
Total	383	355	100	100	259	308	13	17	93	75	403	398

Table 2 : Income from Billing in Himachal Pradesh

Years	SHIMLA	SOLAN	DHARAMSALA	HAMIRPUR	MANDI	KULU	TOT
2003-04	-	-	-	-	-	-	-
2004-05	-	8315	25610	-	3930000	588000	4551925
2005-06	-	51821	159609	11162	2831000	406000	3459592
2006-07	3415198	100268	308826	28380	2891000	528000	7271672
2007-08	2451612	116367	358140	47077	3219000	393000	6585196
2008-09	1897407	78842	242927	18299	3703000	391000	6331475

Strengths of the VPT as per the officials at the state level is provision of communication in rural areas at affordable charges. In hilly regions like Himachal, it still remains the only source of communication to public in remote and far flung area thereby connecting them to other parts of the country. To ensure its smooth functioning, VPTs are monitored by JTO or SDO on a daily basis and faults are rectified on top priority. If any VPT remain non-functional due to cable theft change of technology such as to WLL is carried out.

Nevertheless, due to the remoteness of the location of VPTs usually in far-flung hilly, at times non-motorable villages in Himachal Pradesh, maintenance is difficult and very expensive. Moreover, mobile services have penetrated rural areas and this has reduced importance of VPTs. There is need to transform the VPT to compete with the multiple services provided by mobile service providers.

The major constraints faced by officials with regard to implementation of VPT services include inability of VPT custodians to install their own monitor for billing; difficulty faced by staff in maintenance and repair due to remote/inaccessible locations; recovery of outstanding bills since

VPTs cannot be remain non-functional even when bills are not paid; proportionately less revenue in comparison with high capital expenditure and maintenance cost.

Nonetheless, considering their wide coverage, the scheme should be continued with active support of Government of India. The officials maintain that issues of technology, competition, coverage & efficiency can be tackled effectively. However, BSNL is facing difficulty in providing new VPTs in uncovered villages for want of interested custodians, lack of proper mechanism for the recovery of outstanding dues, loss of subsidy in case of Non-incremental Meter Reading (NIMR) VPTs which are actually active but not used by custodians. They attribute these problems to the apathy shown by local public representatives i.e. Panchayat Pradhans. VPTs can be popularized through public media with full detail of tariff through BSNL Brand Ambassadors. VPT holders should be provided with billing monitors as well as booth to popularize its use among consumers.

Against the backdrop of discussion on the performance of VPTs at the state level, the next section discusses the performance of VPTs in Shimla and Dharamasala SSA. The present study covered Shimla district of Shimla SSA and Kangra and Chamba districts of Dharamasala SSA. Village Public Telephone in these SSA / Districts was canvassed for study.

Against the backdrop of discussion on the performance of VPTs at the state level, the next section discusses the performance of VPTs in Shimla and Dharamasala SSA. The present study covered Shimla district of Shimla SSA and Kangra and Chamba districts of Dharamasala SSA. Village Public Telephone in these SSA / Districts was canvassed for study.

DISTRICT/ SSA : SHIMLA

In Shimla SSA, the General Manager, Telecom District, is the Head of the implementing department. At the district level, the in charge officer is Sub-Divisional Engineer (USO). Under the Bharat Nirman, the scheme is being implemented from 2004 November even though the VPT scheme was introduced as early as 1991. As per records, the number of villages covered under Bharat Nirman amounts to 355. The criteria for identifying and selecting the villages for installation of VPTs are based on the statistics available about the infrastructure facilities in the Census of 1991 and 2001. The main objective of the VPT scheme at district level is to achieve the targeted villages as per the plan of the BSNL Headquarters and provide telecom services to these villages. The maintenance of these VPTs under first priority is also emphasized to all the SDCAs and telephone exchanges. Every year action plan is prepared and action is executed to achieve the targets. Of the targeted 383 VPTs to be covered in Shimla SSA, 81 were achieved until 28.2.2006 whereas 302 were pending of which 256 were proposed to be WLL and 46 VPTs were to be provided with DSPT technology. By March 2008, 361 connections were given. However, at present, as per official records only 355 are functional.

As per the official records, there are no extended services available (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. The village public telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. Nevertheless, there is no separate account with respect to flow of funds and the expenditure on VPTs. Details about revenue generated from the all the VPT is however available.

With respect to availability of staff, there is no separate recruitment for the VPT scheme. However, both under technical and administrative staff, there was shortage. In case of supporting staff, the number of shortfall was 60 under technical category and 53 under administrative cadre. This was due to the fact that there is no recruitment of staff under the Group C and D category for the last few years.

With regard to monitoring and supervision of VPTs there were clear-cut guidelines provided by the BSNL (already discussed in the section dealing with State). There were no charges for repairing and maintenance. At the Mandal level, the Junior Telecom Officer (JTO) & Telecom Technical Assistant (TTA) are in charge of monitoring and supervision on a monthly basis. At the village level, TTA, RM/DRM is in charge of monitoring – twice in a day. Repairs and maintenance of VPTs are solely the responsibility of BSNL. Technical staff (there is no separate staff for VPT) is in charge of the maintenance. The work distribution is based on area wise location of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff. Similar view was echoed by BSNL officials during the field visits to different parts of Shimla SSA as part of primary survey. Line Man in Theog, Kotkhai and Jubbal Tehsils pointed out that they are overburdened due to lack of sufficient staff. The Line Man had to cater to five to six Panchayats spread over various hilly terrains, which lead to delay in repair and maintenance. Moreover, due to geographical terrain, the faults are also continuous and frequent. Similarly, SDO at Rohru pointed out that while schemes such as VPT are being implemented it should be kept in mind that the geographical terrain of Himachal Pradesh which is entirely different from that of other states. For example, he cited that at the BSNL headquarters it is decided that Rs. 2 lakhs will be allotted for the laying off 4 kilo metres of cable. However, in the terrain of Himachal it is not feasible with its curves and hairpin curves at every 100 metres. This, he indicated, need to be taken into account while framing any policy at a central level.

In the last three months a total of 226 faults were reported and were rectified. Of these 28 were related to faults in cable, 114 were faults with instruments and 89 were related to technical faults (drop wire). It is evident that almost 51 percent of the repairs were related to defects with the instruments. With regard to training, more than 475 personnel have been trained in the last three years on latest technologies being used in the different telephone exchanges. There is no direct competition for VPT from other service providers since BSNL is still the only provider

of Village Public Telephone (free of cost and rent free) in Shimla SSA. Nevertheless, at the field level it was observed that mobile connections and STD/PCOS, coin box facilities of both BSNL and other service providers at better quality and cheaper rates are leading to abysmally low patronage of VPT. Across Shimla SSA, SDOs pointed out that at least five years ago, VPTs used to be the lifeline of every village. Nevertheless, since the introduction of mobiles and especially various schemes such as Student cards (of BSNL), the patronage for VPT has reduced drastically.

Strengths of VPTs include monitoring of faults on a daily basis by JTO and SDO at the Headquarters and these are rectified on top priority. Whenever fault in VPT is reported due to cable theft, change of technology (WLL) is being done to make the VPT functional. The installation of VPTs at remote areas where reach is difficult makes it challenging to keep them operational. In addition, lack of awareness among villagers to use and operate telephone facility also renders them non-functional. Moreover, telecom service at present (as per the GM's office) is not viable in rural areas. This is attributed to the fact that faults are continuous in remote areas cable theft, damage to OFC and difficult geographical terrain to lay down cable. In short, maintenance of these VPTs is quite tedious and expensive. Hence, USO subsidy needs to be continuously provided under Operation and & Maintenance Head to make VPT remain functional. The GM points out that all out efforts are being done to replace the landline VPTs to WLL under CDMA technology. Moreover, in remote areas where landline and WLL connections in remote areas are non-feasible, DPST are being provided. GMS WLL VPTs are also being planned to provide uninterrupted services. Maximum coverage i.e. 98 percent of targeted VPTs has been achieved under VPT scheme. The remaining is being covered on DSPT on top priority basis.

DISTRICT/ SSA : DHARAMSALA

In Dharamsala SSA, the jurisdiction of the General Manager covers two districts namely Kangra and Chamba. Like in Shimla, the in charge officer for the VPT at district level is the Sub Divisional Engineer (USO). In Dharamsala too, the VPT was brought under Bharat Nirman Programme in 2004-05. The number of villages covered was 308. The selection of the villages for installation of VPTs was based on the revenue village list provided by BSNL headquarters and the custodian was identified by the Gram Panchayat. The guidelines for the VPT scheme were provided by the Chief General Manager's office (as discussed in section on profile of the State). Interestingly since 2004-05, the installed VPTs were more than the target (see Table below).

Years	Physical Performance (Newly connected villages/VPTs)			
	Target		Achievement	
	No. of Villages	No. of VPTs	No. of Villages	No. of VPTs
2004-05	50	50	53	53
2005-06	120	120	152	152
2006-07	70	70	84	84
2007-08	15	15	15	15
2008-09	4	4	4	4

There are no extended services available (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. Nonetheless, CDMA services were extended in existing VPTs in Dharamsala, the details of which are evident in the table below.

Years	Physical Performance (CDMA Services extended in existing VPTs)			
	Target		Achievement	
	No. of Villages	No. of VPTs	No. of Villages	No. of VPTs
2004-05	38	38	38	38
2005-06	142	142	142	142
2006-07	82	82	82	82
2007-08	15	15	15	15
2008-09	3	3	3	3

The VPT scheme is 100 percent financed by BSNL. However, there is no separate account with respect to flow of funds and the expenditure on VPTs. The revenue generated from VPT in Dharamsala SSA increased from Rs. 25610 in 2004-05 to Rs. 358410 in 2007-08, however, it declined to Rs. 242927 in 2008-09.

Though there is no separate recruitment for technical and administrative staff for VPT, it is evident that there was a shortfall of 216 (28 percent of the sanctioned) technical staff and 253 (27 percent of the sanctioned) administrative staff in the SSA. This is attributed to the lack of recruitment at various cadres. There exist clear-cut guidelines for monitoring and supervision of VPT. Daily testing of VPTs is being done at every switch (Exchange/WLL BTS). However, JTO at Sihunta remarked that on the one hand, since VPT cannot be disconnected even if bills are not paid on time, this leads to complacency on part of custodians (in general) to make prompt payments. On the other hand, even if the concerned custodians / villagers do not complain, it is the responsibility of the BSNL officials to check and rectify the problem. Thus, there is lack of accountability on part of the custodian, remarked the BSNL officials.

With respect to posting of staff, staff is posted exchange wise as per workload. There is no separate staff for VPTs. The allocation of staff especially in hilly terrain like Himachal Pradesh for repair and maintenance was insufficient and this fact was also reiterated by officials during

field visits to different parts of Dharamsala SSA. SDO at Rehana pointed out that there is not only shortage of field staff such as Line Man, but also of vehicles – for 3 SDOs there is only one vehicle available and hence they rotate the vehicle amongst themselves.

The repair and maintenance is done solely by BSNL and is undertaken free of charge. In the last three months repair of cable breakdown, change of EPBT/IFWT and replacement of SMPs, drop wire etc was undertaken. In the month of May the total faults were 487, in April 502 and in March 433. With respect to training, regular refresher courses are being run by BSNL at All India Telecom Training Centre to train the technical staff on the latest development in technology. With regard to competition, there is no other VPT provider in Dharamsala SSA. Nevertheless, there is competition from mobile and telephone connections of not only BSNL but also other service providers especially in terms of better plans at cheaper rates than VPT. This fact was reiterated by BSNL officials during field visits as well. For instance, SDE at Dharamsala indicated that until 5-6 years ago, the VPTs were the lifeline of the village. However, at present with the revolution of mobiles (BSNL and private) the entire scenario has undergone changes. The VPT is hardly used in many places, however, BSNL receives subsidy from USO for its maintenance and hence the scheme does not bring loss to BSNL. This point was reiterated by SDO at Dehra Exchange who remarked that in general, customers are no longer interested in WLL, LL and VPT. The mobile revolution has made these insignificant. Nevertheless, prior to 5-6 years, VPT was the backbone of communication for most of the villages. Thanks to Pradhan Mantri Sadak Yojana, at present, there are no villages, which are inaccessible. This has led to not only better communication but also greater competition from other service providers. Moreover, today most of the calls are made from mobile-to-mobile and in this context, BSNL is in highly disadvantageous position. The calls from BSNL to other service providers are costlier and hence people do not prefer. Similarly, SDO at Rehana also pointed out that there is an urgent need to strengthen VPT with additional services such as Internet (Wi-Fi, 3G, etc) to make it more viable. This would be useful on part of the villagers to increase their connectivity. This would let them access information on not only agriculture related activities but also about education such as admission notification, examination results, online tests, etc. He pointed out that with the mobile revolution there is need to graduate VPT from communication through phone to other services as well. In his exchange, 45 new connections were given in 2008-09. Moreover, theft of cable is rampant and hence most of the landlines are now being replaced with WLL. Similarly, JTO at Sihunta pointed out that as a general rule, one lineman is in charge of 350 connections, and the norm is not feasible in hilly areas like Himachal Pradesh.

Irrespective of all these, VPT still remain the only source of communication to the public in very remote and far flung areas of Dharamsala SSA, which connects remote and tribal areas to other parts of the country. It is a public facility provided by Government of India under Universal Service Obligation funding through BSNL. With respect to constraints in

implementation of VPTs it was pointed out by the office of the GMTD that there was no separate allocation of funds for VPTS and there was lack of sufficient staff taking into consideration the difficult and hilly terrain of Himachal Pradesh. Like his counterpart in Shimla, the GMTD observed that VPT was not commercially viable due to the low return. The average revenue per VPT was approximately around Rs. 65 per month.

Overall, the GMTD was of the opinion that BSNL is facing difficulty in providing new VPTs in uncovered villages for want of responsible custodians; recovery of outstanding dues, loss of subsidy in case of NIMR VPTs which are actually active but not used by custodians. He attributes these problems to the apathy shown by local public representatives i.e. Panchayat Pradhan. Hence, in his opinion, this scheme may be converged with the NREGA programme of the Central Government.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Himachal Pradesh – Shimla and Dharamshala. In Shimla 92 VPT users and in Dharamshala SSA 65 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users :** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum per cent belong to general (55 %) in Shimla and 41 % in Dharmshala districts of Himachal Pradesh.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Shimla	General	55	59.8
	OBC	2	2.2
	SC	34	37.0
	ST	1	1.1
	Total	92	100.0
Dharamshala	General	41	63.1
	OBC	4	6.2
	SC	12	18.5
	ST	8	12.3
	Total	65	100.0

Description of gender specification depicts that 80 % and 70.7 % females in Shimla and Dharmshala districts respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Shimla	74	18	92
Dharamshala	46	19	65

Regarding their primary occupation data revealed that maximum users were home maker in Shimla. In Dharmshala maximum users were engaged in agriculture and home making. Educational qualification of VPT users was maximum 14 % having primary education in Shimla and 26 % were having upper primary in Dharmshala in current study.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	Shimla	Dharamshala
1.	Agriculture	27	26
2	Agriculture Casual Labour	5	1
3	Own Business	2	2
4	Self employed in Services	-	1
5	Salaried work	10	5
6	Homemaker	39	26
7	Non-working Adults	1	-
8	Students	5	-
9	Dependents	1	-
10	Non Agriculture Casual Labour	2	3
11	Self employed in household industry	-	1
	Total	92	65
	Educational Qualification		
1	Not literate	19	13
2	Functional literate	9	8
3	Primary	28	6
4	Upper Primary	11	17
5	High School	15	14
6	Intermediate	6	3
7	Graduate	3	2
8	Above Graduation	1	2
	Total	92	65

B. Particulars of Home of VPT Users

B.1. Type of House: Maximum users owned kucha houses in Shimla (56.5 %) as well as in Dharmshala (44.6 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Shimla	Kucha House	52	56.5
	Semi-pucca House	11	12.0
	Pucca House	29	31.5
	Total	92	100.0
Dharamshala	Kucha House	29	44.6
	Semi-pucca House	16	24.6
	Pucca House	20	30.8
	Total	65	100.0

- B.2. **Status of Electrification:** Electrification status of respondents reflects that majority are having electricity in their houses (97.8 %) in Shimla and in Dharmshala all users were having electricity connection available at their home.

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Shimla	Electricity not available	2	2.2
	Electricity available	90	97.8
	Total	92	100.0
Dharamshala	Electricity available	65	100.0

- B.3. **Distance of House from Pucca Road:** Looking to the proximity of their houses to pucca roads data revealed that 43.6 % of respondents in Shimla were staying more than 1 km away from the Pucca Road. Although 44.6 % users were staying 100 meters or less in Dharmshala but reach is very difficult in this hilly terrain.

Table I.B.3. Distance of house of Users from pucca Road

Telecom District	Distance	No. of Users	Percent
Shimla	100 metres or less	25	27.2
	More than 100 metres but less than 1 km	27	29.3
	More than 1 km	40	43.5
	Total	92	100.0
Dharamshala	100 metres or less	29	44.6
	More than 100 metres but less than 1 km	22	33.8
	More than 1 km	14	21.5
	Total	65	100.0

- B.4. **Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 54.3 % respondents were staying at more than 2 but less than 10 kms., in Shimla and 41 % respondents were staying at the distance of more than 10 km., in Dharmshala district of the state of Himachal Pradesh.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Shimla	Upto 2 km	19	20.7
	More than 2 but less than 10 km	50	54.3
	More than 10 km	23	25.0
	Total	92	100.0
Dharamshala	Upto 2 km	22	33.8
	More than 2 but less than 10 km	16	24.6
	More than 10 km	27	41.5
	Total	65	100.0

C. Details of Telephone Connectivity

- C.1. **Telephone availability at home:** Majority respondents in Shimla (77 %) as well as in Dharmshala district (81.5%) were having telephone at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No. of Users	Percent
Shimla	Telephone Not available	21	22.8
	Telephone available	71	77.2
	Total	92	100.0
Dharmshala	Telephone Not available	12	18.5
	Telephone available	53	81.5
	Total	65	100.0

- C.2. **Type of Telephone:** Among telephone owners at their home maximum 82.8 % were having mobiles in Shimla and 82.4 % in Dharmshala.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent	Percent of Cases
Shimla	Landline	15	17.2	21.1
	Mobile	72	82.8	101.4
	Total	87	100.0	122.5
Dharmshala	Landline	12	17.6	22.6
	Mobile	56	82.4	105.7
	Total	68	100.0	128.3

- C.3. **Details of Service Provider:** Regarding the details about service providers to the respondents BSNL and Airtel were found to provide services to maximum respondents in Shimla (40.2 %) but in Dharmshala Airtel was found providing services to maximum respondents 41.7 %.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent	Percent of Cases
Shimla	BSNL	35	40.2	49.3
	Airtel	35	40.2	49.3
	Vodafone	1	1.1	1.4
	Idea	3	3.4	4.2
	Reliance Communications	11	12.6	15.5
	Others	2	2.3	2.8
	Total	87	100.0	122.5
Dharmshala	BSNL	25	36.8	47.2
	Airtel	38	55.9	71.7
	Idea	1	1.5	1.9
	Reliance Communications	2	2.9	3.8
	Others	2	2.9	3.8
	Total	68	100.0	128.3

II. USAGE OF VPT

- A.1.** Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observation reflects that maximum 55.7 % VPT beneficiaries in Shimla have used VPT more than 6 times for local calls in last 60 days. In Dharmshala 50.8 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Shimla	No calls	3	3.3	2	2.2
	2 or less	13	14.1	4	4.3
	3 to 4	21	22.8	14	15.2
	5 to 6	17	18.5	18	19.6
	More than 6	38	41.3	54	58.7
	Total	92	100.0	92	100.0
Dharamshala	No calls	2	3.1	1	1.5
	2 or less	11	16.9	4	6.2
	3 to 4	24	36.9	9	13.8
	5 to 6	12	18.5	18	27.7
	More than 6	16	24.6	33	50.8
	Total	65	100.0	65	100.0

- A.2.** Usage of VPT for STD calls in last 60 days revealed that 88 % VPT beneficiaries have not made any STD call in Shimla and 98.5 % in Dharmshala district. This shows that VPT usage for STD call is very low in both the districts of Himachal Pradesh.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Shimla	No calls	81	88.0	81	88.0
	2 or less	-	-	-	-
	3 to 4	4	4.3	-	-
	5 to 6	2	2.2	4	4.3
	More than 6	5	5.4	7	7.6
	Total	92	100.0	92	100.0
Dharamshala	No calls	64	98.5	63	96.9
	2 or less	-	-	1	1.5
	3 to 4	-	-	-	-
	5 to 6	1	1.5	-	-
	More than 6	-	-	1	1.5
	Total	65	100.0	65	100.0

B. Distance of VPT from the House

- B.1. Data regarding distance of VPT from beneficiary's house reflects that 64.1 % in Shimla district were residing within 200 mts. Distance and in Dharmshala was true in 80 % cases. That suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B.1. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Shimla	Within 200 mts from residence	59	64.1
	200-500 mts from residence	19	20.7
	More than 500 mts	14	15.2
	Total	92	100.0
Dharamshala	Within 200 mts from residence	52	80.0
	200-500 mts from residence	11	16.9
	More than 500 mts	2	3.1
	Total	65	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A **Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Shimla district 41.3 % and in Dharmshala district 35.4 % users were involved in the decision it means peoples participation is not very high.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Shimla	No	54	58.7
	Yes	38	41.3
	Total	92	100.0
Dharamshala	No	42	64.6
	Yes	23	35.4
	Total	65	100.0

- B1. **Availability of VPT service:** It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Shimla district VPTs were mostly found reliable as respondents communicated that in 81.5 % cases no fault, 82.6 % available (not busy), 89.1 % open and 76.1 % not engaged during last month. Similarly, table shows that in Dharmshala district also VPT service were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent
Shimla	0	75	81.5	0	76	82.6	0	82	89.1	0	70	76.1
	1	4	4.3	1	6	6.5	1	5	5.4	1	5	5.4
	2	11	12.0	2	6	6.5	2	1	1.1	2	10	10.9
	3	2	2.2	3	2	2.2	3	2	2.2	3	4	4.3
				4	1	1.1	4	2	2.2	4	1	1.1
				5	1	1.1				5	2	2.2
	Total	92	100.0	Total	92	100.0	Total	92	100.0	Total	92	100.0
Dharamshala	0	40	61.5	0	60	92.3	0	55	84.6	0	37	56.9
	1	10	15.4	1	2	3.1	1	6	9.2	1	12	18.5
	2	10	15.4	2	2	3.1	2	1	1.5	2	8	12.3
	3	1	1.5				3	1	1.5	3	1	1.5
	4	3	4.6				5	1	1.5	4	2	3.1
	6	1	1.5	5	1	1.5	6	1	1.5	5	2	3.1
										6	1	1.5
										8	1	1.5
										9	1	1.5
	Total	65	100.0	Total	65	100.0	Total	65	100.0	Total	65	100.0

B.2. Same trend could be seen in both the districts of Himachal Pradesh in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of fault	No. of Users	Per cent	No. of fault	No. of Users	Per cent	No. of fault	No. of Users	Per cent	No. of fault	No. of Users	Per cent
Shimla	0	76	82.6	0	78	84.8	0	85	92.4	0	72	78.3
	1	3	3.3	1	3	3.3	1	3	3.3	2	13	14.1
	2	9	9.8	2	8	8.7	2	3	3.3	3	4	4.3
	3	3	3.3	3	3	3.3	3	1	1.1	4	2	2.2
	4	1	1.1							5	1	1.1
	Total	92	100.0	Total	92	100.0	Total	92	100.0	Total	92	100.0
Dharamshala	0	47	72.3	0	62	95.4	0	56	86.2	0	40	61.5
	1	3	4.6	1	1	1.5	2	6	9.2	1	10	15.4
	2	8	12.3	2	1	1.5	3	2	3.1	2	4	6.2
	3	4	6.2	3	1	1.5	4	1	1.5	3	8	12.3
	4	2	3.1							6	2	3.1
	5	1	1.5							8	1	1.5
	Total	65	100.0	Total	65	100.0	Total	65	100.0	Total	65	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following table. Majority VPTs in Shimla were not displaying tariff, grievance redressal number and toll free numbers. But no custodian in both the districts were having book for complaint registration. In Dharamshala district not a single VPT was found having displayed grievance, Toll free numbers and tariff rate at the booth.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent
Shimla	No	8	57.14	8	57.14	8	57.14	14	100.00
	Yes	6	42.87	6	42.87	6	42.87	-	-
	Total	14	100.0	14	100.0	14	100.0	14	100.0
Dharamshala	No	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that except one all the places of installation was found convenient in Shimla as well as in Dharmshala.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Shimla	Sarpanch house	-	1	-	1
	Shop	-	7	19	26
	Others	1	24	40	65
	Total	1	32	59	92
Dharamshala	Anganwadi	-	-	10	10
	Sarpanch house	-	2	3	5
	Shop	-	12	10	22
	Others	1	13	14	28
	Total	1	27	37	65

- B. **Convenience of technology used in VPT:** Observations in Shimla and Dharamshala districts reflect that all the VPT users found the technology used in VPT convenient and very convenient. Except three VPTs in Shimla and one VPT in Dharamshala, all were using landline technology in these districts.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Shimla	Landline	-	40	47	87
	Mobile	-	3	2	5
	Total	-	43	49	92
Dharamshala	Landline	-	39	25	64
	Mobile	-	1	-	1
	Total	-	40	25	65

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT in Himachal Pradesh. All users in Shimla shared that WLL FX technology used in their VPTs is convenient and very convenient. In Other district also users all were feeling that this technologies is quite convenient. In Dharmshala district 98 users in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
Shimla	WLL FX	-	35	37	72
	Total	-	35	37	72
Dharamshala	WLL FX	-	14	16	30
	WLL FT	-	-	1	1
	Total	-	14	17	31

- D. Level of convenience with type of instrument:** It is showed in the following table that almost all feel convenient about the instrument used in VPT.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of Instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Shimla	Dial Key Board	-	-	1	1
	Single touch Key board	5	34	49	88
	Cordless	-	1	2	3
	Total	5	35	52	92
Dharamshala	Single touch Key board	-	28	35	63
	Cordless	-	-	2	2
	Total	-	28	37	65

- E. Clarity of Voice:** It is an important indicator of quality assessment of installed VPT. In Shimla district 88 VPT users had expressed that clarity of voice is always convenient and very convenient. Similarly in Dharmshala all users were having same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of Voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Shimla	Rarely	3	1	1	5
	Often	1	6	4	11
	Always	-	33	43	76
	Total	4	40	48	92
Dharamshala	Never	-	-	1	1
	Rarely	-	1	-	1
	Often	1	14	2	17
	Always	-	22	24	46
	Total	1	37	27	65

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. About Sixty per cent users in district Shimla and 69.2 % users in Dharmshala district of Himachal Pradesh shared that connectivity of VPT service is reliable. Although 35.9 % users in Shimla and 29.2 % users in Dharmshala district communicated that VPT service is highly reliable. So very few were having feeling that VPT is not reliable in their village.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Shimla	Not reliable	3	3.3
	Reliable	56	60.9
	Highly reliable	33	35.9
	Total	92	100.0
Dharamshala	Not reliable	1	1.5
	Reliable	45	69.2
	Highly reliable	19	29.2
	Total	65	100.0

V. TIMELINESS OF VPT

- A.** Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 76.1 % respondents in Shimla and 84.6 % in Dharmshala district found VPT always available in their area. Similarly VPT was never closed in both the districts of Himachal Pradesh.

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Shimla	During day time	3	3.3
	During night	1	1.1
	Always	70	76.1
	Fixed timings	18	19.6
	Total	92	100.0
Dharamshala	During day time	3	4.6
	Always	55	84.6
	Fixed timings	7	10.8
	Total	65	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 75 % users in Shimla were paying in case of VPT usage, 39.1% were paying cash. In Dharamshala district 81.5 % users were paying, 50.8 % were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Shimla	No	23	25.0
	Yes	69	75.0
	Total	92	100.0
Dharamshala	No	12	18.5
	Yes	53	81.5
	Total	65	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
Shimla	Cash	36	39.1
	Credit	5	5.43
	Partly cash, partly credit	28	30.4
	Non Payment	23	25.0
	Total	92	100.0
Dharamshala	Cash	33	50.8
	Credit	6	9.23
	Partly cash, partly credit	14	21.5
	Non Payment	12	18.5
	Total	65	100.00

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Dharmshala district there was no social restriction but in Shimla district only 1 % VPT users expressed some social restriction. Particularly users belonging to lower caste face restriction in VPT use.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Shimla	No	91	98.9
	Yes	1	1.1
	Total	92	100.0
Dharamshala	No	65	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Shimla district was less than Rs 250 in 42.9% cases of VPT but on the other side one vpt was having high ARPU more than Rs 1000 also. In Dharamshala ARPU was less than Rs 250 in 70% VPTs of the district.

Table VI. B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
Shimla	Less than 250	6	42.9
	250-500	3	21.4
	501-750	2	14.3
	751-1000	2	14.3
	More than 1000	1	7.1
	Total	14	100.0
Dharamshala	Less than 250	7	70.0
	250-500	2	20.0
	501-750	1	10.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Shimla	No	46	50.0
	Yes	46	50.0
	Total	92	100.0
Dharamshala	No	38	58.5
	Yes	27	41.5
	Total	65	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Shimla district (50 %) VPT users were of the opinion that VPT usage has positive effect on household income but in other district (Dharmshala) of the state it was observed that 41.5 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Shimla	No change reported	46	50.0
	Upto 5 percent	14	15.2
	5 to 10 percent	9	9.8
	10 to 20 percent	10	10.9
	More than 20 percent	13	14.1
	Total	92	100.0
Dharamshala	No change reported	38	58.5
	Upto 5 percent	10	15.4
	5 to 10 percent	6	9.2
	10 to 20 percent	9	13.8
	More than 20 percent	2	3.1
	Total	65	100.0

Further enquiring about the percent change in income revealed that 14.1 % of users in Shimla expressed more than 20 % increase and in Dhramshala 13.8% shared 10-20 % increase in their household income.

- B. Improvement in Connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Shimla	No improvement	5 (5.4)	31 (33.7)	46 (50.0)
	Marginal Improvement	37 (40.2)	32 (34.8)	25 (27.2)
	Significant improvement	50 (54.4)	29 (31.5)	21 (22.8)
	Total	92 (100.0)	92 (100.0)	92 (100.0)
Dharamshala	No improvement	2 (3.1)	32 (49.2)	40 (61.5)
	Marginal Improvement	32 (49.2)	25 (38.5)	16 (24.6)
	Significant improvement	31 (47.7)	8 (12.3)	9 (13.8)
	Total	65 (100.0)	65 (100.0)	65 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Shimla	No improvement	21 (22.8)	23 (25.0)	23 (25.0)	22 (23.9)
	Marginal Improvement	23 (25.0)	28 (30.4)	28 (30.4)	29 (31.5)
	Significant improvement	48 (52.2)	41 (44.6)	41 (44.6)	41 (44.6)
	Total	92 (100.0)	92 (100.0)	92 (100.0)	92 (100.0)
Dharamshala	No improvement	16 (24.6)	15 (23.1)	15 (23.1)	15 (23.1)
	Marginal Improvement	12 (18.5)	17 (26.2)	17 (26.2)	16 (24.6)
	Significant improvement	37 (56.9)	33 (50.8)	33 (50.8)	34 (52.3)
	Total	65 (100.0)	65 (100.0)	65 (100.0)	65 (100.0)

		Shimla	Dharamshala
a.	Personal communication	60% Significant	47.7% Significant
b.	Business networking	32% Marginal	49.2% No
c.	Emergency Management		
	1. Medical	48% Significant	48
	2. Fire	44.6% Significant	
	3. Police	44.6% Significant	
	4. Natural Calamities	44.6% Significant	
d.	Official Purposes	50% No	61.5% no

To Add 56.9% Significant , 50.8% Significant, 50.8% Significant, 50.2% Significant

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

Information on	Shimla					Dharamshala				
	Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a. Employment Opportunity	71 (77.2)	5 (5.4)	12 (13.0)	4 (4.3)	92 (100.0)	62 (95.4)	2 (3.1)	1 (1.5)	-	65 (100.0)
b. Market	42 (45.7)	11 (12.0)	19 (20.7)	20 (21.7)	92 (100.0)	58 (89.2)	5 (7.7)	1 (1.5)	1 (1.5)	65 (100.0)
c. Development & Welfare scheme of Govt. on										
1. Health	63 (68.5)	11 (12.0)	11 (12.0)	7 (7.6)	92 (100.0)	60 (92.3)	3 (4.6)	2 (3.1)	-	65 (100.0)
2. Education	66 (71.7)	12 (13.0)	8 (8.7)	6 (6.5)	92 (100.0)	60 (92.3)	4 (6.2)	1 (1.5)	-	65 (100.0)
3. Related to Agrl.	58 (63.0)	12 (13.0)	10 (10.9)	12 (13.0)	92 (100.0)	60 (92.3)	3 (4.6)	1 (1.5)	1 (1.5)	65 (100.0)
4. Others	67 (72.8)	12 (13.0)	8 (8.7)	5 (5.4)	(100.0)	61 (93.8)	3 (4.6)	1 (1.5)	-	65 (100.0)
d. Natural Calamity / Weather forecasting	68 (73.9)	8 (8.7)	14 (15.2)	2 (2.2)	92 (100.0)	59 (90.8)	3 (4.6)	3 (4.6)	-	65 (100.0)
e. Rail / Road transport	70 (76.1)	4 (4.3)	14 (15.2)	4 (4.3)	(100.0)	59 (90.8)	3 (4.6)	3 (4.6)	-	65 (100.0)
f. Health Services	56 (60.9)	12 (13.0)	19 (20.7)	5 (5.4)	92 (100.0)	55 (84.6)	4 (6.2)	6 (9.2)	-	65 (100.0)
g. Agrl. related	49 (53.3)	14 (15.2)	13 (14.1)	16 (17.4)	92 (100.0)	58 (89.2)	3 (4.6)	4 (6.2)	-	65 (100.0)
h. Business related	53 (57.6)	12 (13.0)	12 (13.0)	15 (16.3)	92 (100.0)	60 (92.3)	1 (1.5)	4 (6.2)	-	65 (100.0)

Table revealed that VPT is not being used as expected by policy planners of India for access to information regarding different aspects (refereed in the table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. **VPT Location:** VPT location was felt highly satisfactory by 52.2 % users in Shimla and Satisfactory by 64.6 % in Dharmshala district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Shimla	Not satisfactory	1	1.1
	Satisfactory	43	46.7
	highly satisfactory	48	52.2
	Total	92	100.0
Dharamshala	Satisfactory	42	64.6
	highly satisfactory	23	35.4
	Total	65	100.0

- B. **VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among about 100 % users in Shimla and but in Dhramshala only 27.7 % users were satisfied regarding accessibility in terms of time.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Shimla	Not satisfactory	1	1.1	-	-
	Satisfactory	42	45.7	49	53.3
	Highly satisfactory	49	53.3	43	46.7
	Total	92	100.0	92	100.0
Dharamshala	Not satisfactory	47	72.3	1	1.5
	Satisfactory	18	27.7	49	75.4
	Highly satisfactory	-	-	15	23.1
	Total	65	100.0	65	100.0

- C. **Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined satisfactory by around 92 % users in Shimla and 97 % in Dharmshala.

Table VIII.C. Level of satisfaction about repair and maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Shimla	Not satisfactory	4	4.3	2	2.2
	Satisfactory	49	53.3	48	52.2
	Highly Satisfactory	39	42.4	42	45.7
	Total	92	100.0	92	100.0
Dharamshala	Not satisfactory	2	3.1	2	3.1
	Satisfactory	50	76.9	51	78.5
	Highly Satisfactory	13	20.0	12	18.5
	Total	65	100.0	65	100.0

- D. **Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 75.5 % users in Shimla and among 81.5 % users of Dharmshala.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Shimla	Satisfactory	23	25.0
	Highly satisfactory	69	75.0
	Total	92	100.0
Dharamshala	Not satisfactory	1	1.5
	Satisfactory	11	16.9
	Highly satisfactory	53	81.5
	Total	65	100.0

- E. **Other Service Provider:** The response about level of satisfaction of other service providers disclosed 55.4 % dissatisfaction in Shimla as well as 60% in Dharmshala.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Shimla	Not satisfactory	51	55.4
	Satisfactory	32	34.8
	Highly satisfactory	9	9.8
	Total	92	100.0
Dharamshala	Not satisfactory	39	60.0
	Satisfactory	24	36.9
	highly satisfactory	2	3.1
	Total	65	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all most all the custodian of VPT were making payment regularly in the both the districts

Table IX. Regularity in payment

Telecom District	Regularity	No. of Custodians	Percent
Shimla	Yes	14	100.0
Dharamshala	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 64 % users in Shimla district have resolved problems about VPT location internally and in Dharmshala 69 % VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Shimla	Internally	59	64.1
	Externally	3	3.3
	Not resolved	10	10.9
	Not aware	20	21.7
	Total	92	100.0
Dharamshala	Internally	45	69.2
	Externally	3	4.6
	Not resolved	13	20.0
	Not aware	4	6.2
	Total	65	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 63 % internally in Shimla and 38 % in Dharmshala district. Problem solution of quality accessibility was also viewed solved internally among 64.1 % users in Shimla and 52.3 % in Dharmshala.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Shimla	Internally	58	63.0	59	64.1
	Externally	8	8.7	14	15.2
	Not resolved	16	17.4	10	10.9
	Not aware	10	10.9	9	9.8
	Total	92	100.0	92	100.0
Dharamshala	Internally	38	58.5	34	52.3
	Externally	8	12.3	13	20.0
	Not resolved	19	29.2	18	27.7
	Not aware	-	-	-	-
	Total	65	100.0	65	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 77.8 % and 13.8 % users were not aware in Shimla and Dharmshala districts respectively. Similarly in the case of the problem of quality repair & maintenance 50 % and 33.8 % of VPT users have resolved internally in Shimla and Dharmshala districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Shimla	Internally	20	21.74	46	50.0
	Externally	1	1.08	24	26.1
	Not aware	71	77.18	9	9.8
	Not resolved	-	-	13	14.1
	Total	92	100.0	92	100.0
Dharamshala	Internally	24	36.9	22	33.8
	Externally	14	21.5	13	20.0
	Not resolved	18	27.7	19	29.2
	Not aware	9	13.8	11	16.9
	Total	65	100.0	65	100.0

D. Problem resolution about the payments to the custodians

The problem of payment to custodian solved internally was viewed by 45.7 % users in Shimla and 35.4 % in Dharmshala district.

Table X.D. Problem resolution related to payments to the custodians

Telecom District		No. of Users	Percent
Shimla	Internally	42	45.7
	Externally	13	14.1
	Not resolved	7	7.6
	Not aware	30	32.6
	Total	92	100.0
Dharamshala	Internally	23	35.4
	Externally	13	20.0
	Not resolved	15	23.1
	Not aware	14	21.5
	Total	65	100.0

E. Problem resolution about the other alternate service providers

47 % VPT users in Shimla and 43 % in Dharmshala were not aware about the problem resolution in Shimla and Dharmshala districts.

Table X.E. Problem resolution related to other alternate service providers

Telecom District		No. of Users	Percent
Shimla	Internally	31	33.7
	Externally	11	12.0
	Not resolved	6	6.5
	Not aware	44	47.8
	Total	92	100.0
Dharamshala	Internally	19	29.2
	Externally	7	10.8
	Not resolved	11	16.9
	Not aware	28	43.1
	Total	65	100.0

SWOT ANALYSIS

DISTRICT : SHIMLA

(1) Village Darbar Balsan

The village is situated 42 kilometres away from Theog and two and a half kilometers away from State Highway. From the pucca road, the house in which VPT was situated was 500 metres down hill. The Gram Sabha selected Mr. Bhagat Ram as the custodian since he was neither educated nor employed and was in the look out for some source of income. Moreover, discussion with BSNL officials revealed that that since he belonged to the SC category, it was decided to give preference to him, and they reported that they did not succumb to the pressures from upper caste villagers.

Strengths

- SC household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the verandah of the house in a separate cabin
- WLL is convenient to all – used by men, women and the elderly
- VPT is located near to upper primary school in the village - used by all including teachers and staff of the school
- Incoming calls were also received in WLL

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Absence of billing machine or stopwatch to monitor the duration of call made
- Shortage of BSNL Staff for repair is reported – only two line man in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and long distance
- WLL is connectivity dependent on weather
- Access during winter is difficult due to blockades in the road due to snowfall

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility

- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation

(2) Village Pohal

Village Pohal is situated 35 kilometres away from Theog and is 10 kilometres uphill from the State Highway on kuccha road. The village is a small hamlet of around 13 houses. Most of the house owners live in Shimla and come here occasionally to supervise their orchards. It is mostly their parents, relatives, security guards and labourers who live in the village. The village falls under Bakhol Panchayat and the Gram Pradhan is Mr. Rajendra Singh. There is a general body meeting of the Gram Panchayat every three months and it was during one of these meetings that it was decided to make Mr. Suresh Chauhan as the custodian of the VPT. Shri Chauhan is a cultivator (orchard) who has passed high school. On observation, it was obvious that Mr. Chauhan is quite well off and earned good income from his orchard. In other words, VPT was not a source of livelihood for him.

Strengths

- Custodian stays in the middle of the village
- The technology used is WLL – convenient to use¹
- WLL is accessed and used by all
- Repair and maintenance is done in 24 hours
- WLL instrument has internal battery
- The VPT has STD facility

Weakness

- Mode of payment was not clear²
- Display board provided by BSNL was lost in rough weather and has not been replaced
- Low recharge of battery earlier, now replaced with internal battery instrument
- Receipt of bills are not made in time³

¹ Even though the custodian's parents are usually available at home, whenever, the family goes out of town the WLL is kept outside the house in the work area in custody with the security guard.

² The custodian claimed that he does not charge his users (this was not corroborated by the beneficiaries).

³ He also pointed out that for the last month he did not receive bills, but as per the directive from the exchange, made payments. Such anomalies need to be rectified and proper billing to be ensured

- Delay in receipt of bills lead to less time interval for the custodian to pay bill leading to late payment and fee
- Since the village is situated uphill and far from post office, there are at times postal delays and the bills are sometimes misplaced (when sent through villagers, school children)
- Line Man is overburdened with the charge of five panchayats leading to delay in rectifying the complaints on time

Opportunities

- There is need to strengthen the VPT scheme through additional benefits such as internet
- It is necessary to ensure proper billing with respect to time and amount

Threats

- Extremely low use of VPT due to multiple phone connections in households– BSNL and private service providers – mobile and landline
- Caste hierarchy observed to be prevalent in a subtle way⁴

(3) Village Kuddu

The headquarter of the Tehsil, Jubbal was situated 32 kilometres from Kotkhair. The village was 20 kilometres away from Jubbal Headquarters (Link Road, no state or national highway), near to Uttaranchal border. The VPT was a landline number established in October 2005. It was situated in the custodian's house near to the road (50 metres). Mr. Rewat Ram was a school teacher. However, it was his brother, Mr. Kewal Ram who responded to our queries. Mr. Kewal Ram also lives in the same house. It is a joint family.

Strengths

- SC household is the custodian of the VPT ensuring equity and social justice
- Display board was available⁵
- Used by villagers during emergency⁶
- VPT also used for receiving incoming calls

Weakness

- Display board not exhibited always
- Most of the villagers were unaware that the phone was a VPT⁷

⁴ Mr. Mujeeb, the Line Man was asked to come to the back door of the house while the research team from CSD entered through the main door

⁵ The brother of the custodian responded that he had put it up on receiving information that CSD team is visiting the house for survey

⁶ For instance the custodian pointed that a week ago, there was a death in the village and the villagers including the upper caste men were in his home, making calls until late in the night. However, Detailed Call Rate (DCR) from Telephone Exchange indicated that during the last three months (February, March and April), the calls from this telephone number amounted to only Rs.3/-.

- Since it is a landline connection there are problems in connectivity due to breakage of cable
- There was no STD facility - Removal of '95' dialing has in effect led to a situation that only local calls are made from VPT
- BSNL officials pointed out that since it was a caste ridden village, the use of VPT by villagers were low
- Low paying capacity of customers
- Non-payment of charges to custodian due to lack of awareness (customers assume its free of cost) and social obligations; burden on custodian

Opportunities

- Involvement of community in selection of the VPT custodian is necessary to make the performance more effective
- The selection should be made preferably in Gram Panchayat meetings with common consent
- Selection of custodian should be synchronized with the socio-economic profile of the village
- Increased awareness among the villagers about the utility of VPT need to be focused on both by Gram Panchayat and BSNL officials
- Provision of STD facility along with additional benefits such as fax, internet will strengthen the scheme

Threats

- Competition exist from private service providers such as Tata, Idea, Reliance, Airtel, etc – mobiles, landlines, STD/PCOs and coin box
- There is profuse availability and better service of private players in terms of connectivity and clarity in billing
- Non-payment of bills by the custodian is leading to difficulties to customers as well as officials
- Social stigma is leading to less frequent use of the VPT

(4) Village Arhal

Rohru Tehsil is situated approximately 130 kilometres away from Shimla. As per the SDO and JTO at the telephone exchange in Rohru, since the introduction of mobiles and especially various schemes such as Student cards (of BSNL), there is less use of VPT. However, at least five years ago, VPTs used to be the lifeline of every village. Moreover, SDO pointed out that

⁷ Villagers considered it as a personal phone and hence did not make calls. During the canvassing of non-beneficiaries who were residing just beside the house (shop owners), it was revealed that they were unaware of its existence until we came for canvassing. Thus, this case was a classic example of how lack of information about VPT led to its underutilization.

while schemes are being implemented it should be kept in mind that the geographical terrain of Himachal Pradesh is entirely different from that of other states. For example, he cited that at the BSNL headquarters it is decided that Rs. 2 lakhs will be allotted for the laying off 4 kilometres of cable. However, in the terrain of Himachal it is not feasible with its curves and hairpin curves at every 100 metres. This, he indicated, need to be taken into account while framing any policy at the central level. Arhal village is situated 12 kilometres (uphill, of which 4 kilometres were kuccha road) away from Rohru town. The VPT (landline) was installed in a shop owned by a villager, Mr. Khem Raj, situated strategically on the road.

Strengths

- The VPT is situated on the road side in a general stores shop
- Display board is kept prominently on the roof of the shop
- This has led to increased awareness about the VPT and its use
- The proactive nature of the Gram Panchayat and BSNL officials has also led to its increased use
- VPT is used irrespective of the widespread prevalence of mobiles and landlines due to its strategic location on the road in the shop
- Villagers opined that making calls were cheaper from VPT and hence they still used it
- VPT is used by villagers not only for personal communication but also for business purposes especially during the peak agricultural season to receive information about the rates of products, mostly apple in the market

Weakness

- Since it is a landline, there is the risk of cable breakage and theft
- Approach road to the village is poor
- There is no STD facility
- There is no billing machine or stop watch to keep check on the duration of the call

Opportunities

- Introduction of STD facility or 95 dialing
- Billing machine or stopwatch to keep check on the duration of the call to be supplied by BSNL or to be provided at subsidized rates
- Introduction of internet and fax could be advantageous to the villagers

Threats

- Competition from other service providers such as Airtel
- Inaccessible road is leading to difficulties in prompt service delivery especially during bad weather

(5) Village Sandosu

The VPT was recently installed in this village on 29th January 2009. The village was situated 20 kilometres away from the State High way. The beautiful Chitkul mountain range was visible on the way to the village. The VPT is situated in the custodian, Rocky Chauhan's home. Mr. Rocky Chauhan runs own business in the village. On observation, one could see that the household was pretty well off and were not dependent on the VPT.

Strengths

- The technology used is WLL – increased mobility and connectivity
- Selection of the custodian was made through Gram Panchayat which was corroborated by the Mahila Mandal Pradhan
- VPT also used for receiving incoming calls
- It was used predominantly by ladies. They observed that usually mobiles remain with the men folk and hence use VPT frequently
- Also used by the customers when the balance in mobile is low

Weakness

- VPT is located inside the kitchen of the house leading to restricted entry in terms of gender and caste
- The users are not paying (mostly women relatives of the custodian) the custodian
- Since it was a new connection, display board was not yet supplied
- Prolonged power cut lead to non-recharge of the battery rendering the VPT dead
- Recharge capability of battery is also low; to be recharged 2-3 times a day
- Lack of STD is also reported as the weakness of VPT especially after the removal of 95 dialing
- SC households were completely unaware of the existence of VPT

Opportunities

- Introduction of STD, internet is necessary to increase the use of VPT
- WLL with internal battery which has longer recharge capability to be introduced

Threats

- Lack of STD facility or 95 dialing is negatively affecting the use of VPT
- This is compounded by the widespread prevalence of mobiles under different plans and landlines
- Social hierarchies to be managed effectively through proactive role of Gram Panchayat and BSNL officials
- Prolonged power cuts to be managed effectively through changes in technology such as better life of battery

(6) Villages Ratanpur

Rampur is situated 150 kilometres away from Shimla. In Rampur Tehsil, the research team had to visit three villages namely Ratanpur, Khaneri and Guso (within a radius of 10-15 kilometres) to ascertain the use of VPT. This was necessitated due to the abysmally low patronage of VPT. **In Guso, Ratanpur and Khaneri, it was obvious during the field work that the VPTs were being predominantly used by custodians for personal use since the widespread introduction of mobiles. The SDO, Rampur also pointed out that since the introduction of BSNL student mobile, even the patronage for ordinary landlines and WLL have come down and hence the competition is not only from private service providers but also from within.**

Strengths

- WLL technology is used widely; former landline connections are replaced with WLL under Bharat Nirman
- This has led to greater connectivity surpassing the problems of cable theft and breakage
- WLL enables the VPT to be mobile, in Guso, the custodian brings it to shop during day and takes it home to the village in the night
- In Ratanpur and Guso, selection of custodian through Gram Panchayat

Weakness

- VPT is used predominantly by custodian and his family (Ratanpur and Khaneri)
- In Khaneri, the VPT was allotted due to links of the custodian with BSNL
- Prolonged power cut lead to non-recharge of the battery rendering the VPT dead
- The capability of battery to recharge is also low; to be recharged 2-3 times a day
- Non-provision of STD is also reported as the weakness of VPT especially after the removal of 95 dialing
- There was no display board

Opportunities

- VPT still used by villagers as ‘caller’ of last resort
- The scheme to be strengthened by introducing coin box system, billing machine/stop watch
- Additional facilities to be granted such as STD, fax, internet to increase its viability

Threats

- Personal mobile connections lead to non-use of VPT⁸
- Lack of power supply for prolonged period render WLL phone non-operational.

⁸ In Khaneri, there were 10 mobile connections within the custodian’s house

(7) Village Kingal

The VPT was centrally located in the Kingal hairpin Junction on the Highway. It was kept in a kirana shop of the custodian's brother, Mr. Surendra Kumar. The official custodian (Mr. Chamanlal) had own shop catering to mobiles and accessories, two shops away. They belong to the SC category. The village has a population of 323.

Strengths

- The VPT is situated centrally in a general stores shop on the state highway
- It is used not only by villagers and shop keepers, but also by travellers
- Technology used is WLL – less frequency of maintenance and repair
- SC individual is the custodian thereby ensuring social justice and equity
- The only VPT canvassed which had display board written in Hindi

Weakness

- Abysmally low patronage due to competition
- Irregularities in billing was reported
- There was not enough time between receipt of bill and payment date

Opportunities

- Introduction of STD facility
- Billing machine or stopwatch to monitor the duration of call need to provided
- Separate cabin to ensure privacy of customers is required
- Clarity in billing is required
- Longer time interval between receipt of bill and payment is called for

Threats

- Proliferation of mobiles, coin box, STD booth by private and BSNL service providers
- Profuse availability and better service of private players in terms of connectivity and clarity in billing
- Low levels of use leading to non-maintenance of VPTs by custodians

(8) Village Bazaar Mashobra and Jalel

The VPT in village in Bazaar Mashobra in Mashobra Tehsil was situated in a shop in the midst of a market place in a small lane. The shop served tea and tiffins. Though frequently visited by customers since it was in the midst of the town, it was primarily used by the custodian, Mr. Maghu Ram and his family and occasionally by his customers in the tea shop. Hence, another village **Jalel** was also canvassed in addition to this. Village Jalel was situated 18 kilometres away from Shimla town. The CSD team was informed by the Line Man that in Mashobra Tehsil, interestingly **every village has a VPT rather than every revenue village. Thus, we found that within a radius of three kilometers there was three VPTs in the villages of**

Bathun, Jalel and Lagha. Jalel was a small village of about 10-12 households. Chandu Lal was the custodian of the VPT and his primary occupation was cultivation. He belonged to the General category

Strengths

- Villagers were aware of the presence of VPT
- VPT was widely used by villagers, especially migrant labourers in Jalel
- The display board with tariff rates, toll numbers were displayed prominently in both villages
- Technology used is WLL (in Jalel) – convenient to use, since it can be carried from one place to another

Weakness

- The VPT is used by the nearby households of around 10-15
- There are three VPTs within 3 kilometers
- There was no provision of STD
- Lack of billing machine or stop watch was problematic in proper billing

Opportunities

- VPT use can be strengthened through additional provisions such as STD
- ISD would also be useful since most of these migrants are from Nepal
- Mobility of WLL help circumvent social hierarchies⁹

Threats

- VPT itself is becoming a major competitor
- In addition, the invasion of mobiles and various plans too are creating neck throat competition

(9) Village Lagha

Village Lagha is situated approximately 1 km away from Jalel. It was recently installed on 6th February 2009. The custodian of the VPT is Mr. Roshan Lal. However, the VPT is kept in his sister-in-law's house 300-500 metres away.

Strengths

- Technology used is WLL – convenient to use, since it can be carried from one place to another

⁹ Women in the household, on probing, pointed out that if a lower caste person wants to make call, since it is a WLL, they can easily take it out and allow him to make the call (thereby avoiding his entering the house).

Weakness

- The VPT is used by the nearby households of around 4 - 5
- There are three VPTs within 3 kilometers
- There was no provision of STD
- The battery load was very weak
- There were problems in billing¹⁰

Opportunities

- Provision of STD facility, internet to increase patronage

Threats

- BSNL student scheme is perceived as the major spoiler to the reduced use of VPT
- VPT is used more as a personal phone rather than a public utility

(10) Village Goru Kanawan

Village Goru Kanawan is situated around 18 kilometres away from Shimla. From Soghi, one has to travel around 5 kilometres on kuccha road to reach the village. The village has a total population of about 16 households. The custodian Mr. Narayan Dutt was the father of the ward member. The ward member, Mr. Pradeep Kumar indicated that gram Sabha had passed the resolution. In the meeting it was decided to initially install it in a panchayat on the periphery/border, however, there was no consensus as to who would become the custodian. Since Goru Kanawan/Pajel was centrally located, it was decided to install it in the ward member's house.

Strengths

- Technology used is WLL
- There was provision to make STD
- The house of the custodian located conveniently in the middle of the village

Weakness

- There was no display board
- There exist non-payment of charges to custodian due to lack of awareness (customers assume its free of cost) and social obligations; this leads to burden on custodian
- There is inconvenience for customers especially women to talk private matters
- WLL connections do not function in the absence of power
- Battery charge do not last more than 6 to 12 hours
- Lack of recharging leads to need for replacing the battery

¹⁰ With reference to billing, in Jalel and Lagha, they complained that even though they pay the due on time, it gets reflected in the next bill. The BSNL officials pointed out that ever since billing was centralized at Chandigarh, this problem as risen. Even before the receipt of the billed amount is entered and the information is passed on to Chandigarh, the next bill is printed. This has led to lots of confusion among consumers (this is not particular to VPT alone).

Opportunities

- Additional facilities such as internet may be provided
- WLL with internal battery which requires less hours of charging may be given
- Display board to be given which should be displayed not only in front of the house but also on the road since the house is situated around half a kilometer downhill

Threats

- Lack of proper approach road to villages (despite the initiation of Pradhan Mantri Grameen Sadak Yojana) lead to low levels of monitoring from both sides (BSNL and the custodian)
- Lack of BSNL field staff and non-availability of vehicles for repair and maintenance leads to non-functioning of VPT.

(11) Village Jangal Tarab

The VPT in Village Jangal Tarab is situated in the Tara Devi Temple. The Temple is around 5 kilometres away from Goru Kanawan. The VPT is issued in the name of Tara Devi Temple Trust.

Strengths

- VPT is situated in a public place
- WLL technology is used
- It is used by temple officials and employees
- Separate box is kept to collect the revenue arising out of the use of VPT
- VPT is used for official communication, rarely used for personal purposes

Weakness

- There was no display board¹¹
- There was no provision for STD
- Neither devotees nor the shopkeepers near the temple premises were not aware of its presence or use which could have otherwise justified the presence of VPT in a religious place

Opportunities

- Introduction of STD, fax and internet could be useful for the officials as well as the devotees
- Introduction of coin box to facilitate its use for devotees

¹¹ On query, the officials indicated that they cannot display anything within the temple premises. However, one could see huge boards outside the entrance of the temple near the stairs indicating temple rules and regulations; probably the temple officials may be directed to indicate the presence of VPT in the office such that general public too will benefit.

Threats

- Introduction of additional provisions might lead to difficulties in regulating its use
- Since it is in an isolated place (no habitations nearby) it was solely used for official use only.

DISTRICT : DHARAMSALA, KANGRA

(1) Village Narwana

Village Narwana in Kangra Tehsil is situated around 10-12 kilometres away from Dharamsala. The village is only one kilometer away from the main road. The custodian was Mr. Baldev Singh who ran a general store attached to his house where there is also an anganwadi. The custodian was away and his spouse was not so forthcoming in the beginning. We had to explain to her several times about the purpose of the survey and had to convince her to give a list of beneficiaries. She pointed out that every household in the village (around 90 households) has mobile as well as landline connection at home. Hence, they use this phone only during emergency or when their balance in mobile is low/landline is out of order.

Strengths

- Selection of the custodian was made in the Gram Panchayat
- Repair and maintenance was done by BSNL

Weakness

- VPT was used sparingly by villagers
- Villagers were completely unaware that it was a public utility, they considered it as a personal phone
- It was used occasionally by labourers and anganwadi workers
- VPT remained faulty a number of times last month due to break in cable (it was a landline)
- There was no display board

Opportunities

- Use of VPT can be increased through enhanced awareness¹²
- Provision of STD facility is required
- Provision of display board with details of tariff and toll free numbers is also needed

¹² During the discussion with the Pradhan, Mr. Hansraj, said that he would raise the issue in the next Panchayat meeting. He agreed that greater awareness about the VPT is required and would direct the custodian to keep it either in the shop or in the anganwadi for better accessibility.

Threats

- Competition from individual connections as well as STD/PCO operators
- Widespread prevalence of mobiles – private and BSNL – under different plans

(2) Village Drumman

Village Drumman is situated approximately 28 kilometres away from the State Highway. The VPT is run by Mr. Baljit Singh and is attached to his Kirana store. He has STD facility (first instance in Dharamsala) for which he had paid a deposit of Rs. 250/- and had purchased a billing machine worth Rs. 25000¹³. He had made this investment in 2005-06, when there was good patronage for VPT especially for making STD calls.

Strengths

- The shop was situated conveniently near the road by the bus stand
- The VPT had STD facility
- There was STD billing machine available

Weakness

- There was no display board
- The patronage is so low that the custodian does not want to repair the billing machine which is at present non-functional
- There is delay in the delivery of the bills which lead to payment of penalty
- Since, the VPT is a landline, during road construction and widening, breaks in cable happen and this leads to difficulties for the custodian as well as the consumer

Opportunities

- Provision of display board¹⁴
- To provide additional facilities such as internet to attract younger attraction¹⁵

Threats

- There is severe competition not only from mobile connections but also from Airtel STD/PCO (two) within 200 metres
- Low levels of use leading to non-maintenance of VPT by the custodian

¹³ Since, he avails STD facility, the billing procedure is different. Shri Ajay Sharma, SDO pointed out that he will be charged only 93 paise per minute of which he gets a discount of 30 paise. Moreover, for a STD/PCO to get discount they should have undertaken a minimum transaction of Rs. 100/-. Nevertheless, VPT with STD is exempted from any such conditionality.

¹⁴ The custodian pointing towards a huge advertisement of Airtel indicated that similar display board should be provided.

¹⁵ In this context, the SDO pointed out that there need to be clarity on whether such facilities would be provided at nominal rates or would include clear cut, specific business plan for the VPTs to be made commercially viable.

(3) Village Kohal Sakwal

Kohal Sakwal village was situated on the Kangra-Dharamsala Highway. The custodian of the VPT was a shop owner, Mr. Kamal Kumar. The shop was strategically located on the Highway. The shop caters to provisions and general stores and hence was frequented often by the villagers.

Strengths

- VPT was allotted through Panchayat
- VPT has STD facility and the peak time for calls was during morning and evening
- Travelers also make use of the telephone facility available

Weakness

- There was no display board indicating the tariff
- Traffic often disturbs the voice clarity and therefore requires separate cabin for the VPT
- Billing machine or timer is required to collect exact payments from the customers
- Women however used this facility occasionally since it was situated in the shop beside road side and there was no privacy

Opportunities

- Provision of display board with details of tariff and toll free numbers is also needed
- Provision for cabin is necessary
- Provision for billing machine or stopwatch is required

Threats

- Since the introduction of mobiles, the patronage has drastically come down
- The location is highly public, hence does not attract female customers

(4) Village Sakral

Sakral village was situated 10 kilometres away from Rehana. SDO, JTO and Line Man accompanied us to the village. The village is situated in a remote area (though only ten kilometers way, the road to the village was broken at many places and the CSD team crossed several small brooks to reach the village). The custodian Mr. Lucky Sharma is a shop owner. But the VPT is kept in his house and the village is a small hamlet with 9 households. The ward member indicated that earlier, the VPT was kept in another house, however, there was problem of network and hence was shifted to this house.

Strengths

- Technology used was WLL
- Network connectivity was highly reliable
- VPT was used predominantly by women for personal communication

Weakness

- There was no display board
- The battery charge was low – often lead to the VPT being non-functional
- Repair and maintenance take about a week due to poor approach road
- There is not only shortage of field staff such as Line Man, but also of vehicles¹⁶

Opportunities

- Provision of display board
- Provision of STD facility
- Increase in field staff and availability of vehicles is necessary for the smooth functioning of the scheme

Threats

- Mobiles (BSNL) preferred due to good network connectivity
- The village is situated in a remote area with badly laid approach road

(5) Village Aghar

Aghar Village was around half kilometer away from State Highway and the VPT was situated in the custodian, Mrs. Narinder Kumari's house who was a school teacher. The village had about 25-30 households and almost every household had landline as well as multiple mobile connections. Thus, over the past two-three years, the use of VPT has drastically reduced. This is evident from abysmally low amount of bill (Rs. 29 for February & March and Rs. 49 for April & May).

Strengths

- The only VPT which had a complaint book available with them
- VPT is used predominantly by ladies of the household of the custodian
- Accessed by all including the only Muslim household in the village
- Repair and maintenance by BSNL

Weakness

- The technology used is landline and breakage in cable is frequent
- VPT used for personal communication by the custodian's household
- Lack of STD is a real hurdle in effective communication¹⁷
- Absence of display board also leads to lack of awareness

¹⁶ For 3 SDOs, there is only one vehicle available and hence they rotate the vehicle amongst themselves, remarked SDO, Shri. Rajesh Khanna

¹⁷ Since most of the men work in Pathankot (Punjab) which is just 20 kilometres away, it is necessary to have STD

Opportunities

- Provision of STD facility
- Provision of display board
- Technology used to be changed to WLL to enable smooth functioning of

Threats

- Extremely low use of VPT due to multiple phone connections in households– BSNL and private service providers – mobile and landline
- There is profuse availability and better service of private players in terms of connectivity and clarity in billing
- Caste hierarchy observed to be prevalent in a subtle way¹⁸

DISTRICT : CHAMBA

(1) Village Nahana

Nahana Village was 13 kilometres away from State Highway and of this, 6 kilometres were kuccha road (uphill). Until recently, there was no approach road to Nahana but thanks to Pradhan Mantri Sadak Yojana, the approach road is laid. The VPT was kept in the house of the Pradhan. He indicated that the resolution was passed in Panchayat and it was decided to keep the VPT in his house since it was centrally located. The village had around 40 households within a radius of one kilometer.

Strengths

- The technology used is WLL
- VPT was centrally located at the Pradhan's house at the entrance of the village.

Weakness

- There was no display board
- There is no STD facility
- There was frequent breakages in network connectivity
- Repair and maintenance takes time due to interior nature of the village with respect to inaccessible road
- Postal delays in receiving the bill lead to payment of late fees
- Double counting of bills since the billing was centralized in Chandigarh

Opportunities

- BSNL tower in the village to rectify uninterrupted connectivity
- Provision of STD facility, internet and fax is required

¹⁸ The Muslim lady who came to the household was not even offered a seat to sit

Threats

- Low patronage due to availability of mobiles and landlines¹⁹
- Difficulties in accessing the village due to rough road
- Lack of trained staff²⁰
- Lack of accountability on part of the custodian²¹

(2) Village Manjir

Village Manjir was situated on the Highway connecting Chamba and Saluni. It was 55 kilometres away from Chamba town. The custodian, Mr. Gopal Singh was a shop owner. He had kept his WLL in the shop wherein he sold tiffins/meals and tea. Since the shop was centrally located in a Y junction near the bus stop he pointed out that most of his customers are travellers who drop in to have food. Moreover, he indicated that it was also used extensively by his family members. This posed problems for us to canvass beneficiaries since it was a floating crowd.

Strengths

- Technology used is WLL
- Repair and maintenance was done by BSNL

Weakness

- Villagers were completely unaware that it was a public utility
- There was no display board
- It was used predominantly by the custodian and his family members

Opportunities

- Publicity about the utility of VPT to be made
- Awareness about VPT among villagers is to enhanced
- Provision of STD, internet (especially since it was on the highway) to generate patronage

Threats

- Another VPT in the local school which was near habitation; hence low patronage for this VPT which was on the road
- Competition from other service providers – especially mobile connections at cheaper rates

¹⁹ This is evident from abysmally low amount of previous month's bill worth a meager Rs. 12.

²⁰ The officials pointed out that one line man is in charge of 350 connections, and the norm is not feasible in hilly areas like Himachal.

²¹ Since VPT cannot be disconnected even if bills are not paid on time, this leads to complacency on part of custodians (in general) to make prompt payments. Even if the concerned custodians/villagers do not complain, it is the responsibility of the BSNL officials to check and rectify the problem.

(3) Village Shali

Tissa Tehsil is situated 55 kilometres away from Chamba town. The village was situated 9 kilometres away from state Highway and we had to walk 1 kilometre downhill to reach the village. There were around 10 households in the village. The custodian was Mr. Roop Lal Singh and he was a Pundit who performs pooja in temples. His mother was the ward member for the last 17 years. He indicated that he was staying in Dalhousie when he learnt that the VPT has been sanctioned in his name through Panchayat. But it was allotted to someone else. He had to fight the case in the court and also with the BSNL officials to revert it back to him.

Strengths

- Technology used was WLL
- The VPT had STD facility
- It was used frequently by villagers especially women for personal communication
- It was also used by men for official purposes

Weakness

- There was no display board either in the house or near the highway
- The quality of the machine was good, but there persist problems with the battery
- Users were mostly blood relatives, hence there was no system of payment
- Repair and maintenance takes time since it has to be reached on foot by 1 km

Opportunities

- It is necessary to provide uninterrupted connectivity through better instrument, installation of tower
- To enhance the use of VPT, it is required to provide internet to attract young generation

Threats

- Competition from other service providers
- Lack of awareness about VPT²²

(4) Village Sup

Bharmour was situated 100 kilometres away from Chamba town. The road was completely broken at all places. Sup village was situated 29 kilometres away from Bharmour. The approach road to the village was kuccha due to work undertaken for hydro-electric projects and road widening. However, we had to walk 3 kilometres uphill to reach the habitation. Even though the village was remote, thanks to the new road being laid, the network for mobiles have improved. Despite this, VPT is being used by villagers for communication due to low costs. Nevertheless, the bills for the last three months were low. On enquiring, the custodian and the

²² On the way to the village, there were a few households, belonging to Muslim community. On enquiry, it was found that they did not use the VPT since it was located downhill and they had mobiles.

beneficiaries indicated that since this is a remote village, their communication is obviously low, their needs are limited and with the introduction of mobiles, male members especially younger generation use more of mobile. In this village, non-beneficiaries were unavailable.

Strengths

- Technology used is WLL
- Repair and maintenance was done by BSNL
- Anganwadi is located in the house of the custodian where the VPT is installed

Weakness

- There was no display board
- There was no STD facility available
- During winter remain faulty for weeks together
- Due to high altitude the network connection is not proper due to absence of towers nearby the village
- There also occurs breaks in OFC due to road widening and hydro-electric work

Opportunities

- STD facility is required since the village remain cut off completely during winter
- Display board is required to increase awareness.

Threats

- Road becomes completely inaccessible in winter.
- The introduction of mobiles have slowly started to impact upon the patronage of VPT.

(5) Village Bujja

Village Bujja is located around 8 kilometres away from Chamba town. The custodian is Mr. Manoj Kumar. His father Mr. Basudev responded to our queries. As soon as we entered his house, he asked us to take the VPT away. He reported that the network of the WLL is weak and there is no use of the machine. Since, there are 3 VPTs (not under Bharat Nirman) in the Panchayat and there is widespread prevalence of STD / PCOs, individual mobiles, landline; the frequency of use of VPT has become limited to family members and close relatives. In the month of April, the billed amount was Rs. 27 after discount. We went to the paddy fields to canvass the villagers. Many of them were unaware that it was a VPT. Moreover, most of them had their own mobile and landlines, hence did not use VPT.

Strengths

- Technology used is WLL
- Repair and maintenance was done by BSNL

Weakness

- There was no display board
- There was no STD facility
- Weak connectivity of network renders the VPT non-functional
- Irregularities in billing is reported
- It was used exclusively by family and relatives of the custodian

Opportunities

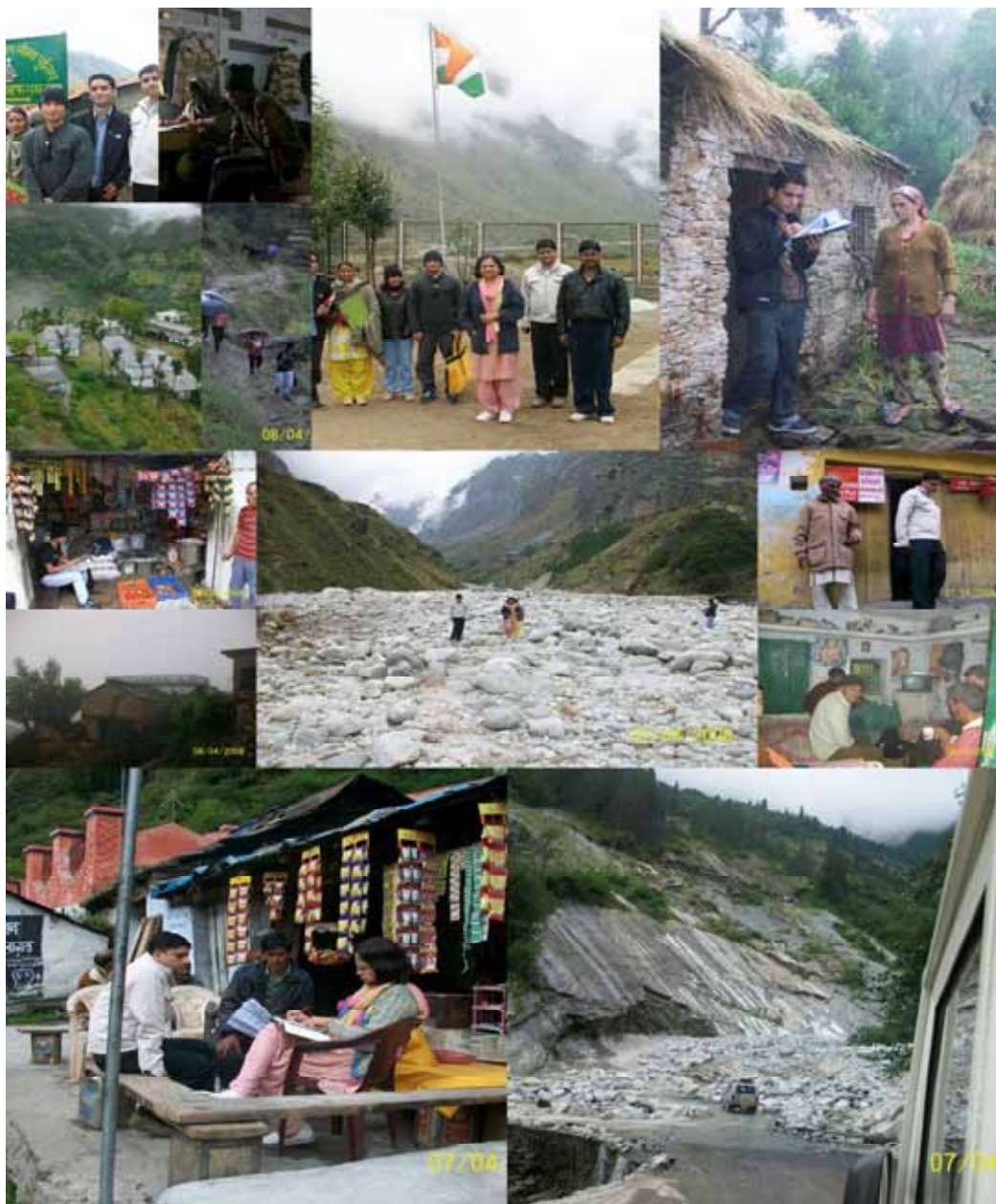
- Provision of display board to increase awareness
- Increased network connectivity such that it can be used properly
- Provision of STD facility

Threats

- Three VPTs are installed in the same Panchayat (before under Bharat Nirman)
- Competition from individual connections as well as STD/PCO operators²³
- Widespread prevalence of mobiles – private and BSNL – under different plans

²³ Widespread prevalence of STD/PCOs, individual mobiles, landline; the frequency of use of VPT has become limited to family members and close relatives

State Report - 3 UTTARANCHAL



Uttarakhand

Uttarakhand is a state located in the northern part of India. It was carved out of Himalayan and adjoining districts of Uttar Pradesh on 9 November 2000, becoming the 27th state of the Republic of India. It borders Tibet on the north, Nepal on the east, the Indian states of Uttar Pradesh to the south, Haryana on the west and Himachal Pradesh on the north-west. The region is traditionally referred to as Uttarakhand in Hindu scriptures and old literature, a term which derives from Sanskrit *uttara* meaning north, and *khaṇḍa* meaning country or part of a country. It has an area of 53,566 km². In January 2007, the name of the state was officially changed from Uttarakhand, its interim name, to Uttarakhand. The provisional capital of Uttarakhand is Dehradun which is also a rail-head and the largest city in the region. The small hamlet of Gairsen has been mooted as the future capital owing to its geographic centrality but controversies and lack of resources have led Dehradun to remain provisional capital. The High Court of the state is in Nainital.



Recent developments in the region include initiatives by the state government to capitalise on handloom and handicrafts, the burgeoning tourist trade as well as tax incentives to lure high-tech industry to the state. The state also has big-dam projects, controversial and often criticized in India, such as the very large Tehri dam on the Bhagirathi-Bhilangana rivers, conceived in 1953 and about to reach completion. Uttarakhand is also well known as the birthplace of the Chipko environmental movement, and a myriad other social movements including the mass agitation in the 1990s that led to its formation.

State has two administrative division Garhwal and Kumaon and 13 districts in all consisting 78 blocks, as per the census data 2001 total number of villages are figure missing in which 15761 are inhabited village and 1065 are un-inhabited Village

Uttarakhand consists of 5 SSA (Secondary Switch Area) - Almora, Dehradun, New Tehri, Srinagar and Nainital. In each SSA, the General Manager, Telecom District (GMTD) is the head of the implementing department. The in-charge officer for the implementation of VPT at

the district level is either Divisional Engineer or Sub-Divisional Engineer. The scheme was implemented in the State in all SSAs from November 2004 under the Bharat Nirman programme. A total of 3881 villages are there in which 2,696 VPTs were to be installed under different SSAs.

Details of Physical Targets & Achievements (No. of newly connected Villages / VPTs) for the last 5 years as per the information provided by CGM office -

	Physical Performance (Newly connected Villages / VPTs)	
	Target	Achievement
	No. of VPTs	No. of VPTs
2003-04	3,881	99
2004-05	3,782	111
2005-06	3,671	148
2006-07	3,523	1,094
2007-08	2,529	582
2008-09	1,947	386

Strengths of the VPT as per the officials at the state level are provision of communication facility to each citizen in rural areas at affordable and reasonable charges. In hilly regions like Uttarakhand, VPT still remains the only source of communication to public in remote and far flung area thereby connecting them to other parts of the country.

Nevertheless, due to the remote locations of VPT usually in far-flung hilly areas, at times non-motorable villages in the state, maintenance is difficult and very expensive. Moreover, mobile services have penetrated rural areas and this has reduced importance of VPTs. The above two are the reasons for low ARPU and high MTRR (Mean Time To Repair). There is a need to transform the VPT to compete with the multiple services provided by mobile service providers.

The major constraints faced by officials with regard to implementation of VPT services include inability of VPT custodians to install their own monitor for billing; difficulty faced by staff in maintenance and repair due to remote / inaccessible locations and shortage of staff; outstanding bills, proportionately less revenue in comparison with high capital expenditure and maintenance cost. (At some places there is unavailability of willing custodians to replace DNP cases)

Nonetheless, considering their wide coverage, the scheme should be continued with active support of Government of India. The officials maintain that issues of technology, competition, coverage and efficiency can be tackled effectively. CGM suggested that with new technology like DSPT, GSM, WLL the possibility of faults are less and usage will increase. Provision of VPT on the GSM technology is also suggested to connect all those uncovered villages those are not feasible on LL/WLL.

Against the backdrop of discussion on the performance of VPTs at the state level, the next section discusses the performance of VPTs in Srinagar and Almora SSA.

DISTRICT : SRINAGAR

Srinagar is a city and a municipal board in Pauri Garhwal District in the Indian state of Uttarakhand. As of 2001 India census^[2], Srinagar had a population of 19,861. Males constitute 57% of the population and females 43 %. Srinagar has an average literacy rate of 83%, higher than the national average of 59.5 % : male literacy is 86%, and female literacy is 79%. In Srinagar, 9% of the population is under 6 years of age. Elevation of the city is 973 m (3,192 ft).

Srinagar SSA is in the Garhwal division of Uttarakhand state. Garhwal division includes Dehradun, Haridwar, Tehri Garhwal, Uttarkashi, Pauri Garhwal, Chamoli and Rudra Prayag. Srinagar SSA comprises Pauri Garhwal, Chamoli and Rudra Prayag.

Like any other districts it has developed its own communication facilities over the years under Bharat Nirman Yojana. The Village Public Telephones (VPTs) are being installed in various regions of the district. The GMTD, BSNL is acting as head of the implementing agency. The SDE (VSO) is given the charge of VPT.

To provide telephone connectivity in rural areas this scheme got operational from 2004, although VPTs were being installed since 1980 as informed by the office. Till date 4197 VPTs have been installed in 4197 villages. The allotment of VPT connections is done on the basis of recommendations of Gram Panchayat.

The department used to prepare an action plan for every financial for installing VPTs. GMTD informed that total uncovered villages under BNY as on 1.04.08 was 756 out of which 84 VPT's were provided on WLL during 2008-09 and rest are planned on DSPT.

If we look at the target v/s achievement figures for VPT installations in Srinagar district it is reflected that every Year targets were met. Extended services are not available in the district.

The VPT is 100 percent financed by BSNL department with the USO subsidies. There is no separate fund allocation for VPT. No separate account is maintained for recording expenditures on repair and maintenance of VPTs. VPT is contributing marginally to the revenue of the department.

It is mentioned by the official that there is no separate staff for repair and maintenance of VPTs, the existing staff takes care of this work. It was mentioned that staff requirement is high in this difficult terrain more over senior line man have to work extremely hard to complete their duties. It is mentioned by the official that staff is overburdened. Contractual staff is bearing the load of work with compromised quality. Work distribution of VPT is based on the geographical area as coverage is difficult. USOF has prescribed certain guideline for monitoring VPTs. BSNL officials at divisional level execute the same as and when required.

The repair and maintenance work of VPTs is carried out by the BSNL department itself. During last three months 22 cases of VPTs were repaired by the department. They do organize some training programme for VPT. The Department perceives competition to VPTs from other service providers as, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Strengths of VPT's shared by GMTD VPTs are the only mode of communication available in remote areas of the District. It even works without electricity supply. The villagers are interested to use the VPTs as they are customer friendly and easy to operate. VPT provides affordable and easily assessable communication facilities in the remote hilly area.

1. While focusing on the weakness of VPTs in their area it was informed that VPT maintenance is difficult and expensive due to remote locations of the villages. In case of installation particularly DSPT technology is quite expensive and due to low revenue collection this is not commercially viable.
2. It was suggested that dedicated staff along with the dedicated resources like vehicles should be provided for VPT installation and maintenance work. VPT should be allowed on GSM technology.

DISTRICT : ALMORA

Almora is a municipal board, a cantonment town in the Almora district in the state of Uttarakhand, India. Almora was founded in 1568. It is a town bustling with activity and a rich cultural heritage and history. It is considered the cultural heart of the Kumaon region of Uttarakhand.

Almora is located at 29°37'N 79°40'E / 29.62°N 79.67°E.^[2] It has an average elevation of 1,651 metres (5,417 feet). It is located on a ridge at the southern edge of the Kumaon Hills of the Himalayan range. In the shape of a horse saddle shaped hillock, it is surrounded by thick forests of pine and fir trees. Flowing alongside the city are rivers of Koshi, (Kaushiki), and Suyal (Salmale). The snow capped Himalayas can be seen in the background.

As of 2001 India census, Almora had a population of 30,613. Males number 16,443 and constitute roughly 53.7 % of the population and females number 14,170 or roughly 46.3 %. Almora has an average literacy rate of 84.09%, higher than the national average of 59.5 %; with 86.39 % of the males and 81.43% of females literate. Nearly 10% of the population is under 6 years of age.

In Almora SSA, General Manager Telecom District is the head of implementing department at the district level, the in-charge officer is SDE under the Bharat Nirman Project. The task of providing VPTs is being implemented from Nov. 2004. The main objective of VPTs under

district level is to achieve the targeted villages as per the plan of the BSNL headquarter and provide telecom services to these villages.

Till date 4686 VPTs have been installed in respective villages. In order to identify and select the villages for installing a VPT the telecom officials follow the census 1991 and 2001. Priorities have been those village Panchayats which had no telecom facility. The department used to give the VPT connection as per the government policy and in consultation with respective Gram Sabha.

In the beginning of the financial year the department used to prepare an action plan for the next year. If we look into the targets and achievement of installation of VPTs in Almora district it is observed that there is no such information regarding target of VPT installation provided by department. However, As per records the number of villages covered under Bharat Nirman Project is 740 in the month of October 2009. Nowhere extended services are provided as per their reference.

The village public telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There is no separate fund allocation for VPT and similarly there is no particular expenditure details for VPT repairing and installation.

Data reflects fluctuations in the trend of billing from VPT. The expenditure details exclusively for VPTs is not available with the department. They used to spend the allotted fund for repairing and maintenance of telephone in general way.

Similarly same staff is sharing the maintenance, repair and installation of VPT. It is mentioned by the official that staff is overburdened. Contractual staff is bearing the load of work with compromised quality. There is certain mechanism available for monitoring and supervision of VPTs. Department used to follow the given guidelines for it. It was also referred that department don't provide any complaint book.

The repairing and maintenance work of VPT is being done by the BSNL department itself. They have certain technical staffs who used to help in repairing. The staff size available with this telephone circle is a total of 212 technical people. The work distribution to the staffs is based on sub division. The information regarding repairing of VPTs in last 3 months shows 7 fault in last month, 341 in second last month and 112 in third last month. It is mentioned by the department that the maintenance of VPTs is done free of cost. Once they get the information that there is some problem with a VPT the department technical staff makes a visit as soon as possible. Sometimes they may to ask the custodian to come with the VPT to exchange office where they repair it. Training is conducted at BSNL regional telecom training centre. Technical staff deputed periodically for refreshment training.

The department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Discussion with GMTD revealed about the strengths of VPT in their area. According to him it is the cheapest means of connectivity specially in the areas without proper road connectivity for communicating with family members in far flung hilly and difficult accessible area of Kumaon region. This area is having very low scope of development in business and agriculture. Almost economy of this area is dependent on the money earned from armed forces or other services in other major town. VPT is giving very useful service to the villagers in the area.

Regarding weakness of VPT it was shared that mostly VPTs are located where user can approach via difficult pedestrian route. During the late hours fear of wild animal's attack make it less usable. Same way maintenance and repair is also difficult in case of fault. Another problem is frequent condemnation of VPT equipments or solar panels in high altitude where whole population migrate to low altitude in the winter season due to heavy snowfall at the places like Munsiyari and Dharchula SDCA adjacent to Tibet border.

They also shared that no additional staff is recruited which is specially required in hilly region and similarly, there is no special consideration for maintenance and repair in hilly area. It was also revealed during discussions that department don't think that VPT is commercial viable.

For improvement in efficiency of VPT, implementation officials opined that additional VPTs for cluster of habitats in a revenue village are required for 100% usability. Maintenance and staff norms for hilly areas should be separate in comparison to plains. Keeping in view the lightening, land slides and seasonal migration, sufficient spare and equipment should be provided. The norms of maintenance vehicles should be separate for hilly area. Subsidy claims of VPTs of hilly areas should be relatively more.

Some more observation highlighted in the meeting with GMTD Almora, AGM, DE Phones, SDE Planning and SDE USOF of BSNL Almora, district.

1. Testing of VPTs and testing WLL lines is done at a random basis due to shortage of staff. There are 5620 village and approximately 4000 VPTs. Therefore, daily testing is almost impossible with the existing manpower.
2. Meter readings are taken fortnightly and non incremental meters are verified. The major reason identified for low reading is the usage pattern of VPTs. People mostly use these VPTs for receiving incoming calls.
3. Regular inspections are not scheduled; there was no record of previous inspections. Rarely they inspect cases of NIM (non-incremental meters). Department showed reluctance towards reinforcing the availability of signboards, complaint book, display of tariff charges and stop watch with the custodian. Tendering for sign boards at VPT location is under

pipeline.

4. Conducting meetings with the villagers in order to sort their grievances is not done separately for villages. During occasions like Tehsil Diwas, general meetings are commenced by SDO's.
5. Till date 435 VPTs were disconnected due to non-payment, out of which only 11 DNP cases were relocated. The reason stated was the cumbersome process of the selection of custodian. Researcher asked regarding the one month deadline for the selection process to be completed, in absence of which the BSNL can choose the custodian themselves, again department was reluctant to exercise this right in order to avoid clashes with the Gram Panchayat.
6. Due to geographical terrain the funds allocated for maintenance were felt inadequate and a need was felt to allocate the funds at higher end and revise the claim rates separately for Uttranchal.
7. Another problem related to the maintenance of VPT's was the inadequacy of staff and problem of mobility due to geographical terrain. Need was felt to revise the norms for hiring of vehicles, Uttranchal being a hilly state.
8. The main reasons identified for the reduction of patronage of VPT's were the reluctant attitude of custodians, increasing density of mobile phones, mobility problems, etc. Need was felt to make VPT's more remunerative and lucrative for the custodians. Extended services may also help in improving the patronage of VPT's.
9. For delay in payment of bills, various problems were identified viz., (a) Inadequate support of post office in distribution of bills as well as collection of payments, (b) The money transfer process also takes around more than a month from Post Office to BSNL, (c) Loss of TRC's in transit, since bill processing is outsourced, proper check and control is not possible on the outsourced agents. Approximately, 20,000 TRC's are processed every month out of which few TRC's are not processed / lost by the agents.
10. Temporary migration from the location where VPT is installed is also taken as a reason for non-payment of bills on time, especially during November to March.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Uttarakhand – Srinagar and Almora. In Srinagar and Almora SSAs 93 VPT users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPT's towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, details of telephone connectivity, etc. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users :** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum per cent belong to general (76 %) in Srinagar and 52 % in Almora districts of Uttarakhand.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Srinagar	General	76	81.7
	OBC	11	11.8
	SC	4	4.3
	ST	2	2.2
	Total	93	100.0
Almora	General	52	55.9
	OBC	5	5.4
	SC	36	38.7
	Total	93	100.0

Description of gender specification depicts that 78.4 % and 76.3 % females in Srinagar and Almora districts respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Srinagar	73	20	93
Almora	71	22	93

Regarding their primary occupation data revealed that majority were engaged in agriculture in Srinagar and also in Almora. Educational qualification of VPT users reflects that 24% users were having primary education in Srinagar and 31 % were not literates in Almora in current study.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	Srinagar	Almora
1	Agriculture	38	54
2	Agriculture Casual Labour	4	3
3	Own Business	2	3
4	Salaried work	5	6
5	Homemaker	37	13
6	Students	-	5
7	Non Agriculture casual Labour	1	4
	Total	93	93
	Educational Qualification		
1	Not literate	19	31
2	Functional literate	13	14
3	Primary	24	14
4	Upper Primary	12	12
5	High School	10	13
6	Intermediate	7	8
7	Graduate	5	1
8	Above Graduation	3	-
	Total	93	93

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned pucca houses in Srinagar (53.8 %) and semi-pucca houses in Almora (44.1 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Srinagar	Kucha House	15	16.1
	Semi-pucca House	28	30.1
	Pucca House	50	53.8
	Total	93	100.0
Almora	Kucha House	18	19.4
	Semi-pucca House	41	44.1
	Pucca House	34	36.6
	Total	93	100.0

B.2. Status of Electrification: Electrification status of respondents reflects that majority are having electricity in their houses (90.3 % in Srinagar and 82.8 % in Almora).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Srinagar	Electricity not available	9	9.7
	Electricity available	84	90.3
	Total	93	100.0
Almora	Electricity not available	16	17.2
	Electricity available	77	82.8
	Total	93	100.0

- B.3. Distance of House from Pucca Road: Looking to the proximity of their houses to pucca roads data revealed that 55.9 % of respondents in Srinagar and 35.5 % in Almora were situated at the distance of more than 1 km.

Table I.B.3. Distance of house of Users from pucca Road

Telecom District	Distance	No. of Users	Percent
Srinagar	100 metres or less	24	25.8
	More than 100 metres but less than 1 km	52	55.9
	More than 1 km	17	18.3
	Total	93	100.0
Almora	100 metres or less	30	32.3
	More than 100 metres but less than 1 km	30	32.3
	More than 1 km	33	35.5
	Total	93	100.0

- B.4. Distance of House from State Highway: In terms of the distance from state highway it was revealed that 34.4 % respondents were staying at more than 2 but less than 10 kms., in Srinagar and 54.8 % were staying more than 10 km away in Almora district of the state of Uttaranchal .

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Srinagar	Upto 2 km	41	44.1
	More than 2 but less than 10 km	32	34.4
	More than 10 km	20	21.5
	Total	93	100.0
Almora	Upto 2 km	3	3.2
	More than 2 but less than 10 km	39	41.9
	More than 10 km	51	54.8
	Total	93	100.0

C. Details of Telephone Connectivity

- C.1. **Telephone availability at home:** Majority (74.2 %) respondents in Srinagar district were having telephone at their home whereas in Almora 72 % were having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Srinagar	Telephone Not available	24	25.8
	Telephone available	69	74.2
	Total	93	100.0
Almora	Telephone Not available	26	28.0
	Telephone available	67	72.0
	Total	93	100.0

C.2. **Type of Telephone:** Among telephone owners at their home maximum 70.7 % were having mobiles in Srinagar and 83.3 % in Almora.

Table I.C.2. Type of Telephone

Telecom District	Type of phone	Responses		Percent of Cases
		No. of Users	Percent	
Srinagar	Landline	27	29.3	39.1
	Mobile	65	70.7	94.2
	Total	92	100.0	133.3
Almora	Landline	13	16.7	19.4
	Mobile	65	83.3	97.0
	Total	78	100.0	116.4

C.3. **Details of Service Provider:** Regarding the details about service providers to the respondents, Airtel was found to provide services to maximum respondents in Srinagar (71.4 %) and 41.7 % in Almora. Regarding the details about service providers to the respondents, BSNL was found to provide services to maximum respondents in Srinagar (73.9 %) and 47.4% in Almora.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	Responses		Percent of Cases
		No. of Users	Percent	
Srinagar	BSNL	68	73.9	98.6
	Airtel	17	18.5	24.6
	Vodafone	3	3.3	4.3
	Idea	4	4.3	5.8
	Total	92	100.0	133.3
Almora	BSNL	37	47.4	55.2
	Airtel	1	1.3	1.5
	Vodafone	30	38.5	44.8
	Idea	10	12.8	14.9
	Total	78	100.0	116.4

II. USAGE OF VPT

A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflects that 25.8 % VPT beneficiaries in Srinagar have used VPT more than 6 times for local calls in last 60 days and 30.1% users have not made any call from VPT. In Almora 28 % VPT users have used VPT two or less times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Srinagar	No calls	19	20.4	28	30.1
	2 or less	15	16.1	11	11.8
	3 to 4	25	26.9	15	16.1
	5 to 6	13	14.0	15	16.1
	More than 6	21	22.6	24	25.8
	Total	93	100.0	93	100.0
Almora	No calls	4	4.3	6	6.5
	2 or less	14	15.1	26	28.0
	3 to 4	36	38.7	17	18.3
	5 to 6	12	12.9	22	23.7
	More than 6	27	29.0	22	23.7
	Total	93	100.0	93	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that 84.9 % VPT beneficiaries have not made any STD call in Srinagar and 52.7 % in Almora district. This shows that VPT usage for STD call is very low in both the districts of Uttarakhand.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Srinagar	No calls	79	84.9	79	84.9
	2 or less	5	5.4	8	8.6
	3 to 4	5	5.4	2	2.2
	5 to 6	2	2.2	-	-
	More than 6	2	2.2	4	4.3
	Total	93	100.0	93	100.0
Almora	No calls	49	52.7	49	52.7
	2 or less	23	24.7	19	20.4
	3 to 4	11	11.8	12	12.9
	5 to 6	4	4.3	7	7.5
	More than 6	6	6.5	6	6.5
	Total	93	100.0	93	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 49.5 % in Srinagar district were residing within 200 mts. Case is same in Almora i.e. 49.5% people were residing within 200 mts from VPT. That suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Srinagar	Within 200 mts from residence	46	49.5
	200-500 mts from residence	32	34.4
	More than 500 mts	15	16.1
	Total	93	100.0
Almora	Within 200 mts from residence	46	49.5
	200-500 mts from residence	18	19.4
	More than 500 mts	29	31.2
	Total	93	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

A Transparency in the decision of VPT location: Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Srinagar district 39.8 % and in Almora district 38.7 % users were involved in the decision it means peoples participation was moderate.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Srinagar	No	56	60.2
	Yes	37	39.8
	Total	93	100.0
Almora	No	57	61.3
	Yes	36	38.7
	Total	93	100.0

B.1. Availability of VPT Service: It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Srinagar district VPTs were mostly found reliable as respondents communicated that in 69.9 % cases no fault, 78.5% available, 91.4% open and 80.6% not engaged during last month. Similarly, table shows that in Almora district also VPT service were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Srinagar	0	65	69.9	0	73	78.5	0	85	91.4	0	75	80.6
	1	8	8.6	1	7	7.5	1	3	3.2	1	8	8.6
	2	6	6.5	2	5	5.4	2	4	4.3	2	6	6.5
	3	4	4.3	3	6	6.5	3	1	1.1	3	3	3.2
	4	5	5.4	5	1	1.1				5	1	1.1
	5	2	2.2	6	1	1.1						
	10	1	1.1									
	15	1	1.1									
	30	1	1.1									
	Total	93	100.0	Total	93	100.0	Total	93	100.0	Total	93	100.0
Almora	0	72	77.4	0	84	90.3	0	89	95.7	0	68	73.1
	1	16	17.2	1	4	4.3	1	3	3.2	1	7	7.5
	2	3	3.2	2	3	3.2	5	1	1.1	2	14	15.1
	3	2	2.2	3	1	1.1	Total	93	100.0	3	3	3.2
				4	1	1.1				4	1	1.1
	Total	93	100.0	Total	93	100.0				Total	93	100.0

B.2. Same trend could be seen in both the districts of Uttarakhand in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Srinagar	0	75	80.6	0	82	88.2	0	82	88.2	0	76	81.7
	1	5	5.4	1	5	5.4	1	4	4.3	1	4	4.3
	2	7	7.5	2	5	5.4	2	4	4.3	2	7	7.5
	3	4	4.3	3	1	1.1	3	1	1.1	3	3	3.2
	15	1	1.1				5	2	2.2	4	3	3.2
	30	1	1.1									
	Total	93	100.0	Total	93	100.0	Total	93	100.0	Total	93	100.0
Almora	0	82	88.2	0	90	96.8	0	88	94.6	0	77	82.8
	1	2	2.2	1	2	2.2	1	1	1.1	1	8	8.6
	2	7	7.5	2	1	1.1	2	3	3.2	2	3	3.2
	3	1	1.1				3	1	1.1	3	5	5.4
	4	1	1.1									
	Total	93	100.0	Total	93	100.0	Total	93	100.0	Total	93	100.0

C. Display of Telephone Numbers, Tariff Rate and Availability of Complaint Book

Another aspect of transparency and sharing of information could be seen from the following table. Majority VPT's in Srinagar were not displaying tariff and toll free numbers and were also

not having book for complaint registration. In Almora district no VPT was displaying no for grievance, toll free numbers and tariff rate on their booth. They were not keeping complaint book also with them.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Srinagar	No	6	60.0	7	70.0	9	90.0	9	90.0
	Yes	4	40.0	3	30.0	1	10.0	1	10.0
	Total	9	90.0	9	90.0	9	90.0	9	90.0
	Total	10	100.0	10	100.0	10	100.0	10	100.0
Almora	No	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A.** Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that most of the places of installation was found convenient and very convenient in Srinagar. In Almora district only 7 VPT's were expressed as not at all convenient that were located in shop.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Srinagar	Post office	-	13	-	13
	Shop	-	3	-	3
	Others	3	58	16	77
	Total	3	74	16	93
Almora	Anganwadi	-	7	-	7
	Sarpanch house	-	12	-	12
	Shop	7	11	2	20
	Others	-	46	8	54
	Total	7	76	10	93

- B. Convenience of Technology used in VPT:** In Srinagar district reflects that almost all VPT users found the technology used in VPT convenient. 73.1 % VPTs are using landline technology in this district. In Almora district 100 % users were using landline and felt that VPT technology is convenient.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Srinagar	Landline	1	68	16	85
	Mobile	-	8	-	8
	Total	1	76	16	93
Almora	Landline	-	84	9	93
	Total	-	84	9	93

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. Total 67 users in Srinagar shared that WLL FT technology used in their VPTs is convenient and 24 expressed that DSPT is convenient technology. Total 91 users in all were feeling that the technology is convenient. In Almora district 93 users in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of convenience			Total
		Not at all convenient	Convenient	Very convenient	
Srinagar	WLL FX	2	59	8	69
	DSPT	-	22	2	24
	Total	2	81	10	93
Almora	WLL FX	-	88	4	92
	WLL FT	-	1	-	1
	Total	-	89	4	93

- D. Level of convenience with type of instrument:** Shown in following table confirms that almost all feel convenient about the instrument used in VPT.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Srinagar	Dial Key Board	2	21	2	25
	Single touch Key board	-	48	20	68
	Total	2	69	22	93
Almora	Dial Key Board	-	13	-	13
	Single touch Key board	1	66	13	80
	Total	1	79	13	93

- E. Clarity of voice:** It is an important indicator of quality assessment of VPT installed. In Srinagar district 90 VPT users have expressed that clarity of voice is always convenient. Same way in Almora, all 93 users were having the same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Srinagar	Rarely	1	6	1	8
	Often	2	34	4	40
	Always	-	32	13	45
	Total	3	72	18	93
Almora	Rarely	-	6	-	6
	Often	-	20	4	24
	Always	-	50	13	63
	Total	-	76	17	93

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. 64.5 % users in district Srinagar and 46.2 % users in Almora district of Uttarakhand shared that connectivity of VPT service is reliable. Although 29 % users in Srinagar and 53.8 % users in Almora district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Srinagar	Not reliable	6	6.5
	Reliable	60	64.5
	Highly reliable	27	29.0
	Total	93	100.0
Almora	Reliable	43	46.2
	Highly reliable	50	53.8
	Total	93	100.0

V. TIMELINESS OF VPT

- A. Timeliness aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 63.4 % respondents in Srinagar and 93.5 % in Almora district found VPT always available in their area. Similarly VPT was majority time opened in both the districts of Uttarakhand.

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Srinagar	During day time	29	31.2
	During night	3	3.2
	Always	59	63.4
	Fixed timings	2	2.2
	Total	93	100.0
Almora	During day time	5	5.4
	During night	1	1.1
	Always	87	93.5
	Total	93	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 66.7 % users in Srinagar were paying in case of VPT usage, 58.1 % were paying cash and maximum were quite regular in payment. In Almora district 75.3 % users were paying, 60.2 % were paying cash and majority were found quite regular. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Srinagar	No	31	33.3
	Yes	62	66.7
	Total	93	100.0
Almora	No	23	24.7
	Yes	70	75.3
	Total	93	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
Srinagar	Cash	54	58.1
	Partly cash, partly credit	8	8.6
	Non Payment	31	33.3
	Total	93	100.0
Almora	Cash	56	60.2
	Credit	1	1.1
	Partly cash, partly credit	13	14
	Non Payment	23	24.7
	Total	93	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in both the districts there was no social restriction.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Srinagar	No	93	100.0
Almora	No	93	100.0

B. Average Revenue Per Unit (ARPU) of VPT

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Srinagar district was less than Rs 250 in 50% cases of VPT but 40% VPT were having ARPU more than Rs 500 and whereas in Almora ARPU was between Rs 250-500 in 30% VPTs of the district.

VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
Srinagar	Less than 250	5	50.0
	250-500	1	10.0
	501-750	2	20.0
	More than 1000	2	20.0
	Total	10	100.0
Almora	Less than 250	7	70.0
	250-500	3	30.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Srinagar	No	90	96.8
	Yes	3	3.2
	Total	93	100.0
Almora	No	83	89.2
	Yes	10	10.8
	Total	93	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Srinagar district only 3.2% VPT users were of the opinion that VPT usage has effect on household income and in other district (Almora) of the state it was observed that 10.8 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Srinagar	No change reported	90	96.8
	5 to 10 percent	1	1.1
	10 to 20 percent	2	2.2
	Total	93	100.0
Almora	No change reported	83	89.2
	Upto 5 percent	1	1.1
	5 to 10 percent	2	2.2
	10 to 20 percent	2	2.2
	More than 20 percent	5	5.4
	Total	93	100.0

Further enquiring about the per cent change in income revealed that 2.2 % of users expressed 10-20 % increase in their household income whereas in Almora district 5.4% users were having belief that their income have increased by more than 20 percentage.

- B. Improvement in connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Srinagar	No improvement	4 (4.3)	65 (69.9)	73 (78.5)
	Marginal Improvement	62 (66.7)	27 (29.0)	15 (16.1)
	Significant improvement	27 (29.0)	1 (1.1)	5 (5.4)
	Total	93 (100.0)	93 (100.0)	93 (100.0)
Almora	No improvement	0	77 (82.8)	80 (86.0)
	Marginal Improvement	56 (60.2)	13 (14.0)	12 (12.9)
	Significant improvement	37 (39.8)	3 (3.2)	1 (1.1)
	Total	93 (100.0)	93 (100.0)	93 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Srinagar	No improvement	45 (48.4)	62 (66.7)	62 (66.7)	63 (67.7)
	Marginal Improvement	35 (37.6)	17 (18.3)	18 (19.4)	17 (18.3)
	Significant improvement	13 (14.0)	14 (15.1)	13 (14.0)	13 (14.0)
	Total	93 (100.0)	93 (100.0)	93 (100.0)	93 (100.0)
Almora	No improvement	20 (21.5)	22 (23.7)	21 (22.6)	21 (22.6)
	Marginal Improvement	37 (39.8)	36 (38.7)	36 (38.7)	36 (38.7)
	Significant improvement	36 (38.7)	35 (37.6)	36 (38.7)	36 (38.7)
	Total	93 (100.0)	93 (100.0)	93 (100.0)	93 (100.0)

		Srinagar	Almora
a.	Personal communication	66.7 marginal	60 Marginal
b.	Business networking	69.9 No	77 No
c.	Emergency Management Medical Fire Police Natural Calamities	37.6 Marginal 62 No 66.7 No 67.7 No	3
d.	Official Purposes	78.5 No	86 No

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Srinagar					Almora				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	83 (89.2)	5 (5.4)	5 (5.4)	0	93 (100.0)	82 (88.2)	10 (10.8)	1 (1.1)	0	93 (100.0)
b.	Market	71 (76.3)	14 (15.1)	6 (6.5)	2 (2.2)	93 (100.0)	91 (97.8)	2 (2.2)	0	0	93 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	53 (57.0)	20 (21.5)	19 (20.4)	1 (1.1)	93 (100.0)	72 (77.4)	15 (16.1)	6 (6.5)	0	93 (100.0)
2.	Education	69 (74.2)	14 (15.1)	10 (10.8)	0	93 (100.0)	70 (75.3)	17 (18.3)	6 (6.5)	0	93 (100.0)
3.	Related to Agriculture	76 (81.7)	10 (10.8)	7 (7.5)		93 (100.0)	72 (77.4)	15 (16.1)	6 (6.5)	0	93 (100.0)

	Information on	Srinagar					Almora				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
4.	Others	80 (86.0)	7 (7.5)	6 (6.5)	0	93 (100.0)	73 (78.5)	15 (16.1)	5 (5.4)	0	93 (100.0)
d.	Natural Calamity / Weather forecasting	83 (89.2)	3 (3.2)	7 (7.5)	0	93 (100.0)	93 (100.0)	0	0	0	93 (100.0)
e.	Rail / Road transport	73 (78.5)	13 (14.0)	5 (5.4)	2 (2.2)	93 (100.0)	86 (92.5)	7 (7.5)	0	0	93 (100.0)
f.	Health Services	69 (74.2)	16 (17.2)	7 (7.5)	1 (1.1)	93 (100.0)	76 (81.7)	12 (12.9)	5 (5.4)	0	93 (100.0)
g.	Agriculture related	86 (92.5)	4 (4.3)	3 (3.2)		93 (100.0)	81 (87.1)	10 (10.8)	2 (2.2)	0	93 (100.0)
h.	Business related	85 (91.4)	4 (4.3)	4 (4.3)		93 (100.0)	93 (100.0)	0	0	0	93 (100.0)
i.	Others (specify)										

Table revealed that VPT is not being used as expected by policy planners of India for access to information regarding different aspects (refereed in the table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt satisfactory by 72% users and highly satisfactory by 23.7% in Srinagar. In Almora district also trend was same (Satisfactory 60.2 %, highly satisfactory 34.4%).

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Srinagar	Not satisfactory	4	4.3
	Satisfactory	67	72.0
	Highly satisfactory	22	23.7
	Total	93	100.0
Almora	Not satisfactory	5	5.4
	Satisfactory	56	60.2
	Highly satisfactory	32	34.4
	Total	93	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings and quality of accessibility was expressed satisfactory among majority of the users in both the districts of the state.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Srinagar	Not satisfactory	5	5.4	12	12.9
	Satisfactory	74	79.6	67	72.0
	Highly satisfactory	14	15.1	14	15.1
	Total	93	100.0	93	100.0
Almora	Not satisfactory	3	3.2	4	4.3
	Satisfactory	64	68.8	62	66.7
	Highly satisfactory	26	28.0	27	29.0
	Total	93	100.0	93	100.0

- C. Repair and Maintenance:** Level of satisfaction regarding timely repair & maintenance opined satisfactory by 73.1 % users in Srinagar and 58.1 % in Almora. About the satisfaction level with respect to quality of repair mostly were satisfied and some were highly satisfied.

Table VIII.C. Level of satisfaction about repair and maintenance- Time & quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Srinagar	Not satisfactory	13	14.0	18	19.4
	Satisfactory	68	73.1	63	67.7
	Highly satisfactory	12	13.0	12	13.0
	Total	93	100.0	93	100.0
Almora	Not satisfactory	12	12.9	13	14.0
	Satisfactory	54	58.1	52	55.9
	Highly satisfactory	27	29.0	28	30.1
	Total	93	100.0	93	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 45.2 % users in Srinagar and highly satisfactory among 72 % users of Almora.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Srinagar	Not satisfactory	3	3.2
	Satisfactory	48	51.6
	Highly satisfactory	42	45.2
	Total	93	100.0
Almora	Not satisfactory	4	4.3
	Satisfactory	22	23.7
	Highly satisfactory	67	72.0
	Total	93	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed 28 % not satisfactory in Srinagar and 68.8% in Almora.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Srinagar	Not satisfactory	26	28.0
	Satisfactory	62	66.7
	Highly satisfactory	5	5.4
	Total	93	100.0
Almora	Not satisfactory	64	68.8
	Satisfactory	14	15.1
	Highly satisfactory	15	16.2
	Total	93	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all the custodian of VPT were making payment regularly in the both the districts.

Table IX. Regularity in Payment

Telecom District	Regularity	No. of Custodians	Percent
Srinagar	Yes	10	100.0
Almora	Yes	10	100.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 34.4 % users in Srinagar district have resolved problems about VPT location internally and in Almora 75.3 % VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Srinagar	Internally	32	34.4
	Externally	4	4.3
	Not resolved	4	4.3
	Not aware	53	57.0
	Total	93	100.0
Almora	Internally	70	75.3
	Externally	15	16.1
	Not resolved	7	7.5
	Not aware	1	1.1
	Total	93	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 99 % internally in Srinagar and 96 % in Almora district. Problem solution of quality accessibility was also viewed solved internally among 99 % users in Srinagar and 96 % in Almora.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Srinagar	Internally	100	99.0	100	99.0
	Externally	-	-	-	-
	Not resolved	-	-	-	-
	Not aware	1	1.0	1	1.0
	Total	101	100.0	101	100.0
Almora	Internally	96	96.0	96	96.0
	Externally	-	-	-	-
	Not resolved	-	-	-	-
	Not aware	4	4.0	4	4.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 60 % users were not aware in Srinagar and in Almora districts 59% shared that it was resolved internally. Similarly in the case of the problem of quality repair & maintenance 60 % users were not aware in Srinagar and 63.4 % of VPT users have resolved internally in Almora districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Srinagar	Internally	26	28.0	26	28.0
	Externally	5	5.4	5	5.4
	Not resolved	6	6.5	6	6.5
	Not aware	56	60.2	56	60.2
	Total	93	100.0	93	100.0
Almora	Internally	59	63.4	59	63.4
	Externally	21	22.6	21	22.6
	Not resolved	12	12.9	12	12.9
	Not aware	1	1.1	1	1.1
	Total	93	100.0	93	100.0

- D. Problem resolution about the payments to the custodians**

Table X.D. Problem resolution related to payments to custodians

Telecom District		No. of Users	Percent
Srinagar	Internally	23	24.7
	Externally	2	2.2
	Not resolved	5	5.4
	Not aware	63	67.7
	Total	93	100.0
Almora	Internally	39	41.9
	Externally	33	35.5
	Not resolved	10	10.8
	Not aware	11	11.8
	Total	93	100.0

Regarding the problem of payment to custodian 67.7% were not aware in Srinagar district and 41.9 % users viewed that it was solved internally in Almora district.

E. Problem resolution about the other alternate service providers

Table X.E. Problem resolution related to alternate service providers

Telecom District		No. of Users	Percent
Srinagar	Internally	9	9.7
	Externally	3	3.2
	Not resolved	2	2.2
	Not aware	79	84.9
	Total	93	100.0
Almora	Internally	18	19.4
	Externally	3	3.2
	Not resolved	4	4.3
	Not aware	68	73.1
	Total	93	100.0

84.9 % VPT users in Srinagar and 73.1 % in Almora were not aware about the problem resolution in Srinagar and Almora districts.

SWOT ANALYSIS

DISTRICT : SRINAGAR

(1) Village Mala B

Mala Basani village is situated 800 meters away from the national highway across the river. VPT is installed on top of the steep hill in a kuchha house. Village is inhabited in 6 km radius but each house is situated on a separate peak of a hillock that limits the use of VPT. It is extremely difficult to cover this village in a day. Custodian was the Sarpanch at the time of installation of this VPT and on the demand of villagers he agreed to install VPT. The technology used in this VPT is WLL fix technology. Mostly people were not aware of this facility. This village is a part of New Tehri district. The bill is paid in the post office of Tehri and then sent to Srinagar SSA that sometime takes more than a month. Meanwhile connection is disconnected without any fault of the owner.

Strengths

- Custodian of the VPT is an influential leader of the village
- WLL fix technology provides clear voice and better connectivity
- STD facility is available on the VPT
- Facilitates regular social connectedness
- Behaviour of the custodian is very cooperative
- Installed in the house and is always available for users in case of the need

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- Lack of billing machine for users. Payment is done on random basis.
- Most of the villagers were not aware about this facility
- Once it is faulty then it becomes difficult to repair and takes a lot of time because of shortage of field staff
- Phone bill delivery is frequently delayed and custodian faces problem in paying bills on time
- People have no orientation about the usage of phone besides personal communication

Opportunities

- Village area is extremely difficult, better system of repair and maintenance is quite essential for daily requirements.
- Generating awareness about VPT usage among villagers other than personal communication is need of hour for enhancement of quality of lives of rural India.

- Strengthen VPT through additional facilities such as Internet, Fax to attract the younger generation to use the facility.
- GSM FIX technology is useful for solving maintenance problem.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the SSA is extremely different and difficult to approach.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be done.

Threats

- Availability of other mobile network at their door steps
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.
- Extensive and wide reach of Other service providers with better services

(2) Village Kundeli (Hilluri)

VPT in this village is installed in a pucca house, 8 km far from the national highway. Custodian is very honest and polite and has retired from education service as Principal. His name was suggested by Gram Sabha for VPT installation. Service is always available for villagers. Village is 2 km away from the location of VPT. VPT is being used mostly when mobile network is not available in the village. He shared that VPT is very useful for poor people especially in rural areas but only relevant when mobile services are disrupted as majority are owning cell now-a-days. VPT was extremely useful one and half years back when there was no mobile network in this village. After mobile tower installation, usage of VPT is drastically reduced.

Strengths

- Installed in the pucca house, always available for users in case of the need
- Custodian is respectable and have good reputation in the village
- Landline technology provides clear voice and better connectivity specially in case of fault in other mobile networks
- STD facility is available on the VPT
- Facilitating regular social connectedness
- Behaviour of the custodian is very cooperative
- VPT is especially beneficial for poor people
- Display board with tariffs, toll free numbers for emergency and complaints are handled properly

Weakness

- Display board is not visible to common villagers, hanged in the house
- Most of the villagers were not aware about the facility
- Lack of billing machine for users. Payment is done on random basis.
- Once it is faulty then it becomes difficult to repair and takes a lot of time because of shortage of field staff
- Phone bill delivery is frequently delayed.
- People have no orientation about the wider use of VPT other than personal usage
- Most of the field staff is contractual thus not fully responsible

Opportunities

- Awareness generation about VPT usage among villagers other than personal communication is need of hour for enhancement of quality of lives of rural India
- Remote Village having difficult accessibility, better system of repair and maintenance is required
- Strengthen VPT through additional facilities such as internet, fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the SSA is extremely different and difficult to approach.
- Extensive marketing of the products is necessary, especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.
- Corruption problem should be solved for proper working of the scheme

Threats

- Reach of other mobile network at their door steps
- Lack of awareness about VPT among villagers is prominent.
- Extensive and wide reach of other service providers with better services

(3) Village Biroli Langaasu

VPT in this village is run by an old NGO named Gomati Prayag Janklyan Parishad GPJP. VPT is installed the office of NGO right on the national highway 58. It was revealed that general phone in the name of secretary of GPJP is converted into VPT on the request of BSNL official as they thought this is the most appropriate location. Surprisingly many members of the organization were not aware about this fact. Neither they were aware about the terms and conditions of VPT, although people were using this phone without any restrictions.

Strengths

- VPT is installed right on the road NH 58. Easy accessible to all
- Display board with tariffs, toll free numbers for emergency and complaints

- Landline technology provides clear voice and better connectivity specially in case of fault in other mobile networks
- STD facility is available on the VPT
- Facilitating regular social connectedness
- NGO is always open, no restriction on usage

Weakness

- Only one display board out of the office, no other indicators were seen
- Mostly used by NGO
- Most of the villagers were not aware about the public facility
- Lack of billing machine for users.
- Once it is faulty then it becomes difficult to repair and takes a lot of time because of shortage of field staff
- Delivery of bills is frequently delayed.
- People have no orientation about the wider use of VPT other than personal usage

Opportunities

- Awareness generation about VPT usage among villagers other than personal communication is need of hour for enhancement of quality of lives of rural India
- Strengthen VPT through additional facilities such as internet, fax to attract the younger generation to use the facility
- There is need to recruit more staff since the geography of the SSA is extremely different and difficult
- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- VPT is not being used much now as other mobile network has reached at their door steps
- Villagers are not aware how to use VPT for improvement of their lifestyle
- Extensive and wide reach of other service providers with economical services and tremendous marketing.

(4) Village Mana

Indo Tibetan Border Police Force (ITBPF) is the custodian of the VPT in this village. Mana village is the last village of India China border in this direction. China border is 40 km from this post. This is an all season post and VPT is exceptionally useful here in the six months season of snowfall. All other networks are non-functional in winters and only one point of

connectivity is this VPT. DSPT technology has provided all time connectivity to the force. Two more DSPT connections are given to ITBPF for 9 months seasonal posts on commercial basis where force has paid for that connection.

Strengths

- Custodian is ITBPF and maintained exceptionally well
- People got benefit of this kind of facility after 35 years at this post.
- Records of all outgoing and incoming calls are kept very well classifying into Government and private.
- DSPT technology is providing 100% connectivity especially in the season of snow fall when all the other services are disrupted and even exchange is closed.
- Extreme clarity of voice and no maintenance problem
- Specially useful on case of emergency facilitating communication to the battalions for extending help
- Before installation of this VPT soldiers used to face lot of problem in contacting their family member. They have to use wireless connection for transferring their messages to the family members.
- All are greatly thankful to BSNL for providing this facility
- All the villagers like coolies, Nepali and Bihari labour use this facility frequently
- No maintenance problem
- Villagers use it even without the display board.

Weakness

- People usually use in case of emergency and social purpose. No orientation about the wider use of VPT.
- No display board with tariffs, toll free numbers for emergency and complaints
- Lack of billing machine for users.

Opportunities

- Awareness generation about VPT usage among villagers other than personal communication can increase the usage and help in enhancement of quality of lives of rural India
- Strengthen VPT through additional facilities such as internet, fax to attract the younger generation to use the facility
- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- Proper display may increase use of this facility

Threats

- VPT is not being used much now as other mobile network has reached at their door steps
- Villagers are not aware how to use VPT for improvement of their lives
- Extensive and wide reach of Other service providers with economical services and tremendous marketing reduce the use of the VPT in season
- Multiple mobile connections – BSNL and private in households especially amongst younger generation.

(5) Village Lambagarh

This newly installed VPT is within 300 meters of the road near to JAYPEE hydel power unit. No network connectivity is available in this hilly location. Tower coverage is not properly accessible thus this VPT is extremely useful for villagers. This VPT is recently installed in the post office and based on DSPT technology to solve the problem of network coverage. BSNL has selected the location of DSPT VPT in this area.

Strengths

- Non-availability of any network making it very useful and essential.
- VPT is installed right on the road side post office which is easily accessible to all
- DSPT technology is providing all time connectivity specially when no other network is available in the area
- STD facility is available on the VPT
- Facilitating regular social connectedness
- Useful in case of any crisis especially natural disasters
- Expensive assets of BSNL is safe in use
- Easy to maintain DSPT technology

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- Lack of billing machine for users.
- Most of the villagers were not aware about this facility as it is recently installed
- Delivery of bills is frequently delayed.
- Villagers are totally ignorant about the wider use of VPT other than personal usage

Opportunities

- Display board is required with all information for optimum utilization of the service
- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established

- Awareness generation about VPT usage among villagers other than personal communication is need of hour for enhancement of quality of lives of rural India
- Incorporation of additional facilities/ features such as STD, internet, fax to the VPT to attract the younger generation for greater access and high usage

Threats

- Villagers are not aware how to use VPT for improvement of their lives
- Extensive and wide reach of other service providers with economical services and tremendous marketing.

(6) Village Khiron

VPT in this village is installed in a post office very recently. No other service is operated in surrounding area because of hilly location. DSPT technology is used here for solving connectivity problem. VPT Accessibility is very easy at this point of location as NH is crossing and mostly tourists stop here because of religious point in front of this post office. VPT was not found working at the time of evaluation, as battery was not charged due to cloudy weather. Custodian was not aware about the functionality, maintenance and call rates of VPT. VPT was also kept in a store like place that itself reflects its non operational status. This VPT was installed on the advice of Pradhan of that village. Before installation of this VPT this village was totally disconnected from other part. This VPT is going to be relocated because of the construction of BRO (Bridge on the site).

Strengths

- Easy to access as installed in the post office on the road side
- Location is decided as per the advice of pradhan
- DSPT technology is able to provide coverage to remote village having no connectivity earlier.
- STD facility is available on the VPT
- Facilitating regular social connectedness
- VPT is especially beneficial for tourists, road by passers and poor villagers

Weakness

- Most of the villagers were not aware about the facility as no display board was there
- No incoming calls from different service operator
- Lack of proper billing machine for users.
- Phone bill delivery is frequently delayed.
- People have no orientation about the wider use of VPT other than personal usage
- No display board with tariffs, toll free numbers for emergency and complaints
- Problem of solar battery charging in cloudy weather
- Bill payment is problematic, centre is very far at Badrinath

Opportunities

- Display board with details of tariff, toll free utilities and grievance redressal
- Awareness generation about VPT usage among villagers other than personal communication for enhancement of quality of lives of rural people
- Strengthen VPT through additional facilities such as Internet, Fax to attract the younger generation to use the facility.
- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- Branding exercise to position VPT as the lifeline for rural development needs to be done.
- Provision of main charging unit (MCU) in the area, can solve battery recharging problem
- Facility of Payment centre at nearest point.

Threats

- Construction work on the site
- Lack of awareness about VPT among villagers is prominent.
- Ignorance about added advantages of VPT in comparison to other players

(7) Village Challoda

VPT in this village is recently installed. The custodian is a female young graduate. The location of phone is in a pucca house within the village. Technology used in this connection is landline. Location of the VPT is decided by the BSNL proposal and is very convenient. Most of the people are willing to avail this facility but were not aware about this service earlier. They were having opinion that Village Panchayat should take proactive action for maximum utilization of the service.

Strengths

- VPT is very useful for poor villagers as no other reliable network is available
- High level of willingness to use and improve the facility in the village
- Easy access as installed within the village
- Landline technology provides clarity of voice
- STD facility is available on the VPT
- Female young graduate custodian is a helping women to access the service easily and all the time
- Facilitating regular social connectedness

Weakness

- Most of the villagers were not aware about this public facility and advantages
- Lack of proper billing machine for users.

- People have no orientation about the wider use of VPT other than personal usage
- No display board with tariffs, toll free numbers for emergency and complaints

Opportunities

- Branding exercise to position VPT as the lifeline for rural development needs to be done
- Awareness regarding BSNL commitment regarding Bharat Nirman without any profit motive.
- Display board with details of tariff, toll free utilities and grievance redressal.
- Awareness generation about VPT usage among villagers other than personal communication for enhancement of quality of lives of rural people
- Strengthen VPT through additional facilities such as internet etc
- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Lack of awareness about VPT among villagers is prominent.
- Ignorance about added advantages of VPT in comparison to other players

(8) Village Suni (Sylori)

VPT in the village of Suni in Agastmuni block is like a life line for the village. This is the only one phone connection available in this village because of hilly geographic terrain. All people are using this phone service and praising BSNL field staff for their commendable job. VPT location is the house of Sarpanch and was decided by the villagers. Not a single non-beneficiary could be found in the village. VPT is maintained very well and villagers were highly satisfied.

Strengths

- Non-availability of any network availability in the difficult hilly terrain making VPT extremely useful and essential.
- Location of the VPT is convenient and thus easily accessible to all
- Land line technology is helping in full clarity of voice
- Custodian is not charging for call and provides free service
- STD facility is available on the VPT
- Helping in regular social connectedness.
- Useful in case of any crisis, especially natural disasters
- Villagers are highly satisfied with the services and BSNL field staff

Weakness

- No display of tariffs, toll free numbers for emergency and complaints
- Delivery of bills is frequently delayed.
- Paying bill is not convenient
- Maintenance and repair is taking longer time because of understaffing

Opportunities

- Detail information on the Display Board is required for optimum utilization of the service
- Awareness generation about VPT usage among villagers other than personal communication is need of hour for enhancement of quality of lives of rural India
- DSPT technology is more viable for uninterrupted services in the area
- Incorporation of additional facilities/ features such as STD, Internet, fax to the VPT to attract the younger generation for greater access and high usage.

Threats

- Difficult geographic terrain is limiting the maintenance of landline technology
- Villagers are not aware how to use VPT for improvement of their lives besides personal communication

(9) Village Thathi

Retired CSIF personal is the custodian of the VPT and he himself had applied for the VPT connection in her wife's name. VPT is installed inside the house. General phone was converted into VPT. Offer was given by BSNL department. Even some of the neighbours were not aware that this is a public phone. It is mostly used as personal phone. Technology of the connection is landline that gives better voice clarity.

Strengths

- Well recorded and maintained by retired CSIF personal
- Good facility for many people
- Landline technology gives clear voice

Weakness

- Most of the villagers were not aware about the facility as no display board was there
- Villagers assumes that this is a private connection
- Lack of proper billing machine for users.
- Phone bill delivery is frequently delayed.
- People have no orientation about the wider use of VPT other than personal usage
- No display board with tariffs, toll free numbers for emergency and complaints
- Maintenance takes longer time in the case of fault

Opportunities

- Extensive marketing of the products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- Awareness regarding BSNL commitment regarding Bharat Nirman without any profit motive.
- Branding exercise to make VPT as the lifeline for rural development needs to be done.
- Display board with details of tariff, toll free utilities and grievance redressal.
- Awareness generation about VPT usage among villagers other than personal communication for enhancement of quality of lives of rural people
- Strengthen VPT through additional facilities such as internet etc

Threats

- Use of VPT as a personal telephone in case of conversion of general connection into VPT
- Lack of interest about VPT among villagers is prominent.
- Ignorance about added advantages of VPT in comparison to other players

(10) Village Dewaldhar

This VPT is installed on the road going towards Kedarnath in Gopeshwar. Technology used in this phone is landline. Service is always available to people, as it is located in a shop. Before reach of mobile services it was quite useful but after easy and wide accessibility of mobiles and landline phones in village utility is drastically reduced.

Strengths

- VPT is installed on the roadside. Easy accessible to all
- Landline technology is providing clear voice and better connectivity specially in case of fault in other mobile networks
- STD facility is available on the VPT
- Facilitating regular social connectedness
- Shop is always open, no restriction on usage

Weakness

- No display board showing tariffs, toll free numbers for emergency and complaints
- Rarely used by villagers because of widespread and easy access to mobiles
- Most of the villagers were not aware about the advantages of VPT
- Lack of billing machine for users.
- Once it is faulty then it is difficult to repair and takes a lot of time because of hilly area
- People have no orientation about the wider use of VPT other than personal usage

Opportunities

- There is need to recruit more staff since the geography of the SSA is extremely different and difficult for proper maintenance
- Awareness generation about VPT usage among villagers other than personal communication for improvement of quality of lives of rural people.
- Strengthen VPT through additional facilities such as internet, fax to attract the younger generation to use the facility
- Extensive marketing of the product is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- Attractive and profitable branding exercises to make VPT, as the lifeline for rural development needs to be established.

Threats

- VPT is not being used much now as other mobile networks have reached at their door steps
- Villagers are not aware how to use VPT for improvement of their lifestyle
- Extensive and wide reach of other competitive service providers with economical services and remarkable marketing.

DISTRICT : ALMORA

(1) Village Khagmara (Karabal)

Khagmara is at a distance of 5 Kms from District Headquarters i.e., Almora. It is almost a part of Almora city. The custodian, Mr. Chandan Singh Adhikari is an ex-serviceman and now runs his own taxi business. On observation one could easily see that the household was very well-off. VPT was ignored and not considered important at all. Custodian told that VPT usage is almost nil, which could also be verified by his billing amounts ranging between Rs 4 to Rs 20 per month. It was quite impossible to locate desired no of beneficiaries required for sample size in this village. It was clear case of NIM (Non-Incremental Meter). It should be immediately relocated.

Strengths

- Selection of custodian was made by Gram Panchayat.
- Repairs and Maintenance was done by BSNL

Weakness

- Villagers were completely unaware that it was a public utility, they considered it as a personal phone.
- There was no display board

- Billing was negligible.
- Reluctant attitude of custodian, while discussing with custodian he told that VPT is of no use these days. He himself doesn't use this phone. He deposits bill after 3-4 months. Since last one-year bill amount has never crossed Rs 50/- a month.
- Village is a part of Almora city, hence well connected through all mobile services. Maximum households are also having landline connection and almost every household have multiple mobile connections.
- STD facility is not available on this phone.

Opportunities

- VPT should be immediately relocated on the roadside shop
- Provision of STD is required to increase the usage of VPT
- Awareness level of VPT needs to be increased.
- Since village is a suburb, extended services viz., Internet and fax can increase the usage of VPT.

Threats

- Competition from individual connections as well as STD/PCO operators.
- Widespread prevalence of mobiles and availability of tariff vouchers make calls very cheap as compared to landlines.

(2) Village Hawalbagh

The village is situated 4 Kms. from state highway, connected through a pucca road. This village is situated on the road. VPT is located in the middle of the village. Mr. Deepak Singh Negi is the custodian selected by the Gram Panchayat. Mr Negi is an unemployed person engaged in non-agricultural casual labour. Before the introduction of mobile services VPT was a source of earning for him, but now due to increasing use of mobile phones and increased number of landline connections in the village, usage of VPT has come down significantly. During discussions with Mr. Negi, we found that he was very keen in making VPT more remunerative for him and wanted to know about extended services and its use.

Strengths

- Custodian stays in the middle of the village.
- Repair and maintenance is done within 24 Hrs.
- VPT is mostly used for receiving incoming calls.
- STD facility is available

Weakness

- Very low usage
- Display board was not available

- VPT is located in the bedroom inside the house, so not a convenient location for users
- Cable theft and cable breakage is a common problem rendering VPT out of service.
- There was no billing machine or stop watch to keep a check on the call duration.

Opportunities

- Extended services are necessary to increase the use of VPT
- Billing machine should be provided for monitoring the long distance calls

Threats

- Proliferation of mobiles by private as well as BSNL.
- Increased number of landline connections in the village.
- Availability of special tariff vouchers make calls from mobiles cheaper than VPT

(3) Village Sarka

Sarka is a small village with 50 households. One has to travel 4 Kms on foot from Shitlakhet to reach the village. The custodian Mr. Gopal Ram, belongs to SC category. His mother was pradhan when he was selected as custodian by village panchayat. VPT in this village was found to be the only life line as there was no other connections, mobile network was also not available in the village, it was available 500 metres uphill. Those who have mobile phones are working in Shitlakhet or other places and use it there only. Village is not electrified till date.

Strengths

- All villagers were aware of the presence of VPT and used it frequently.
- The house of custodian is located conveniently in the middle of the village.
- It is the only lifeline of village many times it has been used during emergencies to call 108.
- Repairs and maintenance was done immediately.
- Connection is a landline, since the village is not electrified till date, WLL is not feasible. It gives connectivity to villagers.
- STD facility was also available.
- Anganwadi Kendra is also located in the custodian's house hence most of the females in the village uses VPT.

Weakness

- VPT is a landline connection and therefore cable breakage and cable theft is a major problem.
- Telephone line is open and hanging, making it more prone to breakages and thefts.
- There was no display board, BSNL people told that it was not issued till date, process of tendering is under pipeline, only after that it will be distributed to all the VPT's.

- Lineman is overburdened and also of old age.
- Inaccessible in night hours due to non-availability of electricity and threat of wild animals.
- Accessibility is poor during winter and rainy seasons.

Opportunities

- Provision of display board.
- Provision for billing machine will increase the usage of STD facility.

Threats

- Inaccessible road is leading to difficulties in prompt service delivery especially during bad weather.

(4) Village Jala

The village is 13 Kms from state highway. The VPT is located on the roadside general store owned by the custodian. Village is 150 mtrs downhill. Mr. Lalsingh, the official custodian of VPT is a government employee and also owns a general store, which is operated by his son.

Strengths

- Technology used is WLL, and hence convenient to use.
- VPT is located in the General store accessed by all the villagers.
- Villagers are aware about the availability and location of VPT.
- Usage of VPT is good despite of stiff competition from increasing network of mobile phones.
- STD facility is available.
- It is used in case of emergencies.
- Even mobile owners use VPT during emergencies and signal problems. People told that when balance in their mobiles is low then they make calls from VPT.

Weakness

- For those staying on the other side of village accessibility is a problem due to distance.
- During bad weather signals are not proper.
- Users argue for paying STD bills due to non-availability of billing machine.
- Battery back-up is not adequate during power cuts, because power cuts are frequent and for longer durations.
- Sign board was not available.
- Problem of overcharging from customers was reported. Few villagers reported that they were charged upto Rs 5 per minute for STD calls and Rs 3 per minute for local calls.

Opportunities

- Strengthening the signals
- Locating the VPT inside the village can increase its usage.
- Battery backup should be increased.
- VPT is still considered as caller of last resort
- The coin box system, billing machine can be used to strengthen the Patronage.

Threats

- Prolonged power cuts make WLL phone non-operational.
- VPT is facing a stiff competition from increasing use of mobile phones.
- Over charging users leads to decline in usage.
- Special tariff vouchers by mobile service providers is a big threat.

(5) Village Enar

This village is 13 kms from state highway and situated 1.5 kms downhill across the river. Village is having 150 households. VPT was located at the roadside shop of nephew of custodian, 1.5 kms from the village. The official custodian Mr. Umrao Singh is an influential person. He is a BTC member and has a shop at Bajol, 5 Kms from village. As reported by villagers, it was just two days back, VPT was brought back to village and was placed in the shop of his nephew. Problem of overcharging was also reported by few villagers. No one was available at custodian's home when survey team reached the village. Villagers reported that in the evening Mr. Umrao Singh brings back the phone to village when he returns from his shop. Villagers also reported a sad incidence, which took place in this village. This tragedy took place on 29th July, one boy namely Bhupendra Singh (15 yrs) drowned in Kosi River and they were not able to call emergency service due to non-availability of VPT. Villagers carried the boy uphill for 5 kms and then called 108. Boy could have been saved if VPT was located in the village. VPT is totally used for personal purpose and not for the betterment of villagers. It needs to be relocated immediately.

Strengths

- Technology used is WLL and convenient to use.
- Incoming calls were received in VPT.
- Signal strength is very good, thus giving better connectivity.

Weakness

- Due to battery problem it was reported that VPT was dysfunctional for 3 months
- Prolonged power cut leads to non-recharge of the battery rendering VPT dysfunctional
- VPT is not available in the village during day-time.
- Overcharging is also reported by villagers.

- Location observed by survey team was also not convenient. It was 1.5 Kms. from village.
- There was no display board available, stop watch and complaint book was also missing.

Opportunities

- VPT should be immediately relocated so that it can be used by the villagers.
- WLL with internal battery, which has longer recharge capabilities, needs to be replaced with the existing one.
- Extended services will improve the patronage of VPT.

Threats

- Personal mobile connections lead to non-use of VPT
- VPT is being used more as a personal phone rather than a public utility.

(6) Village Nanisar

The village is situated 9 Kms from Majkhali, 3.5 Kms from state highway and 300 mtrs downhill from road. Custodian, Smt Gopuli Devi was present Pradhan of village and belonged to SC category. VPT was installed just 2 months back after long efforts made by Pradhan. It was observed that Pradhan was quite active in the development of village. It was due to efforts of Pradhan, village was allotted Solar street lights 20 in nos and 13 domestic solar lights under EUREDA project. Electricity failure was a major problem in the village. Power cuts for 2 to 3 days were very frequent.

Strengths

- SC Household is the custodian of VPT, ensuring equity and social justice.
- VPT was installed in the Pradhan's office outside the house, making it convenient location to all.
- Custodian being Pradhan at present was very active in providing services to villagers
- Majority of villagers don't have mobiles or landlines, hence, VPT is very useful for the village.

Weakness

- No display board was given to the custodian
- Prolonged power cuts leads to discharge of battery, making VPT dysfunctional
- Internal battery of the instrument had a backup of only 1 hour.
- Signal strength was very weak
- Since it was a new connection, people were not fully aware of VPT.

Opportunities

- By increasing the signal strength
- Efforts are required to increase the awareness of villagers about availability of VPT
- Battery with more back up can reduce the problem of low battery back up and would result in functioning of VPT for a longer period during power cuts.

Threats

- Rapidly growing mobile connections in household.

(7) Village Kotar

This village is situated 7 Kms from state highway and 3 Kms downhill from pucca road. Custodian Mr. Rajendra Singh is a government employee and almost every household had multiple mobile connections, thus over past two years the usage of VPT has reduced drastically. Due to the geographical location of custodian's house, signals are often not strong resulting in problem such as, voice drops and call disconnect.

Strengths

- Technology used is WLL
- People still use VPT when balance is low in mobiles or when mobile don't work.
- Custodian is active in helping villagers.

Weakness

- There was no display board
- Weak connectivity, especially during cloudy weather, rains renders the VPT dysfunctional.
- There was no sign board, stop watch or billing machine for monitoring the call duration and billing amount
- One villager reported that sometimes VPT is not available in village, it is used at the shop uphill 3 Kms from the village on road.

Opportunities

- Increasing the signal strengths
- Extended services can help in increasing the patronage of VPT
- Awareness needs to be increased
- Reducing call rates will help VPT to compete from low cost calls of mobiles.

Threats

- Competition exists from mobile service providers. It was told that using special tariff vouchers, local call can be made @ 50 paise per minute whereas, custodian charges Rs 2 per call.
- Connectivity is far better with private service providers.

(8) Village Thakulari

Village is situated very close to tehsil, 4 Kms from state highway and 500 metres from pucca road downhill. Custodian Mr Paan Singh Adhikaari is working as a peon in a school. It was his initiative to bring a VPT connection in the village, as there was no telephone facility in the village. He was unemployed at that time and hence he initiated an application for VPT connection, which was forwarded by Gram Pradhan, and he was allotted VPT. According to Mr. Pan Singh, VPT was a source of livelihood for him, but since last one and half-year usage of VPT has declined significantly due to increasing use of mobile phone.

Strengths

- Technology used is WLL
- People still use VPT in emergency
- It is used mostly for incoming calls. People reported that their children who live in other cities mostly make calls on VPT because mobile is not at home all the time during day hours. Similarly, those who work in nearby areas mostly make calls on VPT to communicate with their family members.
- Location is very convenient, as house of custodian is situated in the middle of the village.
- Custodian is proactive and enthusiastic about usage of VPT, when mobiles were not available, VPT was a source of income for him

Weakness

- Battery back up is very weak, it gives a backup of only 10 – 15 minutes. Whenever there is a power cut, VPT is dysfunctional.
- During rainy season and night hours signals are very weak
- There was no display board
- Awareness level needs to be improved

Opportunities

- External battery or a better quality internal battery will keep the VPT functional for longer duration during power cuts.
- Display board along with toll free numbers can increase the usage of VPT

Threats

- Increasing competition from mobile service providers is a major threat to the patronage of VPT

(9) Village Dumdoli

Village is situated 2 Kms downhill from main road, whereas, VPT is situated on the roadside. Custodian Mr. Bhim Singh is ex-serviceman. He moved an application through Gram Panchayat and VPT was sanctioned to him. Though billing was very good in this VPT, which indicates heavy use of VPT, but mostly this is due to personal usage by the custodian for his business. He himself admitted that he charges Rs. 3 / min for local call and Rs. 5/min for STD calls. This is a clear indication that VPT is considered as a personal phone and custodian discourages the use of VPT.

Strengths

- Used by villages during emergency
- VPT is used for getting information about NAREGA schemes.

Weaknesses

- Location is not convenient, it is 2 Kms from village.
- Custodian is reluctant and discourages the use of VPT
- It is a landline connection, hence problems like cable breakage and cable theft are frequent
- Overcharging is a de-motivating factor (Rs 3 per minute for Local and Rs 5 per minute for STD)
- No display board was available

Opportunities

- VPT should be relocated between the village for betterment of villages
- Coin box should be introduced
- More awareness needs to be created

Threats

- Attitude of custodian is not favourable towards usage by villagers. He considers it to be a personal phone.
- Increasing use of mobiles

(10) Village Dadholi

Village is situated 17 Kms from Bhikyasain. Approach road to this village is in very poor condition, during rainy season the road is closed. Custodian Mr. Taradutt Sharma was Gram Pradhan when VPT was allotted to him. He maintains good relation with villages and is helpful as told by villagers. Though mobile connections have increased in village but due to weak signal, VPT is still used widely.

Strengths

- Technology used is WLL
- Location is convenient to all villagers
- Used by majority of villagers, incoming calls are received in large number
- In case of emergency it is used by all villagers
- VPT is used irrespective of the widespread prevalence of mobiles due to signal problem. Hence, VPT gets good network coverage, whereas mobile signals are very weak.

Weakness

- Due to poor connectivity of road, bills are not received on time. Custodian told that, mostly he has to get a duplicate copy of bill and pay it.
- Battery backup is also weak.
- No display board is provided till date by BSNL. Official accompanying survey team told that tenders have been invited and very soon they will distribute the display board

Opportunities

- Extended service in increasing the usage of VPT
- Battery backup is required to keep VPT functional during power cut

Threats

- Increasing competition from mobiles and WLL connection in village. Now there are 5 more WLL connections in the village

State Report - 4 JHARKHAND



Jharkhand

Jharkhand is a state in eastern India. It was carved out of the southern part of Bihar on 15 November 2000. Jharkhand shares its border with the states of Bihar in the north, Uttar Pradesh and Chhattisgarh in the west, Orissa in the south, and West Bengal in the east. The total area of Jharkhand is 28,833 sq mi (74,677 km²).

The 28th state of the Indian Union was brought into existence by the Bihar reorganization Act on November 15, 2000 - the birth anniversary of the legendary Bhagwan Birsa Munda. Jharkhand is famous for its rich mineral resources like Uranium, Mica, Bauxite, Granite, Gold, Silver, Graphite, Magnetite, Dolomite, Fireclay, Quartz, Feldspar, Coal (32% of India), Iron, Copper (25 % of India) etc. Forests and woodlands occupy more than 29% of the state which is amongst the highest in India (<http://jharkhand.nic.in>).



The Jharkhand population constitutes of 2.18 crore as per the census of 2001. The newly formed state of Jharkhand is densely populated with 274 persons per square kilometer. A total of 32620 villages are there in Jharkhand state out of which only 45 % are electrified and only 8,484 villages are connected by roads.

After the creation of the State of Jharkhand focused attention on telecommunication facilities has resulted in a significant improvement in the telecommunication services and facilities. A separate Telecommunication circle for Jharkhand has started functioning, which would take care of the requirements of this sector. Jharkhand has 337 telephone exchanges having total switching capacity of 3.52 lakhs and has 2.75 lakhs working telephone connections. All district headquarters are connected to the main network by reliable media and STD facility in all district headquarters is available. The switching capacity of major towns of the State such as Ranchi, Hazaribagh and Giridih are being upgraded. The Ranchi internet node has been upgraded to "A" category. Optical Fibre Cable (OFC) media connectivity is available in all district headquarters. At present 6 internet nodes are operational in Jharkhand Telecom Circle. Local dialing facility to access internet is available for all district headquarters. 1566 villages were covered under Bharat Nirman out of 1694 Villages under agreement, rest 128 are non-feasible due to various reasons.

Apart from the low pace of development, Jharkhand has been at the centre of the Naxalite-Maoist insurgency. Despite constituting almost 7.80 % of India's geographical area (home to 5.50% of India's population), the state of Jharkhand is part of the "Naxal Belt" comprising 92,000 square kilometres, where the highest concentrations of the groups estimated 20,000 combatants indulge in insurgency. Part of this is due to the fact that the state harbors a rich abundance of natural resource, while its people live in abject poverty and destitution.

FLOW OF FUND

The village public telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There is no particular income obtained from repairs and maintenance as it is done free of cost. There is no record maintained separately for billing income from VPT. From the field experience and institutional survey with the BSNL officials, it is evident that the custodians of maximum of the VPT are not paying the bills properly. Also sometime the post offices are not delivering the bills to the people staying in remote areas. As a result so many custodians are under the defaulter list. Billing pattern from the BSNL office shows that there is income from the VPT service. Custodians showed their dissatisfaction because of late receipt of the bill and hence are not able to pay it.

AVAILABILITY OF STAFF

No manpower is sanctioned specifically for VPT. The existing manpower staff are utilized for provisioning and maintenance of VPT. They completely monitor and supervise VPTs as and when fault reported on routine testing or complaint by custodian. There is no special technical staff available with BSNL for repairs of VPTs. The staff available for maintenance of communication facility of a particular exchange / BTS area, is also responsible for the maintenance of the VPTs. Routine Technical Training is imparted to staff as per need basis due to change of Technology etc.

As regards to strengths and weakness of VPTs in the state it was shared that major benefit of VPT is that it provides connection to rural and poor villagers staying in very remote places. On the flip side, its main weakness is non availability of stable electricity power supply in remote rural areas, which causes frequent faults of the instrument and break in communication. Also the naxal problem is adding more miseries to the lives of the people as well as to the BSNL staff. As a result of this, the monitoring and supervising components of VPT are found to be very poor.

There was lack sufficient staff in the field. So far as monitoring and supervision is concerned, there should be improvement by deploying additional trained manpower for VPT programme with vehicles. However repair and maintenance takes longer time due to poor accessibility, non-availability of electricity / prolonged failure of electricity. VPTs with Solar Panel can give better performance in the remote villages. Repairs and maintenance of VPT were done by

BSNL staff but FWT, IFWT and FWP sets were being done by the Vendor. The Telecom Services is not at all commercially viable in rural areas of the State because of low voice traffic in rural areas and high maintenance cost of IFWTs because of remote locations. If along with VPT, Internet services are also provided to villagers it will provide additional revenue to USP / Custodians.

Officials expressed that it is a very good scheme for upliftment of villagers. WLL provides good coverage but its efficient functioning needs improvement by deploying solar panels for such connections and regular monitoring and supervision. The suggestions for improvement are as follows:

- i) Prepaid VPTs with life time scheme will help in avoiding DNP cases and frequent change of custodians.
- ii) WLL VPTs should be provided with solar panels so that prolonged failure of mains supply does not affect the IFWT performance.
- iii) The job of regular replacement of faulty sets and batteries, change of custodians etc., may be outsourced and JTOs / TTAs may do the monitoring and supervision jobs.
- iv) Again the VPT should be kept in a free place so that all the people should use it without any hesitation.
- v) VPT is an asset of all the villagers. So the custodian should also look after it properly.
- vi) Repair and maintenance takes larger time due to poor accessibility, naxal problem non-availability of electricity / prolonged failure of electricity. VPTs with Solar Panel can give better performance in the remote villages.
- vii) Needs improvement by deploying additional trained manpower for VPT fault rectification with vehicles.

DISTRICT : DUMKA

Dumka is one of the underdeveloped districts in the state of Jharkhand. It is located at 24°16'N 87°15'E / 24.27°N 87.25°E. Dumka has an average elevation of 137 metres (449 feet). The district has an area of 3716.02 sq.km., and consists of only one sub-division namely Dumka. Under the Dumka sub-division, there are 10 blocks namely Dumka, Gopikander, Jama, Jarmundi, Kathikund, Maslia, Ramgarh, Raneshwar, Shikaripara and Saraiyhat. As per 2001 India census, Dumka had a population of 44,06,52. Males constitute 52% of the population and females 48 %. Dumka has an average literacy rate of 40%, higher than the national average of 59.5 % : male literacy is 50% and, female literacy is 26%. Dumka has predominantly undulating terrain with hard rocks in the underground. The entire district has topography with high ridges and valleys bounded by mountains and rivers. The fertility of soil is poor due to

extensive erosion, acidic character and low retaining capacity. The revenue district of Dumka is Dumka. However there are 6 telecom districts coming under this. Those districts are: Dumka, Deoghar, Pakur, Sahibganj, Jawtara and Godda. As per the Bharat Nirman scheme in the district, the total number of villages covered under VPT is 9752 (at the rate of one VPT per village).

Performance of VPT in Dumka District

The details of physical targets and achievements in terms of number of newly connected villages/ VPTs for the last 5 years has been furnished below.

Details of physical achievements
(No. of newly connected villages/ VPTs) for the last 5 years

Year	Physical Achievements (Newly connected villages/VPTs)	
	No. of Villages	No. of VPTs
2003-04	9186	9186
2004-05	18	18
2005-06	12	12
2006-07	61	61
2007-08	219	219
2008-09	48	48
Total	9544	9544

Table shows that the number of VPTs is proportional to the number of villages. However, from the field experience, it is found that though the target is achieved in quantity, it is not achieved in quality. According to the observation of the study team, the sole reason for the non-performance of VPT in this district is the fear of naxals. Also the problem of approach road is additional problem to the rural people in maintaining the facility provided by the government properly. There is no specific fund for VPT, but there is no shortage also. There are mechanisms available for monitoring and supervision of VPTs by the BSNL people. They do the work on the basis of some of the BSNL guidelines. However the of work distribution has been done by area wise. The major repair and maintenance work includes replacement of battery. They don't charge for repairs and maintenance. Training Programmes are being arranged by BSNL Training Centres for the installation, operation and maintenance of C-DOT / WLL / DSPT equipments, on which these VPTs are working.

Strengths and Weakness

Strengths

- Availability of Telecom facilities to remote villages at affordable price, which help them to be connected with rest of the world.
- Poorest of the poor are in a position to derive benefit from it by collating information for their livelihood.

- Rural villagers are using VPT for emergency purposes like health

Weakness

- Unstable / No Electric supply
- Difficult to maintain in far flung areas due to lack of approach road.
- Poor maintenance by the custodians
- Less BSNL staff to monitor properly
- Poor approach road.

DISTRICT : HAZARIBAGH

Hazaribagh lies in the northern part of Jharkhand at an elevation of 2000 ft. It has a high central plateau, a lower and more extensive plateau and the central valley of the Damodar River. Main crops are rice, paddy, wheat, maize and oilseeds. The district is divided into two sub-divisions: Hazaribagh and Barhi. Hazaribagh sub-division comprises 11 blocks: Hazaribagh, Katkam Sandi, Bishnugarh, Barkagaon, Keredari, Ichak, Churchu, Daru, Tatijhariya, Katkambag and Dari. Barhi sub-division comprises 4 blocks: Padma, Barhi, Chauparan and Barkatha. The 2001 Census has recorded a population of 127,423. Males constitute 53% of the population and females 47%. Hazaribagh has an average literacy rate of 76 %, higher than the national average of 59.5%: male literacy is 81%, and female literacy is 70 %. This district of Hazaribagh is located in the northeastern portion of the North Chotanagpur Division. It is bounded by both Gaya and Koderma districts in the northern part, in the eastern side lie Giridih and Bokaro. Lush forest actually made the geography of Hazaribagh so divergent. Nearly 45 % of the total area of the district is dense forest. As per the Bharat Nirman scheme in the district, the total number of villages covered under VPTs is 5884 (at the rate of one VPT per village).

Performance of VPTs in Hazaribagh District

The details of physical targets and achievements in terms of number of newly connected villages / VPTs for the last 5 years has been furnished below:

Details of physical achievements
(No. of newly connected villages/ VPTs) for the last 5 years

Year	Physical Achievement (Newly connected villages/VPTs)	
	No. of Villages	No. of VPTs
2003-04	1134	1134
2004-05	324	324
2005-06	312	312
2006-07	31	31
2007-08	61	61
Total	1862	1862

Table shows that the number of VPTs is proportional to the number of villages. However, from the field experience, it is found that though the target is achieved in quantity, it is not achieved in quality. According to the observation of the study team, mere availability of a particular facility will not increase the connectivity. It should also be monitored properly. There is no specific fund for VPT, but there is no shortage also. There are mechanisms available for monitoring and supervision of VPTs by the BSNL staff. They do the work on the basis of some of the BSNL guidelines. However the of work distribution has been done area wise. The major repair and maintenance work includes replacement of battery. They don't charge for repairs and maintenance. Training Programmes are being arranged by BSNL Training Centres for the installation, operation and maintenance of C-DOT / WLL / DSPT equipments, on which these VPTs are working.

Strengths and Weakness

Strengths

- Availability of Telecom facilities to remote villages at affordable price, which help them to be connected with rest of the world.
- Poorest of the poor are in a position to derive benefit from it by collating information for their livelihood.
- Rural villagers are using VPTs for emergency purposes like health

Weakness

- Unstable / No Electric supply
- Difficult to maintain in far flung areas due to no approach road.
- Poor maintenance by the custodian
- Less BSNL staff to monitor properly.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPTs in the rural areas, the present study included two districts in Jharkhand – Hazaribagh and Dumka. In Hazaribagh 100 VPT users and in Dumka 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPTs. This section of the report analyses all the aspects referred above in detail.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, details of telephone connectivity. This reflects general profile of villagers who are using VPTs installed under Bharat Nirman.

Socio-Economic Profile of VPT Users : The socio-economic profile of the respondents covered under the present study revealed that 75 per cent were OBCs in Hazaribagh and 61% were OBCs in Dumka district of Jharkhand.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Hazaribagh	General	8	8.0
	OBC	75	75.0
	SC	12	12.0
	ST	5	5.0
	Total	100	100.0
Dumka	General	11	11.0
	OBC	61	61.0
	SC	13	13.0
	ST	15	15.0
	Total	100	100.0

Description of gender specification depicts that 61 % and 71 % females in Hazaribagh and Dumka districts, respectively.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Hazaribagh	61	39	100
Dumka	71	29	100

Regarding their primary occupation data revealed that 46 % were homemakers in Hazaribagh and 64 % were homemakers in Dumka. Educational qualifications of VPT users were 47 % were illiterates in Hazaribagh and 37 % were illiterates in Dumka in current study.

Table I.A.3. Primary Occupation and Educational Qualification

	Primary Occupation (Self)	Hazaribagh	Dumka
1	Agriculture	16	5
2	Agriculture Casual Labour	8	5
3	Own Business	4	5
4	Self employed in Services	2	-
5	Salaried work	-	3
6	Homemaker	46	64
7	Non-working Adults	-	1
8	Students	8	8
9	Dependents	4	2
10	Others	6	1
11	Non-Agriculture Casual Labour	6	6
	Total	100	100
Educational Qualification			
1	Not literate	47	37
2	Functional literate	8	13
3	Primary	14	10
4	Upper Primary	18	8
5	High School	5	18
6	Intermediate	4	10
7	Graduate	4	4
	Total	100	100

Particulars of Home of VPT Users

B.1. Type of House: Majority owned kucha houses in both the districts- Hazaribagh (72.0 %) and in Dumka (64%).

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Hazaribagh	Kucha House	72	72.0
	Semi-pucca House	13	13.0
	Pucca House	15	15.0
	Total	100	100.0
Dumka	Kucha House	64	64.0
	Semi-pucca House	20	20.0
	Pucca House	16	16.0
	Total	100	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that majority of VPT users in Hazaribagh were having electricity in their houses (71 %) and in Dumka the figure was 50 %.

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Hazaribagh	Electricity not available	29	29.0
	Electricity available	71	71.0
	Total	100	100.0
Dumka	Electricity not available	50	50.0
	Electricity available	50	50.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road:** Looking at the proximity of their houses to pucca roads data revealed that 40.0 % of respondents in Hazaribagh and 69 % in Dumka were situated at the distance of 100 metres or less.

Table I.B.3. Distance of house of Users from Pucca Road

Telecom District	Distance	No. of Users	Percent
Hazaribagh	100 metres or less	40	40.0
	More than 100 metres but less than 1 km	30	30.0
	More than 1 km	30	30.0
	Total	100	100.0
Dumka	100 metres or less	69	69.0
	More than 100 metres but less than 1 km	10	10.0
	More than 1 km	21	21.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 70.0 % respondents were staying at more than 10 kms., in Hazaribagh and 50 % in Dumka at more than 2 km but less than 10 kms.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Hazaribagh	Upto 2 km	20	20.0
	More than 2 but less than 10 km	10	10.0
	More than 10 km	70	70.0
	Total	100	100.0
Dumka	Upto 2 km	40	40.0
	More than 2 but less than 10 km	50	50.0
	More than 10 km	10	10.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at home:** Majority (83 %) respondents in Hazaribagh district were having telephone at their home whereas in Dumka 71 % were having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Hazaribagh	Telephone Not available	83	83.0
	Telephone available	17	17.0
	Total	100	100.0
Dumka	Telephone Not available	71	71.0
	Telephone available	29	29.0
	Total	100	100.0

- C.2. Type of Telephone:** Among telephone owners at their home maximum 88.9 % were having mobiles in Hazaribagh and 96.9 % in Dumka.

Table I.C.2. Type of Telephone

Telecom District	Type of phone	No. of Users	Percent	Percent of Cases
Hazaribagh	Landline	2	11.1	11.8
	Mobile	16	88.9	94.1
	Total	18	100.0	105.9
Dumka	Landline	1	3.1	3.4
	Mobile	31	96.9	106.9
	Total	32	100.0	110.3

- C.3. Details of Service Provider:** Regarding the details about service providers to the respondents, Airtel was found to provide services to maximum respondents in Hazaribagh (70.6 %) and 41.4 % in Dumka.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent	Percent of Cases
Hazaribagh	Airtel	12	70.6	75.0
	Idea	4	23.5	25.0
	Reliance Communications	1	5.9	6.3
	Total	17	100.0	106.3
Dumka	BSNL	9	31.0	33.3
	Airtel	12	41.4	44.4
	Vodafone	2	6.9	7.4
	Idea	4	13.8	14.8
	Reliance Communications	2	6.9	7.4
	Total	29	100.0	107.4

II. USAGE OF VPT

- A.1.** Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 34 % VPT beneficiaries in Hazaribagh have used VPT 2 or less times for local calls in last 60 days. In Dumka 32 % VPT users have used VPT two or less times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	No calls	4	4.0	-	-
	2 or less	58	58.0	34	34.0
	3 to 4	30	30.0	32	32.0
	5 to 6	8	8.0	17	17.0
	More than 6	-	-	17	17.0
	Total	100	100.0	100	100.0
Dumka	No calls	11	11.0	-	-
	2 or less	43	43.0	32	32.0
	3 to 4	28	28.0	27	27.0
	5 to 6	14	14.0	12	12.0
	More than 6	4	4.0	29	29.0
	Total	100	100.0	100	100.0

- A.2.** Usage of VPT for STD calls in last 60 days revealed that in both the districts of Jharkhand, no body had done a single STD call.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	No calls	100	100.0	100	100.0
	2 or less	-	-	-	-
	3 to 4	-	-	-	-
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0
Dumka	No calls	100	100.0	100	100.0
	2 or less	-	-	-	-
	3 to 4	-	-	-	-
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 51.0 % in Hazaribagh district were residing within 200 mts. Distance and in Dumka this was found to be 49%. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Hazaribagh	Within 200 mts from residence	51	51.0
	200-500 mts from residence	40	40.0
	More than 500 mts	9	9.0
	Total	100	100.0
Dumka	Within 200 mts from residence	49	49.0
	200-500 mts from residence	44	44.0
	More than 500 mts	7	7.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Hazaribagh district 82 % and in Dumka district 84 % users were not involved in the decision. It means peoples' participation was very less.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Hazaribagh	No	82	82.0
	Yes	18	18.0
	Total	100	100.0
Dumka	No	84	84.0
	Yes	16	16.0
	Total	100	100.0

- B.1. Availability of VPT service:** It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Hazaribagh district VPTs were mostly found reliable as respondents communicated that in 54 % cases no fault, 99 % available (not busy), 99 % open and 76 % not engaged during last month. Similarly, Table shows that in Dumka district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Hazaribagh	0	54	54.0	0	99	99.0	0	99	99.0	0	76	76.0
	1	36	36.0	1	1	1.0	1	1	1.0	1	19	19.0
	2	10	10.0							2	5	5.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Dumka	0	71	71.0	0	100	100.0	0	99	99.0	0	86	86.0
	1	23	23.0				1	1	1.0	1	12	12.0
	2	6	6.0							2	2	2.0
	Total	100	100.0				Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Jharkhand in 2nd last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	No. of Fault	Faulty			Busy			Closed			Engaged	
		No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Hazaribagh	0	71	71.0	0	100	100.0	0	100	100.0	0	90	90.0
	1	25	25.0							1	10	10.0
	2	4	4.0									
	Total	100	100.0							Total	100	100.0
Dumka	0	74	74.0	0	99	99.0	0	100	100.0	0	88	88.0
	1	20	20.0	1	1	1.0				1	12	12.0
	2	6	6.0									
	Total	100	100.0	Total	100	100.0				Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

90 % of the cases in Hazaribagh there was absence of display of grievance redressal number, toll free numbers, tariff and complaint book, which was the same in the case of Dumka district.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent
Hazaribagh	No	9	90.0	9	90.0	9	90.0	9	90.0
	System	1	10.0	1	10.0	1	10.0	1	10.0
	Total	10	100.0	10	100.0	10	100.0	10	100.0
Dumka	No	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation was found very convenient (47%) in Hazaribagh. In Dumka district 9 % VPT was expressed as not at all convenient that were located in other places but 64 VPTs were found convenient.

Table IV.A. Level of convenience of place of installation

Telecom District		Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Kodama	School	-	-	10	10
	Others	40	13	37	90
	Total	40	13	47	100
Dumka	Sarpanch House	-	2	1	3
	Shop	-	37	21	58
	Others	9	25	5	39
	Total	9	64	27	100

- B. Convenience of technology used in VPT:** In Hazaribagh district reflects that almost all VPT users found the technology used in VPT convenient. 98 % VPTs are using landline technology in this district. In Dumka district 91 % users felt the VPT technology convenient in which 99% were using landline technology in their VPTs.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Hazaribagh	Landline	3	85	10	98
	Mobile	-	2	-	2
	Total	3	87	10	100
Dumka	Landline	-	91	8	99
	Mobile	-	1	-	1
	Total	-	92	8	100

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. Total 78 users in Hazaribagh shared that WLL FT technology used in their VPTs is convenient. In Dumka district 90 users in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
Hazaribagh	WLL FX	13	78	9	100
	Total	13	78	9	100
Dumka	WLL FX	-	90	10	100
	Total	-	90	10	100

- D. Level of convenience with type of instrument:** The following Table confirms that more than 60 % of the users feel convenient about the instrument used in VPTs.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Hazaribagh	Dial Key Board	1	1	-	2
	Single touch Key board	5	74	19	98
	Total	6	75	19	100
Dumka	Single touch Key board	1	63	36	100
	Total	1	63	36	100

- E. Clarity of Voice:** It is an important indicator of quality assessment of VPT installed. In Hazaribagh district 64 VPT users had expressed that clarity of voice is always not at all convenient. Same was the case in Dumka where 81 users were having same opinion. In other words majority were not satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Hazaribagh	Never	1	-	-	1
	Rarely	3	2	-	5
	Often	7	20	3	30
	Always	-	14	50	64
	Total	11	36	53	100
Dumka	Often	1	17	1	19
	Always	-	36	45	81
	Total	1	53	46	100

- F. Reliable connectivity of VPT**

VPT users were enquired about the reliability of connectivity of VPT service in their village. 61% users in district Hazaribagh and 58% users in Dumka district of Jharkhand shared that connectivity of VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Hazaribagh	Not reliable	7	7.0
	Reliable	32	32.0
	Highly reliable	61	61.0
	Total	100	100.0
Dumka	Not reliable	1	1.0
	Reliable	41	41.0
	Highly reliable	58	58.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 85% respondents in Hazaribagh and 86 % in Dumka district found VPT always available in their area

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Hazaribagh	During day time	2	2.0
	Always	85	85.0
	Fixed timings	13	13.0
	Total	100	100.0
Dumka	During day time	14	14.0
	Always	86	86.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 98 % users in Hazaribagh were paying in case of VPT usage, 89.0 % were paying cash. In Dumka district 100% users were paying, 85 % were paying cash.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Hazaribagh	No	2	2.0
	Yes	98	98.0
	Total	100	100.0
Dumka	Yes	100	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
Hazaribagh	Cash	89	89.0
	Credit	1	1.0
	Partly cash, partly credit	8	8.0
	Non-payment	2	2.0
	Total	100	100.0
Dumka	Cash	85	85.0
	Partly cash, partly credit	15	15.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in both the districts there is no social restriction.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Hazaribagh	No	100	100.0
Dumka	No	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Hazaribagh district was between Rs. 250 - 500 in 60% cases of VPT whereas in Dumka ARPU was less than Rs. 250 in 60 % VPTs of the district.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU in Rs.	No. of VPT	Percent
Hazaribagh	Less than 250	4	40.0
	250-500	6	60.0
	Total	10	100.0
Dumka	Less than 250	6	60.0
	250-500	4	40.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPTs would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, and transport and health etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Hazaribagh	No	63	63.0
	Yes	37	37.0
	Total	100	100.0
Dumka	No	71	71.0
	Yes	29	29.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Hazaribagh district (63%) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Dumka) of the state it was observed that this figure is 71%.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Per cent
Hazaribagh	No change reported	63	63.0
	Upto 5 percent	9	9.0
	5 to 10 percent	5	5.0
	10 to 20 percent	12	12.0
	More than 20 percent	11	11.0
	Total	100	100.0
Dumka	No change reported	71	71.0
	Upto 5 percent	11	11.0
	5 to 10 percent	9	9.0
	10 to 20 percent	7	7.0
	More than 20 percent	2	2.0
	Total	100	100.0

- B. Improvement in Connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Hazaribagh	No improvement	-	82 (82.0)	95 (95.0)
	Marginal Improvement	69 (69.0)	9 (9.0)	3 (3.0)
	Significant improvement	31 (31.0)	9 (9.0)	2 (2.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)
Dumka	No improvement	-	83 (83.0)	83 (83.0)
	Marginal Improvement	81 (81.0)	12 (12.0)	10 (10.0)
	Significant improvement	19 (19.0)	5 (5.0)	7 (7.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Hazaribagh	No improvement	84 (84.0)	100 (100.0)	100 (100.0)	100 (100.0)
	Marginal Improvement	15 (15.0)	-	-	-
	Significant improvement	1 (1.0)	-	-	-
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
Dumka	No improvement	84 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
	Marginal Improvement	16 (16.0)	-	-	-
	Significant improvement	-	-	-	-
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Hazaribagh	Dumka
a.	Personal communication	69% marginal improvement	81% marginal improvement
b.	Business networking	82% no improvement	83% no improvement
c.	Emergency Management Medical Fire Police Natural Calamities	1. 84% no improvement 2. 100% no improvement 3. 100% no improvement 4. 100% no improvement	1. 84% no improvement 2. 100% no improvement 3. 100% no improvement 4. 100% no improvement
d.	Official Purposes	95% no improvement	83% no improvement

C. Access of information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Hazaribagh					Dumka				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	83 (83.0)	-	4 (4.0)	13 (13.0)	100 (100.0)	91 (91.0)	1 (1.0)	5 (5.0)	3 (3.0)	100 (100.0)
b.	Market	84 (84.0)	-	7 (7.0)	9 (9.0)	100 (100.0)	82 (82.0)	1 (1.0)	17 (17.0)	-	100 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	95 (95.0)	5 (5.0)	-	-	100 (100.0)	98 (98.0)	1 (1.0)	1 (1.0)	-	100 (100.0)
2.	Education	100 (100.0)	-	-	-	100 (100.0)	97 (97.0)	-	3 (3.0)	-	100 (100.0)

Information on	Hazaribagh					Dumka				
	Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
3. Related to Agriculture	99 (99.0)	-	1 (1.0)	-	100 (100.0)	95 (95.0)	2 (2.0)	3 (3.0)	-	100 (100.0)
4. Others	100 (100.0)	-	-	-	100 (100.0)	100 (100.0)	-	-	-	100 (100.0)
d. Natural Calamity / Weather forecasting	100 (100.0)	-	-	-	100 (100.0)	100 (100.0)	-	-	-	100 (100.0)
e. Rail / Road transport	99 (99.0)	1 (1.0)	-	-	100 (100.0)	98 (98.0)	-	2 (2.0)	-	100 (100.0)
f. Health Services	91 (91.0)	5 (5.0)	4 (4.0)	-	100 (100.0)	93 (93.0)	2 (2.0)	5 (5.0)	-	100 (100.0)
g. Agriculture related	83 (83.0)	-	6 (6.0)	11 (11.0)	100 (100.0)	87 (87.0)	1 (1.0)	12 (12.0)	-	100 (100.0)
h. Business related	84 (84.0)	-	10 (10.0)	6 (6.0)	100 (100.0)	84 (84.0)	1 (1.0)	15 (15.0)	-	100 (100.0)

	Access to information on	Hazaribagh	Dumka
a.	Employment Opportunity	83% never	91% never
b.	Market	84% never	82% never
c.	Development & Welfare Schemes of Government on Health Education Related to agriculture Others	1. 95% never 2. 100% never 3. 99% never 4. 100% never	1. 98% never 2. 97% never 3. 95% never 4. 100% never
d.	Natural calamity / weather forecasting	100% never	100% never
e.	Rail / road transport	99% never	98% never
f.	Health services	91% never	93% never
g.	Agriculture related	83% never	87% never
h.	Business related	84% never	84% never

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 70.0 % users in Hazaribagh and not satisfactory by 43% in Dumka district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of Satisfaction	No. of Users	Percent
Hazaribagh	Not satisfactory	15	15.0
	Satisfactory	15	15.0
	Highly satisfactory	70	70.0
	Total	100	100.0
Dumka	Not satisfactory	43	43.0
	Satisfactory	16	16.0
	Highly satisfactory	41	41.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed highly satisfactory among 90 % users in Hazaribagh and 64% also in Dumka district.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	Not satisfactory	8	8.0	46	46.0
	Satisfactory	2	2.0	19	19.0
	Highly satisfactory	90	90.0	35	35.0
	Total	100	100.0	100	100.0
Dumka	Not satisfactory	21	21.0	22	22.0
	Satisfactory	15	15.0	30	30.0
	Highly satisfactory	64	64.0	48	48.0
	Total	100	100.0	100	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined highly satisfactory by 46 % users in Hazaribagh and satisfactory in case of 55% cases in Dumka district.

Table VIII.C. Level of satisfaction about repair and maintenance - Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	Not satisfactory	26	26.0	23	23.0
	Satisfactory	28	28.0	37	37.0
	Highly satisfactory	46	46.0	40	40.0
	Total	100	100.0	100	100.0
Dumka	Not satisfactory	7	7.0	12	12.0
	Satisfactory	55	55.0	54	54.0
	Highly satisfactory	38	38.0	34	34.0
	Total	100	100.0	100	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 74% users in Hazaribagh and among 51 % users of Dumka.

Table VIIL.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Hazaribagh	Not satisfactory	21	21.0
	Satisfactory	5	5.0
	Highly satisfactory	74	74.0
	Total	100	100.0
Dumka	Not satisfactory	24	24.0
	Satisfactory	25	25.0
	Highly satisfactory	51	51.0
	Total	100	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed 64% satisfaction in Hazaribagh and highly satisfactory among 53 % of the users in Dumka.

Table VIIL.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Hazaribagh	Satisfactory	64	64.0
	Highly satisfactory	36	36.0
	Total	100	100.0
Dumka	Satisfactory	47	47.0
	Highly satisfactory	53	53.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all most all the custodians of VPTs in Hazaribagh were not making payment regularly where as in Dumka 60% were paying regularly.

Table IX. Regularity in Payment

Telecom District	Regularity	No. of Custodians	Percent
Hazaribagh	No	7	70.0
	Yes	3	30.0
	Total	10	100.0
Dumka	No	4	40.0
	Yes	6	60.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair and maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 81 % users in Hazaribagh were not aware about the problem where as in Dumka district in 51% cases the problem has not yet resolved.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Hazaribagh	Not resolved	19	19.0
	Not aware	81	81.0
	Total	100	100.0
Dumka	Internally	1	1.0
	Not resolved	51	51.0
	Not aware	48	48.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 80% not aware in Hazaribagh and 59 % in Dumka district. Problem solution of quality accessibility was also viewed not solved among 60% users in Hazaribagh and 47 % not aware in Dumka district.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	Not resolved	17	17.0	60	60.0
	Not aware	83	83.0	40	40.0
	Total	100	100.0	100	100.0
Dumka	Internally	8	8.0	10	10.0
	Externally	-	-	5	5.0
	Not resolved	33	33.0	37	37.0
	Not aware	59	59.0	48	48.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair and maintenance, 75 % and 86 % users were not aware in Hazaribagh and Dumka districts, respectively. Similarly in the case of the problem of quality repair and maintenance 74 % and 82 % of VPT users were not aware in Hazaribagh and Dumka districts.

Table X.C. Problem resolution related to Repair and Maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Hazaribagh	Internally	-	-	-	-
	Externally	2	2.0	2	2.0
	Not aware	75	75.0	74	74.0
	Not resolved	23	23.0	24	24.0
	Total	100	100.0	100	100.0
Dumka	Internally	1	1.0	-	-
	Externally	3	3.0	1	1.0
	Not resolved	10	10.0	17	17.0
	Not aware	86	86.0	82	82.0
	Total	100	100.0	100	100.0

D. Problem resolution about the payments to the custodians

The problem of payment to custodians was viewed to be unaware by 86 % users in Hazaribagh and 75 % in Dumka district.

Table X.D. Problem resolution related to payments to the Custodians

Telecom District		No. of Users	Percent
Hazaribagh	Internally	6	6.0
	Externally	-	-
	Not resolved	16	16.0
	Not aware	86	86.0
	Total	92	100.0
Dumka	Internally	2	2.0
	Externally	2	2.0
	Not resolved	21	21.0
	Not aware	75	75.0
	Total	100	100.0

E. Problem resolution about the other alternate service providers

100% VPT users in both the districts were not aware about the problem resolution related to other alternate service providers.

Table X.E. Problem resolution related to other alternate Service Providers

Telecom District		No. of Users	Percent
Hazaribagh	Not aware	100	100.0
	Total	100	100.0
Dumka	Not aware	100	100.0
	Total	100	100.0

SWOT ANALYSIS

DISTRICT : DUMKA

(1) Village Jama

In this village the VPT has installed in residence of a villager. He is a businessman and his education is intermediate. Village is near to block headquarter. People are educated and relatively wealthy.

Strengths

- A dynamic and well-educated person is the custodian of the VPT. He maintains it properly.
- As village is nearby block headquarter, the monitoring process is also fast.
- Custodian informs about the incoming calls to the people.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints.
- Some time people feel uneasy to access the VPT as it is inside the house.
- Poor signal causes dis-connectivity in the network.
- During electricity failure, VPT does not function.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment

Threats

- There are four coin collecting boxes in the village of different service provider.
- Multiple mobile connections – BSNL and private - in households especially among younger generation

(2) Village Sugnibad

In this village the VPT was installed in the residence of the teacher. He studied up to Masters degree.

Strengths

- People derive benefit from the incoming call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Custodian charge more money per call rate.
- Some time people feel uneasy to access the VPT as it is inside the house.
- Custodian is not cooperative in nature.
- There is network problem.
- Price differences found in VPT and other coin box (for 1 minute in coin box is Re 1 where as in VPT it is Rs. 2).
- During electricity failure, VPT does not function.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment

Threats

- There are five coin collecting boxes in the village of different service provider.
- Multiple mobile connections – BSNL and private - in households especially among younger generation

(3) Village Rampur

In this village VPT has been installed in the residence of the school teacher. He is a well known person of the village. People respect him. He is very much co-operative and well behaved.

Strengths

- People derive benefit from the incoming call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- There is network problem.
- During electricity failure, VPT does not function.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Battery replacement should be fast
- Awareness generation for wider use of VPT by rural people

Threats

- There is an STD booth in nearby village, where people go frequently because of the power failure problem in their villages.

(4) Village Kundadihi

In this village VPT has been installed in residence of village level worker. This village is un-electrified. So VPT is run by battery. VPT is not in working condition because of charging problem.

Strengths

- People derive benefit from the incoming call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- There is network problem.
- During electricity failure, VPT does not function.

Opportunities

- Poor people should get this service free of charge
- Awareness generation for wider use of VPT by rural people
- Battery charging facility should be made available

Threats

- Mobile phones of different service providers.

(5) Village Ghatia

In this village the VPT has been installed in residence of a villager. He is very much co-operative in nature.

Strengths

- People derive benefit from the incoming call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Low capacity battery.
- There is network problem.
- During electricity failure, VPT does not function.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge

- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Mobile phones of different service providers

(6) Village Daulatpur

In this village the VPT has been installed in residence of a villager who is not a literate person. The VPT is not in working condition.

Strengths

- People derive benefit from the incoming call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- The battery has lost its charging capacity.
- There is network problem.
- The village is an un-electrified village.

Opportunities

- Awareness should be give for proper use
- Out going facility should be improved
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Mobile phones of different service providers

(7) Village Kariachak Raghunathganj

In this village the VPT has been installed in residence of a villager. He is a graduate and working as a tutor. He is a co-operative person. The village is electrified. It is just 5 km far away from the district head quarter. 80 percent of the people use mobile phones. The poor people use this VPT only. The custodian has kept the VPT inside the house. Sometime people feel uncomfortable, assessing the instruments.

Strengths

- Poor people derive benefit from the incoming call as well as from the out going call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- There is network problem.

Opportunities

- Systematic billing mechanism should be used
- Bill collection service should be developed to help in time payment
- Cabin should be provided for privacy
- Battery charging facility should be made available
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Mobile phones of different service providers

(8) Village Karhalbil

In this village the VPT has been installed in the residence of a villager. He is a graduate and working as a tutor. He has been selected by the villager as a custodian to look after the VPT. Village is 6 km far away from district head quarter. It is an electrified village. Most of the people have mobile phones. Poor people those who do not have mobiles are using the VPTs.

Strengths

- Poor people derive benefit from the incoming call as well as from the out going call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Coin collecting box is better than VPT.

(9) Village Phasiadangal

In this village the VPT has been installed in the residence of the teacher. She studied up to 12th standard. She was selected by the villagers to look after the VPT. Her residence is inside the school compound. So, sometimes it makes problem to the beneficiary in accessing the VPT. Some people think that the telephone belongs to the school. Village is electrified. The VPT is in running condition. Custodian pays bill regularly.

Strengths

- Poor people derive benefit from the incoming call as well as from the out going call also.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.

Opportunities

- Custodian should be friendly and business orientated
- Broad band and other add on services should be provided
- Bill collection service should be developed to help in time payment
- Battery replacement should be fast
- Awareness generation for wider use of VPT by rural people

Threats

- Coin collecting box, mobiles of different service providers, STD booth in the nearby town.

(10) Village Gidhni Pahadi

In this village the VPT has been installed in the residence of an advocate. Village is 5 km far away from the town. Most of the people depend on mobile. So the VPT usability is very less. Those, who are poor and do not have mobile, are using VPT. Main gate of the custodian's residence is always closed. Sometimes poor people feel hesitant in accessing the benefit of VPT. The custodian generally stops the use of VPT after 9 pm. Some villagers opined that the VPT should install at open place for easy accessibility.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.

Opportunities

- Awareness generation for wider use of VPT by rural people other than personal use
- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment

Threats

- Coin collecting box, mobiles of different service providers, and STD booth in the nearby town.

DISTRICT : HAZARIBAGH

(1) Village Salaidihi

In this village the VPT is installed in the residence of a social worker. He is also a cultivator. He is a very cooperative and well-behaved human being. Village is situated in a remote area. There are no other service providers available here. Network problem occurs.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Poor signal since VPT is at far distant from the BTS.
- Frequent power failure

Opportunities

- Awareness generation for wider use of VPT by rural people other than personal use
- STD facility should be given

Threats

- Mobiles of different service providers

(2) Village Gadidihi

In this village the VPT has been installed in residence a villager. He is very much cooperative and well behaved in nature.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Poor Frequent power failure.
- Bill is not coming in time.

Opportunities

- Out going facility should be improved
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Battery maintenance should be made available near by
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Mobiles of different service providers

(3) Village Parhd

In this village the VPT has been installed in residence of a villager. He is a cooperative and well-behaved human being. Village is situated in a remote forest area. However it is infrastructure wise developed. Around 30 percent of the total households are tribal and socio-economically backward.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.
- Bill is not coming in time.

Opportunities

- Battery replacement should be fast
- Awareness generation for wider use of VPT by rural people
- Systematic billing mechanism should be used
- Bill collection service should be developed to help in time payment
- Battery charging facility should be made available

- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- There are 8 numbers of Airtel CCB installed here in the village. More than 80 percent of the people depend upon CCB and mobile.
- Coin box phones are also available.

(4) Village Nalwa

In this village the VPT has been installed in residence of a villager who is very much honest and helpful in providing the facilities to the people. 30 percent of the people use mobile phones for their communication.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- Battery charging facility should be made available
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Mobile phones of different service providers.

(5) Village Jarudihi

In this village the VPT has been installed in the residence of a teacher.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- Awareness should be provided for wider use of VPT by rural people
- Tower installation for all time and quality connectivity
- VPT should be relocated in convenient to all location like grocery shop

- Custodian should be friendly and business orientated

Threats

- There are 2 numbers of Airtel CCB installed in the village. 70 percent of the people are dependent on CCB and mobiles.

(6) Village Domchanch

In this village the VPT has been installed in a shop. The custodian is a well-behaved human being. The people of this village are economically poor. The main occupation is collection of mica sheet. They manually process it and subsequently sale it in the market. 60 percent of the people are dependent on CCB and mobile phones.

Strengths

- Poor people who are involved in mica transaction derive benefit from VPT by contacting the mica merchant over phone.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- Battery replacement should be fast
- Awareness generation for wider use of VPT by rural people

Threats

- There are 2 numbers of Airtel CCB installed in the village. Also STD booths are there in nearby town.

(7) Village Pasia

In this village the VPT is installed at residence of the Ex-Ward Member. He is not at all a co-operative person. Also he charges more price per call rate. The people of this village are economically poor. The main occupation is collection of mica sheet. They manually process it and subsequently sale it in the market.

Strengths

- Poor people who are involved in mica transaction derive benefit from VPT by contacting the mica merchant over phone.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.

- Frequent power failure.

Opportunities

- Orientation should be provided for wider use of VPT by rural people
- Telephone no of important government links should be made available on VPT
- Wire line technology is preferred for better quality of voice
- Alternative arrangement should be made for charging of Battery

Threats

- Mobile phones of different service providers

(8) Village Nawadihi

In this village the VPT is installed at the residence of a villager, who is not at all co-operative in nature. He charges more money per call rate and also takes money for incoming call. People derive their livelihood through cultivation and non-agriculture labour work.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- Orientation should be provided for wider use of VPT by rural people
- Telephone no of important government links should be made available on VPT
- Alternative arrangement should be made for charging of Battery

Threats

- Mobile phones of different service providers

(9) Village Maliyal

In this village VPT has been installed in grocery shop. The custodian of the VPT is not a co-operative human being. The main occupation of the village is cultivation and non-agriculture work.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints

- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Mobile phones of different service providers

(10) Village Salaidihi

In this village the VPT has installed in the residence of a villager, who is very much co-operative in nature. Though the location of VPT is good but female feel uneasy to access VPT. Some of people do not like to access VPT because of the problem of location.

Strengths

- Poor people derive benefit from VPT.

Weaknesses

- No display board with tariffs, toll free numbers for emergency and complaints
- Battery is the only problem in the village.
- Frequent power failure.

Opportunities

- STD facility should be given
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Mobile phones of different service providers

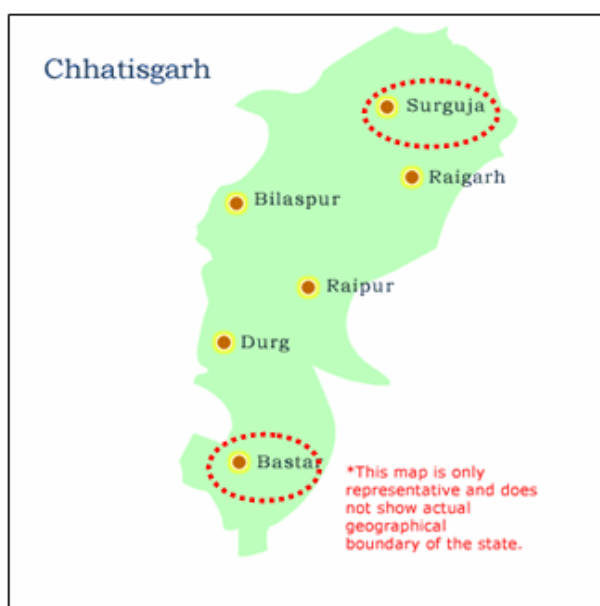
State Report - 5 CHATTISGARH



Chattisgarh

Chattisgarh, a state in central India, formed when the sixteenth Chhattisgarhi-speaking south-eastern districts of Madhya Pradesh gained statehood on November 1, 2000. Raipur serves as its capital. It is the 10th largest state of India by area of 52,199 sq mi (135,194 km²). Chhattisgarh takes its name from 36 (Chattisgarh is thirty-six in Hindi and Garh is Fort) princely states in this region from very old times, though the listing of these 36 forts has always remained a point of dispute. It borders Madhya Pradesh on the northwest, Maharashtra on the west, Andhra Pradesh on the south, Orissa in the east, Jharkhand on the northeast and Uttar Pradesh on the north.

The Chhattisgarh population constitutes of 2.0795 crore as per the census of 2001. The newly formed state of Chhattisgarh is densely populated with one hundred and fifty four persons per square kilometer. The rural areas of Chhattisgarh are more populated than the urban areas. However, in the recent years, most of the population of rural Chhattisgarh migrated to the urban areas in search of better jobs and higher standards of living. Most of the districts of Chhattisgarh depend on agriculture because of low level of industrialization. Also the pace infrastructure development found in the state is very low.



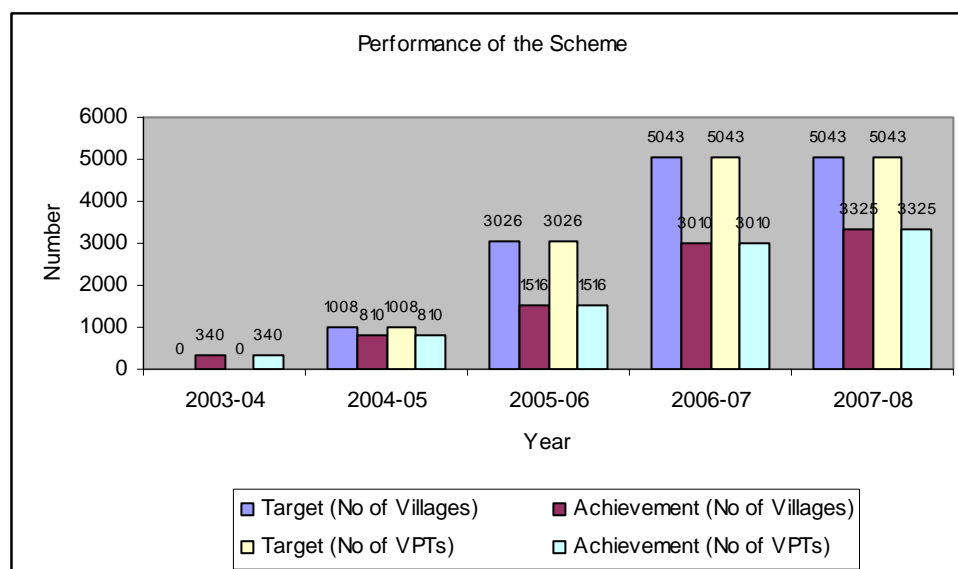
Apart from the low human development, naxal problem is very much acute in this state. As observed from the above discussion that the state Chattisgarh is under-developed so far as infrastructure and communication is concerned. Keeping these issues in mind, the Government implemented Bharat Nirman scheme in this state in the year 2004.

The total number of villages covered under VPT through this scheme is 5043 and 3370 VPT booths have been installed. The objective of the VPT scheme is to provide rural communication facilities in remote area.

The details of physical targets & achievements (No. of newly connected villages/ VPTs) for the last 5 years in Chattisgarh has been explained in the following table.

Years	Physical Performance (Newly connected Villages / VPTs)		
	Target	Achievement	Reasons for shortfall, if any
	No. of VPTs	No. of VPTs	
2004-05	1,008	810	Could not be provided in Naxal affected villages
2005-06	3,026	1,516	Could not be provided in Naxal affected villages
2006-07	5,043	3,010	Could not be provided in Naxal affected villages
2007-08	5,043	3,325	Could not be provided in Naxal affected villages
2008-09	5,043	3,361	Could not be provided in Naxal affected villages

According to the details there is shortfall in the target and achievement. BSNL could not provide the facilities in the naxal affected villages. In some of the naxal areas, people were not interested to take the VPT in their houses because of the fear of naxal attack. Sometimes people ask money in order to install VPT in their houses and instances are there where SDOs have given money for installation also.



The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There is no particular income obtained from repairs and maintenance as it is provided free of cost. There is no separate billing income from VPT. From the field experience and institutional survey with the BSNL officials it is evident that the custodians of maximum of the VPT are not paying the bills properly. As a result so many custodians are under the defaulter list. Billing pattern from the BSNL office shows that there is income from the VPT service. Custodians showed their dissatisfaction because of late receipt of the bill and hence resulting in non-payment.

Default Payment

In case of default of payment, BSNL will wait up to the outstanding around 1000/- and then BSNL will send two to three reminder to pay the money. Otherwise with the consent of the villagers, BSNL will change the custodian and shift the phone in some other's name. CGM, Raipur has the power to subsidize 100% of the amount up to an outstanding of 1 lakh rupees.

Regarding availability of Staff no manpower is sanctioned specifically for VPT. The existing manpower staffs are utilized for provisioning and maintenance of VPT. They completely monitor and supervise VPTs as and when fault reported on routing, testing or complaint by custodian. There is no special technical staff available with BSNL for repairs of VPTs. The staff available for maintenance of communication facility of a particular exchange / BTS area is also responsible for the maintenance of the VPTs. Routine Technical Training is imparted to staff as per need basis due to change of Technology etc.

BSNL officials shared the following strengths and weakness of VPTs in the state

Strengths: Provide communication to rural mass.

Weakness: Non availability of stable electricity power supply in remote rural areas, which causes frequent faulty of instrument and break in communication.

There sufficient JTOs but TTAs are not available in the field. So far as monitoring and supervision is concerned, there should be improvement by deploying additional trained manpower for VPT programme with vehicles. However, repair and maintenance takes larger time due to poor accessibility, non-availability of electricity / prolonged failure of electricity. VPTs with Solar Panel can give better performance in the remote villages. The Telecom Services is not at all commercially viable in rural areas of the State because of low voice traffic in rural areas and high maintenance cost of IFWTs because of remote locations. If along with VPT, Internet services are also provided to villagers it will generate additional revenue to USP / Custodians.

As suggestions for improvement in this scheme it was expressed that it is a very good scheme for upliftment of villagers. WLL provides good coverage but its efficient functioning needs improvement by deploying solar panels for such connections and regular monitoring and supervision. Main suggestions for improvement are to prepaid VPTs with life time scheme will help in avoiding DNP cases and frequent change of custodians, WLL VPTs should be provided with solar panels so that prolonged failure of mains supply does not affect the IFWT performance and the job of regular replacement of faulty sets and batteries, change of custodians etc., may be outsourced and JTOs / TTAs may do the monitoring and supervision jobs.

DISTRICT : BASTAR

Bastar is one of the under developed district of Chattisgarh. People are basically tribal in nature. This particular district is a naxal affected district. Bharat Nirman scheme has been implemented in the district in 2004-05. The total number of villages covered under VPT through this scheme is 1765.

The details of physical targets and achievements in terms of number of newly connected villages / VPTs for the last five year has been furnished in Table. The different years starting from 2004-05 to 2008-09 witnessed shortfall in the target and achievement. BSNL could not provide the facilities in the naxal affected villages.

Years	No.of VPTs	Reasons for shortfall
2004-05	6	No Coverage
2005-06	162	Partial Coverage
2006-07	146	Partial Coverage
2007-08	64	
2008-09	12	

There is no specific fund for VPT, but there is no shortage also. There are mechanisms available for monitoring and supervision of VPTs by the BSNL people. They do the work on the basis of some of the BSNL guidelines. There are 22 technical staffs available to repair the VPT (they are not exclusively for VPT). However the distribution of work has been done by area wise. The major repair and maintenance work includes replacement of battery. They don't charge for repairs and maintenance. Training Programmes are being conducted at various Training Centres for upgradation of skill for technical staff for installation, maintenance and operation of VPTs and equipments.

Regarding monitoring and supervision it was informed that the staffs and officers of BSNL generally monitors and supervises the work of VPTs. They follow the guidelines provided by BSNL for supervising and monitoring purpose of VPTs. Repair and maintenance work is also done by the BSNL people. They don't outsource the work.

The major type of repairs and maintenance work in Bastar district are: (i) replacement of battery and (ii) replacement of FWT. Last month 14 battery and 9 FWT have been replaced where as 2nd last month the numbers are 11 and 7 respectively for battery and FWT. 3rd last month 13 number of batteries and 6 numbers of FWT were replaced.

Major Strengths of this scheme in the area as shared by officials includes availability of Telecom facilities to remote villages at affordable price, which helps them to be connected with rest of the world, poorest of the poor are in a position to derive benefit from it by collating information for their livelihood and rural villagers are using VPT for emergency purposes like health.

Regarding weakness they expressed that due to naxallism it is difficult to reach the remote villages for installation of VPTs, operation / maintenance. Also unstable/No Electric supply is a major problem in VPT functioning. Another weakness is services in far plugged areas, due to no approach to road. It is also difficult to install and maintain in naxallite area such as Bastar.

Suggestion for Improvement includes provision of power supply in many areas and stable electric supply in rural area.

DISTRICT : SURGUJA

Surguja district is located in the northern part of Chhattisgarh State of India. Borders of Uttar Pradesh, Jharkhand, Orissa and Madhya Pradesh States are adjoining to the district.

People are basically tribal in nature. Out of the total population of 1,972,094, only seven percent of the population resides in the urban area. Out of the total geographical area of 16,034 square km, 53.98% are covered by forest. Insufficient rural connectivity makes many villages inaccessible mainstream area. Villagers are unaware of the various welfare schemes of the government and modern techniques etc. This particular district is a naxal affected district. The revenue district is Surguja where as Surguja and Korja are the two districts included in Surguja telecom district. Bharat Nirman scheme has been implemented in the district in 2004-05. The total number of villages covered under VPT is 1590 under Bharat Nirman Yojana.

The details of physical targets and achievements in terms of number of newly connected villages/ VPTs for the last 5 years has been furnished in Table. The different years starting from 2004-05 to 2008-09 witnessed shortfall in the target and achievement. BSNL could not provide the facilities in the naxal affected villages.

Years	Physical Performance ((Newly connected villages/VPTs)		
	No. of Villages	No. of VPTs	Reasons for shortfall, if any (not more than three)
2004-05	1850	142	No Coverage
2005-06	1850	878	Partial Coverage
2006-07	1850	424	Partial Coverage
2007-08	1850	60	
2008-09	1850	86	

There is no specific fund for VPT, but there is no shortage also. There are mechanisms available for monitoring and supervision of VPTs by the BSNL people. They do the work on the basis of some of the BSNL guidelines. There are 07 technical staffs available to repair the VPT. However the distribution of work has been done area wise. The major repair and maintenance work includes replacement of battery. They don't charge for repairs and maintenance. Training Programmes are being arranged by BSNL Training Centres for the

installation, operation and maintenance of C-DOT/WLL/DSPT equipments, on which these VPTs are working.

As regards to monitoring and supervision the staffs and officers of BSNL generally monitor and supervise the work of VPTs. They follow guidelines provide by BSNL for supervising and monitoring purpose of VPTs. Also the repair and maintenance work is also done by the BSNL people. They don't outsource the work. The total number of repair and maintenance of VPTs undertaken at the district level for the last 3 months were 39.

People generally replace battery because of its low capacity. Also because of frequent power failure, it is not getting charged properly. As a result it does not function properly. In the last 3 months 39 numbers of batteries has been replaced in this particular district. BSNL do not charge for the repair and maintenance of VPTs.

Officials at district level highlighted the strengths as availability of Telecom facilities to remote villages at affordable price, which help them to be connected with rest of the world, poorest of the poor are in a position to derive benefit from it by collating information for their livelihood and rural villagers are using VPT for emergency purposes like health.

They informed that main weakness include Unstable / No Electric supply, difficult to maintain in far plugged areas due to no approach to road ,poor maintenance by the custodian and BSNL staff to monitor properly.

Suggestion for Improvement were that supply in rural area should be regular and power supply should be provided in those areas where still electricity is not available.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Chattisgarh – Surguja and Bastar. In Surguja SSA 100 VPT users and in Bastar SSA 95 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPT's towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home and details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum percent belong to OBC (41.0%) in Surguja and ST (76.2 %) in Bastar districts of Chattisgarh.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Surguja	General	14	14.0
	Other Backward Class (OBC)	41	41.0
	Scheduled Caste (SC)	4	4.0
	Scheduled Tribe (ST)	41	41.0
	Total	100	100.0
Bastar	General	5	5.0
	Other Backward Class (OBC)	16	15.8
	Scheduled Caste (SC)	3	3.0
	Scheduled Tribe (ST)	76	76.2
	Total	100	100.0

Description of gender specification depicts that 68 % and 71 % females in Surguja and Bastar districts respectively were interacted in the present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Surguja	68	32	100
Bastar	71	29	100

Regarding their primary occupation data revealed that majority i.e. 40 % were homemaker in Surguja and 43 % homemakers in Bastar. Educational qualification of VPT users was 55% functional literates in Surguja and 66 % in Bastar.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	Surguja	Bastar
1	Agriculture	34	30
2	Agriculture Casual Labour	7	14
3	Own Business	3	-
4	Self employed in service	2	1
5	Salaried work	1	4
6	Homemaker	40	43
7	Livestock	2	-
8	Non-working students	2	-
9	Students	3	2
10	Dependents	3	1
11	Others	2	-
12	Non agriculture casual labour	1	5
	Total	100	100
Educational Qualification			
1	Not literate	55	66
2	Functional literate	7	4
3	Primary	13	10
4	Upper Primary	13	13
5	High school	10	4
6	Intermediate	1	3
7	Graduate	1	-
8	Above Graduation	-	-
	Total	100	100

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned Kucha houses both in Surguja as well as Bastar district (88.0 %).

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Surguja	Kucha House	88	88.0
	Semi-pucca House	11	11.0
	Pucca House	1	1.0
	Total	100	100.0
Bastar	Kucha House	89	89.0
	Semi-pucca House	8	8
	Pucca House	3	3
	Total	100	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that majority is having electricity in their houses (65 % in Surguja and 61% in Bastar).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Surguja	Electricity not available	35	35.0
	Electricity available	65	65.0
	Total	100	100.0
Bastar	Electricity not available	39	39.0
	Electricity available	61	61.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road :** Looking at the proximity of their houses to pucca roads data revealed that 40.0 % of respondents in Surguja and 30 % in Bastar were situated at the distance of more than 100 metres but less than 1 km.

Table I.B.3. Distance of house from pucca Road

Telecom District	Distance	No. of Users	Percent
Surguja	100 metres or less	60	60.0
	More than 100 metres but less than 1 km	40	40.0
	Total	100	100.0
Bastar	100 metres or less	61	61
	More than 100 metres but less than 1 km	30	30.0
	More than 1 km	09	9.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In the terms of distance from state highway it was revealed that 39.0 % respondents were staying at more than 10 kms. in Surguja and 60 % in Bastar district of the state of Chattisgarh.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Surguja	Upto 2 km	40	40.0
	More than 2 but less than 10 km	21	21.0
	More than 10 km	39	39.0
	Total	100	100.0
Bastar	Upto 2 km	20	20.0
	More than 2 but less than 10 km	20	20.0
	More than 10 km	60	60.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at home:** Majority respondents in both Surguja (74%) and Bastar (78 %) were not having telephones at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No. of Users	Percent
Surguja	Telephone Not available	74	74.0
	Telephone available	26	26.0
	Total	100	100.0
Bastar	Telephone Not available	78	78.0
	Telephone available	22	22.0
	Total	100	100.0

C.2. Type of Telephone: Among telephone owners at their home maximum 96.3 % were having mobiles in Surguja and 91.3 % in Bastar.

Table I.C.2. Type of Telephone

Telecom District	Type of phone	No. of Users	Percent	Percent of Cases
Surguja	Landline	1	3.7	3.8
	Mobile	26	96.3	100.0
	Total	27	100.0	103.8
Bastar	Landline	2	8.7	8.7
	Mobile	21	91.3	91.3
	Total	23	100.0	100.0

C.3. Details of Service Provider: Regarding the details about service providers to the respondents, Idea was found to provide services to maximum respondents in Surguja (70.4 %) and 43.5 % from BSNL in Bastar.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent	Percent of Cases
Surguja	BSNL	6	22.2	23.1
	Airtel	2	7.4	7.7
	Idea	19	70.4	73.1
	Total	27	100.0	103.8
Bastar	BSNL	10	43.5	43.5
	Airtel	7	30.4	30.4
	Vodafone	1	4.3	4.3
	Idea	3	13.0	13.0
	Reliance Communications	2	8.7	8.7
	Total	23	100.0	100.0

II. USAGE OF VPT

A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 47 % VPT beneficiaries in Surguja and 51% in Bastar have used VPT two or less times for local calls in last 60 days.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Surguja	No calls	15	15.0	-	-
	2 or less	47	47.0	30	30.0
	3 to 4	21	21.0	28	28.0
	5 to 6	10	10.0	19	19.0
	More than 6	7	7.0	23	23.0
	Total	100	100.0	100	100.0
Bastar	No calls	19	19.0	1	1.0
	2 or less	51	51.0	38	38.0
	3 to 4	24	24.0	25	25.0
	5 to 6	6	6.0	23	23.0
	Total	100	100.0	100	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that 99.0 % VPT beneficiaries in both Surguja and Bastar districts have not made any STD call. This shows that VPT usage for STD call is very low in both the districts of Andhra Pradesh.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Surguja	No calls	99	99.0	99	99.0
	2 or less	1	1.0	-	-
	3 to 4	-	-	1	1.0
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0
Bastar	No calls	99	99.0	95	95.0
	2 or less	1	1.0	5	5.0
	3 to 4	-	-	-	-
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 54.0 % in Surguja district were residing within 200-500 mts. distance and in Bastar around half of the respondents were residing within 200 - 500 mts and another half within 200 mts from the residence. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Surguja	Within 200 mts from residence	33	33.0
	200-500 mts from residence	54	54.0
	More than 500 mts	13	13.0
	Total	100	100.0
Bastar	Within 200 mts from residence	51	51.0
	200-500 mts from residence	48	48.0
	More than 500 mts	1	1.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

A Transparency in the decision of VPT location: Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Surguja district 77 % and in Bastar district 68 % users were not involved in the decision making. It means that people participation is very less.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Surguja	No	77	77.0
	Yes	23	23.0
	Total	100	100.0
Bastar	No	68	68.0
	Yes	32	32.0
	Total	100	100.0

B.1. Availability of VPT service: It was observed in the terms of functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Surguja district VPTs were mostly found reliable as respondents communicated that in 73.0 % cases no fault, 96.0 % available (not busy), 94.0 % open and 79.0 % not engaged during last month. Similarly, table shows that in Bastar district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Surguja	0	73	73.0	0	96	96.0	0	94	94.0	0	79	79.0
	1	19	19.0	1	2	2.0				1	15	15.0
	2	6	6.0	2	2	2.0	1	4	4.0	2	6	6.0
	3	2	2.0				2	2	2.0			
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Bastar	0	79	79.0	0	99	99.0	0	96	96.0	0	96	96.0
	1	17	17.0	1	1	1.0	1	4	4.0	1	4	4.0
	2	4	5.0									
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

- B.2.** Same trends could be seen in both the districts of Chattisgarh in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Surguja	0	70	70.0	0	96	96.0	0	94	94.0	0	87	87.0
	1	19	19.0	1	3	3.0	1	4	4.0	1	9	9.0
	2	9	9.0	2	1	1.0	2	2	2.0	2	3	3.0
	3	1	1.0							3	1	1.0
	4	1	1.0									
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Bastar	0	64	64.0	0	100	100.0	0	90	90.0	0	96	96.0
	1	28	28.0				1	8	8.0	1	3	3.0
	2	7	7.0				2	2	2.0	2	1	1.0
	3	1	1.0									
	Total	100	100.0				Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

In both the districts of Surguja and Bastar of Chattisgarh, there was no display with regard to grievance redressal, toll free number, tariff and complaint book.

III.C. DISPLAY OF TELEPHONE NUMBERS, TARIFF RATE AND AVAILABILITY OF COMPLAINT BOOK

Telecom District		Display of Grievance Redressal		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent
Surguja	No	10	100.0	10	100.0	10	100.0	10	100.0
Bastar	No	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A.** Quality of VPT service is assessed in the terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation were found convenient (64 %) and very convenient (27 %) in Surguja district. In Bastar district 59% of the respondents were very much convenient regarding the place of installation of VPT.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Surguja	Sarpanch house	-	2	1	3
	Shop	-	37	21	58
	Others	9	25	5	39
	Total	9	64	27	100
Bastar	Sarpanch house	-	9	13	22
	Shop	-	10	20	30
	Others	1	21	26	48
	Total	1	40	59	100

- B. Convenience of technology used in VPT:** Surguja district reflects that almost all VPT users found the technology used in VPT convenient. 78 % VPTs are using landline technology in this district. In Bastar district all the users felt the VPT technology convenient in which 70 % were using landline technology in their VPTs.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Surguja	Landline	-	78	20	98
	Mobile	-	2	-	2
	Total	-	80	20	100
Bastar	Landline	-	70	30	100
	Mobile	-	-	1	1
	Total	-	70	30	100

- C. Wireless Technology:** Table below indicates information related with wire line technology in VPT. Out of a total 99 users in Surguja shared that WLL FT technology used in their VPTs and for 78 users it is convenient. In Bastar district 98 respondents use the above said technique, of which 70 in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of convenience			Total
		Not at all convenient	Convenient	Very convenient	
Surguja	WLL FX	-	78	21	99
	WLL FT	-	1	-	1
	Total	-	79	21	100
Bastar	WLL FX	-	70	28	98
	WLL FT	-	2	-	2
	Total	-	72	28	100

- D. Level of convenience with type of instrument:** It is showed in following table that confirms that almost everyone feels convenient about the instrument used in VPT.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Surguja	Dial Key Board	-	1	1	2
	Single touch Key board	-	53	45	98
	Total	-	54	46	100
Bastar	Dial Key Board	-	2	-	2
	Single touch Key board	-	62	36	99
	Total	-	64	36	100

- E. Clarity of voice:** It is an important indicator of quality assessment of the VPT. In Surguja district 66 VPT users have expressed that clarity of voice is always convenient or very convenient. Same ways in Bastar 78 users were having same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Surguja	Rarely	-	2	1	3
	Often	10	13	6	29
	Always	-	22	46	68
	Total	10	37	53	100
Bastar	Rarely	-	1	-	1
	Often	3	14	4	21
	Always	-	34	44	78
	Total	3	49	48	100

- F. Reliable connectivity of VPT**

VPT users were enquired about the reliability of connectivity of VPT service in their village. 71% users in district Surguja and 70% users in Bastar district of Chattisgarh shared that connectivity of VPT service is reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Surguja	Reliable	71	71.0
	Highly reliable	29	29.0
	Total	100	100.0
Bastar	Reliable	70	70.0
	Highly reliable	30	30.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. User's response revealed that 89 % respondents in Surguja and 70% in Bastar district found VPT always available in their area.

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Surguja	During day time	7	7.0
	During night	2	2.0
	Always	89	89.0
	Fixed timings	2	2.0
	Total	100	100.0
Bastar	During day time	4	4.0
	Always	70	70.0
	Fixed timings	26	26.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 92% users in Surguja were paying in case of VPT usage, 69 % were paying cash. In Bastar district 96% users were paying, 58% were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Surguja	No	8	8.0
	Yes	92	92.0
	Total	100	100.0
Bastar	No	4	4.0
	Yes	96	96.0
	Total	100	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of Payment	No. of Users	Percent
Surguja	Cash	69	69.0
	Partly cash, partly credit	22	22.0
	Others	1	1.0
	Non-Payment	8	8.0
	Total	100	100.0
Bastar	Cash	58	58.0
	Credit	1	1.0
	Partly cash, partly credit	37	37.0
	Non-Payment	4	4.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Bastar district there is no social restriction but in Surguja district, only 2% VPT users expressed some social restriction. Particularly users belonging to SC faces restriction in VPT usage.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Surguja	No	98	98.0
	Yes	2	2.0
	Total	100	100.0
Bastar	No	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Surguja district was less than Rs 250 in 60 % cases of VPT whereas in Bastar it was 90 %.

Table VI. B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
Surguja	Less than 250	6	60.0
	250-500	3	30.0
	501-750	1	10.0
	Total	10	100.0
Bastar	Less than 250	9	90.0
	501-750	1	10.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Surguja	No	45	45.0
	Yes	55	55.0
	Total	100	100.0
Bastar	No	53	53.0
	Yes	47	47.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPT usage has increased their income and what is the percentage change in income of VPT users.

In Surguja district (45%) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Bastar) of the state it was observed that 47% users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Per cent
Surguja	No change reported	45	45.0
	Upto 5 percent	32	32.0
	5 to 10 percent	16	16.0
	10 to 20 percent	7	7.0
	Total	100	100.0
Bastar	No change reported	53	53.0
	Upto 5 percent	31	31.0
	5 to 10 percent	12	12.0
	10 to 20 percent	4	4.0
	More than 20 percent	-	0.0
	Total	100	100.0

Further enquiring about the percent change in income revealed that 32% of users expressed up to 5 % increase in their household income in Surguja where as in Bastar this figure is 31 %.

- B. Improvement in connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Surguja	No improvement	-	79 (79.0)	81 (81.0)
	Marginal Improvement	59 (59.0)	8 (8.0)	17 (17.0)
	Significant improvement	41 (41.0)	13 (13.0)	2 (2.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)
Bastar	No improvement	-	88 (87.1)	88 (88.0)
	Marginal Improvement	77 (76.2)	9 (9.0)	7 (7.0)
	Significant improvement	23 (23.0)	3 (3.0)	5 (5.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Surguja	No improvement	69 (69.0)	100 (100.0)	98 (98.0)	100 (100.0)
	Marginal Improvement	31 (31.0)	-	2 (2.0)	-
	Significant improvement	-	-	-	-
	Total	100 (100.0)	-	100 (100.0)	-
Bastar	No improvement	80 (79.2)	100 (100.0)	100 (100.0)	100 (100.0)
	Marginal Improvement	20 (19.8)	-	-	-
	Significant improvement	-	-	-	-
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Surguja	Bastar
a.	Personal communication	59% marginal improvement	77% marginal improvement
b.	Business networking	79% no improvement	88% no improvement
c.	Emergency Management Medical Fire Police Natural Calamities	1. 69% no improvement 2. 100% no improvement 3. 98% no improvement 4. 100% no improvement	1. 80% no improvement 2. 100% no improvement 3. 100% no improvement 4. 100% no improvement
d.	Official Purposes	81% no improvement	88% no improvement

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Surguja					Bastar				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	73 (73.0)	10 (10.0)	16 (16.0)	1 (1.0)	100 (100.0)	72 (72.0)	7 (7.0)	17 (17.0)	4 (5.0)	100 (100.0)
b.	Market	74 (74.0)	10 (10.0)	14 (14.0)	2 (2.0)	100 (100.0)	94 (94.0)	1 (1.0)	5 (5.0)	-	100 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	85 (85.0)	13 (13.0)	2 (2.0)	-	100 (100.0)	84 (84.0)	12 (12.0)	4 (4.0)	-	100 (100.0)
2.	Education	98 (98.0)	1 (1.0)	1 (1.0)	-	100 (100.0)	92 (92.0)	3 (3.0)	5 (5.0)	-	100 (100.0)
3.	Related to Agriculture	89 (89.0)	8 (8.0)	3 (3.0)	-	100 (100.0)	89 (89.0)	6 (6.0)	5 (5.0)	-	100 (100.0)
4.	Others	95 (95.0)	5 (5.0)	-	-	100 (100.0)	97 (97.0)	3 (3.0)	-	-	100 (100.0)
d.	Natural Calamity / Weather forecasting	97 (97.0)	3 (3.0)	-	-	100 (100.0)	100 (100.0)	-	-	-	100 (100.0)
e.	Rail / Road transport	100 (100.0)	-	-	-	100 (100.0)	100 (100.0)	-	-	-	100 (100.0)
f.	Health Services	71 (71.0)	22 (22.0)	7 (7.0)	-	100 (100.0)	78 (78.0)	18 (18.0)	4 (4.0)	-	100 (100.0)
g.	Agriculture related	75 (75.0)	11 (11.0)	14 (14.0)	-	100 (100.0)	78 (78.0)	10 (10.0)	12 (12.0)	-	100 (100.0)
h.	Business related	77 (77.0)	6 (6.0)	13 (13.0)	4 (4.0)	100 (100.0)	92 (92.0)	1 (1.0)	7 (7.0)	-	100 (100.0)
i.	Others (specify)	-	-	-	-	-	-	-	-	-	-

	Access to information on	Surguja	Bastar
a.	Employment Opportunity	73% never	72% never
b.	Market	74% never	94% never
c.	Development & Welfare Schemes of Government on Health Education Related to agriculture Others	1. 85% never 2. 98% never 3. 89% never 4. 95% never	1. 84% never 2. 92% never 3. 89% never 4. 97% never
d.	Natural calamity / weather forecasting	97% never	100% never
e.	Rail / road transport	100% never	100% never
f.	Health services	71% never	78% never
g.	Agriculture related	75% never	78% never
h.	Business related	77% never	92% never

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt satisfactory by 56.0% users in Surguja and highly satisfactory by 64 % in Bastar district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Surguja	Not satisfactory	16	16.0
	Satisfactory	56	56.0
	Highly satisfactory	28	28.0
	Total	100	100.0
Bastar	Not satisfactory	5	5.0
	Satisfactory	31	31.0
	Highly satisfactory	64	64.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 59% users in Surguja and 60% highly satisfactory in Bastar district.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Surguja	Not satisfactory	13	13.0	39	39.0
	Satisfactory	59	59.0	47	47.0
	Highly satisfactory	28	28.0	14	14.0
	Total	100	100.0	100	100.0

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Bastar	Not satisfactory	7	7.0	22	22.0
	Satisfactory	33	33.0	53	53.0
	Highly satisfactory	60	60.0	25	25.0
	Total	100	100.0	100	100.0

- B. **Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined satisfactory by 62 % users in Surguja and 72% in Bastar.

Table VIII.C. Level of satisfaction about repair and maintenance-Time & quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Surguja	Not satisfactory	9	9.0	6	6.0
	Satisfactory	62	62.0	61	61.0
	Highly satisfactory	29	29.0	33	33.0
	Total	100	100.0	100	100.0
Bastar	Not satisfactory	8	8.0	2	2.0
	Satisfactory	72	72.0	36	36.0
	Highly satisfactory	20	20.0	62	62.0
	Total	100	100.0	100	100.0

- D. **Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 49% users in Surguja and 75% users of Bastar.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Surguja	Not satisfactory	19	19.0
	Satisfactory	32	32.0
	Highly satisfactory	49	49.0
	Total	100	100.0
Bastar	Not satisfactory	6	6.0
	Satisfactory	19	19.0
	Highly satisfactory	75	75.0
	Total	100	100.0

- E. **Other Service Provider:** The response about level of satisfaction of other service providers disclosed 91% satisfaction in Surguja and 96% in Bastar.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Surguja	Not satisfactory	1	1.0
	Satisfactory	91	91.0
	highly satisfactory	8	8.0
	Total	100	100.0
Bastar	Satisfactory	96	6.0
	Highly satisfactory	4	4.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that almost all the custodian of VPT (6) in Bastar district was making payment regularly. However in Surguja only 3 out of 10 were making regular payment.

Table IX. Regularity in payment

Telecom District	Regularity	No. of Custodians	Percent
Surguja	Yes	6	60.0
	Total	10	100.0
	No	7	70.0
	Yes	3	30.0
	Total	10	100.0
Bastar	No	4	40.0
	Yes	6	60.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 83% users in Surguja and 88 % in Bastar are not aware of the problem.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Surguja	Internally	1	1.0
	Externally	2	2.0
	Not resolved	14	14.0
	Not aware	83	83.0
	Total	100	100.0
Bastar	Internally	2	2.0
	Externally	4	4.0
	Not resolved	6	6.0
	Not aware	88	88.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 83% were unaware in Surguja and 93% in Bastar district. Problem solution of quality accessibility was also viewed to be unaware in both the districts by the same percentage as above.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Surguja	Internally	-	-	-	-
	Externally	1	1.0	1	1.0
	Not resolved	16	16.0	16	16.0
	Not aware	83	83.0	83	83.0
	Total	100	100.0	100	100.0
Bastar	Internally	2	2.0	2	2.0
	Externally	-	-	-	-
	Not resolved	5	5.0	5	5.0
	Not aware	93	93.0	93.0	93.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 88% and 84% users were not aware in Surguja and Bastar districts respectively. Similarly in case of the problem of quality repair & maintenance 91% and 97% of VPT users were not aware in Surguja and Bastar districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Surguja	Internally	3	3.0	2	2.0
	Externally	3	3.0	2	2.0
	Not resolved	6	6.0	5	5.0
	Not aware	88	88.0	91	91.0
	Total	100	100.0	100	100.0
Bastar	Internally	4	4.0	-	-
	Externally	7	7.0	2	2.0
	Not resolved	5	5.0	1	1.0
	Not aware	84	84.0	97	97.0
	Total	100	100.0	100	100.0

D. Problem resolution about the payments to the custodians

The problem of payment to custodian was viewed to be unaware by 82% users in Surguja and 89 % in Bastar district.

Table X.D. Problem resolution related to payments to custodians

Telecom District		No. of Users	Percent
Surguja	Internally	4	4.0
	Externally	1	1.0
	Not resolved	13	13.0
	Not aware	82	82.0
	Total	100	100.0
Bastar	Internally	5	5.0
	Externally	2	2.0
	Not resolved	4	4.0
	Not aware	89	89.0
	Total	100	100.0

E. Problem resolution about the other alternate Service Providers

100 % VPT users in both Surguja and Bastar district were not aware of the problem related with alternate service providers.

Table X.E. Problem resolution related to alternate service providers

Telecom District		No. of Users	Percent
Surguja	Not aware	100	100.0
Bastar	Not aware	100	100.0

SWOT ANALYSIS

DISTRICT : BASTAR

(1) Village Kamanar

In this village VPT has installed in Ward Member's residence. Ward Members is cooperative but charges more price per call rate. Some people are not aware about VPT. 60 % households use mobile. So VPT users are gradually decreasing in this village.

Strengths

- A dynamic person is the custodian of the VPT as a result there is proper maintenance of the VPT.
- VPT is located in a central place of the village.
- Incoming calls were also received in WLL
- The custodian is approachable.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- Custodian charge more money per call rate.
- Some time people feel uneasy to access the VPT as it is inside the house.
- Lack of communication found among the people with the BSNL officials.
- Electricity problem is very frequent in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staff.

Opportunities

- STD facility would increase the facility to people
- Orientation should be provided for wider use of VPT by rural people

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(2) Village Chhotekadma

In this village VPT has installed in a Kirana shop. The custodian is very much cooperative in nature. Mobile users are gradually increasing in village.

Strengths

- VPT is in a very convenient place.
- VPT is located in a central place of the village.
- Incoming calls were also received in WLL

Weakness

- No billing machine in the VPT
- People are little displeased about the rate charged by the custodian.
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staff.

Opportunities

- Improved technology for clarity of voice
- Timely maintenance should be provided
- Instrument should be changed
- Provision of battery charging or alternative battery

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation

(3) Village Gandamguda

In this village VPT is installed in teacher's residence. He is a well-behaved and cooperative man. Village is a remote Naxal affected area. 40 % of total households are tribals. Socio-economically they are backward. Mostly they depend upon agriculture and labour work. The village connected to pucca road

Strengths

- Use of VPT in an equitable manner.
- Incoming calls were also received in WLL

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.

Opportunities

- STD facility should be added
- Internet facility for more connectivity
- Proper mechanism for delivery and collection of bills in time
- Bi monthly billing cycle
- Reduced call rate for senior citizens
- On line bill payment facility
- Orientation should be provided for wider use of VPT by rural people

Threats

- Reliance has its own tower in the village and hence the networking is very nice.

(4) Village Karabadgaon

VPT has installed in teacher's residence. But custodian is the younger brother of teacher. He is a cultivator. He is very well person. Village is in a remote area. 40 % of the households are falling under ST category. Hence irrespective of caste, all the people use the services of VPT.

Strengths

- Incoming calls were received in WLL

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Inconvenience regarding the place.

Opportunities

- Proper mechanism for delivery and collection of bills in time
- Action against higher call charges
- Proper and Relocation of pole for high quality of service in the village
- Orientation should be provided for wider use of VPT by rural people

Threats

- Well functioning STD booth is nearby market.

(5) Village Patoda

In this village the VPT is installed at the kirana shop. There is a rice mill attached to the kirana shop. So all categories of people come. It is a suitable, roadside place. Behaviour of custodian is honest. He is cooperative. No other service provider is found in the village.

Strengths

- Incoming calls were received in WLL
- Available at a location-wise advantageous place.
- Available for all the time

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Lack of information regarding the VPT.

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time
- Alternative solution for net work
- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL
- Potential of higher revenue with ISD calls

Threats

- Well functioning STD booth is in the block headquarters, which is just 3 km far away from the village.

(6) Village Arla

In this village the VPT is installed at the kirana shop. He is a graduate and well behaved human being.

Strengths

- Incoming calls were received in WLL
- Available at a location-wise advantageous place.
- Available for all the time

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Network problem.

Opportunities

- Alternative solution for net work

- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL

Threats

- Mobiles of other service provider.

(7) Village Tedmunda

In this village the VPT has installed at the residence of the school teacher. He is an honest person. Mostly the ST people access the VPT because the ST hamlet is situated near the VPT booth.

Strengths

- Incoming calls were received in WLL
- Available for all the time

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Lack of information regarding the VPT.
- Uneasiness towards the place of VPT.

Opportunities

- STD facility should be added
- Improved delivery of bills for collection of bills in time

Threats

- Mobiles of other service provider.

(8) Village Chhote Salena

In this village VPT has installed in Sarpanch's house. His education is middle and schedule tribe in caste. Location is very convenient and daily some people come here regarding village issue and other political matters.

Strengths

- Incoming calls were received in WLL
- Available for all the time

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Lack of information regarding the VPT.

Opportunities

- Battery charging facility
- Fix time power supply
- Wide and proper orientation should be provided for wider use of VPT by rural people

Threats

- Mobiles of other service provider.

(9) Village Nalajhar

VPT is installed in the residence of Upa-Sarpanch. Sarpanch has selected him as Custodian. He is very cooperative and well behaved human being. This village is basically a naxal affected village. Maximum of the people are illiterate. They use this VPT very rarely.

Strengths

- Incoming calls were received in WLL
- Available for all the time

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Lack of information regarding the VPT.

Opportunities

- Improved technology for clarity of voice
- Timely maintenance should be provided
- STD facility should be added

Threats

- Mobiles of other service provider.

(10) Village Bagdema

In this village VPT is installed in the residence of the Sarpanch. His education is up to 7th standard. He is a very cooperative and well behaved human being. He is an ST. This village is in a very remote area. No other service provider is present in the village. Education is very poor. Most people depend upon labour work & agriculture.

Strengths

- Incoming calls were received in WLL

Weakness

- No billing machine in the VPT
- Frequent current failure in these areas.
- Battery problem related to VPT.
- Lack of proper monitoring by the BSNL staffs.
- Lack of information regarding the VPT.

Opportunities

- STD facility should be added
- Display board with tariffs, toll free numbers for emergency and complaints
- Proper mechanism for delivery and collection of bills in time
- Action against higher call charges

Threats

- Mobiles of other service provider.

DISTRICT : SURGUJA

(1) Village Lohapatra

This village is situated on the main road. VPT is installed inside a residence of the ex-sarpanch. Percentages of mobile users in this village are 42 % and 12 % are VPT users.

Strengths

- Incoming calls were also received in WLL

Weakness

- Custodian is non-cooperative in nature.
- SC and ST people feel uneasy in accessing the facility.
- People have to wait a long for this.
- Women are also hesitant to use this.
- No display board with tariffs, toll free numbers for emergency and complaints

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time

Threats

- Multiple mobile connections in households especially among younger generation.
- STD booth is there in the nearby town with all facilities.

(2) Village Rajpuri

This village is situated on the main road.

Strengths

- Incoming calls were also received in WLL

Weakness

- Network problem during thundering & lighting.
- Due to low quality battery VPT doesn't function during current off
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- There is no separate for VPT.

Opportunities

- STD facility should be added
- Display board with tariffs, toll free numbers for emergency and complaints
- Proper mechanism for delivery and collection of bills in time
- Action against higher call charges
- Proper and Relocation of pole for high quality of service in the village
- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL

Threats

- Multiple mobile connections in households especially among younger generation.
- STD booth is there in the nearby town with all facilities.

(3) Village Madenswarpur

In this village VPT is installed in a shop. Three years ago, VPT was used by all the villagers. After the arrival the facility of mobile phone, the usage of VPT has come down. Those who do not have mobile, use VPT.

Strengths

- Incoming calls were also received in WLL

Weakness

- Network problem during thundering & lighting.
- Due to low quality battery VPT doesn't function during current off
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- There is no separate for VPT.

Opportunities

- STD facility should be added
- Display board with tariffs, toll free numbers for emergency and complaints
- Proper mechanism for delivery and collection of bills in time
- Action against higher call charges
- Orientation should be provided for wider use of VPT by rural people

Threats

- Multiple mobile connections in households especially among younger generation.

(4) Village Parsapara

In this village people's awareness on VPT is very poor. Mostly the people do not know about the VPT. Those people who are nearer and dearer to the custodian, they use it. Other people use mobile. Some people go to the nearest market to use STD booth.

Strengths

- Incoming calls were also received in WLL

Weakness

- Due to low quality battery VPT doesn't function during current off
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- There is no separate for VPT.
- Custodian is non-cooperative during emergency time.

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time
- Bi monthly billing cycle
- Reduced call rate for senior citizens and students

Threats

- Multiple mobile connections in households especially among younger generation.
- STD booth in nearby market.

(5) Village Parema

In this village VPT is installed in the residence of the Upa-Sarpanch. Here maximum of the people are using mobile phone. Few people are using VPT.

Strengths

- Incoming calls were also received in WLL.
- Voice quality is very good.

Weakness

- Due to low quality battery VPT doesn't function during failure of current.
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- There is no separate for VPT.
- Female feel hesitant in using VPT as it is in an open place.

Opportunities

- STD facility should be added
- Improved delivery of bills for collection of bills in time
- Alternative solution for net work
- Orientation should be provided for wider use of VPT by rural people

Threats

- Multiple mobile connections in households especially among younger generation.

(6) Village Manoharpur

In this village VPT is installed in a grocery shop. The Custodian is a very cooperative and well-behaved human being. Around 40 % of the households are Muslim. Some people are non-aware about VPT. This village is a naxal-affected village. More than 50% of the people in this village use VPT.

Strengths

- Incoming calls were also received in WLL.
- Voice quality is very good.
- Female are comfortable in using the VPT as there is tailoring unit attached to the shop.

Weakness

- Due to low quality battery VPT doesn't function during failure of current.
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- There is no separate room for VPT.

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time

Threats

- Multiple mobile connections in households especially among younger generation.

(7) Village Okara

In this village VPT is installed at Grocery shop. Custodian is cooperative but charges more price in call rate and charge in incoming call also. This place is convenient for all.

Strengths

- Incoming calls were also received in WLL.
- Voice quality is very good.

Weakness

- Due to low quality battery VPT doesn't function during failure of current.
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.

Opportunities

- Wide and proper orientation should be provided for wider use of VPT by rural people
- Improved technology for clarity of voice
- Timely maintenance should be provided

Threats

- Multiple mobile connections in households especially among younger generation.

(8) Village Dhanespur

In this village the VPT is installed at the residence of the Upa Sarpanch. Due to his involvement in politics, some people feel uneasy in accessing the VPT.

Strengths

- Incoming calls were also received in WLL.

Weakness

- Sometime the custodian does not inform about the incoming call.
- Sometime outgoing call is also not possible because of late payment of bill.
- Due to low quality battery VPT doesn't function during failure of current.
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.

Opportunities

- Orientation should be provided for wider use of VPT by rural people
- Telephone no of important Government and markets links should be made available on VPT
- Improved technology for clarity of voice
- Instrument should be changed

Threats

- Multiple mobile connections in households especially among younger generation.

(9) Village Jaliadand

In this village the VPT is installed at kirana shop. The place is centre in the village.

Strengths

- Incoming calls were also received in WLL.

Weakness

- Due to low quality battery VPT doesn't function during failure of current.
- Since there is no billing system, the customers do not have faith on billing system.
- Lack of awareness about VPT.
- Custodian is not a cooperative person.
- Though there is complaint against the custodian, the district level officials are not taking any steps.

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time Improved technology for clarity of voice
- Timely maintenance should be provided

Threats

- Multiple mobile connections in households especially among younger generation.

(10) Village Tamjeera

In this village the VPT is installed at a shop. The place is centre in the village. Village is a naxal-affected village. Cultivation & non-agriculture labour are the main occupation of the village. More than 50 % of the people possess the facility of mobile phone because of its better accessibility and good network.

Strengths

- Incoming calls were also received in WLL.

Weakness

- Due to low quality battery VPT doesn't function during failure of current.
- Lack of awareness about VPT.
- Custodian is not a cooperative person.

Opportunities

- Instrument should be changed
- Provision of battery charging or alternative battery
- STD facility should be added
- Internet facility for more connectivity
- Proper mechanism for delivery and collection of bills in time
- Bi monthly billing cycle

Threats

- Multiple mobile connections in households especially among younger generation.

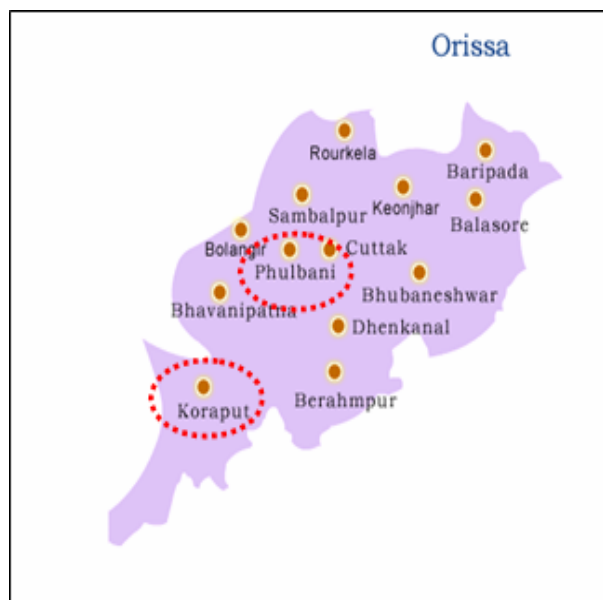
State Report - 6 ORISSA



Orissa

Orissa comprises of 4.74% of India's landmass and 36.71 million people (2001 Census), which accounts for 3.57% of the population of the country. Nearly 85% of its population live in the rural areas and depend mostly on agriculture for their livelihood. The State has abundant mineral and natural resources. In spite of all these things Orissa is one of the most economically backward states in India.

In order to mitigate these problems the Government of Orissa has tried a lot in strengthening its infrastructure. The telecommunication service network has undergone a major expansion in the state. By 2003-04, the number of telephone exchanges and telephone connections in the State has increased to 1,122 and 9,44,252 respectively. The following Table shows the profile of telecom service in the public sector in Orissa as on 31.03.04.



Number of Telephone connection		Number of villages covered with telephones	Total number of STD Lines	Public Telephones	
Land line	7,35,199	40,753 (86.72%)	4,28,470	STD	18,858
WLL	45,509				
Mobile	1,63,544			Local	570

Source: Economic Survey, 2004-05, Govt. of Orissa, Pp-12/11.

In order to connect the rural Orissa over telephone and to provide telecom service to rural mass at subsidized rate Village Public Telephones (VPT) were installed. This scheme was implemented in the year 2003 with the establishment of USO Fund under Indian Telegraph (Amendment) Act, 2003 and Rules framed there under.

At present Shri A. N. Rai, C.G.M.T. BSNL, Orissa Telecom Circle, Bhubaneswar is in charge of implementing VPTs in Orissa.

There are 51,349 (Inhabited Villages: 47,529) villages in the State (2001 Census). Out of that 42,243 villages are covered under VPT. As per the various agreements signed from time to time by BSNL with USO (F) the telecom department prepared an action plan every year. As per their action Plan for the year 2008-09 it has been made to replace remaining MARR VPTs by DSPTs. Plans have been made to cover the remaining villages under Bharat Nirman

Programme and VPT agreement by any technology like LL / WLL / GSM and by DSPTs where no other technology is feasible.

If we look into the physical targets and achievement aspects of VPT it will be found that it achieved only 39.61% in 2006-07 and 66.90% in 2007-08. The naxalite problems, lack of electricity connection, shortage of staffs and lack of communication problems were mentioned as major hurdles in achieving the target.

Years	Physical Performance (Newly connected Villages / VPTs)	
	Target	Achievement
	No. of VPTs	No. of VPTs
2004-05	--	--
2005-06	--	--
2006-07	1,300	515
2007-08	1,550	1,037

The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. It is subsidized by USOF for installation and operation of VPTs in different technologies. Regarding expenditure details there is no accounting for expenditure on VPT exclusively. It used to be covered under overall expenditure of BSNL. Similarly, there is no separate staff for VPT maintenance and performance. VPTs are maintained by existing staff of BSNL by incurring extra expenditure for installation and maintenance.

Monitoring and Supervision

There are some mechanisms available for monitoring and supervision of VPTs at the State level. This monitoring and supervision work used to be done by the BSNL staff. They prepare a format and guidelines for monitoring and supervision. They do it by maintaining VPT daily testing registers at every exchange as well as from monthly meter reading of TRA billing records. There were no charges for repairing and maintenance. At the block level, the Junior Telecom Officer (JTO) & Telecom Technical Assistant (TTA) are in charge of monitoring and supervision. At the village / exchange level, lineman is in charge of monitoring. Repairs and maintenance of VPTs are solely the responsibility of BSNL. Technical staff (there is no separate staff for VPT) is in charge of the maintenance. Due to naxalite threat, lack of staff and lack of communication problem it is very difficult in the case BSNL officials to extend regular maintenance service to the VPTs.

Repairs and Maintenance of VPTs

The repairing and maintenance activities of VPT used to be done by BSNL staff. There is no outsourcing for it. There is some special technical staff available with BSNL for repair of VPTs. The work distribution is based on number of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff. In order to train

the technical staff more efficiently sometimes head office used to organize some training programmes. For DSPT (Digital Satellite Phone Terminal) VPT installation and maintenance Training was imparted to field staffs for three days at state level during 2007-08 and 2008-09. In Orissa BSNL did not perceive any competition to VPTs from other private service providers. No private service provider has been appointed for provisioning of VPTs.

Future plans revealed that VPTs are being provided in the newly identified villages as per 2001 census, improvement in present functional efficiency of VPTs (70%), Provisioning of broadband services through VPTs to the villages are in progress. There is also overall review and reorganization of VPT structure as due to U/G cable damage in most of the villages because of construction of rural roads under PMGSY, the VPTs are restored either by WLL, GSM or DSPT. Also there are future plans for upgrading the skills of the officers and technical staff to train up staff for DSPT VPT maintenance at SDCA level to reduce non-functionality as well as to educate the VPT custodians.

Following issues were highlighted during interface with officials. Regarding strengths of VPTs it was observed that it is one of the sources of the communication for the villagers dwelling in inaccessible areas. In remote rural areas, where there is no telecommunication facility is possible on landline, WLL or GSM due to drastic geographical conditions, VPTs on DSPT are the only source of communication for people of those villages. VPTs are one of the sources of revenue for BSNL. This is the very useful public utility service provided by BSNL in rural areas which consists 70 % of the country.

While discussing weaknesses of VPTs it was revealed that non-availability of commercial power supply in villages creates difficulty in charging batteries regularly to provide uninterrupted service. And also difficulty in providing landline connection because laying of U/G cable is a problem due to difficult terrains. Another point is that the custodians do not pay the bills in time for which a lot of VPTs are disconnected due to non-payment. Some time locations are very remote and there is no other telephone working to lodge the complaint. Regarding maintenance field staffs are facing problems in naxalite areas in maintaining the VPTs especially in Koraput (4 districts), Gajapati, Sambalpur and Sundergarh districts. Lack of ignorance about use of VPT due to which people in villages may not be able to operate the VPTs properly because the installed equipments are of advanced technology.

Other constraints in Implementation of VPTs with regard to Guidelines of the scheme are:

Political interference in most of the villages during installation of VPTs. Due to lack of electricity, the WLL and DSPTs VPTs are not being supplied with power and the maintenance of solar and battery sets are very difficult. Difficulty is being faced in installing VPT Display boards and details of tariff due to resistance from VPT custodians. Identification of custodians is a problem at some remote places where nobody is willing to accommodate the VPTs in their

premises. Identification of custodians in rural / tribal areas is not an easy task due to lack of awareness among the inhabitants and poor financial conditions. Most of the villagers received threat from the naxalites that they will be in trouble if they kept VPT at their home. This delays the VPT installation work.

Reasons for non-viability of VPT are the maintenance expenditure is very high in remote and inaccessible areas, the extremists damage the installations frequently and some times custodian does not pay the bills in time hence VPTs get disconnected.

Some of the suggestions provided for the improvement are that VPTs have high relevance in areas where normal telecom networks are yet to reach. In these areas due to insignificant scale of operation by Telecom operators, Payment of bills / availability of pre-paid coupons is the biggest problem in the area. To overcome this problem, operator needs to be compensated for maintenance and operation of the service and the cost of service to a limited extent be borne by USO fund as a community service.

CGM given his overall opinion about VPT, that it has made huge impact by connecting people who were unconnected. On part of BSNL it required tremendous effort to expand the network to uncovered areas although not justified on commercial considerations. This is unlike provision of rural connections where connections are provided wherever the network is available.

The next section discusses the performance of VPTs in Kandhamal and Koraput districts against the backdrop of discussion on the performance of VPTs at the state level.

DISTRICT : KANDHAMAL (PHULBANI)

The Kandhamal district in the present state was constituted w.e.f 1st January 1994. Before that it was part of Phulbani district. It is located in the heart of Orissa stretching between 19°34' & 20°36' north latitude and 83°34' & 84°34' east longitude with an area of 7649 sq.km. Administratively, it constitutes 2 sub-divisions, 12 CDBs, 2 ULBs, 153 GPs and 2515 villages. Physiographically, the entire district lies in high altitude zone with inter spreading inaccessible terrain of hilly ranges and narrow valley tracts which guides the socio-economic conditions of people and development of the district. More than 50 % of population constitutes ST community of aboriginal tribal races. Overall, the district is ranked as a backward district in the state of Orissa (India).

Like any other district, it has developed its own communication facilities over the years. The village Public Telephones (VPTs) is being installed in various regions of the district. The TDE, BSNL is acting as head of the implementing agency. The SDE (VSO) is given the charge of VPT.

To provide telephonic communication to rural India this scheme is in function since 2003 in this district. Till date 639 VPTs are being installed in 639 villages. The department used to give the VPT connection in consultation with respective Gram Sabha.

In the beginning of the financial year the department used to prepare an action plan for the forthcoming year. As mentioned by the official, it is being planned to provide 521 WLL phones, 414 DSPT phones, 49 D/A phones, 262 Opex and 4 Zero POP by end of 2009.

If we look into the target and achievement of installation of VPTs in Kandhamal district it will be found that achievement is always lagging far behind the target. It has achieved only 9.58 percent of its total target. In the case of providing extended services it has achieved 47.27 percent of its total target. Due to lack of transport facilities and disturbed areas they failed to achieve the target.

It is mentioned by the officials that there are only 84 staff including the technical and administrative officers working in the Phulbani telephone circle.

There is certain mechanism available for monitoring and supervision of VPTs. There are no such guidelines to do it. It used to be done by the BSNL officials. There are no fixed staff for monitoring work. The BSNL staff used to visit each mandal everyday to enquire about the VPTs. In village and booth level they used to visit as and when there is requirement.

The VPT is 100 percent financed by BSNL department. There is no separate fund allocation for VPT. There are also no particular expenditure details for VPT repairing and installation. As mentioned by officials VPT has helped in gathering some revenue for the department. However, it has not achieved the goal. While during 2007-08 Rs. 15,81,042 was collected from billing in year 2008-09 it was Rs. 14,27,476. The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staff, who used to help in repairing. There are total 47 technical staff available in this telephone circle. The work distribution to the staff is based on number of VPTs available. During last three months all 92 VPTs are being repaired by the department. Once they get the information that there is some problem with a VPT, the department technical staff used to make a visit as soon as possible. Sometimes they used to ask the custodian to come with the VPT to exchange office where they repair it. The department does not charge anything for the repairing activity.

During 2008 one-week training programme was organized on DSPT at ALTTC, Ghariabal. Around 4 persons attended the training programme.

The department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Major strength of VPTs observed in the district are that the villagers are interested to use the VPTs and it has helped the villagers in getting the emergency services and market information.

Main weakness of VPTs reflected in the area is that maintenance is difficult due to lack of communication facilities around 76 per cent villagers are not electrified in the district, even if some villages are electrified there is frequent power cut, naxalism has stood as a major threat and due to hilly area it is difficult to maintain the network connectivity.

The major constraints in implementation of VPTs were faced with regard to staff, monitoring and supervision and repairing and maintenance. All these constraints were due to lack of staff, frequent power cut, non-availability of electricity, threat from naxalites and lack of communication facilities.

The telecom service has not become commercially viable in rural areas. The number of calls originated from VPTs are very less, most of the villagers are not able to pay the bills because of their low economic condition and some villagers think the phone is allotted by the Government for free calling.

Some of the suggestions for improvement were like VPT should have SPV, improved road connectivity to rural areas, electrifying rural areas and creating awareness regarding the use of VPTs among villagers.

DISTRICT : KORAPUT

Koraput district in the present state was constituted w.e.f 1st January 1994. Before that it was with same name but with other divided districts such as Rayagada, Malkangiri, and Nabarangpur. It is located in the southern part of Orissa stretching between 17.40' & 20.7' north latitude and 81.24' & 84.2' east longitude with an area of 8379 sq.km. Administratively, it constitutes 2 sub-divisions, 14 blocks. Physiographically, the entire district lies with high altitude zone with inter spreading inaccessible terrain of hilly ranges and narrow valley tracts which guides the socio-economic conditions of people and development of the district. Around 50.66 % population of this district are tribals and 13.41 % are from SC communities. Overall the district is rank as a backward district in the state of Orissa (India).

Like any other districts it has developed its own communication facilities over the years. The Village Public Telephones (VPTs) are being installed in various regions of the district. The GM, telecom district Koraput is acting as head of the implementing agency. The SDE (MLS & VSO) is given the charge of VPT.

To provide telephonic communication to all the villages this scheme is in function since 2004 in this district. Till date 4941 VPTs were being installed in 4941 villages. In order to identify and select the villages and VPTs the telecom officials follow the Census 1991 and 2001. They used to install VPTs on those villages wherever there are no telecom facilities on priority basis. The department used to give the VPT connection in consultation with respective Gram Sabha.

In the beginning of the financial year the department used to prepare an action plan for the forthcoming year. As it is mentioned by the officials that it was planned to provide 634 WLL phones, 185 GSMs, 30 DSPT phones during 2007-08. In 2008-09 it is being planned to provide 144 DSPTs, 224 GSM phones in disturbed and in those areas wherever there is no phone facilities.

If we look into the target and achievement of installation of VPTs in Koraput district it will be found that there is no such information regarding target of VPT installation available with department. However, in last six years, the department has able to install 2813 VPTs in this telecom district. Due to lack of transport facilities and disturbed areas they failed to cover all the areas.

There is no separate fund allocation for VPT. There are also not so particular expenditure details for VPT repairing and installation. As it is mentioned by officials VPT has helped in gathering some revenue for the department. However, it has not achieved the goal.

It was informed that there is up and down in revenue from VPT. However it is showing that the use of VPT has increased after 2006-07. The expenditure details relating to exclusively VPT is not available with the department. They used to spend the allotted fund for repairing and maintenance of telephone as a whole.

It is mentioned by the officials that there are only 20 staffs on roll including the technical and administrative officers working in the Koraput telephone circle. However, the total sanctioned staff strength is 28. The head office has not yet sent the rest staff. By employing the contract labourer, the department is meeting the demand.

There is certain mechanism available for monitoring and supervision of VPTs. There are some guidelines the department used to follow to do it. It used to be done by the BSNL officials. There are no fixed staff for monitoring work. The BSNL staff used to visit each mandal everyday to enquire about the VPTs. In village and booth level they used to visit as and when there is requirement. The department has given a complaints book in each and every VPT booth. However, it was not found in the field.

The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staff, who used to help in repairing. There are total 14 technical staff available in this telephone circle. The work distribution to the staff is based on equipped capacity. The information regarding repairing of VPTs in last 3 months was not available. However, it is mentioned by the department that the maintenance of VPTs used to be done in a routine manner. Once they get the information that there is some problem with a VPT the department technical staff used to make a visit as soon as possible. Sometimes they used to ask the custodian to come with the VPT to exchange office where they repair it. The department does not charge anything for the repairing activity.

Training is conducted at BSNL regional telecom training centre. Technical staff are deputed periodically for refresher training.

The department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Some of the strength of VPT observed are that it is a key for rural communication, the villagers are interested to use the VPTs and it has helped the villagers in getting the emergency services and market information.

Weakness of VPTs felt during study are that maintenance is difficult due to lack of communication facilities, shortage of staff, around 85 percent villages are not electrified in the district, even if some villages are electrified there is frequent power cut, naxalism has stood as a major threat, problem due to hilly and remote area, frequent bandh by extremist in the region and non availability of spares.

The major constraints in implementation of VPTs were faced with regard to staff, monitoring and supervision and repairing and maintenance. All these constraints were due to lack of staff, frequent power cut, unavailability of electricity, threat from extremists, lack of availability of spares, and lack of communication facilities.

The telecom service has become commercially viable in rural areas. The number of calls originated from VPTs has increased. Even though most of the villagers are not able to pay the bill because of their low economic condition and some villagers think the phone is allotted by the Government for free calling, the revenue from VPTs has increased.

Some suggestions for improvement were sufficient recruitment of staffs, improved road connectivity to rural areas, electrifying rural areas, creating awareness regarding the use of VPTs among villagers and awareness and orientation of VPTs should be created among custodians too.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPTs in the rural areas, the present study included two districts in Orissa – Koraput and Phulbani. In Koraput 100 VPT users and in Phulbani 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPTs. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, and details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum percent belong to OBC (49 %) in Koraput and ST (53 %) in Phulbani districts of Orissa.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Koraput	General	-	-
	Other Backward Class (OBC)	49	49.0
	Scheduled Caste (SC)	9	9.0
	Scheduled Tribe (ST)	42	42.0
	Total	100	100.0
Phulbani	General	-	-
	Other Backward Class (OBC)	13	13.0
	Scheduled Caste (SC)	34	34.0
	Scheduled Tribe (ST)	53	53.0
	Total	100	100.0

Description of gender specification depicts that 65 % and 66 % females in Koraput and Phulbani districts, respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Koraput	65	34	99
Phulbani	66	32	98

Regarding their primary occupation data revealed that majority 31 % were agricultural casual labour in Koraput and also 23 % in Phulbani. Educational qualifications of VPT users were not literates in Koraput (61 %) and 41 % were not literates in Phulbani in current study.

Table I.A.3. Primary Occupation & Educational Qualification

Sl. No.	Primary Occupation (Self)	Koraput	Phulbani
1	Agriculture	28	13
2	Agriculture Casual Labour	31	23
3	Own Business	1	3
4	Self employed in Services	-	10
5	Salaried work	3	5
6	Homemaker	8	14
7	Non-working Adults	4	-
8	Students	2	1
9	Dependents	4	4
10	Others	-	4
11	Non Agriculture Casual Labour	17	21
12	Pensioners/Retired	1	1
	Total	99	99
Educational Qualification			
1	Not literate	61	41
2	Functional literate	16	24
3	Primary	8	9
4	Upper Primary	7	15
5	High School	5	5
6	Intermediate	2	5
	Total	99	99

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned kucha houses in Koraput (73 %) and in Phulbani (64 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Koraput	Kucha House	73	73.0
	Semi-pucca House	18	18.0
	Pucca House	9	9.0
	Total	100	100.0
Phulbani	Kucha House	64	64.0
	Semi-pucca House	28	28.0
	Pucca House	8	8.0
	Total	100	100.0

B.2. Status of Electrification: Electrification status of respondents reflects that majority are not having electricity in their houses (85 % in Koraput and 92 % in Phulbani).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Koraput	Electricity not available	85	85.0
	Electricity available	15	15.0
	Total	100	100.0
Phulbani	Electricity not available	92	92.0
	Electricity available	8	8.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road:** Looking at the proximity of their houses to pucca roads data revealed that 57 % of respondents in Koraput were situated at the distance of more than 1 km and 42 % in Phulbani were situated within 100 mts.

Table I.B.3. Distance of house from Pucca Road

Telecom District	Distance	No. of Users	Percent
Koraput	100 metres or less	23	23.0
	More than 100 metres but less than 1 km	20	20.0
	More than 1 km	57	57.0
	Total	100	100.0
Phulbani	100 metres or less	42	42.0
	More than 100 metres but less than 1 km	37	37.0
	More than 1 km	21	21.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 37 % respondents were staying at a distance of more than 10 kms. in Koraput and 41 % in Phulbani district within 2 kms.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Koraput	Upto 2 km	33	33.0
	More than 2 but less than 10 km	30	30.0
	More than 10 km	37	37.0
	Total	100	100.0
Phulbani	Upto 2 km	41	41.0
	More than 2 but less than 10 km	30	30.0
	More than 10 km	29	29.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at home:** Majority (88 %) respondents in Koraput district were not having telephone at their home whereas in Phulbani 90 % were not having telephones at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No. of Users	Percent
Koraput	Telephone Not available	88	88.0
	Telephone available	12	12.0
	Total	100	100.0
Phulbani	Telephone Not available	90	90.0
	Telephone available	10	10.0
	Total	100	100.0

C.2. Type of Telephone: Among telephone owners at their home maximum 69.2 % were having mobiles in Koraput and 90.9 % in Phulbani.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent	Percent of Cases
Koraput	Landline	4	30.8	33.3
	Mobile	9	69.2	75.0
	Total	13	100.0	108.3
Phulbani	Landline	1	9.1	10.0
	Mobile	10	90.9	100.0
	Total	11	100.0	110.0

C.3. Details of Service Provider: Regarding the details about service providers to the respondents, Airtel was found to provide services to maximum respondents in Koraput (46.2 %) and BSNL was the only service provider (100 %) in Phulbani.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent	Percent of Cases
Koraput	BSNL	5	38.5	41.7
	Airtel	6	46.2	50.0
	Reliance Communications	2	15.4	16.7
	Total	13	100.0	108.3
Phulbani	BSNL	11	100.0	110.0
	Total	11	100.0	110.0

II. USAGE OF VPT

A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 32 % VPT beneficiaries in Koraput have used VPT for 3 to 4 times to make local calls in last 60 days. In Phulbani 53 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Koraput	No calls	12	12.0	5	5.0
	2 or less	39	39.0	21	21.0
	3 to 4	34	34.0	32	32.0
	5 to 6	8	8.0	24	24.0
	More than 6	7	7.0	18	18.0
	Total	100	100.0	100	100.0
Phulbani	No calls	17	17.0	10	10.0
	2 or less	20	20.0	5	5.0
	3 to 4	35	35.0	15	15.0
	5 to 6	15	15.0	17	17.0
	More than 6	13	13.0	53	53.0
	Total	100	100.0	100	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that 99 % VPT beneficiaries have not made any STD call in Koraput and 95 % in Phulbani district. This shows that VPT usage for STD call is very low in both the districts of Orissa.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Koraput	No calls	99	99.0	99	99.0
	2 or less	1	1.0	1	1.0
	3 to 4	-	-	-	-
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0
Phulbani	No calls	95	95.0	95	95.0
	2 or less	1	1.0	1	1.0
	3 to 4	2	2.0	-	-
	5 to 6	2	2.0	2	2.0
	More than 6	-	-	2	2.0
	Total	100	100.0	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 83 % in Koraput district were residing within 200 mts. distance and in Phulbani this was found 81 %. This reveals that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Koraput	Within 200 mts from residence	83	83.0
	200-500 mts from residence	16	16.0
	More than 500 mts	1	1.0
	Total	100	100.0
Phulbani	Within 200 mts from residence	81	81.0
	200-500 mts from residence	15	15.0
	More than 500 mts	4	4.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Koraput district 75 % and in Phulbani district 76 % users were not involved in the decision which means peoples' participation is very less.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Koraput	No	75	75.0
	Yes	25	25.0
	Total	100	100.0
Phulbani	No	76	76.0
	Yes	24	24.0
	Total	100	100.0

- B.1. Availability of VPT service:** The functional condition of VPTs in their villages was observed by collecting information regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Koraput district VPTs were mostly found reliable as respondents communicated that in 35 % cases fault was observed for twice in last month, 49 % available (not busy), 88 % open and in 35 % cases engaged for twice during last month. Similarly, Table shows that in Phulbani district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Koraput	0	32	32.0	0	49	49.0	0	88	88.0	0	22	22.0
	1	15	15.0	1	4	4.0	1	7	7.0	1	10	10.0
	2	35	35.0	2	18	18.0	2	4	4.0	2	35	35.0
	3	11	11.0	3	15	15.0	3	1	1.0	3	25	25.0
	4	3	3.0	4	3	3.0				4	4	4.0
	5	3	3.0	5	11	11.0				5	2	2.0
	6	1	1.0							6	2	2.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

Contd ...

Table III.B.1. Availability of VPT services in Last Month ... (Contd...)

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Phulbani	0	29	29.0	0	37	37.0	0	89	89.0	0	21	21.0
	1	16	16.0	1	13	13.0	1	5	5.0	1	15	15.0
	2	26	26.0	2	23	23.0	2	5	5.0	2	23	23.0
	3	12	12.0	3	14	14.0	3	1	1.0	3	19	19.0
	4	8	8.0	4	1	1.0				4	8	8.0
	5	4	4.0	5	9	9.0				5	10	10.0
	6	1	1.0	10	2	2.0				6	1	1.0
	10	2	2.0	15	1	1.0				7	1	1.0
	15	2	2.0							8	1	1.0
										10	1	1.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Orissa in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Koraput	0	35	35.0	0	49	49.0	0	86	86.0	0	46	46.0
	1	6	6.0	1	9	9.0	1	8	8.0	1	15	15.0
	2	19	19.0	2	21	21.0	2	5	5.0	2	17	17.0
	3	16	16.0	3	5	5.0	3	1	1.0	3	12	12.0
	4	11	11.0	4	7	7.0				4	4	4.0
	5	6	6.0	5	9	9.0				5	4	4.0
	6	5	5.0							8	1	1.0
	8	1	1.0							13	1	1.0
	13	1	1.0									
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Phulbani	0	25	25.0	0	36	36.0	0	86	86.0	0	9	9.0
	1	11	11.0	1	8	8.0	1	5	5.0	1	18	18.0
	2	13	13.0	2	20	20.0				2	19	19.0
	3	23	23.0	3	11	11.0				3	22	22.0
	4	4	4.0	4	8	8.0	2	5	5.0	4	8	8.0
	5	8	8.0	5	12	12.0	4	2	2.0	5	8	8.0
	6	5	5.0	7	1	1.0	5	2	2.0	6	4	4.0
	7	3	3.0	8	1	1.0				7	5	5.0
	8	1	1.0	10	1	1.0				8	2	2.0
	10	2	2.0	12	1	1.0				10	1	1.0
	13	1	1.0	30	1	1.0				15	4	4.0
	15	1	1.0									
	20	1	1.0									
	25	2	2.0									
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

In both Koraput and Phulbani districts it has been found that there was no display of grievance redressal numbers, emergency toll free numbers and tariff rates. Moreover, complaint book was not available in 100 % cases in Koraput district and in 90 % cases in Phulbani district.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal number		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Koraput	No	10	100.0	10	100.0	10	100.0	10	100.0
Phulbani	No	10	100.0	10	100.0	10	100.0	9	90.0
	Yes	-	-	-	-	-	-	1	10.0
	Total	-	-	-	-	-	-	10	100.0

IV. QUALITY ASPECTS OF VPT

A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation were found convenient (83 %) in Koraput. In Phulbani district, 9 % VPTs were expressed as not at all convenient that were located in shop or houses but 85 % VPTs were found convenient.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Koraput	Anganwadi	-	10	-	10
	Shop	4	16	-	20
	Others	13	57	-	70
	Total	17	83	-	100
Phulbani	Shop	1	7	3	11
	Others	8	78	3	89
	Total	9	85	6	100

B. Convenience of technology used in VPT: In Koraput district 75 % VPT users found the technology used in VPT convenient. 93 % VPTs are using landline technology in this district. In Phulbani district, 80 % users felt the VPT technology convenient in which 91 % were using landline technology in their VPTs.

Table IV.B. Level of convenience with technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Koraput	Landline	25	68	-	93
	Mobile	0	7	-	7
	Total	25	75	-	100
Phulbani	Landline	16	74	1	91
	Mobile	2	6	1	9
	Total	18	80	2	100

C. Wireless Technology: Table below indicates information related to wire line technology in VPT. Total 67 users in Koraput shared that WLL FX technology used in their VPTs is convenient and total 76 users in all felt the technologies convenient. In Phulbani district 76 users in aggregate found the technology convenient.

Table IV.C. Level of convenience and technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
Koraput	WLL FX	23	67	-	90
	GSM	1	9	-	10
	Total	24	76	-	100
Phulbani	WLL FX	24	76	-	100
	Total	24	76	-	100

D. Level of convenience with type of instrument: It is showed in following Table that confirms that 71 % in Koraput and 88 % in Phulbani district feel convenient about the single touch key board instrument used in VPT.

Table IV.D. Level of convenience with type of instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Koraput	Single touch Key board	28	71	1	100
	Total	28	71	1	100
Phulbani	Dial Key Board	1	1	-	2
	Single touch Key board	9	88	1	98
	Total	10	89	1	100

- E. Clarity of voice:** It is an important indicator of quality assessment of VPT installed. In Koraput district 36 VPT users had expressed that clarity of voice is often convenient. Same way in Phulbani 39 users were having the same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Koraput	Never	1	-	-	1
	Rarely	8	27	-	35
	Often	4	36	2	42
	Always	1	17	4	22
	Total	14	80	6	100
Phulbani	Never	3	-	-	3
	Rarely	12	19	-	31
	Often	4	39	2	45
	Always	1	17	3	21
	Total	20	75	5	100

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. Eighty six per cent users in district Koraput and 86 % users in Phulbani district of Orissa shared that connectivity of VPT service is reliable. Although 9 % users in Koraput and 6 % users in Phulbani district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT Service Provider

Telecom District	Reliability	No. of Users	Percent
Koraput	Not reliable	5	5.0
	Reliable	86	86.0
	Highly reliable	9	9.0
	Total	100	100.0
Phulbani	Not reliable	8	8.0
	Reliable	86	86.0
	Highly reliable	6	6.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A.** Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 84 % respondents in Koraput and 86 % in Phulbani district found VPT always available in their area. Similarly, VPT was never closed in both the districts of Orissa.

Table V.A. Timeliness Availability of the Service (working hours)

Telecom District	Timings	No. of Users	Percent
Koraput	During day time	5	5.0
	During night	1	1.0
	Always	84	84.0
	Fixed timings	10	10.0
	Total	100	100.0
Phulbani	During day time	1	1.0
	Always	86	86.0
	Fixed timings	13	13.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 80 % users in Koraput were paying in case of VPT usage, 55 % were paying cash. In Phulbani district 93 % users were paying, 53 % were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT Services

Telecom District		No. of Users	Percent
Koraput	No	20	20.0
	Yes	80	80.0
	Total	100	100.0
Phulbani	No	7	7.0
	Yes	93	93.0
	Total	100	100.0

Table VI.A.2. Mode of Payment for VPT Service Usage

Telecom District	Mode of payment	No. of Users	Percent
Koraput	Cash	55	55.0
	Partly cash, partly credit	25	25.0
	Non-payment	20	20.0
	Total	100	100.0
Phulbani	Cash	53	53.0
	Credit	1	1.0
	Partly cash, partly credit	38	38.0
	Others	1	1.0
	Non-payment	7	7.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Koraput district 3 % users expressed some social restriction and in Phulbani district 7 % VPT users expressed about social restriction. Particularly users belonging to SC face restriction in VPT use.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Koraput	No	97	97.0
	Yes	3	3.0
	Total	100	100.0
Phulbani	No	93	93.0
	Yes	7	7.0
	Total	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Koraput district was less than Rs 250 in 60% cases of VPT whereas in Phulbani ARPU was more than 1000 in 30% VPTs of the district.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
Koraput	Less than 250	6	60.0
	250-500	3	30.0
	501-750	1	10.0
	Total	10	100.0
Phulbani	Less than 250	2	20.0
	250-500	2	20.0
	501-750	2	20.0
	751-1000	1	10.0
	More than 1000	3	30.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Koraput	No	94	94.0
	Yes	6	6.0
	Total	100	100.0
Phulbani	No	86	86.0
	Yes	14	14.0
	Total	100	100.0

To examine the impact of VPT on users, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Koraput district (94 %) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Phulbani) of the state it was observed that 14 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Koraput	No change reported	94	94.0
	Upto 5 percent	5	5.0
	10 to 20 percent	1	1.0
	Total	100	100.0
Phulbani	No change reported	86	86.0
	Upto 5 percent	9	9.0
	5 to 10 percent	3	3.0
	10 to 20 percent	2	2.0
	Total	100	100.0

Further enquiring about the change in income revealed that 5 % of users in Koraput district and 9 % in Phulbani district expressed increase in their household income upto 5 percent.

- B. Improvement in connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Koraput	No improvement	4 (4.0)	98 (98.0)	99 (99.0)
	Marginal Improvement	87 (87.0)	2 (2.0)	1 (1.0)
	Significant improvement	9 (9.0)	0	0
	Total	100 (100.0)	100 (100.0)	100 (100.0)
Phulbani	No improvement	4 (4.0)	91 (91.0)	87 (87.0)
	Marginal Improvement	74 (74.0)	8 (8.0)	11 (11.0)
	Significant improvement	22 (22.0)	1 (1.0)	2 (2.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Koraput	No improvement	55 (55.0)	99 (99.0)	100 (100.0)	100 (100.0)
	Marginal Improvement	41 (41.0)	1 (1.0)	0	0
	Significant improvement	4 (4.0)	0	0	0
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
Phulbani	No improvement	39 (39.0)	98 (98.0)	96 (96.0)	98 (98.0)
	Marginal Improvement	39 (39.0)	2 (2.0)	4 (4.0)	2 (2.0)
	Significant improvement	22 (22.0)	0	0	0
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Koraput	Phulbani
a.	Personal communication	87% Marginal	74 % Marginal
b.	Business networking	2 % Marginal	8 % Marginal
c.	Emergency Management Medical Fire Police Natural Calamities	55 % No improvement 99 % No improvement 100 % No improvement 100 % No improvement	39 % Marginal 98 % No improvement 4 % Marginal 98 % No improvement
d.	Official Purposes	99 % No improvement	11 % Marginal

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

Sl. No.	Information on	Koraput					Phulbani				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	96 (96.0)	4 (4.0)	0	0	100 (100.0)	98 (98.0)	1 (1.0)	0	1 (1.0)	100 (100.0)
b.	Market	94 (94.0)	3 (3.0)	3 (3.0)	0	100 (100.0)	95 (95.0)	2 (2.0)	3 (3.0)	0	100 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	96 (96.0)	3 (3.0)	1 (1.0)	0	100 (100.0)	84 (84.0)	13 (13.0)	3 (3.0)	0	100 (100.0)
2.	Education	99 (99.0)	1 (1.0)	0	0	100 (100.0)	98 (98.0)	2 (2.0)	0	0	100 (100.0)
3.	Related to Agriculture	99 (99.0)	1 (1.0)	0	0	100 (100.0)	97 (97.0)	3 (3.0)	0	0	100 (100.0)
4.	Others	100 (100.0)	0	0	0	100 (100.0)	99 (99.0)	0	1 (1.0)	0	100 (100.0)
d.	Natural Calamity / Weather forecasting	99 (99.0)	1 (1.0)	0	0	100 (100.0)	99 (99.0)	1 (1.0)	0	0	100 (100.0)
e.	Rail / Road transport	88 (88.0)	4 (4.0)	8 (8.0)	0	100 (100.0)	80 (80.0)	10 (10.0)	9 (9.0)	1 (1.0)	100 (100.0)
f.	Health Services	71 (71.0)	5 (5.0)	24 (24.0)	0	100 (100.0)	49 (49.0)	22 (22.0)	29 (29.0)	0	100 (100.0)
g.	Agriculture related	97 (97.0)	2 (2.0)	1 (1.0)	0	100 (100.0)	97 (97.0)	2 (2.0)	1 (1.0)	0	100 (100.0)
h.	Business related					100 (100.0)				0	100 (100.0)

	Access to information on	Koraput	Phulbani
a.	Employment Opportunity	96 % Never	98 % Never
b.	Market	94 % Never	95 % Never
c.	Development & Welfare Schemes of Government on Health Education Related to agriculture Others	96 % Never 99 % Never 99 % Never 100 % Never	84 % Never 98 % Never 97 % Never 99 % Never
d.	Natural calamity / weather forecasting	99 % Never	99 % Never
e.	Rail / road transport	88 % Never	80 % Never
f.	Health services	24 % As Per Necessity	29 % As Per Necessity
g.	Agriculture related	97 % Never	97 % Never
h.	Business related	100 % Never	100 % Never

Table revealed that VPT is not being used as expected by policy planners of India for access to information regarding different aspects (referred in the Table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair and maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt satisfactory by 93 % users in Koraput and by 89 % in Phulbani district.

Table VIII.A. Level of Satisfaction about Convenience of the Location

Telecom District	Level of satisfaction	No. of Users	Percent
Koraput	Not satisfactory	7	7.0
	Satisfactory	93	93.0
	Total	100	100.0
Phulbani	Not satisfactory	6	6.0
	Satisfactory	89	89.0
	Highly satisfactory	5	5.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 90 % users in Koraput and 57 % also in Phulbani district.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Koraput	Not satisfactory	9	9.0	16	16.0
	Satisfactory	90	90.0	84	84.0
	Highly satisfactory	1	1.0	0	0.0
	Total	100	100.0	100	100.0
Phulbani	Not satisfactory	40	40.0	46	46.0
	Satisfactory	57	57.0	52	52.0
	Highly satisfactory	3	3.0	2	2.0
	Total	100	100.0	100	100.0

- C. Repair and Maintenance:** Level of satisfaction regarding timely repair and maintenance opined satisfactory by 71 % users in Koraput and 49 % opined not satisfactory in Phulbani.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Koraput	Not satisfactory	19	19.0	19	19.0
	Satisfactory	71	71.0	69	69.0
	4	10	10.0	12	12.0
	Total	100	100.0	100	100.0
Phulbani	Not satisfactory	49	49.0	47	47.0
	Satisfactory	44	44.0	45	45.0
	Highly satisfactory	1	1.0	1	1.0
	4	6	6.0	7	7.0
	Total	100	100.0	100	100.0

D. Behaviour of Custodian: The cooperativeness and behaviour of custodian was articulated highly satisfactory among 86 % users in Koraput and satisfactory among 89 % users of Phulbani.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Koraput	Not satisfactory	5	5.0
	Satisfactory	86	86.0
	Highly satisfactory	8	8.0
	4	1	1.0
	Total	100	100.0
Phulbani	Not satisfactory	2	2.0
	Satisfactory	89	89.0
	Highly satisfactory	9	9.0
	Total	100	100.0

E. Other Service Provider: The response about level of satisfaction of other service providers disclosed 76 % highly satisfied in Koraput and 96 % in Phulbani.

Table VIII.E. Level of Satisfaction about Other Alternate Service Providers

Telecom District	Level of Satisfaction	No. of Users	Percent
Koraput	Not satisfactory	13	13.0
	Satisfactory	11	11.0
	Highly Satisfactory	76	76.0
	Total	100	100.0
Phulbani	Not satisfactory	1	1.0
	Satisfactory	3	3.0
	Highly Satisfactory	96	96.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all most all the custodian of VPT were making payment regularly in the both the districts.

Table IX. Regularity in Payment

Telecom District	Regularity	No. of Custodians	Percent
Koraput	Yes	10	100.0
Phulbani	No	2	20.0
	Yes	8	80.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 70 % users in Koraput district were not aware of resolution of problems about VPT location and same was the case in Phulbani (42 %) district.

Table X.A. Problem Resolution Related to Location

Telecom District		No. of Users	Percent
Koraput	Internally	22	22.0
	Externally	8	8.0
	Not aware	70	70.0
	Total	100	100.0
Phulbani	Internally	39	39.0
	Externally	17	17.0
	Not resolved	2	2.0
	Not aware	42	42.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was revealed to be not aware by 65 % users in Koraput whereas 42 % users viewed that resolution of problem related to accessibility was done externally in Phulbani district. Problem solution of quality accessibility was also viewed as not aware by 63 % users in Koraput but in Phulbani 41 % users viewed that it was solved externally.

Table X.B. Problem Resolution Related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Koraput	Internally	12	12.0	13	13.0
	Externally	21	21.0	22	22.0
	Not resolved	2	2.0	2	2.0
	Not aware	65	65.0	63	63.0
	Total	100	100.0	100	100.0
Phulbani	Internally	18	18.0	19	19.0
	Externally	42	42.0	41	41.0
	Not aware	40	40.0	40	40.0
	Total	100	100.0	100	100.0

- C. Problem Resolution Related to Repair and Maintenance:** Regarding the problem solution of timely repair and maintenance, 67 % and 49 % users were not aware in Koraput and Phulbani districts, respectively. Similarly, in the case of the problem of quality repair and maintenance 67 % and 49 % of VPT users were not aware in Koraput and Phulbani districts.

Table X.C. Problem Resolution Related to Repair and Maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Koraput	Internally	3	3.0	3	3.0
	Externally	28	28.0	28	28.0
	Not resolved	2	2.0	2	2.0
	Not aware	67	67.0	67	67.0
	Total	100	100.0	100	100.0
Phulbani	Internally	4	4.0	4	4.0
	Externally	47	47.0	47	47.0
	Not aware	49	49.0	49	49.0
	Total	100	100.0	100	100.0

D. Problem Resolution about the Payments to the Custodians

The problem of payment to custodian solved internally was viewed by 50 % users in Koraput and 85 % in Phulbani district.

Table X.D. Problem Resolution Related to Payments to the Custodians

Telecom District		No. of Users	Percent
Koraput	Internally	50	50.0
	Externally	6	6.0
	Not aware	44	44.0
	Total	100	100.0
Phulbani	Internally	85	85.0
	Not aware	15	15.0
	Total	100	100.0

E. Problem resolution about the other alternate service providers

94 % VPT users in Koraput and 86 % in Phulbani were not aware about the problem resolution related to other service providers in Koraput and Phulbani districts.

Table X.E. Problem Resolution Related to Other Alternate Service Providers

Telecom District		No. of Users	Percent
Koraput	Externally	6	6.0
	Not aware	94	94.0
	Total	100	100.0
Phulbani	Internally	1	1.0
	Externally	13	13.0
	Not aware	86	86.0
	Total	100	100.0

SWOT ANALYSIS

DISTRICT : PHULBANI (KANDHAMAL)

(1) Village Gadiapada

The village Gadiapada falls under Khajuripada block and khajuripada Grama Pachayat. It is situated around 7 K.M. far from Khajuripada and 7 K.M. far from state highway. There are 25 households residing in this village. Out of them 20 households belonging to tribal community that is Kandha and rest are Scheduled Castes. Here the VPT is located in a shop owned by a tribal person. The VPT was installed by the telephone department without consultation with the villagers. Very few villagers were aware about its connection. No Gram Sabha meeting was organized to install the VPT.

Strengths

- No ethnic discrimination
- Custodian is available through out the day as it is installed in a shop
- Villagers paying the bills for their calls.
- Solar battery is being provided
- Willingness of villagers to use VPT as they benefited by it.

Weakness

- No electricity
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.
- Even though solar battery is being provided custodian is not aware about its use.
- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.
- Due to road up gradation work most of the time there is problem in network connection.
- Telephone bill is not given in time. Bills come once in 3 or 4 months.
- There is tampering in bill also.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.

(2) Village Ghodaga

The village Ghodaga falls under Tikabali block and Beheranga Grama Pachayat. It is situated around 10 K.M. far from Tikabali block and state highway too. There are 60 households residing in this village. Out of them 30 households belonging to tribal community that is Kandha and rest are Scheduled Castes. Out of 60 households 40 households belong to Hindu community and rest Christian. All the tribal households are belonging to Hindu community. Here the VPT is located in a villager's home owned by a tribal person. Here VPT is working through electric system. The VPT was installed by the telephone department without consultation with the villagers. The custodian revealed that he requested the BSNL authority for VPT connection. According to the suggestions of officials he got the letter signed by 5 villagers. Thereafter VPT was sanctioned to him.

Strengths

- Custodian is a nice person and he is available at home most of the time.
- Electricity connection is there.
- Villagers are using VPT.
- Villagers are convinced about the benefits of VPT.

Weakness

- Religious and Caste discrimination
- Frequent power cut.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.
- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.
- Due to road up-gradation work most of the time there is problem in network connection.
- Telephone bill is not given in time. Bills come once in 3 or 4 months.
- Most of the villagers are not paying the bill. They claim it is a government phone.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- To install one more VPT in the street where SC communities are staying.
- Telephone bill should be given to custodian in time.

Threats

- Religious discrimination.
- Villagers' unwillingness to pay the bill in time.
- Multiple mobile connections – BSNL and private in households especially among younger generation.

(3) Village Budugudari

The village Budugudari falls under Tikabali block. It is situated around 8 Kms., far from Tikabali block and 15 KM from state highway. There are 30 households residing in this village. It is a musty ethnic village. Out of the 30 households 15 belonging to tribal community that is Kandha, 1 Brahmin, 12 potters, 1 fisherman and one oil maker. All the households are belonging to Hindu community. Here the VPT is located in a villager's home owned by a tribal person. The VPT was installed by the telephone department without consultation with the villagers. Only few people were aware about it at the time of installation. No Gram Sabha meeting was organized to install the VPT.

Strengths

- Custodian is a nice person and he is available at home most of the time.
- Electricity connection is there.
- Villagers are using VPT.
- Villagers are paying the bills in time.
- All belong to one religion that is Hindu – not a strength.

Weakness

- Frequent power cut.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.

- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Not repairing in time.

(4) Village Bilabadi

The village Bilabadi falls under Khajuripada block. It is situated around 12 K.M. far from Khajuripada block and same from state high way. There are 30 households residing in this village. It is a musty ethnic village. Out of the 30 households 15 belonging to tribal community that is Kandha and rests are SC. Here the VPT is located in a villager's home owned by a tribal person. The VPT was installed by the telephone department without consultation with the villagers. Only few people were aware about it at the time of installation. No Gram Sabha meeting was organized to install the VPT.

Strengths

- Electricity connection is there.
- Villagers are using VPT.

Weakness

- Caste and religious discrimination keeps the SC communities away from VPT
- Frequent power cut.
- Villagers are not paying the phone bill for their respective calls.
- Custodian is not available most of the time.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.
- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- Create awareness on communal harmony.
- Install separate VPT in the street where SC communities are staying.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Not repairing in time.
- Communal disturbance.

(5) Village Rangamatia

The village Rangamatia falls under Chakapad block. It is situated around 2 K.M. far from Chahali and 8 KM from block head quarter and state high way. There are 40 households residing in this village. Out of which 9 belonging to tribal community that is Kandha and rests are SC. Here the VPT is located in a villager's home owned by a Scheduled Caste person. VPT was installed by the telephone department without consultation with the tribal communities in the village. Only few SC people were aware about it at the time of installation.

Strengths

- Villagers are willing to use VPT.
- Except VPT there is no other alternative for calling. Even no mobile.

Weakness

- Caste and religious discrimination keeps the ST communities away from VPT
- No electricity
- No solar battery
- Recharging battery is a major problem. The custodian has to go 8 KM to charge.
- The person who used to re-charge battery used to cheat the custodian.
- Villagers are not paying the phone bill for their respective calls.
- Custodian is not available most of the time.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.

- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- Create awareness on communal harmony.
- Install separate VPT in the street where ST communities are staying.
- Separate and common place should be selected to install VPT where everybody can enter freely and talk.

Threats

- Not repairing in time.
- Communal disturbance.

(6) Village Chadakhia

The village Chadakhia falls under Daringibadi block and Dasingbadi Gram Panchayat. It is situated around 5 K.M. far from GP head quarter and 17 KM from block head quarter and the same from state high way. There are 100 households residing in this village. Out of which 30 belonging to tribal community that is Kandha and rest are SC. Here the VPT is located in a villager's home owned by a Scheduled Caste person. The custodian revealed that the VPT was installed by the telephone department without consultation with the villagers in the village. Due to his personal request he got the connection.

Strengths

- Villagers are willing to use VPT
- Villagers are highly educated
- Most of them belonging to one religion that is Christianity
- Missionary is too active in this village.

Weakness

- No electricity
- No solar battery
- Recharging battery is a major problem. The custodian has to go 17 KM to charge.
- The person who used to re charge battery used to cheat the custodian.
- Most of the villagers are not aware that this VPT is belonging to government department. The custodian projects it as if it is his own phone.
- Villagers are not paying the phone bill for their respective calls for which the custodian failed to submit the bill. Due to this the phone is also disconnected by the Department.

- Custodian is not available most of the time
- No display board with tariffs
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line man in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities
- Village is surrounded by hills.
- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.

Opportunities

- Increased awareness about VPT among villagers.
- Encourage villagers to pay the bill.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Not repairing in time.
- Not paying the bill.

(7) Village Sakiripadar

The village Sakiripadar falls under Tumudibandha block and Kurtamgarh Gram Panchayat. It is situated around 5 K.M. far from GP head quarter and 9 KM from block head quarter and 15 KM from state highway. There are 24 households residing in this village. Out of which 4 belonging to tribal community that is Kandha and rests are OBC. All the households belong to Hindu community in the village. Here the VPT is located in a villager's home owned by an OBC person. The villagers revealed that the VPT was installed by the telephone department in consultation with the villagers in the village. As the custodian is an educated and well- behaved person all the villagers recommended his name.

Strengths

- Villagers are willing to use VPT.
- No religious and caste discrimination
- All of them belonged to one religion that is Hindu.
- Villagers were consulted before the installation of VPT.
- Villagers are happy with Custodian
- Custodian is an educated person.
- Mobile facilities are not available.

Weakness

- No electricity
- No solar battery
- Recharging battery is a major problem. The custodian has to go 17 KM to charge.
- Villagers are not paying the phone bill for their respective calls for which the custodian failed to submit the bill. Due to this, the phone is also disconnected by the Department.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities.
- Due to network problem, disconnection of phone or one sided while talking
- No separate room for phone and also no proper sitting arrangement.

Opportunities

- Increased awareness about VPT among villagers.
- Provide Solar facility.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Not repairing in time.

(8) Village Penamala

The village Penamala falls under Raikia block of kandhamal district. It comes under Dumamal Grama Panchayat. It is around 7 Km far from State highway. There are around fourty households. Out of which thirty are belonging to tribal community and rest are Scheduled Caste. All the tribal family is belonging to Hindu community. The custodian belongs to ST community. VPT is installed without consulting the villagers.

Strengths

- Villagers are willing to use VPT.
- Mobile facilities are not available.

Weakness

- No electricity
- No solar battery
- Recharging battery is a major problem. The custodian has to go 17 KM to charge.

- Villagers are not paying the phone bill for their respective calls for which the custodian failed to submit the bill. Due to this the phone is also disconnected by the Department.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities. Since 2 months the phone is not working. In spite of lots of complain from Custodian department officials are not responding.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call. Those who are paying it is not regular. For which custodian failed to repay the bill in time.

Opportunities

- Increased awareness about VPT among villagers.
- Provide solar facility.
- Provide double battery.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Not repairing in time.
- Not paying the bill in time.

(9) Village Badangi

Village Badangi falls under Daringbadi Block of Kandhamal district, which is about 25 K.M. distance from Block headquarter and 25 K.M. state highways. The custodian is belonging to ST community. The VPT was installed with out consultation with all villagers.

Strengths

- Villagers are willing to use VPT
- Mobile facilities are not available
- It has saved the time and money of the villagers
- As most of the villagers are migrated to Kerala they need phone facilities
- Solar battery is being given

Weakness

- No electricity
- Solar battery is not properly working

- Recharging battery is a major problem. The custodian has to go 17 KM to charge
- Villagers are not paying the phone bill for their respective calls for which the custodian failed to submit the bill. Due to this the phone is also disconnected by the Department
- No display board with tariffs
- The price per unit is also very high, i.e. Rs. 3/- per minute. The incoming charges also fixed by the villagers at Rs. 5/-. The custodian charged Rs. 5/- to call the person if he has any call from outside. Even he used to charge Rs.00.50/- I minute from the villagers if they receive any call from outside
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line man in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities. Since 2 months the phone is not working. In spite of lots of complain from Custodian department officials are not responding
- No separate room for phone and also no proper sitting arrangement
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call. Those who are paying, it is not regular. For which custodian failed to repay the bill in time.

Opportunities

- Increased awareness about VPT among villagers.
- Provide double battery.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Not repairing in time.
- Not paying the bill in time.
- Naxal problem.

(10) Village Atabadi

Village Atabadi comes under Tumudi bandha Block of Kandhamal district. It is 8 K.M. distance of Tumudi bandha block and on side of NH 217. The total number of households of the village is 30. All are in tribal community, i.e. Gond. The VPT is installed at a home. The selection procedure of the custodian is not decided by the villagers through Grama Sabha. Few villagers were involved in this selection procedure. They selected a custodian, who is educated and calculated correctly the price of the unit.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.

Weakness

- No electricity
- Recharging battery is a major problem. The custodian has to go 17 KM to charge.
- Villagers are not paying the phone bill for their respective calls for which the custodian failed to submit the bill. Due to this the phone is also disconnected by the Department.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call. Those who are paying, it is not regular. For which custodian failed to repay the bill in time.

Opportunities

- Increased awareness about VPT among villagers.
- Provide double battery.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Not repairing in time.
- Not paying the bill in time.

DISTRICT : KORAPUT

(1) Village Kariput

Katariput is 11 km far from block headquarter Kundra and it is connected by katcha road from block. Total households of this village are 75. Out of which, 15 are SC, 40 ST, and 20 OBC. The VPT is installed at a home. The selection procedure of the custodian is not decided by the villagers through Grama Sabha. Due to his own relation with telephone official he got this VPT connection.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.

Weakness

- Frequent power cut.
- Most of the villagers are not aware about the VPT connection. They feel it is his Private phone.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call. Those who are paying it is not regular. For which custodian failed to repay the bill in time.

Opportunities

- Increased awareness about VPT among villagers.
- Install VPT in some shop in village.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.

Threats

- Threat by naxals to hand over VPT
- Not repairing in time
- Not paying the bill in time
- Claiming it as his phone by custodian
- The existence of other phone network

(2) Village Katarla

The village Katarla connected with pucca road by MDR 52. It is around 8 Km far from block headquarter and 10 Km from state highway. The village is having 87 households (OBC-31, SC-6, and ST-20).

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.

Weakness

- No electricity connection.
- Solar facility is not there.
- Most of the villagers are not aware about the VPT connection.
- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff and lack of communication facilities.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call. Those who are paying it is not regular. For which custodian failed to repay the bill in time.

Opportunities

- Increased awareness about VPT among villagers.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Provided solar plate to charge the battery.

Threats

- Threat by naxals to hand over VPT.
- Not repairing in time.
- Not paying the bill in time.
- The existence of other phone network.

(3) Village Gourinaikput

The Village Gourinaikput is 6 km. far from block headquarter. This is 2 km distance from State Highway. There are 50 households in this village. Out of them 30 are belonging to tribal community. Here the VPT was installed without consulting the villagers.

Strengths

- Villagers are willing to use VPT
- It has saved the time and money of the villagers
- Near to state high way

Weakness

- No electricity connection.
- Solar facility is not there.

- No display board with tariffs.
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line men in charge of 7 villages spread across various hills
- Delay in repair works is due to shortage of staff.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call.
- Network connection is very problematic.

Opportunities

- Increased awareness about VPT among villagers.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Provided solar plate to charge the battery.

Threats

- Threat by naxals to hand over VPT.
- Not repairing in time.
- Not paying the bill in time.
- The existence of other phone network.

(4) Village Jamlabeda

Jamalabeda falls under Baipuriguda block. This is 3 km far from Baipuriguda- Gupteswara road. It is around 30 Km State Highway. There are total 20 households in the village. Out of which one is SC and the rests are OBC. Here the VPT was connected with out organizing Gram Sabha. Very few villagers are aware about the VPT in the village.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.
- No other phone facilities in village.

Weakness

- No electricity connection.
- Solar facility is not there.
- No display board with tariffs.
- No STD facility

- Shortage of BSNL Staff.
- Delay in repair works is due to shortage of staff and lack of communication.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call.
- Network connection is very problematic.
- So much distance from main area.

Opportunities

- Increased awareness about VPT among villagers.
- Strengthen VPT through additional facilities such as STD.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Provided solar plate to charge the battery.

Threats

- Threat by naxals to hand over VPT.
- Not repairing in time.
- Not paying the bill in time.

(5) Village Kusumi -2

The village is connected by pucca road from block headquarter. The public transport facility is available in Kotpad, which is 7 km far from this. There are 80 households. Out of them 18 are Harijan and rests are tribal. The VPT installed in a residence, which is given by BSNL staff. There is no discussion prior to installation of VPT.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.
- Electricity facility is there.
- Village is well connected with block headquarter.

Weakness

- Villagers are not happy with the location of VPT.
- Before installation of VPT villagers were not consulted.
- Villagers are not aware that the phone kept in the village is a VPT. They think it is a personal phone of the custodian.
- Custodian is not available always.
- Frequent power cut.

- No display board with tariffs.
- Shortage of BSNL Staff for repair.
- Delay in repair works is due to shortage of staff and lack of communication.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call.
- Network connection is very problematic.

Opportunities

- Increased awareness about VPT among villagers.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Villagers should be consulted before installing VPT.

Threats

- Threat by naxals to hand over VPT.
- Not repairing in time.
- Not paying the bill in time.

(6) Village Khandiaguda

Village Khandiaguda comes under Boriguma block of Koraput district. It is around 5 Km far from state Highway. Total number of households in village is 300. Out of which, 10 belong to SC and 30 GC and rests are Tribal. Here the VPT is installed in a shop.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.

Weakness

- No electricity facility is there
- There is solar battery facility also.
- Custodian faces lots of problem in recharging.
- Before installation of VPT villagers were not consulted.
- Villagers are not aware that the phone kept in the village is a VPT. They think it is a personal phone of the custodian.
- No display board with tariffs.
- Shortage of BSNL Staff for repair is reported
- Delay in repair works is due to shortage of staff and lack of communication.
- No separate room for phone and also no proper sitting arrangement.

- As most of the villagers are uneducated they are not able to handle the phone properly.
- Villagers are not paying bill for their call.
- Network connection is very problematic.

Opportunities

- Increased awareness about VPT among villagers.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Villagers should be consulted before installing VPT.

Threats

- Availability of mobile services from various private agencies.
- Not repairing in time.
- Not paying the bill in time.

(7) Village Sipaiput

Village Sipaiput falls under Malipur Gram Panchayat of Patangi Block. This village is just one KM away from state highway. There are around 120 households in the village. Out of that 10 households belong to ST and the rest are OBC. All belong to Hindu community. Here VPT is installed in a residence. It was installed without consulting villagers.

Strengths

- Villagers are willing to use VPT.
- It has saved the time and money of the villagers.
- Well connected with outside.

Weakness

- No electricity facility is there
- There is solar battery facility also.
- Custodian faces lots of problem in recharging.
- Before installation of VPT villagers were not consulted.
- Villagers are not aware that the phone kept in the village is a VPT. They think it is a personal phone of the custodian.
- No display board with tariffs.
- Delay in repair works is due to shortage of staff and lack of communication.
- No separate room for phone and also no proper sitting arrangement.
- As most of the villagers are uneducated they are not able to handle the phone properly.
- Network connection is very problematic.

Opportunities

- Increased awareness about VPT among villagers.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Villagers should be consulted before installing VPT.

Threats

- Availability of mobile services from various private agencies.
- Not repairing in time.
- Not paying the bill in time.
- Naxalism

(8) Village Malipungar

The village Malipungar falls under Kunduli Gram Panchayat of Similiguda Block. It is around 5 Km from state high way. It has two streets. In one street all OBCs are dwelling in the other SC & ST habitations are located. There are 105 households reside in the village. Out of them 35 households are belonging to SC and ST and the rest are OBC. There was no consultation with all villagers prior to VPT installation.

Strengths

- Villagers are willing to use VPT.
- Well connected with outside.

Weakness

- No electricity facility is there
- There is solar battery facility also.
- Before installation of VPT villagers were not consulted.
- No display board with tariffs.
- Delay in repair works is due to shortage of staff and lack of communication.
- No separate room for phone and also no proper sitting arrangement.
- Network connection is very problematic.
- There is some problem in out going. It is only accessing to BSNL phones.
- Only local facility is there.

Opportunities

- Increased awareness about VPT among villagers.
- There is need to recruit more staff since there is huge shortage of staffs.
- Perfect network should be connected like other service provider.
- Villagers should be consulted before installing VPT.

- STD facilities should be given.
- Repairing of VPT should be done in time.

Threats

- Availability of mobile services from various private agencies.
- Not repairing in time.
- Naxalism

(9) Village Kanji Maliguda

The village Kanjimaliguda falls under Jayopore block. It is around 15 KM from state highway. Around 47 house holds are here all are belongs to Mali community. Here VPT was installed with prior consultation of the villagers.

Strengths

- Villagers are willing to use VPT.
- The Custodian is working as a line man in BSNL office
- All the villagers belong to one community.
- VPT is running through electricity.
- The unity among villagers is too strong
- VPT was installed with prior consultation with villagers.

Weakness

- No display board with tariffs.
- No separate room for phone and also no proper sitting arrangement.
- Network connection is very problematic.
- Only local facility is there.

Opportunities

- Increased awareness about VPT among villagers.
- Perfect network should be connected like other service provider.
- STD facilities should be given.

Threats

- Availability of mobile services from various private agencies.
- Naxalism

(10) Village Katarba

The village Katarba falls under Nandpur block. It is around 5 KM from state highway. Around 75 households are residing here. Out of them 60 are belonging to tribal community. Here VPT was installed without prior consultation of the villagers.

Strengths

- Villagers are willing to use VPT.
- The service provided by the Custodian is very good.
- No caste discrimination
- VPT is running through electricity.
- The unity among villagers is too strong

Weakness

- Communication facilities are not good to the village.
- Due lack of BSNL staffs it is taking long time to repair.
- Even due to long distance custodian also not able to come immediately and give complain in case anything held to VPT.
- No display board with tariffs.
- No separate room for phone and also no proper sitting arrangement.
- Network connection is very problematic.
- Only local facility is there.
- Due to naxalite threat Custodian are not so incline to tell everybody come and call from this phone.
- Most of the villagers are not paying the bill for their call.

Opportunities

- Increased awareness about VPT among villagers.
- Perfect network should be connected like other service provider.
- STD facilities should be given.

Threats

- Availability of mobile services from various private agencies.
- Naxalism

State Report - 7

MADHYA PRADESH

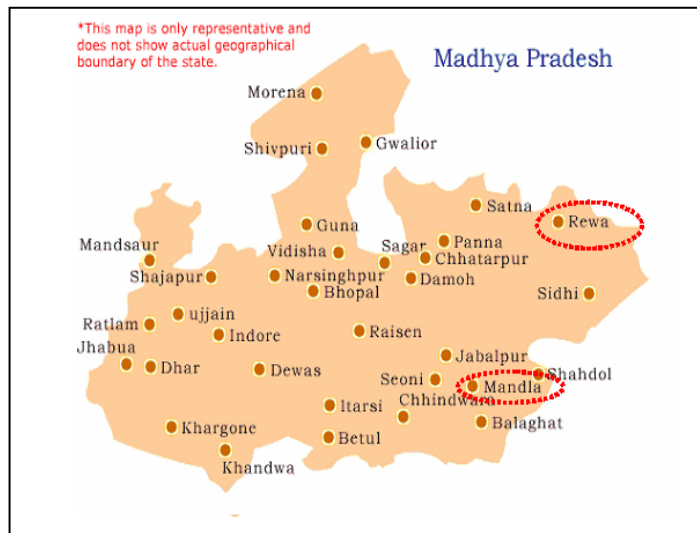


Madhya Pradesh

Madhya Pradesh, in its present form, came into existence on November 1, 2000 following its bifurcation to create a new state of Chhattisgarh. The undivided Madhya Pradesh was founded on November 1, 1956. The state is situated in the central part of India with Rajasthan in the north-west, Uttar Pradesh in the north-east, Chhattisgarh in the south-east and Maharashtra in the south-west. Madhya Pradesh has a total population of 60,348,000 as per the 2001 census with 31,444,000 males and 28,904,000 females.

The fieldwork for the study was carried out in two districts of the state in the month of June – July 2009. Some of the preliminary observations about working of Village Public Telephone in the state of Madhya Pradesh are discussed as below.

The VPT scheme in the state of Madhya Pradesh is being implemented through the Chief General Manager Telecom (CGMT), BSNL M.P Circle with its office at Bhopal. The organizational structure of the department is hierarchical in nature with the office of CGMT and SDTO.



Referring to the background of the VPT Scheme in MP, it was launched in the state way back in 1989. As per the 2001 census, the state has 52117 villages, out of which VPT has been implemented in 51987 villages, with only 130 villages remaining uncovered. VPT booths have been installed in all the villages, where the scheme has been launched. The objective guideline for implementation of the VPT scheme comes from the BSNL policy guidelines. The organization responsible for implementing VPT in the state prepares an action plan every year as per the guidelines of BSNL.

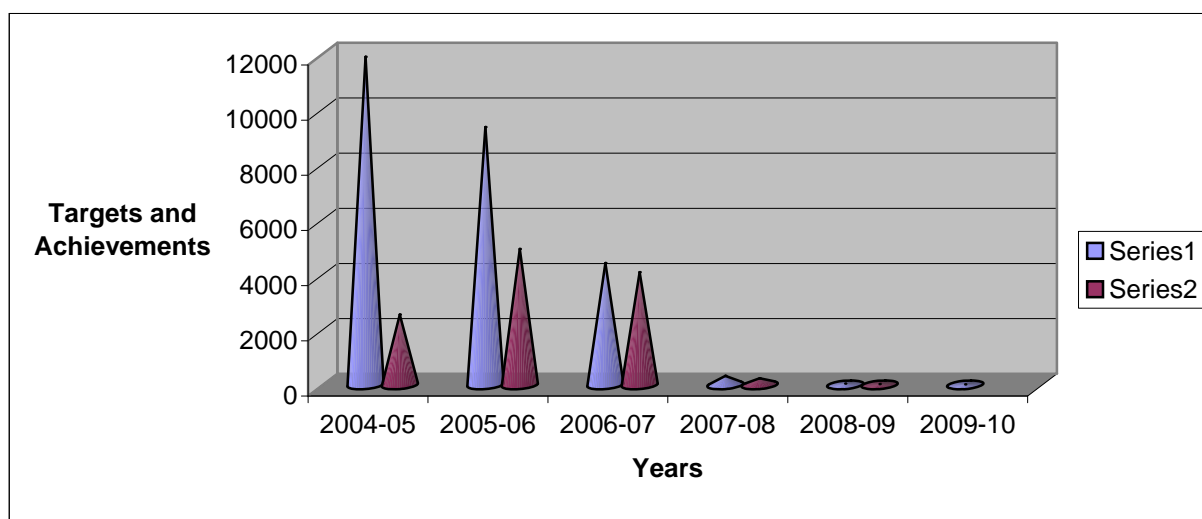
The performance of the VPT scheme in the state of MP is assessed here taking into consideration the date pertaining to targets and achievements between the year 2003-04 to 2009-10. In the year 2004-05, BSNL set a target of implementing VPT scheme in 11,894 villages with installation of one VPT booth in each village. However, by the end of the year, only 2549 VPT booths were installed in same number of villages. Therefore, the remaining 9345 villages, which were not covered during 2004–05, were set as target for the next year. The state was successful enough in implementing VPT boots in 4928 villages by the end of the year 2005–06, with 4417 uncovered villages. These became the targets for the year 2006–07, out of which 4088 villages were covered by the end of the year. In 2007–08 the remaining 329

villages were set as targets, and the state was successful enough in implementing VPT in 238 villages by the end of the year. In 2008–09, the state decided not to provide VPT in 40 villages, and therefore, a target of further 51 villages were set in the year, out of which 31 villages were covered by the end of the year. By the year 2009–10, there were only 20 villages, which were not covered by VPT out of the original target of 11,894 set up in 2004–05. The discussions with state level officials further revealed that VPT has been already installed in these villages making it a total achievement of targets set in the beginning. The following graph depicts the targets and achievements through the years 2004-05 to 2009-10.

Targets and Achievements of Implementation of VPT

Years	Physical Performance (Newly connected Villages / VPTs)			
	Target	Achievement	Reasons for shortfall, if any	Action taken up to overcome the shortfalls
	No. of VPTs	No. of VPTs		
2004-05	11,894	2,549	Coverage	BTS planned
2005-06	9,345	4,928	Coverage	BTS planned
2006-07	4,417	4,088	Coverage	BTS planned
2007-08	329	238	Coverage	BTS planned
2008-09	51	31	Coverage	BTS planned
Total	26,036	11,834		

In 40 villages VPTs not to be provided hence revised target is 11,854



As far as Extended Services are concerned no other extended services such as multimedia communication amenities, broad band connections and internet facilities, etc, are provided by BSNL along with VPT. Discussions with state level officials revealed that at present there is no demand from customers of VPT for such services. However, the officials recognized the importance of such value added services and opined that these issues may be prioritized for their future action.

The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There are no separate funds assigned for the purpose of implementing the VPT scheme separately. The expenses incurred for the scheme is managed as a part of the expenditure of the BSNL overall functions. Therefore, no separate data were available for income and expenditure details exclusively for VPT Scheme.

About availability of Staff for VPT, the discussions with the state level officials of BSNL revealed that no separate technical and / or administrative staff is maintained exclusively for functioning of VPTs. All the SDOTs are given the job of VPT with their existing staff to manage the functioning of VPT along with their other responsibilities.

As far as monitoring and supervision aspects are concerned, the state level officials of BSNL positively ascertained the availability of monitoring and supervision mechanisms for VPTs at the state level. The monitoring and supervision of VPTs is done by the respective district units through their existing field staff. There were no staff members appointed exclusively for monitoring and supervision of VPTs. Likewise, there was also no exclusive guidelines for monitoring and supervision of VPTs. It is done as per the regular guidelines of BSNL.

The repair and maintenance of VPTs are done by BSNL through their regular staff. No technical staff members were appointed exclusively for the purpose. All the SDOTs of the telecom circle along with their ground staff are responsible for repair and maintenance of the VPTs. The state level officials reported that all the ground staffs of BSNL are technically capable enough for repair and maintenance of the VPTs. Further BSNL also provides regular training to its staffs as a part of its HRD programmes. The officials reported that VPT scheme faces strong competition from other private service providers such as Reliance, TATA Indicom and Airtel.

It was informed that BSNL has a future plan of extending VPT services to all the 52117 villages of Madhya Pradesh as per Census report of 2001. Currently BSNL uses the latest WLL and GSM technology for the VPT schemes. Further, there are plans for providing additional services like broadband and internet facilities through VPTs.

During interaction with the officials some strengths and weaknesses of VPTs were highlighted. One of the major strengths of VPT is reported that it has successfully extended telecom facilities to rural areas, including those remote villages, which were difficult to access. This has increased the opportunity for rural dwellers to connect with their relatives and friends who stay away from them.

Availability of poor power supply in rural areas as well as poor road networks were identified as the main weaknesses of VPT schemes.

The district level officials reported that they don't foresee any constraint in implementation of VPT schemes, and therefore, believe that covering all the villages of Madhya Pradesh through VPT is achievable. The officials also never mentioned about constraints with respect to staff and funds to implement VPT scheme successfully in Madhya Pradesh.

However, it was a common opinion amongst the officials at the state level that telecommunication services have not become commercially viable in rural areas, owing to factors like acute power shortage, poor infrastructure, increased expenditure on maintenance, and low paying capacity of customers. To improve the situation for successful implementation of VPT scheme, the officials provided the following suggestions:

- Power supply must be ensured by the state government
- Road networks are to be made available and strengthened
- Economic conditions of rural areas need to be improved through several government schemes

Finally, the CGM opined that overall performance of VPT scheme in the state is satisfactory. However, the subsidy needs to be increased to offset the cost of operation of VPTs in rural areas.

DISTRICT : MANDLA

The VPT scheme in the district of Mandla, Madhya Pradesh is being implemented through the Telecom District Engineer (TDE), BSNL, Mandla Telecom Circle. Sub-Divisional Officer Telecom (SDOT) is the in-charge officer of VPTs in the districts.

Looking to the background to the VPT Scheme The Village Public Telephone (VPT) Scheme was launched in the district along with the state guidelines. As per the 2001 census, the district has 701 villages to be covered under Bharat Nirman, and VPT has been installed in all the villages. VPT booths have been installed in all the villages, where the scheme has been launched. The criteria for identifying villages and VPTs were based on Panchayat *prastav*, commercial places, and prominent or educated persons' houses and with the consultation of villagers. The objective guidelines for implementation of the VPT scheme come from the BSNL policy guidelines. The TDE of Rewa also stated that the objective of VPT scheme at district level is to provide most reliable and effective communication facility by an advance technology at competitive prices.

The department responsible for implementing VPT in the district prepares an action plan every year as per the guidelines of BSNL. The main action plan is to execute the plans and targets of provisions by the BSNL corporate office as per the agreement with the government under USO

scheme for VPTs. As per the targets conveyed, the feasibility survey for the respective village is done and the VPT's are provided on the best reliable media.

Performance of VPT Scheme in Mandla

The performance of the VPT scheme in the district of Mandla is assessed here taking into consideration the date pertaining to targets and achievements between the year 2003–04 to 2009–10. The data are shown in the following table:

Years	Physical Performance ((Newly Connected Villages/VPTs)					
	Target		Achievement		Reasons for shortfall, if any (not more than three)	Action taken up to overcome the shortfalls (not more than three)
	No. of Villages	No. of VPTs	No. of Villages	No. of VPTs		
2004-05	625	625	38	38	Coverage	New BTS Planning
2005-06	587	587	104	104	Coverage	New BTS Planning
2006-07	483	483	202	202	Coverage	
2007-08	281	281	279	279	Coverage	
2008-09	2	2	2	2		
2009	76	76	76	76		
Total			701	701		

In the year 2004-05, BSNL set a target of implementing VPT scheme in 625 villages with installation of one VPT booth in each village. However, by the end of the year only 38 VPT booths were installed in same number of villages. Therefore, the remaining 587 villages, which were not covered during 2004 – 05, were set as target for the next year. The district was successful enough in implementing VPT booths in 104 villages by the end of the year 2005-06, with 483 uncovered villages. These became the targets for the year 2006-07 and 202 villages were covered by the end of the year. In the year 2007-08 the remaining 281 villages were to be covered out of which 279 were covered. In the year 2008-09 the remaining 2 villages were covered. Again in the year 2009 there was an addition of another 76 villages which were set as targets, and the district was successful enough in installing VPT in all the villages by the end of the year.

Regarding extended Services no other extended services of multimedia communication amenities such as broad band connections and internet facilities, etc, are provided by BSNL along with VPT. Discussions with the officials revealed that at present there is no demand from customers of VPT for such services. However, the officials recognized the importance of such value added services and opined that these issues may be prioritized for their future action.

Same as referred above there are no separate funds assigned for the purpose of implementing the VPT scheme. The cost incurred for the scheme is managed as a part of the expenditure of the BSNL. Therefore, no separate data were available for income and expenditure details exclusively for VPT Scheme in the district.

Regarding the availability of Staff for VPT the discussions with the district level officials of BSNL revealed that no separate technical and/or administrative staff is maintained exclusively for functioning of VPTs. All the SDOTs are given the job of maintenance of VPTs with their existing staff to manage the functioning of VPT along with their other responsibilities.

As regards to monitoring and supervision of VPTs the district level officials of BSNL positively ascertained about the availability of monitoring and supervision mechanisms for VPTs. The monitoring and supervision of VPTs are done by the respective units through their existing ground staff. No separate staff is appointed exclusively for monitoring and supervision of VPTs. Likewise, there was also no exclusive guidelines for monitoring and supervision of VPTs. It is done as per the regular guidelines of BSNL. Testing and monitoring is done BTS wise, and the testing from circle is done by call center. Staff available at the BTS looks after the exchange and VPTs in the district.

About information regarding repair and maintenance of VPTs it was reported that the repair and maintenance of VPTs is done by BSNL through their regular staff. No technical staff is appointed exclusively for the purpose. All the SDOTs of the telecom circle along with their ground staff such as Junior Telecom Officers, Telecom Technical Assistance, and Telecom Mechanics are responsible for repair and maintenance of the VPTs. The work distribution to the technical staff is done on BTS basis. The details of repair and maintenance of VPTs undertaken at the district level for the last 3 months are shown in the table below:

Details of Repairs and Maintenance of VPTs

Type of repairs & Maintenance	Last month (June)	2nd last month (May)	3rd last month (April)
Change of SMPS / Battery	170	225	140
FWT	40	34	23

The district level officials reported that all the field staff of BSNL is technically capable enough for undertaking repair and maintenance of the VPTs. Further BSNL also provides regular training to its staffs at Telecom Training Centre, Indore, for VPTs and customer care. The officials reported that they undergo a training of five days each for technology familiarization and improvement in communication skills.

As far as the issue of competition to VPTs from other Service Providers is concerned, the TDE stated that the VPTs face severe competition in the villages where other service providers like Reliance, Idea, Airtel, Tata, are present. However there is a declining trend in the revenue and usage of VPTs in the villages as the telecom coverage from other service operators are increasing in the rural areas, both in WLL and GSM technology. The custodians of VPTs are not paying bills regularly and due to increasing out-standing amount there is an increase in relocation of VPTs. Moreover, for facing stiff competition tariff structure of VPT's has been changed and now rates per unit are competitive and discount to VPT holder is attractive.

During the survey it was observed that the remote tribal villages of Mandla are very much dependent on the VPTs. It has proved to be one of the successful medium of telecommunication in the tribal villages of Mandla.

Main pointers refer to strengths and weaknesses of VPTs, it was shared that one of the major strengths of VPT is that it has successfully extended telecom facilities to rural areas, including those remote villages, which are difficult to access. This has increased the opportunity of rural dwellers to connect with their relatives and friends who stay away from them.

Referring to the weakness of VPTs at Rewa discussed, lack of availability of power supply in rural areas was identified as the main weakness of VPT schemes. Around 16 hours of daily power cuts throughout the year and continuous 5-6 days of complete black outs during monsoon creates hindrances for WLL VPTs in sustaining the charge of the battery. Apart from this, the irregularity of the custodians of VPTs in paying bills, high maintenance cost of VPTs and misuse of SMPS and Battery for lighting tube lights are some of the stumbling blocks in the future growth of VPTs in rural areas.

The district level officials reported that they don't foresee any constraint in implementation of VPT schemes, and therefore, believe that covering all the villages of Madhya Pradesh through VPT is achievable. The officials also never mentioned about constraints with respect to staff and funds to implement VPT scheme successfully in Madhya Pradesh. However, it was a common opinion amongst the officials that telecommunication services have not become commercially viable in rural areas, owing to factors like acute power shortage, poor infrastructure, increased expenditure on maintenance, low revenue per connection and low paying capacity of customers.

To improve the situation for successful implementation of VPT scheme, the officials provided the following suggestions:

Technology- BSNL is using most reliable technology (WLL and LL) for VPTs, by using this technology demand of new services in future (e.g. High speed Internet etc.) can be fulfilled easily. Competition - Although competition in telecom sector is increasing continuously but BSNL have sufficient power to face this competition efficiently.

Coverage - BSNL have sufficient coverage in Mandla District through CDMA technology. However for improving coverage some new BTS are also planned.

Efficiency - The efficiency of VPT depends on availability of power supply and also on use and facility expected by the villagers. For improving efficiency regular power supply and educating the people is must. BSNL staff makes visit to educate the villagers.

DISTRICT : REWA

The VPT scheme in the district of Rewa, Madhya Pradesh is being implemented through the Telecom District Manager (TDM), BSNL, Rewa Telecom Circle with its office at Rewa. Divisional Engineers (DE) and Sub-divisional Officer Telecom (SDOT) who are the office-in-charge of VPTs in the districts.

The Village Public Telephone (VPT) Scheme was launched in the district along with the state guidelines. As per the 2001 census, the district has 1831 villages to be covered under the Bharat Nirman and VPT has been installed in all the villages. VPT booths have been installed in all the villages, where the scheme has been launched. The criteria for identifying villages and VPTs is based on Panchayat *prastav*, commercial places, prominent or educated persons' house and with the consultation of villagers. The objective guidelines for implementation of the VPT scheme come from the BSNL policy guidelines. The TDM of Rewa also stated that the objective of VPT scheme at district level is to provide most reliable and effective communication facility by an advance technology at competitive prices.

The department responsible for implementing VPT in the district prepares an action plan every year as per the guidelines of BSNL. The main action plan is to execute the plans and targets of provisions by the BSNL corporate office as per the agreement with the government under USO scheme for VPTs. As per the targets conveyed, the feasibility survey for the respective village is done and the VPT's are provided on the best reliable media.

The performance of the VPT scheme in the district of Rewa is assessed here taking into consideration the date pertaining to targets and achievements between the year 2003-04 to 2009-10. The data are shown in the following table:

Years	Physical Performance ((Newly Connected Villages/VPTs)					
	Target		Achievement		Reasons for shortfall, if any (not more than three)	Action taken up to overcome the shortfalls (not more than three)
	No. of Villages	No. of VPTs	No. of Villages	No. of VPTs		
2004-05	1240	1240	830	830	Coverage	New BTS Planning
2005-06	410	410	310	310	Coverage	New BTS Planning
2006-07	100	100	100	100		
2007-08	591	591	169	169		
2008-09	422	422	422	422		
Total			1831	1831		

In the year 2004–05, BSNL set a target of implementing VPT scheme in 1240 villages with installation of one VPT booth in each village. However, by the end of the year only 830 VPT booths were installed as against the target number of villages. Therefore, the remaining 410 villages, which were not covered during 2004–05, were set as target for the next year. The district was successful enough in implementing VPT boots in 310 villages by the end of the

year 2005–06, with 100 uncovered villages. These became the targets for the year 2006–07 and all the villages were covered by the end of the year. Again in the year 2007–08 there was an addition of another 591 villages which were set as targets, and the district was successful enough in implementing VPT in 169 villages by the end of the year. In 2008–09, the district completed the target of installing VPTs in the remaining 422 villages.

No other extended services of multimedia communication amenities such as CDMA, cellular phones, broad band connections and internet facilities, etc, are provided by BSNL along with VPT. Discussions with the officials revealed that at present there is no demand from customers of VPT for such services. However, the officials recognized the importance of such value added services and opined that these issues may be prioritized for their future action.

Regarding flow of funds, there are no separate funds assigned for the purpose of implementing the VPT scheme. The cost incurred for the scheme is managed as a part of the expenditure of the BSNL. Therefore, no separate data were available for income and expenditure details exclusively for VPT Scheme in the district.

Maintenance expenditure for VPT's is taken on pro-rata basis. Accounting for income on VPT maintenance is not done separately.

Regarding information about availability of Staff for VPT the discussions with the district level officials of BSNL revealed that no separate technical and/or administrative staff is maintained exclusively for functioning of VPTs. All the SDOTs are given the job of VPT with their existing staff to manage the functioning of VPT along with their other responsibilities.

As far as monitoring and Supervision is concerned the district level officials of BSNL positively ascertained about the availability of monitoring and supervision mechanisms for VPTs. The monitoring and supervision of VPTs is done by the respective units through their existing ground staff. There were no staff members appointed exclusively for monitoring and supervision of VPTs. Likewise, there was also no exclusive guidelines for monitoring and supervision of VPTs. It is done as per the regular guidelines of BSNL. Testing and monitoring is done BTS wise, and the testing from circle is done by call center. Staff available at the BTS looks after the exchange and VPTs in the district.

The repair and maintenance of VPTs is done by BSNL through their regular staff. No technical staff is appointed exclusively for the purpose. All the SDOTs of the telecom circle along with their ground staff such as Junior Telecom Officers, Telecom Technical Assistance, and Telecom Mechanic are responsible for repair and maintenance of the VPTs. The work distribution to the technical staff is based on BTS wise. The details of repair and maintenance of VPTs undertaken at the district level for the last 3 months are shown in the table below:

Details of Repairs and Maintenance of VPTs

Type of repairs & Maintenance	Last month (June)	2nd last month (May)	3rd last month (April)
Change of SMPS /Battery	220	342	310
FWT	35	41	57
Line fault	0	0	0
Total	255	383	367

The district level officials reported that all the ground staffs of BSNL are technically capable enough for repair and maintenance of the VPTs. Further BSNL also provides regular training to its staffs at Telecom Training Centre, Indore for VPTs and customer care. The officials reported that they undergo a training of five days each for technology familiarization and improvement in communication skills.

As regards to the aspects of competition to VPTs from other Service Providers, the TDM stated that the VPTs face severe competition from other service providers like Reliance, Idea, Airtel, Tata, Vodafone and Virgin, in terms of call charges, network connectivity and profuse availability. He further mentioned that the WLL switch technology for providing VPT is CDMA. There are in all 16 BTS operational in SSA of Rewa and the coverage is good and almost all area of Rewa telecom district is covered. However there is a declining trend in the usage of VPTs in the villages by the habitant as the telecom coverage from other service operators exists in most of the rural area both in WLL and GSM technology. The custodians of VPTs are not paying bills regularly and due to increasing outstanding amount there is an increase in relocation of VPTs. Moreover, for facing stiff competition tariff structure of VPT's has been changed and now rates per unit are competitive and discount to VPT holder is attractive.

Discussion about strengths and Weaknesses of VPTs in the district reveled that one of the major strengths of VPT is that it has successfully extended telecom facilities to rural areas, including those remote villages, which are difficult to access. This has increased the opportunity of rural dwellers to connect with their relatives and friends who stay away from them.

About weakness of VPTs at Rewa it was shared that lack of availability of power supply in rural areas as well as poor road networks were identified as the main weaknesses of VPT schemes. Apart from this, the irregularity of the custodians of VPTs in paying bills, high maintenance cost of VPTs and misuse of SMPS and Battery for lighting tube lights are some of the stumbling blocks in the future growth of VPTs in rural areas.

The district level officials reported that they don't foresee any constraint in implementation of VPT schemes, and therefore, believe that covering all the villages of Madhya Pradesh through VPT is achievable. The officials also never mentioned about constraints with respect to staff

and funds to implement VPT scheme successfully in Madhya Pradesh. However, it was a common opinion amongst the officials that telecommunication services have not become commercially viable in rural areas, owing to factors like acute power shortage, poor infrastructure, increased expenditure on maintenance, low revenue per connection and low paying capacity of customers.

Officials expressed some of their suggestions for Improvement of the situation for successful implementation of VPT scheme as follows-

Technology - BSNL is using most reliable technology (WLL) for VPTs, by using this technology demand of new services in future (e.g. High speed Internet etc.) can be fulfilled easily. **Competition** - Although competition in telecom sector is increasing continuously but BSNL have sufficient power to face this competition efficiently.

Coverage - BSNL have sufficient coverage in Rewa District through CDMA technology. However for improving coverage some new BTS are also planned.

Efficiency - The efficiency of VPT depends on availability of power supply and also on use and facility expected by the villagers. For improving efficiency regular power supply and educating the people is must. BSNL staff makes visit to educate the villagers.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPTs in rural areas, the present study included two districts of Madhya Pradesh – Rewa and Mandla. In Rewa SSA 100 VPT users and in Mandla SSA 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, revenue collection, nature of impediments, and contribution of VPT's towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, details of telephone connectivity and general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum percent belong to general (37 %) in Rewa and OBC (43 %) in Mandla districts of Madhya Pradesh.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Rewa	General	37	37.0
	Other Backward Class (OBC)	28	28.0
	Scheduled Caste (SC)	17	17.0
	Scheduled Tribe (ST)	18	18.0
	Total	100	100.0
Mandla	General	5	5.0
	Other Backward Class (OBC)	43	43.0
	Scheduled Caste (SC)	11	11.0
	Scheduled Tribe (ST)	41	41.0
	Total	100	100.0

Description of gender specification depicts that 72 % and 65 % females in Rewa and Mandla districts respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Rewa	72	28	100
Mandla	65	35	100

The primary occupation data revealed that majority (i.e. 30 %) were homemaker in Rewa and 26 % non-agricultural casual labour in Mandla. Educational qualification of VPT users was not literates (50 %) in Rewa and 40 % in Mandla in current study.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	Rewa	Mandla
1	Agriculture	10	25
2	Agriculture Casual Labour	13	11
3	Own Business	4	4
4	Salaried work	4	4
5	Homemaker	30	20
6	Non working adults	-	1
7	Students	2	1
8	Dependents	18	5
9	Non-agriculture casual labour	17	26
10	Self-employed in household industry	2	-
	Total	100	100
Educational Qualification			
1	Not literate	50	40
2	Functional literate	4	15
3	Primary	13	13
4	Upper Primary	9	18
5	High school	9	9
6	Intermediate	8	3
7	Graduate	4	2
8	Above Graduation	3	0
	Total	100	100

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned kucha houses in Rewa (70 %) and 57 % in Mandla districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Rewa	Kucha House	70	70.0
	Semi-pucca House	20	20.0
	Pucca House	10	10.0
	Total	100	100.0
Mandla	Kucha House	57	57.0
	Semi-pucca House	36	36.0
	Pucca House	7	7.0
	Total	100	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that majority is having electricity in their houses (68 % in Rewa and 77 % in Mandla).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Rewa	Electricity not available	32	32.0
	Electricity available	68	68.0
	Total	100	100.0
Mandla	Electricity not available	23	23.0
	Electricity available	77	77.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road:** Looking at the proximity of their houses to pucca roads data revealed that 39 % of respondents in Rewa and 70 % in Mandla were situated at the distance of more than 100 metres but less than 1 km.

Table I.B.3. Distance of house from pucca Road

Telecom District	Distance	No. of Users	Percent
Rewa	100 metres or less	25	25.0
	More than 100 metres but less than 1 km	39	39.0
	More than 1 km	36	36.0
	Total	100	100.0
Mandla	100 metres or less	25	25.0
	More than 100 metres but less than 1 km	70	70.0
	More than 1 km	5	5.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 59 % respondents were staying at upto 2 kms distance in Rewa and 78 % in Mandla district.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Rewa	Upto 2 km	59	59.0
	More than 2 but less than 10 km	36	36.0
	More than 10 km	5	5.0
	Total	100	100.0
Mandla	Upto 2 km	78	78.0
	More than 2 but less than 10 km	17	17.0
	More than 10 km	5	5.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at home:** Majority (53 %) respondents in Rewa district were having telephone at their home whereas in Mandla 66 % were not having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Rewa	Telephone Not available	47	47.0
	Telephone available	53	53.0
	Total	100	100.0
Mandla	Telephone Not available	66	66.0
	Telephone available	34	34.0
	Total	100	100.0

- C.2. Type of Telephone:** Among telephone owners at their home maximum 90.5 % were having mobiles in Rewa and 97.1 % in Mandla.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent
Rewa	Landline	3	4.8
	Mobile	57	90.5
	others	3	4.8
	Total	63	100.0
Mandla	Landline	1	2.9
	Mobile	34	97.1
	Total	35	100.0

- C.3. Details of Service Provider:** Regarding the details about service providers to the respondents, Airtel was leading service provider in Rewa (43.3 %) and BSNL provides services to 59 % respondents in Mandla.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
Rewa	BSNL	5	16.7
	Airtel	13	43.3
	Idea	3	10.0
	Reliance Communications	1	3.3
	Others	8	26.7
	Total	30	100.0
Mandla	BSNL	23	59.0
	Airtel	12	30.8
	Idea	3	7.7
	Reliance Communications	1	2.6
	Total	39	100.0

II. USAGE OF VPT

- A.1.** Usage pattern is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 61 % VPT beneficiaries in Rewa have used VPT more than 6 times for local calls in last 60 days. In Mandla 42 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Rewa	No calls	3	3.0	3	3.0
	2 or less	16	16.0	8	8.0
	3 to 4	24	24.0	11	11.0
	5 to 6	28	28.0	17	17.0
	More than 6	29	29.0	61	61.0
	Total	100	100.0	100	100.0
Mandla	No calls	7	7.0	7	7.0
	2 or less	28	28.0	6	6.0
	3 to 4	33	33.0	20	20.0
	5 to 6	20	20.0	25	25.0
	More than 6	12	12.0	42	42.0
	Total	100	100.0	100	100.0

- A.2.** Usage of VPT for STD calls in last 60 days revealed that 85 % VPT beneficiaries have not made any STD call in Rewa and 41 % in Mandla district. This shows that VPT usage for STD call is very low in both the districts of Madhya Pradesh.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Rewa	No calls	84	84.0	85	85.0
	2 or less	10	10.0	5	5.0
	3 to 4	2	2.0	3	3.0
	5 to 6	4	4.0	3	3.0
	More than 6	-	-	4	4.0
	Total	100	100.0	100	100.0
Mandla	No calls	37	37.0	41	41.0
	2 or less	36	36.0	16	16.0
	3 to 4	15	15.0	17	17.0
	5 to 6	7	7.0	9	9.0
	More than 6	5	5.0	17	17.0
	Total	100	100.0	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 50 % in Rewa district were residing within 200mts. distance and in Mandla 46 % beneficiaries reside within 200-500 mts. distance. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Rewa	Within 200 mts from residence	50	50.0
	200-500 mts from residence	13	13.0
	More than 500 mts	37	37.0
	Total	100	100.0
Mandla	Within 200 mts from residence	32	32.0
	200-500 mts from residence	46	46.0
	More than 500 mts	22	22.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, it was observed that in Rewa district 76 % and in Mandla district 75 % users were not involved in the decision which means peoples participation is very less.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Rewa	No	76	76.0
	Yes	24	24.0
	Total	100	100.0
Mandla	No	75	75.0
	Yes	25	25.0
	Total	100	100.0

- B.1. Availability of VPT service:** It was observed in terms of functional condition of VPTs in their villages. Information was collected regarding how many times the VPT was faulty, busy, closed and engaged in last two months. In Rewa district VPTs were mostly found reliable as respondents communicated that in 90% cases no fault, 84% available (not busy), 89 % open and 78 % not engaged during last month. Similarly, table shows that in Mandla district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Rewa	0	90	90.0	0	84	84.0	0	89	89.0	0	78	78.0
	1	8	8.0	1	11	11.0	1	10	10.0	1	13	13.0
	2	2	2.0	2	4	4.0	2	1	1.0	2	9	9.0
				5	1	1.0						
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Mandla	0	63	63.0	0	65	65.0	0	74	74.0	0	66	66.0
	1	20	20.0	1	22	22.0	1	14	14.0	1	17	17.0
	2	14	14.0	2	11	11.0	2	6	6.0	2	15	15.0
	3	3	3.0	3	2	2.0	3	5	5.0	3	2	2.0
							5	1	1.0			
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Madhya Pradesh in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT Services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
Rewa	0	87	87.0	0	81	81.0	0	91	91.0	0	79	79.0
	1	6	6.0	1	11	11.0	1	6	6.0	1	7	7.0
	2	7	7.0	2	4	4.0	2	3	3.0	2	11	11.0
				3	2	2.0				3	3	3.0
				4	1	1.0						
				9	1	1.0						
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Mandla	0	66	66.0	0	65	65.0	0	72	72.0	0	63	63.0
	1	21	21.0	1	14	14.0	1	17	17.0	1	21	21.0
	2	9	9.0	2	15	15.0	2	5	5.0	2	14	14.0
	3	3	3.0	3	5	5.0	3	2	2.0	3	2	2.0
	4	1	1.0	5	1	1.0	4	2	2.0			
							5	1	1.0			
							6	1	1.0			
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

In both Rewa and Mandla districts it has been found that there was proper display of grievance redressal numbers, emergency toll free numbers and tariff rates. However, complaint book was not available at VPTs in 80 % cases in Rewa district and 70 % cases in Mandla district.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Rewa	No	-	-	-	-	-	-	8	80.0
	Yes	10	100.0	10	100.0	10	100.0	2	20.0
	Total	10	100.0	10	100	-	-	10	100.0
Mandla	No	-	-	-	-	-	-	7	70.0
	Yes	10	100.0	10	100.0	10	100.0	3	30.0
	Total	10	-	-	-	-	-	10	100.0

IV. QUALITY ASPECTS OF VPT

- A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and clarity of voice. Present evaluation study revealed that all the places of installation were found convenient (46 %) and very convenient (45 %) in Rewa. In Mandla district 5 % VPT was expressed as not at all convenient that were located in shop but 57 VPTs were found convenient.

Table IV.A. Level of Convenience of Place of Installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Rewa	Sarpanch house	1	5	2	8
	School	-	-	1	1
	Shop	1	20	22	43
	Others	7	21	20	48
	Total	9	46	45	100
Mandla	Sarpanch house	-	5	-	5
	Open space	1	-	2	3
	Post office	-	4	1	5
	Shop	5	38	26	69
	Others	3	10	5	18
	Total	9	57	34	100

- B. **Convenience of technology used in VPT:** In Rewa district our findings reflect that 77% VPT users found the technology used to be convenient. 43% VPTs are using landline technology in this district. In Mandla district 86% users felt the VPT technology is convenient in which 90 % were using mobile technology in their VPTs.

Table IV.B. Level of Convenience with Technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Rewa	Landline	1	34	8	43
	Mobile	-	43	14	57
	Total	1	77	22	100
Mandla	Landline	-	9	1	10
	Mobile	1	86	3	90
	Total	1	95	4	100

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. Total 74 users in Rewa shared that WLL FT technology used in their VPTs is convenient. In Mandla district 89 users in aggregate found the technology convenient.

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
Rewa	WLL FT	1	74	25	100
	Total	1	74	25	100
Mandla	WLL FT	-	89	10	99
	DSPT	-	1	-	1
	Total	-	90	10	100

- D. Level of convenience with type of instrument:** It is showed in following table that almost all users feel convenient about the instrument used in VPT.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Rewa	Single touch Key board	-	74	25	99
	Cordless	-	-	1	1
	Total	-	74	26	100
Mandla	Single touch Key board	-	88	12	100
	Total	-	88	12	100

- E. Clarity of Voice:** It is an important indicator for the quality assessment of VPT installed. In Rewa district 39 VPT users had expressed that clarity of voice is always convenient. Similarly, in Mandla 44 users were having same opinion. In other words majority was satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Rewa	Rarely	1	3	-	4
	Often	-	28	1	29
	Always	-	39	28	67
	Total	1	70	29	100
Mandla	Rarely	1	9	1	11
	Often	-	21	1	22
	Always	-	44	23	67
	Total	1	74	25	100

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. Seventy four per cent users in district Rewa and 86 % users in Mandla district of Madhya Pradesh shared that connectivity of VPT service is reliable. Although 26 % users in Rewa and 12 % users in Mandla district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT Service Provider

Telecom District	Reliability	No. of Users	Percent
Rewa	Reliable	74	74.0
	Highly reliable	26	26.0
	Total	100	100.0
Mandla	Not reliable	2	2.0
	Reliable	86	86.0
	Highly reliable	12	12.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 71 % respondents in Rewa and 50 % in Mandla district found VPT always available in their area. Similarly VPT was never closed in both the districts of Madhya Pradesh.

Table V.A. Timeliness Availability of the Service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Rewa	During day time	18	18.0
	Always	71	71.0
	Fixed timings	11	11.0
	Total	100	100.0
Mandla	During day time	19	19.0
	During night	1	1.0
	Always	50	50.0
	Fixed timings	30	30.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 100 % users in Rewa were paying in case of VPT usage, 82 % were paying in cash. In Mandla district 93 % users were paying, 78 % were paying in cash. It was observed that users were not getting bill for the payments made by them.

Table VI.A.1. Paying for use of VPT Services

Telecom District		No. of Users	Percent
Rewa	Yes	100	100.0
Mandla	No	7	7.0
	Yes	93	93.0
	Total	100	100.0

Table VI.A.2. Mode of Payment for VPT Service usage

Telecom District	Mode of payment	No. of Users	Percent
Rewa	Cash	82	82.0
	Partly cash, partly credit	17	17.0
	Others	1	1.0
	Total	100	100.0
Mandla	Cash	78	78.0
	Credit	1	1.0
	Partly cash, partly credit	14	14.0
	Non-payment	7	7.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study revealed that in Rewa district there is no social restriction but in Mandla district, 5 % VPT users expressed some social restriction. Particularly users belonging to SC face restriction in using VPT.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Rewa	No	100	100.0
Mandla	No	95	95.0
	Yes	5	5.0
	Total	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives a clear picture about the usage of the VPT in particular village. ARPU calculation is made on the basis of aggregate income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Rewa district was less than Rs 250 in 70 % cases of VPT and 30 % cases in Mandla.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
Rewa	Less than 250	7	70.0
	250-500	1	10.0
	751-1000	2	20.0
	Total	10	100.0
Mandla	Less than 250	5	50.0
	250-500	2	20.0
	501-750	1	10.0
	More than 1000	2	20.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information related to Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Rewa	No	85	85.0
	Yes	15	15.0
	Total	100	100.0
Mandla	No	70	70.0
	Yes	30	30.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected whether VPT use has increased their income and if yes what is the percentage change in income of VPT users.

In Rewa district (85 %) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Mandla) of the state it was observed that 20 % users believed that VPT has increased their household income by more than 20 per cent.

Table VII.A.2. Percent Change in Income Categories

Telecom District	Level of Change	No. of Users	Percent
Rewa	No change reported	85	85.0
	5 to 10 percent	4	4.0
	10 to 20 percent	4	4.0
	More than 20 percent	7	7.0
	Total	100	100.0
Mandla	No change reported	70	70.0
	5 to 10 percent	2	2.0
	10 to 20 percent	8	8.0
	More than 20 percent	20	20.0
	Total	100	100.0

Further enquiring about the change in income revealed that 7 % of users in Rewa district and 20 % in Mandla district expressed increase in their household income by more than 20 percent.

- B. Improvement in connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity across various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Rewa	No improvement	4 (4.0)	53 (53.0)	56 (56.0)
	Marginal Improvement	8 (8.0)	5 (5.0)	-
	Significant improvement	88 (88.0)	7 (7.0)	4 (4.0)
	4	-	-	40 (40.0)
	Total	100 (100.0)	35 (35.0)	100 (100.0)
Mandla	No improvement	4 (4.0)	36 (36.0)	34 (34.0)
	Marginal Improvement	12 (12.0)	5 (5.0)	1 (1.0)
	Significant improvement	84 (84.0)	5 (5.0)	5 (5.0)
	4	-	54 (54.0)	60 (60.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Rewa	No improvement	57 (57.0)	53 (53.0)	55 (55.0)	55 (55.0)
	Marginal Improvement	6 (6.0)	6 (6.0)	1 (1.0)	-
	Significant improvement	6 (6.0)	4 (4.0)	4 (4.0)	3 (3.0)
	4	-	37 (37.0)	40 (40.0)	42 (42.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
Mandla	No improvement	36 (36.0)	37 (37.0)	34 (34.0)	32 (32.0)
	Marginal Improvement	8 (8.0)	4 (4.0)	6 (6.0)	6 (6.0)
	Significant improvement	6 (6.0)	3 (3.0)	5 (5.0)	6 (6.0)
	4	50 (50.0)	56 (56.0)	55 (55.0)	56 (56.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Rewa	Mandla
a.	Personal Communication	88 % Significant	84 % Significant
b.	Business Networking	1 % Marginal	1 % Marginal
c.	Emergency Management Medical Fire Police Natural Calamities	100 % No improvement 100 % No improvement 100 % No improvement 100 % No improvement	6 % Marginal 100 % No improvement 100 % No improvement 100 % No improvement
d.	Official Purposes	100 % No improvement	1 % Marginal

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users responses regarding accessing information in various aspects is summarized below:

Table VII.C. Access of Information

Information on	Rewa					Mandla				
	Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a. Employment Opportunity	92 (92.0)	-	6 (6.0)	2 (2.0)	100 (100.0)	70 (70.0)	7 (7.0)	14 (14.0)	9 (9.0)	100 (100.0)
b. Market	93 (93.0)	1 (1.0)	4 (4.0)	2 (2.0)	100 (100.0)	87 (87.0)	7 (7.0)	4 (4.0)	2 (2.0)	100 (100.0)
c. Development & Welfare scheme of Govt. on										
1. Health	96 (96.0)	2 (2.0)	2 (2.0)	-	100 (100.0)	79 (79.0)	7 (7.0)	11 (11.0)	3 (3.0)	100 (100.0)
2. Education	98 (98.0)	1 (1.0)	-	1 (1.0)	100 (100.0)	86 (86.0)	7 (7.0)	4 (4.0)	3 (3.0)	100 (100.0)
3. Related to Agri.	94 (94.0)	3 (3.0)	2 (2.0)	1 (1.0)	100 (100.0)	89 (89.0)	4 (4.0)	2 (2.0)	5 (5.0)	100 (100.0)

Contd ...

Table VII.C. Access of Information (Contd ...)

	Information on	Rewa					Mandla				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
4.	Others	98 (98.0)		1 (1.0)	1 (1.0)	100 (100.0)	90 (90.0)	1 (1.0)	-	9 (9.0)	100 (100.0)
d.	Natural Calamity/ Weather forecasting	99 (99.0)	1 (1.0)	-	-	100 (100.0)	95 (95.0)	5 (5.0)	-	-	100 (100.0)
e.	Rail / Road transport	88 (88.0)	6 (6.0)	6 (6.0)	-	100 (100.0)	88 (88.0)	5 (5.0)	5 (5.0)	2 (2.0)	100 (100.0)
f.	Health Services	95 (95.0)	2 (2.0)	3 (3.0)	-	100 (100.0)	95 (95.0)	2 (2.0)	3 (3.0)	-	100 (100.0)
g.	Agri. related	99 (98.0)	1 (1.0)	1 (1.0)	-	101 (100.0)	99 (99.0)	1 (1.0)	-	-	100 (100.0)
h.	Business related	96 (96.0)		4 (4.0)	-	100 (100.0)	94 (94.0)	-	6 (6.0)	-	100 (100.0)
i.	Others (specify)	-	-	-	-	-	-	-	-	-	-

	Access to information on	Rewa	Mandla
a.	Employment Opportunity	Never	Never
b.	Market	100 %	1 % (as per necessity)
c.	Development & Welfare Schemes of Government on – Health Education Related to agriculture Others	100 % (Never) 100 % (Never) 100 % (Never) 100 % (Never)	2 % (As per necessity) 1 % (Frequently) 100 % (Never) 2 % (As per necessity)
d.	Natural calamity / weather forecasting	100 % (Never)	100 % (Never)
e.	Rail / road transport	100 % (Never)	100 % (Never)
f.	Health services	10 % (Rarely)	13 % (Rarely)
g.	Agriculture related	1 % (As per necessity)	1 % (As per necessity)
h.	Business related	3 % (Rarely)	1 % (As per necessity)

Table reveals that VPT is not being used as expected by policy planners of India with respect to access of information (refer table above). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 43 % users in Rewa and Satisfactory by 56 % in Mandla district.

Table VIII.A. Level of Satisfaction about Convenience of the Location

Telecom District	Level of satisfaction	No. of Users	Percent
Rewa	Not satisfactory	8	8.0
	Satisfactory	49	49.0
	Highly satisfactory	43	43.0
	Total	100	100.0
Mandla	Not satisfactory	12	12.0
	Satisfactory	56	56.0
	Highly satisfactory	32	32.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 71 % users in Rewa and 73 % also in Mandla district.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Rewa	Not satisfactory	3	3.0	1	1.0
	Satisfactory	71	71.0	66	66.0
	Highly satisfactory	26	26.0	33	33.0
	Total	100	100.0	100	100.0
Mandla	Not satisfactory	10	10.0	10	10.0
	Satisfactory	73	73.0	66	66.0
	Highly satisfactory	17	17.0	24	24.0
	Total	100	100.0	100	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined satisfactory by 69 % users in Rewa and 70 % in Mandla.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Rewa	Not Satisfactory	-	-	-	-
	Satisfactory	69	69.0	73	73.0
	Highly satisfactory	31	31.0	27	27.0
	Total	100	100.0	100	100.0
Mandla	Not satisfactory	4	4.0	2	2.0
	Satisfactory	70	70.0	79	79.0
	Highly satisfactory	26	26.0	19	19.0
	Total	100	100.0	100	100.0

D. Behaviour of Custodian: The cooperativeness and behaviour of custodian was articulated satisfactory among 54 % users in Rewa and 46 % users of Mandla.

Table VIII.D. Level of Satisfaction about Cooperativeness and behaviour of Custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Rewa	Not satisfactory	2	2.0
	Satisfactory	54	54.0
	Highly satisfactory	44	44.0
	Total	100	100.0
Mandla	Not satisfactory	9	9.0
	Satisfactory	46	46.0
	Highly satisfactory	45	45.0
	Total	100	100.0

E. Other Service Provider: The response about level of satisfaction of other service providers disclosed 48 % satisfaction in Rewa and 71 % in Mandla.

Table VIII.E. Level of Satisfaction about Other Alternate Service Providers

Telecom District	Level of satisfaction	No. of Users	Percent
Rewa	Not satisfactory	45	45.0
	Satisfactory	48	48.0
	Highly satisfactory	7	7.0
	Total	100	100.0
Mandla	Not satisfactory	20	20.0
	Satisfactory	71	71.0
	Highly satisfactory	9	9.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villages in the districts. Observation reflects that all most all the custodians were making payment regularly in the both the districts

Table IX. Regularity in payment

Telecom District	Regularity	No. of Custodians	Percent
Rewa	No	1	10.0
	Yes	9	90.0
	Total	10	100.0
Mandla	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair and maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 81 % users in Rewa district and 77 % in Mandla were not aware about resolving problems about VPT location in Madhya Pradesh.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Rewa	Internally	8	8.0
	Externally	8	8.0
	Not resolved	3	3.0
	Not aware	81	81.0
	Total	100	100.0
Mandla	Internally	3	3.0
	Externally	17	17.0
	Not resolved	3	3.0
	Not aware	77	77.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time and quality was also revealed as not aware 78 % in Rewa and 85 % in Mandla district. Problem solution of quality accessibility was also viewed as not aware among 93% users in Rewa and 90 % in Mandla.

Table X.B. Problem Resolution Related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Rewa	Internally	10	10.0	-	-
	Externally	10	10.0	7	7.0
	Not resolved	2	2.0	-	-
	Not aware	78	78.0	93	93.0
	Total	100	100.0	100	100.0
Mandla	Internally	7	7.0	-	-
	Externally	8	8.0	10	10.0
	Not resolved	-	-	-	-
	Not aware	85	85.0	90	90.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 95% and 94% users were not aware in Rewa and Mandla districts respectively. Similarly in the case of the problem of quality repair & maintenance 96% and 95% of VPT users were not aware in Rewa and Mandla districts.

Table X.C. Problem Resolution related to Repair and Maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Rewa	Externally	5	5.0	4	4.0
	Not aware	95	95.0	96	96.0
	Total	100	100.0	100	100.0
Mandla	Externally	6	6.0	5	5.0
	Not aware	94	94.0	95	95.0
	Total	100	100.0	100	100.0

D. Problem resolution about the payments to the Custodians

The problem of payment to custodian was viewed as not aware by 97 % users in Rewa and 89 % in Mandla district.

Table X.D. Problem resolution related to payments to Custodians

Telecom District		No. of Users	Percent
Rewa	Externally	3	3.0
	Not aware	97	97.0
	Total	100	100.0
Mandla	Internally	1	1.0
	Externally	10	10.0
	Not aware	89	89.0
	Total	100	100.0

E. Problem resolution about the other alternate service providers

98 % VPT users in Rewa and 100 % in Mandla are not aware about the problem resolution in Rewa and Mandla districts.

Table X.E. Problem Resolution related to Alternate Service Providers

Telecom District		No. of Users	Percent
Rewa	Externally	2	2.0
	Not aware	98	98.0
	Total	100	100.0
Mandla	Not aware	100	100.0

SWOT ANALYSIS

DISTRICT : MANDLA

(1) Village Madhopur

The village Madhopur is situated in Bichhiya Tehshil of Mandla District of Madhya Pradesh. The village is connected through National high way No. 12 A to the Mandla town, which is 35 kilometers away. Even though the road to the village is declared as a national highway, the condition of the road is in a very bad situation. The village has large forest coverage with trees of several important species like *sal* and teak. The social composition of the village was quite heterogeneous with people from several castes as well as tribes staying in the village.

The custodian for the VPT in the Madhopur village is Kishan Chand Mulchandani. The VPT has been shifted to him one year back, since the previous custodian was very irregular in paying the telephone bills. The VPT is placed in a roadside shop, and therefore, making it accessible to all through out the day.

Strengths

- Increased rural connectivity through VPT
- Generation of employment opportunities through passing of information from nearby towns to the village
- Maximum use by truck drivers owing to its placement in a road-side shop
- Used by all categories of caste and tribe
- Located in an approachable place throughout the day
- Many households get information about their members who are working in the city / town

Weakness

- Since the VPT is provided through land cable wiring (landline), rats cut the cable quite often
- The underground cable also gets damaged whenever any road widening or any other repairing work is carried out
- Repairing work takes more than a week
- Lack of billing machine to display the duration of call and call charges

Opportunities

- If a separate cabin is provided with fan facility, it will result in attracting more customers to VPT
- VPTs have huge potential for generating employment opportunities though passing of information to village
- If call charges can be reduced for the customers especially for making STD calls, VPT can attract more customers

Threats

- Existence of public call booths (PCO) by private providers such as TATA, IDEA, Reliance

(2) Village Aurai Ryt

The village Aurai Ryt is situated in Bichhiya Tehsil of Mandla District of Madhya Pradesh. The village is connected through National high way No. 12 A to the Mandla town, which is 50 kilometers away. Even though the road to the village is declared as a national highway, the condition of the road is in a very bad situation. The social composition of the village was quite heterogeneous with people from several castes as well as tribes staying in the village.

The custodian for the VPT in the Aurai Ryt village is Jagdish Kumar Chandrol. The VPT has been there with this custodian for last 15 years. The custodian of the VPT is also the postman of the nearby post office. The VPT is placed in a roadside shop, thereby, making it accessible to all through out the day. The village has one nationalized bank, i.e the Punjab National Bank, which is situated adjacent to the VPT.

Strengths

- VPT is used by the employees of the bank for both official and personal purposes, owing to its location closer to the bank
- Increased rural connectivity
- Since the VPT used WLL technology, it was reported to be more convenient by many.

Weakness

- Custodian was not very much cooperative as reported by many of the respondents
- In the absence of calling meters, custodian has his own calling rates, which amounts to confusion and dissatisfaction among the customers about call charges
- VPT was used more or less as a personal phone by the custodian
- Inconvenience reported by respondents in the absence of proper display board and location of the VPT inside the shop
- Compared to other PCOs, the VPT was less visible to customers

Opportunities

- Separate cabins for VPT can result in more customer satisfaction
- Separate billing meters should be installed for clarity about billing
- BSNL should consider about changing the custodian, since the present custodian is not so cooperative to the villagers

Threats

- Since many of the villagers were affluent, uses of mobile phones was high
- Presence of coin box telephones from other service providers like Air Tel, IDEA and Reliance

(3) Village Patpara Ryt

The village Patpara Ryt is situated in Mandla Tehshil of Mandla District of Madhya Pradesh. The village is connected through a State high way to the Mandla town, which is 45 kilometers away from the village. The social composition of the village was homogeneous in nature with all the households belonging to tribal communities.

The custodian for the VPT in the Patpara Ryt village is Fundu Lal. The VPT has been there with this custodian for last 10 years. The VPT is placed in a roadside shop, thereby, making it accessible to all through out the day.

Strengths

- Telecommunication facility to such a remote village
- VPT is very effective during emergency requirements for communication
- People get information about employment opportunities through VPT even in remote areas
- Personal communication has become easier through VPT
- Tribal people in this village of Mandla are well connected due to VPT

Weakness

- Acute power shortage
- Lack of awareness about the use of VPT
- Customers' confusion about bill
- Not so comfortable, especially for women to talk private matters
- Low paying capacity of customers
- Operation and maintenance cost of VPTs at remote areas are more

Opportunities

- Separate closed cabin to ensure privacy of customers and undisturbed conversation
- Awareness about and provision of STD facility to all VPTs in the context of removal of 95 dialing across India
- VPT with Solar Panel can overcome the problem of prolonged power failure
- Call charges reduction to increase customer satisfaction
- Independent telecom tower to improve connectivity

Threats

- Misuse of battery for purposes other than running the VPT
- Less awareness about phone usage

(4) Village Bahmani (Partala)

The village Bahmani is situated in Niwas Tehsil of Mandla District of Madhya Pradesh. The village is connected through a narrow road from the National Highway. It is nearly 55 kilometers away from the Mandla district head quarter. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in the Bahmani village was Anup Agarwal. WLL technology was used for the VPT.

Strengths

- People of this village are very much dependent upon VPT for communication since it is difficult to access this village through road
- VPT is very effective during emergency requirements such as flood and diarrhea.
- Some of the business households of the village use VPT to procure materials for their business

Weakness

- Absence of separate cabins for VPT and electronics meters for billing
- Less privacy to customers while talking through VPT
- Acute power shortage in the village making the phone practically dysfunctional
- Absence of display board

Opportunities

- Awareness should be created among customers about the benefits of VPT
- Proper display of important numbers of nearest agricultural *mandi*, police station, hospitals, ambulance, etc. would be more beneficial.
- Use of solar panels could overcome the problem of prolonged power cut

Threats

- Difficult road network to the village, which works as a bottleneck to proper operation and maintenance of the telephone
- It was reported during field work that once there was continuous power failure for four days, which resulted in discharge of the telephone battery

(5) Village Pipariya Mal

The village Pipariya Mal is situated in the Niwas Tehsil of Mandla district of Madhya Pradesh. After travelling almost 72 kilometers in the National Highway from Mandla, one has to take a narrow *pucca* road of approximately 12 kilometers in a hill terrain to approach the village. It is one of the remotest tribal villages in Mandla, but connected with average road network and electricity facility. The custodian for the VPT in the Pipariya Mal was Mahaveer Singh Khumbare.

Strengths

- Connectivity was relatively good owing to close positioning of the BSNL tower
- Increased personal communication through VPT
- Availability of information regarding business and job to the villagers through VPT
- Informing the local police station about occurrence of fire in the nearby forest
- Informing the local administration about incidence of conflict among two tribal groups

Weakness

- Repeated power failures especially during monsoon season results in discharge of battery of VPT
- Maintenance of the telephone (during monsoons) in the case of any problem takes much time owing to the distance of the village
- Lack of separate booth and billing meter

Opportunities

- Use of solar panel could be a better option to tackle power failure related problems
- Provisioning of electric billing meters could generate more interest among customers to use VPT

Threats

- Insufficient incentives to custodians, which hampers their profit from owning the VPT

(6) Village Lato

The village Lato is situated in the Bichhiya Tehsil of Mandla district of Madhya Pradesh. It is around 65 kilometers away from Mandla town and placed within a thickly covered forest area. The custodian for the VPT in the village Lato was Siva Das Gaikwad. He is the secretary of the Panchayat and quite a cooperative person in the village. The BSNL officials stated that the villagers unanimously decided to place the VPT in his house. According to the villagers, the custodian many a times pays the bill from his pocket and helps the poor and disadvantaged people.

Strengths

- Increase in family income after getting information about employment opportunities in cities through VPT
- Many people from this village are mostly working as construction workers in the nearby city of Raipur. Their families get information about their wellbeing through VPT
- It was observed during the research that, few ladies were waiting at the custodian's house for incoming calls. They stated that VPT is very beneficial for them
- Students got information about different opportunities from cities through VPT

Weakness

- Separate cabin with electronic billing machine will be more satisfactory for the customers
- Lack of electricity has proved to be a hindrance in usage of WLL phones
- Call charges reduction for the customers

Opportunities

- The study reveals that in case of prolonged power cuts the VPT needs extra power backup battery to function uninterruptedly
- Use of solar panel could be a better option to tackle power failure related problems

Threats

- Call charges for BSNL cell phones are less which create threat for VPTs

(7) Village Atariya

The village Atariya is situated in the Nainpur Tehsil of Mandla district of Madhya Pradesh. It is around 45 kilometers away from Mandla town. The custodian for the VPT in the village Atariya was Chokhelal Thakur. He has good reputation as a knowledgeable person in the village. The VPT is placed in his house as per the panchayat's decision. There are some conflicts pertaining to the decision by some of the differing groups. However, the beneficiaries

stated that they get full cooperation from the custodian. He passes the messages to the concerned person even during night.

Strengths

- Expenditure on traveling to relative's houses has decreased, as people can talk to them through VPT
- Passing of emergency information has become easier due to VPT
- There are some school teachers who have come to work in the village school. They are of the opinion that communication with their family members has become easier and comfortable through VPT. Earlier they used to travel to the nearby city to call from PCO booths.

Weakness

- Voice clarity is not there during monsoon season
- Lack of awareness about the use of VPT
- Customers' confusion about bill

Opportunities

- Better maintenance of VPT will improve telecom connectivity in the rural areas
- Awareness campaigns about the advantages of VPT

Threats

- Competition from private service providers such as Idea, Reliance, Airtel – mobiles, landlines, STD/PCOs and coin box
- Profuse availability and better service of private players in terms of connectivity and clarity in billing

(8) Village Samnapur

The village Samnapur is situated 55 kilometres away from Mandla town and five kilometers away from State Highway. From the pucca road, the shop in which VPT was situated was 500 metres. The village Panchayats selected Mr. Sewakram Thakur as the custodian since he is the Sarpanch of the Panchayats. There are other added services like provision of grocery and stationary available in the shop, which is very convenient for the people. Moreover, there was an *atta-chakki* attached to the shop.

Strengths

- Increased personal communication through VPT
- Information regarding job opportunities through VPT
- Intimation of incidence of flood to the local authorities through VPT

Weakness

- Noise from *atta-chakki* creates trouble in hearing properly in the telephone
- The shop is a crowded place where women feel shy to talk over phone
- During night women do not feel safe to wait at the shop for incoming calls

Opportunities

- Involvement of community in selection of the VPT custodian to make the performance more effective
- Introduction of internet facility with the VPT will attract youth generation

Threats

- Private service providers' lucrative and convenient offers
- Convenience and comfort in using cell phones

(9) Village Palehara

The village Palehara is situated in Mandla Tehsil of Mandla District of Madhya Pradesh. The village is connected through National high way No. 12 A to the Mandla town, which is 55 kilometers away. The construction work of the road is going on under the Pradhan Mantri Gramin Sadak Yojana (PMGSY). The social composition of the village was quite heterogeneous with people from several castes as well as tribes staying in the village.

The custodian for the VPT in the Palehara village was Radheram Choudhury. The VPT has been there with this custodian for last 8 years. The custodian has the only grocery shop of the village, which is located in the center of the village. It also has an *atta-chakki* attached to it.

Strengths

- Information about employment opportunities in cities from building contractors to the construction workers through VPT
- There is a primary health centre located in the village, whose staff use the VPT regularly
- Women benefit more from VPT, as they get information about the male members of their families who are working in the cities
- There was a staff from the Agriculture Department who stated that he was able to communicate to his office by using the VPT

Weakness

- High costs of maintenance and repair on part of the service provider
- Inability to pay before due date because of bad road condition. The custodian said that during monsoon the roads become waterlogged and the village remains almost cut off from other places. Payment of bills during those days becomes very difficult.
- Repair and maintenance of VPT also becomes very difficult during monsoon

Opportunities

- Increase the subsidy from 50 percent to 100 percent for the custodian
- Separate closed cabin to ensure privacy of customers and undisturbed conversation
- Separate technical staff exclusively for maintenance of VPT

Threats

- Misuse of battery for running tube lights and tractors. This underplays the main purpose of providing telecom facilities to the rural areas by the government.

(10) Village Khalhe Githuri

The village Khalhe Githuri is situated 65 kilo metres away from Mandla town. One has to travel another six kilometers interior from the Highway on the hills and between thick forest areas to reach the village. The VPT is placed in a grocery shop, which is centrally located. The custodian Karelal Padwar was selected on the basis of his good relationship with the villagers and panchayats members. Moreover, the central location of the grocery shop proved to be another added advantage, which is very convenient for the people.

Strengths

- Increase of rural connectivity in remote villages
- Beneficial during emergency requirements
- Personal communication is easier through VPT

Weakness

- The custodian has put the VPT on a fridge which creates inconvenience for people in using the phone
- Sometimes there is problem in connectivity. Respondents have opined that they had to try continuously for three days to get the connectivity
- The shop owner sometimes goes for work outside the village, during which the shop remains closed. It is said to be inconvenient for the villagers.

Opportunities

- Separate cabin with electronic billing machine will be more satisfactory for the customers
- Good telecom network connection will improve in quality of telecom facility

Threats

- Acute power shortage
- Lack of awareness about the advantages of VPT

DISTRICT : REWA

(1) Village Kati

The village Kati is situated in Huzur Tehshil of Rewa District of Madhya Pradesh. The village is connected through a State high way to the Rewa town, which is 35 kilometers away from the village. The social composition of the village was heterogeneous in nature with different castes and tribes staying in the village. However, the Scheduled castes households are clustered in one corner of the village having a separate boundary. The custodian for the VPT in the village Kati was Naresh Patel. The VPT has been there with this custodian for last 10 years. The VPT is placed in a roadside shop, thereby, making it accessible to all through out the day. He is an old customer of BSNL.

Strengths

- There was a journalist whose house is very near to the VPT booth. He is of the opinion that VPTs are cost effective compared to other service providers. So he uses the VPT for making calls for official purpose.
- Some respondents are of the opinion that VPTs are good for getting incoming calls. Families whose male members are staying outside for work send messages through VPT.

Weakness

- Tata has good schemes, less cost and more convenient. In the rural areas of Rewa, Tata has provided phone almost to every house at less cost.
- The custodian stated that the post man delivers the VPT bill quite late for which he has to pay the fine for late payment
- People are interested but due to less cost of other service providers they are not using VPT

Opportunities

- Call charges reduction will fetch more customers
- Bill collection centers near to the village
- Increase in subsidy to the custodian opting for STD facility. In Rewa, the custodian was getting 30 percent discount for opting STD facility in the VPT. Moreover, he/she has to deposit Rs. 250 for getting STD facility. This seems to be a discouraging fact for people to take up VPTs as custodian.

Threats

- Tata is giving severe competition to the VPT in the rural areas of Rewa.

(2) Village Itaura

The village Itaura is situated in Teonthar Tehsil of Rewa District of Madhya Pradesh. The village is connected through a State high way to the Rewa town, which is 55 kilometers away from the village. The social composition of the village was heterogeneous in nature with different castes and tribes staying in the village. The custodian for the VPT in the village Itaura was Dadu Bhai Yadav. The VPT is placed in his house because of its central location. It is accessible to all through out the day. He also has a flourmill for which people come to his house often. The BSNL officials stated that the placement of the VPT was done on the basis of who can pay the bill regularly. This VPT does not have STD facility.

Strengths

- VPT is used mainly for receiving incoming calls
- There is an Anganwadi teacher whose son is studying in the city and husband is working outside. Her personal communication has increased due to VPT.
- There are some persons in this village who have grocery, stationary and seed shops. They use the VPT to get information on products and also order for different products.

Weakness

- Noise from the flour mill creates trouble in hearing properly in the telephone
- Sometimes voice clarity is not there
- Lack of power supply for long days makes the VPT defunct

Opportunities

- Streamlining of billing for STD and local calls made from VPT (removal of discrepancy of 30 % and 50 % discount)
- VPTs with Solar Panel can overcome the problem of prolonged power failure

Threats

Competition from other service providers such as Tata, Idea and Reliance.

(3) Village Look No. 1

The village Look No. 1 is situated 65 kilometres away from Mandla town and five kilometers away from National Highway. The shop in which VPT is situated was 500 metres from the pucca road. The village panchayat selected Vilay Kumar Dube as the custodian since only he has a shop in the village. There are other added services like provision of grocery, seeds and stationary available in the shop, which is very convenient for the people. Moreover, the custodian is well aware about telephone operations, which actually help many villagers who are not aware about telephones but have to make calls.

Strengths

- Increased personal communication through VPT
- Information regarding job opportunities through VPT
- Intimation of incidence of flood to the local authorities through VPT

Weakness

- Call from Tata to Tata is free. So many people have taken Tata to talk free with their relatives
- VPT remains faulty or defunct during monsoon days

Opportunities

- Awareness should be created among customers about the benefits of VPT
- Proper display of important numbers of nearest agricultural *mandi*, police station, hospitals, ambulance, etc. would be more beneficial.
- Use of solar panels could overcome the problem of prolonged power cut

Threats

- Competition from other service providers such as Tata, Idea and Reliance
- Less awareness about the advantages of VPT.

(4) Village Dugawli

The village Dugawli is situated in Hanumana Tehsil of Rewa District of Madhya Pradesh. The village is connected through a narrow road from the National Highway. It is nearly 70 kilometers away from the Rewa district head quarter. It shares the border with Uttar Pradesh. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in the Dugawli village was Brihaspati Kol. The VPT is placed in his house since he is the Sarpanch of the panchayat and belongs to the tribal community. Besides, his son is an employee of BSNL. The village has predominant presence of tribal community and Scheduled castes. WLL technology was used for the VPT.

Strengths

- Connectivity was relatively good owing to close positioning of the BSNL tower
- Increased personal communication through VPT
- Availability of information regarding business and job to the villagers through VPT
- Informing the local administration about incidence of conflict among two tribal groups

Weakness

- Low paying capacity of customers
- Condition of the roads in the village is very bad.
- Absence of separate cabins for VPT and electronics meters for billing
- Less privacy to customers while talking through VPT

Opportunities

- If the road condition improves then it will help in proper maintenance of the VPTs
- Call charges reduction will help the poor and disadvantaged people to use the VPT

Threats

- The upper caste people in the village are quite rich and can afford mobiles. So, they are not much interested about the improvement of VPT
- This village is quite big in size and spread over a large area. So, the placement of the VPT in the beginning of the village is creating problem for some Scheduled caste households whose house are on the other end of the village

(5) Village Dubgawan (485)

The village Dubgawan (485) is situated in Mauganj Tehsil of Rewa District of Madhya Pradesh. The village is connected through a narrow *kuchha* road from the National Highway. It is nearly 65 kilometers away from the Rewa district head quarter. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in this village was Brij Raj Patel. The VPT is placed in his house since he belongs to one of the educated and prestigious family in the village. Apart from this, during the interview it was found that he has good contacts with the BSNL people.

Strengths

- People of this village are very much dependent upon VPT for communication since it is difficult to access this village through road
- This village has lot of intra-village conflict between different caste groups. The sarpanch stated that they used the VPT to call the police during internal conflicts
- VPTs are an effective device for communication during emergency requirements such as flood and diarrhoea
- Some of the business households of the village use VPT to procure materials for their business.

Weakness

- Lack of billing machine to display the duration of call and call charges
- Some respondents are of the view that they do not prefer the placement of the VPT in the current custodian's house. They want the VPT to be given to anyone from the Scheduled castes or tribes
- Poor road network

Opportunities

- Coin box facility should be provided to avoid confusion about the duration of the calls
- This VPT does not have STD facility. So, STD facility should be provided, but without decreasing the subsidy to the custodian
- Improvement in basic infrastructure like road and electricity will increase tele-connectivity.

Threats

- Lack of interest among the villagers about the utilities of VPT
- Custodian does not want to keep the VPT with him because of less profit.

(6) Village Hidwar

The village Hidwar is situated in Mauganj Tehsil of Rewa District of Madhya Pradesh. The village is connected through a narrow road from the National Highway. It is nearly 60 kilometers away from the Rewa district head quarter. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in the Hidwar village was Lakshmi Narayan. He has a grocery shop. It was unanimously decided to place the VPT at his shop, as it can be used by all. The custodian has good relations with the villagers because of his cooperative nature. WLL technology was used for the VPT.

Strengths

- The distribution of WLL phones for VPTs in place of Landline connections is more effective in terms of network connectivity
- WLL phones are easy to carry to somebody's house for getting incoming calls
- The custodian does not charge money to many customers who are poor

Weakness

- Sometimes voice clarity is not there
- Lack of power supply for long days makes the VPT defunct
- Repair and maintenance takes more time

Opportunities

- If the road condition improves then it will help in proper maintenance of the VPTs
- Call charges reduction will help the poor and disadvantaged people to use the VPT

Threats

- Acute power shortage through out the year.

(7) Village Fool Harchand Singh

The village Fool Harchand Singh is situated in Hanumana Tehsil of Rewa District of Madhya Pradesh. The village is connected through a narrow road from the National Highway. It is nearly 60 kilometers away from the Rewa district head quarter. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in this village was Sudhir Singh. The VPT is placed in his house. WLL technology was used for the VPT. The Grama Sabha decided to place the VPT in his house since he is quite educated and well aware about the usage of telephone.

Strengths

- There was a contractor who used the VPT often. He had to get information from Panchayat Sarpanch and Secretary whose houses are in different villages. According to him, VPT has successfully increased rural connectivity.
- People get information about employment opportunities through VPT even in remote areas
- Personal communication has become easier through VPTs

Weakness

- VPT with STD get 30 percent discount on overall bill while VPT with only local calls get 50 percent discount. This aspect discourages custodian to opt for STD
- Non-display of board with details of the name of the village, VPT number, name of the custodian, tariff rates, toll free and complaint numbers, the designation of the official concerned
- Lack of awareness about how to operate a telephone

Opportunities

- Increase the subsidy for the custodian from 30 percent to 50 percent
- Separate closed cabin to ensure privacy of customers and undisturbed conversation.

Threats

- Lack of awareness about VPT – i.e. availability of telephone for the public at cheap rates

(8) Village Godari No. 6

The village Godari No. 6 is situated in Sirmour Tehshil of Rewa District of Madhya Pradesh. The village is quite interior and connected through a narrow *kucha* road from the National Highway. It is nearly 60 kilometers away from the Rewa district head quarter. The social composition of the village was heterogeneous in nature with members from different castes and tribes residing in it. The custodian for the VPT in this village was Dan Bahadur Singh. The VPT is placed in his house. WLL technology was used for the VPT. The Gram Panchayat decided to place the VPT in his house since his son is the secretary at gram panchayat. Apart from this, his house is near to the Primary Health Centre and Panchayat office, where many people come for their work and chances of using VPT is quite high.

Strengths

- Expenditure on traveling to relative's houses has decreased, as people can talk to them through VPT
- Passing of emergency information has become easier due to VPT
- Staffs of Primary Health Centre have benefited a lot due to the VPT connection by BSNL in this village
- The custodian pays the bill from panchayat's fund and thus do not force the poor and disadvantaged people to pay call charges

Weakness

- Proper display of important numbers of nearest agricultural *mandi*, police station, hospitals, ambulance, etc. would be more beneficial
- Call from Tata to Tata is free. So many people have taken Tata to talk free with their relatives
- VPT remains faulty or defunct during monsoon days

Opportunities

- Provision of billing collection centre near to villages
- Call charges reduction will help the poor and disadvantaged people to use the VPT

Threats

- Competition from private service providers such as Tata, Idea, Reliance, – mobiles, landlines, STD / PCOs and coin box
- Profuse availability and better service of private players in terms of connectivity and clarity in billing

(9) Village Bhathawa

The village Bhathawa is situated in Sirmour Tehsil of Rewa District of Madhya Pradesh. The village is quite interior and connected through a narrow *kucha* road from the National Highway. It is nearly 70 kilometers away from the Rewa district head quarter. The custodian for the VPT in this village was Devendra Kumar Patel. The VPT is placed in his shop. WLL technology was used for the VPT. The Gram Panchayat decided to place the VPT in his shop since it has other added services like selling of seeds, grocery and stationery. His shop was one of the central public places, where people of all caste and community come.

Strengths

- Increased rural connectivity in remote villages through VPT
- Generation of employment opportunities through passing of information from nearby towns to the village
- Used by all categories of caste, tribe and community
- Located in an approachable place throughout the day
- Many households get information about their members who are working in the city / town.

Weakness

- Low levels of return discourage youth to become custodian
- Lack of power supply
- Misuse of battery for purposes other than running the VPT

Opportunities

- Call charges reduction to increase customer satisfaction
- Independent telecom tower to improve connectivity

Threats

- Poor road network in remote villages create hindrances in enhancing rural infrastructure

(10) Village Gerui

The village Gerui is situated in Huzur Tehsil of Rewa District of Madhya Pradesh. The village is on the National Highway and nearly 40 kilometers away from the Rewa district head quarter. The custodian for the VPT in this village was Anand Roop Tiwari. The VPT is placed in his house. WLL technology was used for the VPT. He is an old customer of BSNL who is regular in payment of bills. Moreover, he has good contacts with BSNL lineman.

Strengths

- Connectivity was relatively good owing to close positioning of the BSNL tower
- Increased personal communication through VPT
- Availability of information regarding business and job to the villagers through VPT.

Weakness

- Less discount in case of opting for STD facility
- Not so comfortable, especially for women to talk private matters
- Low paying capacity of customers

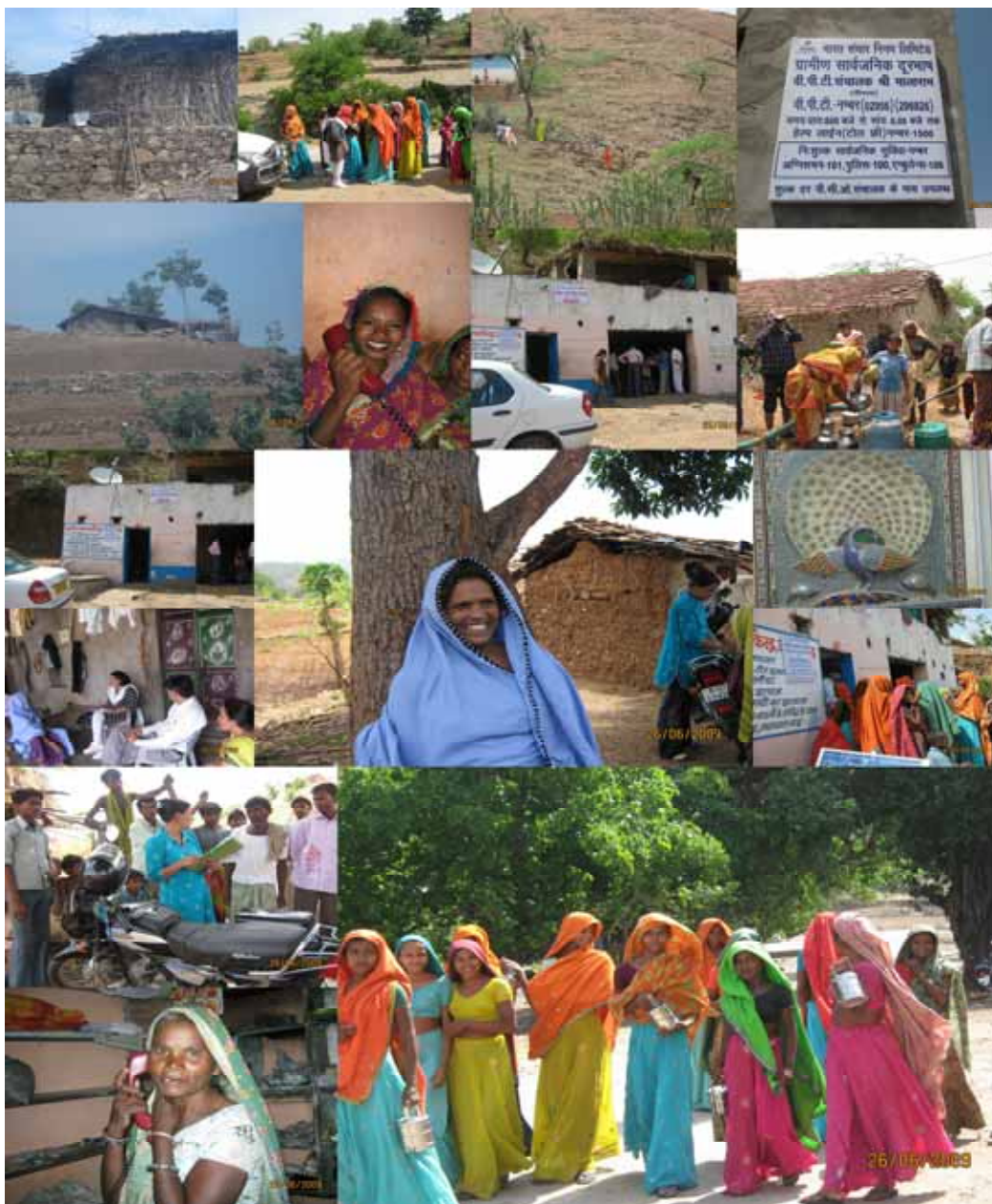
Opportunities

- If a separate cabin is provided with fan facility, it will result in attracting more customers to VPT

Threats

- Poverty and lack of awareness about modern facilities are stumbling blocks for the Government for development.

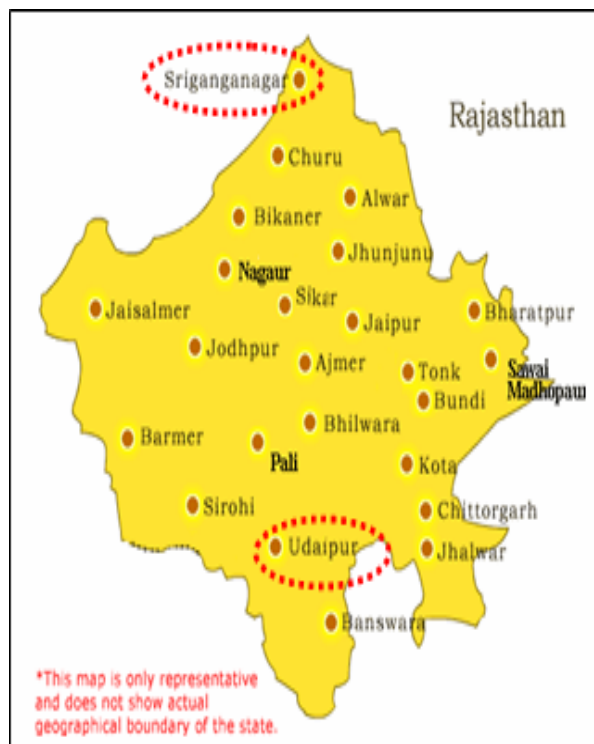
State Report - 8 RAJASTHAN



Rajasthan

Rajasthan is the largest state of the Republic of India in terms of area. It encompasses most of the area of the large, inhospitable Great Indian Desert (Thar Desert), which has an edge paralleling the Sutlej-Indus river valley along its border with Pakistan. The state borders Pakistan to the west, Gujarat to the southwest, Madhya Pradesh to the southeast, Uttar Pradesh and Haryana to the north-east and Punjab to the north.

Rajasthan was formed on 30th March 1949. Geographical features include the Thar Desert along north-western Rajasthan and the termination of the Ghaggar River near the archaeological ruins at Kalibanga, which are the oldest in the subcontinent discovered so far. One of the world's oldest mountain ranges, the Aravalli Range, cradles the only hill station of Rajasthan, Mount Abu. This region receives less than 400 mm of rain in an average year. Summer temperatures can exceed 45° C in the summer months and drop below freezing in the winter.



Rajasthan's economy is primarily agricultural and pastoral and the main industries are mineral based, agriculture based, and textiles. Rajasthan is now the largest state in India after Chhatisgarh state was formed. Its area of 3.42 lakh sq. km. is 10.4 % of the area of the country. The population figures for the year 2001 show that it has 5.5% of the population of the country

Population: 56.47 million (2001 Census,
Climate: Generally dry with monsoon during
July-August
Districts: 33
Languages: English and Hindi commonly used,
as well as indigenous Rajasthani languages
Literacy: 61.03%

but only 1 % of its water resources. 76.6 % of the state's population lives in villages. Rajasthan is primarily an agricultural economy with 41,353 revenue villages- 39787 inhabited and 1566 uninhabited and 222 towns.

Owing to famines, out of the total reporting area of around 34250 thousand hectares, only 15509 to 17075 thousand hectares is sown on an average Rajasthan ranks at 8th in population size among the States and Union Territories in the country. It ranks 24th in the population density because of its size but 29th in literacy in spite of a jump in literacy from 38.55 % in 1991 to 61.03 % in 2001 among the States in the country.

Village Public Telephony (VPT) Programme

Implementing department of VPT in Rajasthan Telecom Circle, under Bharat Nirman Yojna, is at CGM office in Jaipur. Organisational set up is headed by CGM and followed by GM (Operation), DGM (Operation), AGM (VPT), AD (VPT), JTO (VPT). CGM is the head of 24 Telecom circles SSA of Rajasthan.

VPT programme under Bharat Nirman Yojna was initiated on November 10, 2004 in Rajasthan. Total 38,560 villages were covered under this programme as on March 31, 2009 out of the target of total 39,753 villages in the state. All 12,383 uncovered villages were supposed to be covered till end of November 2009. Additionally, villages having more than 2000 population were to be provided 2nd phone called as Rural Community Phone (RCP). Details of Physical Targets and Achievements (No. of newly connected Villages / VPTs) for the last five years are as below as per the information provided by CGM office.

Years	Physical Performance (Newly connected Villages / VPTs)	
	Target	Achievement
	No. of VPTs	No. of VPTs
2004-05	957	1,073
2005-06	3,447	4,840
2006-07	3,990	3,996
2007-08	2,477	1,283
2008-09	1,512	627

Authorities in the state are of the opinion that VPT is an important programme of BNY and first priority for VPT installation is given to Government places, which opens only during day time. Second choice is decided by the Sarpanch that has political influence. After that preference, about location is decided by Gram Panchayat followed by the approval of Sarpanch. In case of DNP (Disconnection due to non-payment) shifting of location is done with the approval of Sarpanch, which takes lot of time.

CGM office has definite action plan for VPT programme for installing new VPT and replacement of MARR (Multiple Access Radio Relay) VPT by CDMA. Rajasthan Circle has successfully achieved all of the laid down physical targets of VPT installation since 2004. Regarding extended services on VPT in Rajasthan it is highlighted that in 2004-09 period, 10,203 VPTs are having CDMA WLL technology with features of SMS and internet browsing up to 14.4 Kbps, broadband PC FAX etc. This limited achievement of extended services in VPT in Rajasthan was due to lack of willingness, awareness and interest in end users.

The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. Officials at CGM office stated that data regarding sanction, release and expenditure of funds is not available specifically for VPT.

Income for aggregate billing reveals a sharp decline of 57.87% in the total billing amount in comparison to year 2004-05. Although the office was not having specific figures for VPT income and expenses.

Similarly, in the matter of accessing information regarding staff availability for particularly this scheme it was revealed that there are no separate staff earmarked only for VPTs and also department don't face any shortage of staff.

As far as monitoring of VPT is concerned itself has a mechanism and guidelines for monitoring and supervision of VPT scheme. Although exclusive staff have not been earmarked for VPTs, the existing staff looking after the maintenance of telecom network has also been assigned the work of installation, operation and maintenance of VPTs on their respective areas. Visit is made once in a month per VPT or more as per the requirement. Repair and maintenance is responsibility of BSNL and they have their own technical staff around 2000 looking after it. BSNL state office also have organized training programme for up scaling of their staff skills. Regular training is being imparted to the field staff as well as senior technical officers by well-established technical centres at Jaipur, Ghaziabad and Jabalpur.

Considering any competition for VPT from other service providers it was expressed by the authorities that there is no competition in Rajasthan as no other private operator has come forward in this programme.

CGM office detailed their future plan categorically. This includes installation of 2nd VPT called RCP in those villages where no other facility other than VPT is available, continuous monitoring and visit of field staff at regular interval, use of WLL, DSPT and FCT (Fixed cellular Terminals) technology for better performance of VPT, provision of internet, broadband and fax etc and regular training for increased awareness of technologies.

Effective communication at affordable cost and easy accessibility to a large rural population is the main strength of VPT according to the officials at State level. They also don't feel any scarcity of funds for implementing this programme on the Philip side of VPT is non availability of regular power supply in far flung rural areas that often drains out the battery and causing interruption in the services. Pointer also found regarding limitation in maintenance and repair of VPT due to difficult accessibility of VPT in remote rural areas. It was also expressed that due to minimal margin in VPT, people are not willing to have custodianship because of low subscriber base and very low per subscriber revenue. This makes it commercially non-viable.

CGM specifically insisted on regular power supply by a separate feeder so that VPT may work regularly. He also recommended quick decision making which otherwise takes a lot of time to implement giving others a chance to move ahead in competition.

The next section discusses the performance of VPTs in Udaipur and Sriganganagar SSA against the backdrop of discussion on the performance of VPTs at the state level.

DISTRICT : UDAIPUR

Udaipur, also known as the City of Lakes, is a city, a Municipal Council and the administrative headquarters of, the Udaipur district in the state of Rajasthan in western India. It is the historic capital of the former kingdom of Mewar in Rajputana Agency. Udaipur District is bounded on the north-west by the Aravalli Range. It is bounded on the north by Rajsamand District, on the east by Chittaurgarh District, on the south-east by Banswara District, on the south by Dungarpur District, and on the southwest by the state of Gujarat. It is part of the Mewar region of Rajasthan.

The district is generally hilly. The western portion of the district is drained by the Sabarmati River, which originates in the Aravalli Range of Udaipur District flows south into Gujarat. Udaipur is located at 24°35'N 73°41'E / 24.58°N 73.68°E. It has an average elevation of 598.00 metres. The climate of Udaipur is tropical, with the mercury staying between a maximum of 42.3°C and a minimum of 28.8°C during summers. Winters are a very cold with the maximum temperature rising to 28.8°C and the minimum dipping to 2.5°C.

As per 2001 Census, Udaipur had a population of 550,000. Males constitute 53 % of the population and females 47 %. Udaipur has an average literacy rate of 77 %, the national average is 79 %: male literacy is 83 % and female literacy is 72 %.

Udaipur district is a SSA of BSNL that includes Rajsamand district also. BSNL officials were of the opinion that VPT is essential specially in those remote areas where till date no connectivity could be provided. They were satisfied that in Udaipur they were able to achieve all physical targets of VPT, though no extended services are available on any VPT in the area. While discussing the strengths and weaknesses of VPT in the area, it was revealed that it provided communication facility to rural and tribal areas which enable them to be connected with outside world and also increases tele-density in rural areas. Non availability of regular power supply is the main hurdle in its operation. Lack of infrastructure is also understood as a factor of limitation for proper maintenance and repair of VPT service. Another factor of fault is ignorance among custodians about the instrument and cable damage by other agencies. They also felt it economically non viable as ARPU is very less and expenses are high. Officials suggested that improved infrastructure, regular power supply, installation of solar panels and proper orientation of custodians and awareness generation of users may increase the performance of VPTs.

DISTRICT : SRIGANGANAGAR

Sriganganagar District is a northern most district of Rajasthan state in western India. The town of Sriganganagar is the district headquarters. Sriganganagar District is located between Latitude 28.4 to 30.6 and Longitude 72.2 to 75.3. Total area of Sriganganagar is 11,154.66 km² or

1093352 hectares. It is surrounded on the east by Hanumangarh District, (Hanumangarh district was carved out of it on July 12, 1994) on the south by Bikaner District, and on the west by Pakistan and on north by Punjab. Named after the Maharaja of Bikaner. Sriganganagar District was part of erstwhile Bikaner State. This was mostly a uninhabited region. History of this district is testimony of vision and efforts of Maharaja Sri Ganga Singh Ji who visualised and built the Gang Canal after the great famine of 1899-1900. Water of Sutluj River were brought into the region through 89 miles long Gang Canal in 1927 which turned this region into the bread basket of Rajasthan. This is one of the most prosperous districts not only of Rajasthan but also India.

Total population of District is 1,789,423, with total male population of 955378 and female population of 834045. Density of Population is 224 per sq km. The literacy rate is 64.74 % (2001 Census).

Economy of Sriganganagar district is dependent on agriculture. Major crops of the region are Wheat, Cotton, Mustard, Guar, Grams, and Sugarcane. Horticulture is also becoming popular among farmers. Kinnu (a citrus family fruit) is a popular horticultural produce and other fruits of citrus family are also grown. Industries in Sriganganagar District are based on agriculture. Major industries are Cotton Ginning and pressing factories, mustard oil mills, wheat flour mills, sugar mill and cotton spinning and textile factories. Most of the factories are located in and around Sriganganagar city.

In Sriganganagar district a SSA of BSNL that includes another district Hanumangarh officials were of the view that VPT scheme is not viable in the area as cost is high specially because of high salaries of staff, low subsidies and high expenditure to engine alternator due to acute power supply problem and high electricity bill due to high rates. They suggested that vehicles on the basis of number of VPTs or on the basis of geographical area should be specially allotted for maintenance of VPT. And also long duration battery backup (at least lasting 3-4 days) should be ensured while purchasing IFWT. Although they felt VPT is very useful in the villages and unconnected areas to help them reach the interior area. This is a social obligation to society and economical weaker section and more useful in remote areas where GSM mobile and other telecom services are not available. VPT is easily accessible to whole villagers at very low rates.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPTs in the rural areas, the present study included two districts in Rajasthan – Udaipur and Sriganganagar. In Sriganganagar SSA 100 VPT users and in Udaipur SSA 95 users were contacted / covered during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, and details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** The socio-economic profile of the respondents covered under the present study revealed that most of them were (49 %) in Sriganganagar and Udaipur districts (44 %) of Rajasthan.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Sriganganagar	General	16	16.0
	Other Backward Class (OBC)	49	49.0
	Scheduled Caste (SC)	33	33.0
	Scheduled Tribe (ST)	2	2.0
	Total	100	100.0
Udaipur	General	9	9.5
	Other Backward Class (OBC)	44	46.3
	Scheduled Caste (SC)	6	6.3
	Scheduled Tribe (ST)	36	37.9
	Total	95	100.0

Among the respondents 60 % and 51 % were females in Sriganganagar and Udaipur districts, respectively.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Sriganganagar	60	40	100
Udaipur	51	44	95

The primary occupation data revealed that majority 37 % were home makers in Sriganganagar and 26 % in Udaipur. 54 % of VPT users were functional literates in Sriganganagar and 46 % were not literates in Udaipur.

Table I.A.3. Primary Occupation and Educational Qualification

S. No.	Primary Occupation (Self)	Sriganganagar	Udaipur
1	Agriculture	8	16
2	Agriculture Casual Labour	16	14
3	Own Business	3	10
4	Self employed in Services	1	1
5	Salaried work	2	8
6	Homemaker	37	26
7	Livestock Management	1	0
8	Non-working Adults	10	3
9	Students	3	1
10	Dependents	3	8
11	Non Agriculture Casual Labour	14	7
12	Non-working Children	1	0
13	Self employed in household industry	1	1
	Total	100	95
Educational Qualification			
1	Not literate	54	46
2	Functional literate	6	16
3	Primary	5	7
4	Upper Primary	18	8
5	High School	11	7
6	Intermediate	2	4
7	Graduate	1	4
8	Above Graduation	3	3
	Total	100	95

B. Particulars of Home of VPT Users

B.1. Type of House: Majority of the VPT users owned semi-pucca houses in Sriganganagar (40 %) and pucca houses in Udaipur (53 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Sriganganagar	Kucha House	29	29.0
	Semi-Pucca House	40	40.0
	Pucca House	31	31.0
	Total	100	100.0
Udaipur	Kucha House	33	34.7
	Semi-Pucca House	9	9.5
	Pucca House	53	55.8
	Total	95	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that majority are having electricity in their houses (83 % in Sriganganagar and 74 % in Udaipur).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Sriganganagar	Electricity not available	17	17.0
	Electricity available	83	83.0
	Total	100	100.0
Udaipur	Electricity not available	21	22.1
	Electricity available	74	77.9
	Total	95	100.0

- B.3. Distance of House from Pucca Road:** 40.6 % houses of respondents in Sriganganagar and 70 % in Udaipur were situated at the distance of more than 100 metres but less than 1 km. from pucca road.

Table I.B.3. Distance of house of Users from pucca Road

Telecom District	Distance	No. of Users	Percent
Sriganganagar	100 metres or less	25	25.0
	More than 100 metres but less than 1 km	49	49.0
	More than 1 km	26	26.0
	Total	100	100.0
Udaipur	100 metres or less	22	23.2
	More than 100 metres but less than 1 km	35	36.8
	More than 1 km	38	40.0
	Total	95	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 48 % respondents were staying at more than 10 kms., in Sriganganagar and 48 % were staying more than 2 but less than 10 km in Udaipur district of the state of Rajasthan.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Sriganganagar	Upto 2 km	34	34.0
	More than 2 but less than 10 km	18	18.0
	More than 10 km	48	48.0
	Total	100	100.0
Udaipur	Upto 2 km	43	45.3
	More than 2 but less than 10 km	48	50.5
	More than 10 km	4	4.2
	Total	95	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at Home:** Majority (72%) respondents in Sriganganagar district were having telephone at their home whereas in Udaipur 62 % were not having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Sriganganagar	Telephone Not available	28	28.0
	Telephone available	72	72.0
	Total	100	100.0
Udaipur	Telephone Not available	36	37.9
	Telephone available	59	62.1
	Total	95	100.0

- C.2. Type of Telephone:** Among the respondents 75.2 % were having mobiles in Sriganganagar and 80.9 % in Udaipur.

Table I.C.2. Type of Telephone

Telecom District	Type of phone	No. of Users	Percent
Sriganganagar	Landline	25	24.8
	Mobile	76	75.2
	Total	13	101
Udaipur	Landline	17	18.1
	Mobile	76	80.9
	Others	1	1.1
	Total	11	94

- C.3. Details of Service Provider:** Regarding the details about service providers to the respondents, BSNL was found to provide services to maximum respondents in Sriganganagar (43 %) and Airtel (62 %) in Udaipur.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
Sriganganagar	BSNL	43	43.0
	Airtel	27	27.0
	Vodafone	27	27.0
	Idea	2	2.0
	Reliance Communications	1	1.0
	Total	100	100.0
Udaipur	BSNL	23	24.7
	Airtel	58	62.4
	Vodafone	7	7.5
	Idea	2	2.2
	Reliance Communications	3	3.2
	Total	93	100.0

II. USAGE OF VPT

A.1. Usage pattern of users is described in terms of STD and Local Calls made in last 60 days. Observations reflect that 77 % VPT beneficiaries in Sriganganagar have used VPT more than 6 times for local calls in last 60 days. In Udaipur 48.4 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	No calls	2	2.0	12	12.0
	2 or less	4	4.0	1	1.0
	3 to 4	13	13.0	3	3.0
	5 to 6	19	19.0	7	7.0
	More than 6	62	62.0	77	77.0
	Total	100	100.0	100	100.0
Udaipur	No calls	23	24.2	35	36.8
	2 or less	8	8.4	2	2.1
	3 to 4	15	15.8	2	2.1
	5 to 6	15	15.8	10	10.5
	More than 6	34	35.8	46	48.4
	Total	95	100.0	95	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that 100 % VPT beneficiaries have not made any STD call in Sriganganagar and 80% in Udaipur district. VPT were not used for STD call in some districts of Rajasthan as there were not having STD facility.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	No calls	100	100.0	100	100.0
	2 or less	-	-	-	--
	3 to 4	-	-	-	-
	5 to 6	-	-	-	-
	More than 6	-	-	-	-
	Total	100	100.0	100	100.0
Udaipur	No calls	76	80.0	89	93.7
	2 or less	6	6.3		
	3 to 4	2	2.1	2	2.1
	5 to 6	4	4.2	1	1.1
	More than 6	7	7.4	3	3.2
	Total	95	100.0	95	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 62 % in Sriganganagar district were residing within 200mts. distance and in Udaipur this was found 52.6 %. That suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Sriganganagar	Within 200 mts from residence	62	62.0
	200-500 mts from residence	20	20.0
	More than 500 mts	18	18.0
	Total	100	100.0
Udaipur	Within 200 mts from residence	50	52.6
	200-500 mts from residence	13	13.7
	More than 500 mts	32	33.7
	Total	95	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

A. Transparency in the decision of VPT location: Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Sriganganagar district 80 % and in Udaipur district 48.4 % users were involved in the decision it means there was good people's participation in decision of location.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Sriganganagar	No	20	20.0
	Yes	80	80.0
	Total	100	100.0
Udaipur	No	49	51.6
	Yes	46	48.4
	Total	95	100.0

B.1. Availability of VPT Service: It was observed in terms of the functional condition of VPT in their villages, information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Sriganganagar district, VPTs were mostly found reliable as 77 % respondents communicated no fault, 90 % as available (not busy), 100 % as open and 82 % not engaged during last month. Similarly, Table shows that in Udaipur district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Sriganga nagar	0	77	77.0	0	90	90.0	0	100		0	82	82.0
	1	1	1.0	1	2	2.0				1	1	1.0
	2	9	9.0	2	4	4.0				2	3	3.0
	3	1	1.0	3	2	2.0				3	3	3.0
	4	5	5.0	5	2	2.0				4	1	1.0
	5	3	3.0							5	5	5.0
	7	1	1.0						100.0	6	1	1.0
	15	3	3.0							10	2	2.0
										15	2	2.0
	Total	100	100.0	Total	100	100.0				Total	100	100.0
Udaipur	0	48	50.5	0	76	80.0	0	75	78.9	0	78	82.1
	1	9	9.5	1	3	3.2	1	9	9.5	1	3	3.2
	2	10	10.5	2	5	5.3	2	1	1.1	2	7	7.4
	3	1	1.1	3	5	5.3	3	1	1.1	3	2	2.1
	5	3	3.2	4	4	4.2	4	1	1.1	5	1	1.1
	7	1	1.1	10	2	2.1	5	2	2.1	10	1	1.1
	10	3	3.2				10	1	1.1	20	1	1.1
	12	1	1.1				30	5	5.3	30	2	2.1
	13	1	1.1									
	14	1	1.1									
	15	5	5.3									
	20	2	2.1									
	30	10	10.5									
	Total	95	100.0	Total	95	100.0	Total	95	100.0	Total	95	100.0

B.2. Same trend could be seen in both the districts of Rajasthan in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Sriganga nagar	0	98	98.0	0	100	100.0	0	100	100.0	0	98	98.0
	2	1	1.0							1	1	1.0
	20	1	1.0							5	1	1.0
	Total	100	100.0							Total	100	100.0
Udaipur	0	79	83.2	0	93	97.9	0	87	91.6	0	88	92.6
	1	2	2.1	1	1	1.1	1	1	1.1	1	1	1.1
	2	2	2.1	30	1	1.1	6	2	2.1	8	1	1.1
	8	1	1.1				10	1	1.1	10	1	1.1
	10	1	1.1				30	4	4.2	30	3	3.2
	15	1	1.1							50	1	1.1
	20	3	3.2									
	30	6	6.3									
	Total	95	100.0	Total	95	100.0	Total	95	100.0	Total	95	100.0

C. Display of Telephone Numbers, Tariff Rate and Availability of Complaint Book

Another aspect of transparency and sharing of information could be seen from following Table. Majority VPTs in Sriganganagar were displaying tariff and toll free numbers. In Udaipur district majority VPT were displaying grievance and toll free numbers but tariff rates were not displayed in 90 % of booth. Same way only 30% were keeping complaint book with them in the district.

Table III.C. Display of Telephone Numbers, Tariff Rate and Availability of Complaint Book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Per Cent	No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent
Sriganganagar	No	2	20.0	2	20.0	5	50.0	10	100.0
	Yes	8	80.0	8	80.0	5	50.0	-	-
	Total	10	100.0	10	100.0	10	100.0	10	100.0
Udaipur	No	1	10.0	1	10.0	9	90.0	7	70.0
	Yes	9	90.0	9	90.0	1	10.0	3	30.0
	Total	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A.** Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that most of the places of installation was found convenient (87 %) and convenient in Sriganganagar. In Udaipur district 59 VPTs was expressed as convenient that were located in shop or houses but 87 VPTs were found convenient.

Table IV.A. Level of Convenience of Place of Installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Sriganganagar	Telephone exchange	-	1	-	1
	Shop	2	48	8	58
	Others	-	38	3	41
	Total	2	87	11	100
Udaipur	Sarpanch house	-	9	9	18
	Shop	2	36	17	55
	Others	4	14	4	22
	Total	6	59	30	95

- B. Convenience of Technology used in VPT:** In Sriganganagar district almost all VPT users found the technology used in VPT convenient and very convenient. 95 % VPTs were using landline technology in this district. In Udaipur district 93 users felt the VPT

technology convenient and very convenient. Landline technology users in their VPTs were 94 in the District.

Table IV.B. Level of Convenience with Technology Used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Sriganganagar	Landline	-	88	7	95
	Mobile	-	5	-	5
	Total	-	93	7	100
Udaipur	Landline	2	73	19	94
	Mobile	-	1	-	1
	Total	2	74	19	95

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. Total 90 users in Sriganganagar shared that WLL FT technology used in their VPTs is convenient and total 88 users in all felt the technologies were convenient. In Udaipur district 59 users in aggregate found the technology convenient.

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
Sriganganagar	WLL FX	6	78	6	90
	WLL FT	-	10	-	10
	Total	6	88	6	100
Udaipur	WLL FX	2	57	29	88
	WLL FT	1	-	1	2
	DSPT	-	2	3	5
	Total	3	59	33	95

- D. Level of convenience with type of instrument:** The following table confirms that almost all felt convenient (97 % in Sriganganagar) about the instrument used in VPT and 60 % felt convenient and 33 % very convenient in Udaipur.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of Instrument	Level of Convenience with type of Instrument			Total
		Not at all convenient	Convenient	Very convenient	
Sriganganagar	Dial Key Board	-	70	1	71
	Single touch Key board	-	27	2	29
	Total	-	97	3	100
Udaipur	Dial Key Board	2	30	6	38
	Single touch Key board	-	30	27	57
	Total	2	60	33	95

- E. Clarity of Voice:** It is an important indicator of quality assessment of VPT installed. In Sriganganagar district almost all VPT users had expressed that there is always clarity of voice. Same way in Udaipur 88 users were having same opinion. In other words, majority were satisfied about the clarity of voice.

Table IV.E. Level of convenience in Clarity of voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Sriganganagar	Rarely	1	3	1	5
	Often	1	63	3	67
	Always	-	24	4	28
	Total	2	90	8	100
Udaipur	Never	2	1	1	4
	Rarely	1	3	5	9
	Often	2	26	5	33
	Always	2	26	21	49
	Total	7	56	32	95

F. Reliable Connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. 96 % users in district Sriganganagar and 66 users in Udaipur district of Rajasthan shared that connectivity of VPT service is reliable. Moreover 4 % users in Sriganganagar and 21 % users in Udaipur district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Sriganganagar	Reliable	96	96.0
	Highly reliable	4	4.0
	Total	100	100.0
Udaipur	Not reliable	8	8.4
	Reliable	66	69.5
	Highly reliable	21	22.1
	Total	95	100.0

V. TIMELINESS OF VPT

- A.** Timeliness aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 30 % respondents in Sriganganagar and 32.6 % in Udaipur district found VPT always available in their area. Similarly, majority time VPT was never closed in both the districts of Rajasthan.

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Sriganganagar	During day time	52	52.0
	Always	30	30.0
	Fixed timings	18	18.0
	Total	100	100.0
Udaipur	During day time	45	47.4
	During night	2	2.1
	Always	31	32.6
	Fixed timings	17	17.9
	Total	95	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 94 % users in Sriganganagar were paying in case of VPT usage, 91 % were paying cash and maximum 66 % were quite regular in payment. In Udaipur district 94.7 % users were paying, 82 % were paying cash and 70 % were found quite regular. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Sriganganagar	No	6	6.0
	Yes	94	94.0
	Total	100	100.0
Udaipur	No	5	5.3
	Yes	90	94.7
	Total	95	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
Sriganganagar	Cash	91	91.0
	Credit	1	1.0
	Partly cash, partly credit	1	1.0
	Others	1	1.0
	Non Payment	6	6.0
	Total	100	100.0
Udaipur	Cash	82	86.3
	Partly cash, partly credit	4	4.2
	Others	4	4.2
	Non Payment	5	5.3
	Total	95	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Sriganganagar district there is no social restriction but in Udaipur district, 6 % VPT users expressed some social restriction. Particularly female users face problem in VPT use as they hesitate to access service in presence of males always sitting there in groups.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Sriganganagar	No	100	100.0
Udaipur	No	89	93.7
	Yes	6	6.3
	Total	95	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Sriganganagar district was between Rs. 250-500 in 50 % cases of VPT and also 30% were having between Rs 500-750. In Udaipur ARPU was found even more than Rs 1000 in one VPT.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No. of VPT	Percent
Sriganganagar	Less than 250	1	10.0
	250-500	5	50.0
	501-750	3	30.0
	751-1000	1	10.0
	Total	10	100.0
Udaipur	Less than 250	3	30.0
	250-500	3	30.0
	501-750	3	30.0
	More than 1000	1	10.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas through increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Sriganganagar	No	98	98.0
	Yes	2	2.0
	Total	100	100.0
Udaipur	No	81	85.3
	Yes	14	14.7
	Total	95	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Sriganganagar district (98 %) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Udaipur) of the state it was observed that only 14 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in Income Categories

Telecom District	Level of Change	No. of Users	Per cent
Sriganganagar	No change reported	98	98.0
	Upto 5 percent	1	1.0
	10 to 20 percent	1	1.0
	Total	100	100.0
Udaipur	No change reported	84	88.4
	Upto 5 percent	1	1.1
	5 to 10 percent	2	2.1
	10 to 20 percent	3	3.2
	More than 20 percent	5	5.3
	Total	95	100.0

Further enquiring about the per cent change in income revealed that 1 % of users believed upto 5% and 1% users felt 10-20% increase in their income in Sriganganagar. In Udaipur district the table reflects 5 % people shared that more than 20 % increase in their household income.

- B. Improvement in Connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Sriganganagar	No improvement	3 (3.0)	66 (66.0)	70 (70.0)
	Marginal Improvement	61 (61.0)	25 (25.0)	25 (25.0)
	Significant improvement	36 (36.0)	9 (9.0)	5 (5.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)
Udaipur	No improvement	9 (9.5)	36 (37.9)	61 (64.2)
	Marginal Improvement	12 (12.6)	32 (33.7)	22 (23.2)
	Significant improvement	74 (77.9)	27 (28.4)	12 (12.6)
	Total	95 (100.0)	95 (100.0)	95 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Sriganganagar	No improvement	62 (62.0)	79 (79.0)	77 (77.0)	87 (87.0)
	Marginal Improvement	32 (32.0)	16 (16.0)	19 (19.0)	10 (10.0)
	Significant improvement	6 (6.0)	5 (5.0)	4 (4.0)	3 (3.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
Udaipur	No improvement	31 (32.6)	44 (46.3)	54 (56.8)	68 (71.6)
	Marginal Improvement	36 (37.9)	31 (32.6)	25 (26.3)	19 (20.0)
	Significant improvement	28 (29.5)	20 (21.1)	16 (16.8)	8 (8.4)
	Total	95 (100.0)	95 (100.0)	95 (100.0)	95 (100.0)

		Sriganganagar	Udaipur
a.	Personal communication	36% Significant improvement	74% significant improvement
b.	Business networking	25% marginal improvement	60% no improvement
c.	Emergency Management		
	Medical	62% No improvement	32% marginal improvement
	Fire	79% No improvement	21% significant improprement
	Police	77% No improvement	26% marginal improprement
	Natural Calamities	87% No improvement	20% marginal improprement
d.	Official Purposes		23.2% marginal improvement

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

S. No.	Information	Sriganganagar					Udaipur				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	84 (84.0)	6 (6.0)	8 (8.0)	2 (2.0)	100 (100.0)	53 (55.8)	8 (8.4)	29 (30.5)	5 (5.3)	95 (100.0)
b.	Market	71 (71.0)	22 (22.0)	7 (7.0)	-	100 (100.0)	33 (34.7)	37 (38.9)	22 (23.2)	3 (3.2)	95 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	43 (43.0)	26 (26.0)	31 (31.0)	-	100 (100.0)	36 (37.9)	16 (16.8)	40 (42.1)	3 (3.2)	95 (100.0)
2.	Education	42 (42.0)	15 (15.0)	43 (43.0)	-	100 (100.0)	53 (55.8)	25 (26.3)	12 (12.6)	5 (5.3)	95 (100.0)
3.	Related to Agrl.	66 (66.0)	5 (5.0)	28 (28.0)	1 (1.0)	100 (100.0)	61 (64.2)	18 (18.9)	12 (12.6)	4 (4.2)	95 (100.0)
4.	Others	74 (74.0)	6 (6.0)	20 (20.0)	-	100 (100.0)	72 (75.8)	12 (12.6)	10 (10.5)	1 (1.1)	95 (100.0)
d.	Natural Calamity / Weather forecasting	94 (94.0)	3 (3.0)	3 (3.0)	-	100 (100.0)	86 (90.5)	7 (7.4)	2 (2.1)	-	95 (100.0)
e.	Rail / Road transport	54 (54.0)	30 (30.0)	14 (14.0)	2 (2.0)	100 (100.0)	65 (68.4)	19 (20.0)	6 (6.3)	5 (5.3)	95 (100.0)
f.	Health Services	39 (39.0)	26 (26.0)	35 (35.0)	-	100 (100.0)	47 (49.5)	22 (23.3)	22 (23.3)	4 (4.2)	95 (100.0)
g.	Agrl. related	92 (92.0)	-	8 (8.0)	-	100 (100.0)	60 (63.2)	19 (20.0)	12 (12.6)	4 (4.2)	95 (100.0)
h.	Business related	85 (85.0)	3 (3.0)	9 (9.0)	3 (3.0)	100 (100.0)	77 (81.1)	9 (9.5)	8 (8.4)	1 (1.1)	95 (100.0)

Table reveals that VPT is not being used as expected by policy planners of India for access to information regarding different aspects (referred in the table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various information sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempted to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, and custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 88 % users in Sriganganagar and Satisfactory by 42.1 % in Udaipur district. Moreover 12 % and 40 % users in both the districts found VPT location highly satisfactory respectively.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Sriganganagar	Not satisfactory	-	-
	Satisfactory	88	88.0
	Highly satisfactory	12	12.0
	Total	100	100.0
Udaipur	Not satisfactory	4	4.2
	Satisfactory	51	53.7
	Highly satisfactory	40	42.1
	Total	95	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 92 % users in Sriganganagar and 72.6 % also in Udaipur district. 21 % users in Udaipur expressed it highly satisfactory. VPT accessibility in terms of its quality also found satisfactory (70 % in Sriganganagar and 69.5 % in Udaipur)

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	Not satisfactory	5	5.0	28	28.0
	Satisfactory	92	92.0	70	70.0
	Highly satisfactory	3	3.0	2	2.0
	Total	100	100.0	100	100.0
Udaipur	Not satisfactory	6	6.3	14	14.7
	Satisfactory	69	72.6	66	69.5
	Highly satisfactory	20	21.1	15	15.8
	Total	95	100.0	95	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair and maintenance were opined as satisfactory by 83 % users in Sriganganagar and 65.3 % in Udaipur in terms of time. In terms of quality repair and maintenance 22 % and 26.3 % users in Sriganganagar and Udaipur were not satisfied.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	Not satisfactory	14	14.0	29	29.0
	Satisfactory	83	83.0	68	68.0
	Highly satisfactory	3	3.0	3	3.0
	Total	100	100.0	100	100.0
Udaipur	Not satisfactory	21	22.1	25	26.3
	Satisfactory	62	65.3	55	57.9
	Highly satisfactory	12	12.6	15	15.8
	Total	95	100.0	95	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 20 % users and satisfactory among 80 % in Sriganganagar. Similarly highly satisfactory among 43.2 % users and satisfactory among 51.6 % in Udaipur.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Sriganganagar	Not satisfactory	-	-
	Satisfactory	80	80.0
	Highly satisfactory	20	20.0
	Total	100	100.0
Udaipur	Not satisfactory	5	5.3
	Satisfactory	49	51.6
	Highly satisfactory	41	43.2
	Total	95	100.0

- E. Other Service Providers:** The response about level of satisfaction of other service providers disclosed 77 % satisfaction in Sriganganagar and only 44 % in Udaipur whereas 8% and 31 % were highly satisfied respectively.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
Sriganganagar	Not satisfactory	15	15.0
	Satisfactory	77	77.0
	Highly Satisfactory	8	8.0
	Total	100	100.0
Udaipur	Not satisfactory	22	23.2
	Satisfactory	42	44.2
	Highly Satisfactory	31	32.6
	Total	95	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that all most all the custodian of VPT were making payment regularly in the both the districts

Table IX. Regularity in payment

Telecom District	Regularity	No. of Custodians	Percent
Sriganganagar	Yes	10	100.0
Udaipur	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 73 % users in Sriganganagar district were not aware about the problems about VPT location and in Udaipur 35.8% VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Sriganganagar	Internally	27	27.0
	Externally	-	-
	Not aware	73	73.0
	Total	100	100.0
Udaipur	Internally	34	35.8
	Externally	1	1.1
	Not resolved	7	7.4
	Not aware	53	55.8
	Total	95	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 83% in Sriganganagar and 60 % in Udaipur district were not aware about the problem. About problem solution of quality accessibility also users were not aware in Sriganganagar (84 %) and in Udaipur (63 %).

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	Internally	16	16.0	15	15.0
	Externally	1	1.0	1	1.0
	Not resolved	-	-	-	-
	Not aware	83	83.0	84	84.0
	Total	100	100.0	100	100.0
Udaipur	Internally	28	29.5	22	23.2
	Externally	4	4.2	5	5.3
	Not resolved	6	6.3	8	8.4
	Not aware	57	60.0	60	63.2
	Total	95	100.0	95	100.0

- C. Problem Resolution related to Repair and Maintenance:** Regarding the problem solution of timely repair and maintenance, 80 % and 70.5 % users were not aware in Sriganganagar and Udaipur districts, respectively. Similarly in the case of the problem of quality repair and maintenance 82 % and 63 % of VPT users were not aware in Sriganganagar and Udaipur districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Sriganganagar	Internally	14	14.0	15	15.0
	Externally	4	4.0	2	2.0
	Not resolved	2	2.0	1	1.0
	Not aware	80	80.0	82	82.0
	Total	100	100.0	100	100.0
Udaipur	Internally	23	24.2	27	28.4
	Externally	2	2.1	4	4.2
	Not resolved	3	3.2	1	1.1
	Not aware	67	70.5	63	66.3
	Total	95	100.0	95	100.0

D. Problem resolution about the payments to the custodians

The problem of payment to custodian solved internally according to 15 % users in Sriganganagar and 25.3 % in Udaipur district. Many of them were not aware about the problem related to it.

Table X.D. Problem resolution related to payments to the custodians

Telecom District		No. of Users	Percent
Sriganganagar	Internally	15	15.0
	Externally	1	1.0
	Not aware	84	84.0
	Total	100	100.0
Udaipur	Internally	24	25.3
	Not aware	71	74.7
	Total	95	100.0

E. Problem resolution about the other alternate service providers

86 % VPT users in Sriganganagar and 80 % in Udaipur about the problem resolution in Sriganganagar and Udaipur districts were not aware about the problem resolution of other service providers.

Table X.E. Problem resolution related to other alternate service providers

Telecom District		No. of Users	Percent
Sriganganagar	Externally	14	14.0
	Not aware	86	86.0
	Total	100	100.0
Udaipur	Internally	17	17.9
	Not resolved	2	2.1
	Not aware	76	80.0
	Total	95	100.0

SWOT ANALYSIS

DISTRICT : SRIGANGANAGAR

(1) Village Hindumal Kote

The VPT was installed in middle of the Village Hindumal Kote in Block Sriganganagar. Majority of the villagers were highly satisfied with the VPT working which was located on the recommendation of the Village Panchayat. VPT is based on WLL technology and having only local dialing facility. Custodian was very friendly and sympathetic to all. Most of the people are very poor so custodian was not charging any money from them. Research team could sense a feeling of dissatisfaction among villagers for government and politicians especially young about not providing appropriate infrastructure to villages. This scarcity is creating a huge rural–urban divide.

Strengths

- Custodian of the VPT is friendly maintaining the VPT perfectly
- WLL is installed in the centre of the village which is available all the time
- Most of the villagers are using VPT and fully satisfied with its services
- Behaviour of the custodian is very helpful
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Lack of proper billing system. No bill display machine
- Some time less clarity of Voice
- Not an attractive scheme for VPT custodian
- People are ignorant about the use of VPT other than for personal communication
- Problem in maintenance of battery

Opportunities

- STD facility would increase the facility to people
- Orientation should be provided for wider use of VPT by rural people

Threats

- Increase in mobile accessibility and no of users are limiting use of VPT
- WLL technology is relatively easy to maintain but clarity of voice is an issue in this technology.

(2) Village 60B

VPT in village 60B is very conveniently located in custodian's house on the roadside. It is always accessible to all and opened every time. Location was decided by the villagers. VPT in this village is specially used at the time of crop cutting. Users are happy and expect to reduce the call charges further as most of the people are agricultural and casual labour and having minimal earnings.

Strengths

- WLL is installed in the centre of the village which is available all the time
- Most of the villagers are using VPT and fully satisfied with its services
- Behaviour of the custodian is very helpful
- Useful at the time of cutting of crops
- In case of unavailability of coverage of other service providers VPT based on WLL is useful
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Lack of proper billing system. No bill display machine
- People are ignorant about the use of VPT other than personal communication
- WLL technology is creating problem of break in voice
- Instrument is not in good working condition
- VPT earning is not sufficient to take up as a business

Opportunities

- Orientation should be provided for wider use of VPT by rural people
- Telephone numbers of important Government and markets links should be made available near VPT
- Improved technology for clarity of voice
- Instrument should be changed
- Effort should be made for making more earnings in VPT counter with add on services like internet etc

Threats

- Custodians are not interested with present limited margin
- No of people having mobiles are increasing. They don't feel utility of VPT

(3) Village 50

The VPT is located in the house of custodian in this village of Block Sri Karanpur who belongs to Scheduled Caste. Many people are not aware about the installation of VPT in the village so was not used by many people. As kept in the house accessibility of phone is very less. Location

was decided by a few people and felt not convenient. There was no display board out side to locate public phone. There are a few Sardar Jamindars in the village and mostly labourer and agricultural labourers are getting meagre wages. Most of them are illiterates and are having low exposure and awareness.

Strengths

- Useful at the time of need.
- Location in the centre of the village
- WLL maintenance is relatively less
- Electricity connection available

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- Lack of proper billing system. No bill display machine
- Many people are not aware about the VPT
- Lack of orientation about the use of VPT other than personal communication
- Low clarity of voice
- Problem in maintenance Delay due to shortage of staff and delay in communication facilities
- Net work problem
- Problem in Instrument
- Mainly VPT is used as personal connection

Opportunities

- Awareness creation about the use and location of VPT as public phone
- Display board with tariffs, toll free numbers for emergency and complaints should be furnished
- Wide and proper orientation should be provided for wider use of VPT by rural people
- Improved technology for clarity of voice
- Timely maintenance should be provided
- Instrument should be changed

Threats

- Relatively limited margin for custodian in VPT
- Entry of other mobile operators with economical and easily accessible options

(4) Village 5 LC

The VPT belongs to a Custodian who is an OBC in the Village 5 LC in Block Raisingh Nagar of district Sriganganagar. The location is very convenient to all in the centre of the village in the house of the custodian. All are highly satisfied with the VPT services and behaviour of the

custodian who is sufficiently literate. Mostly this service is being used at the time of marriages and festivals.

Strengths

- WLL is installed in the centre of the village which is always accessible to all
- Most of the villagers are using VPT and fully satisfied with its services
- Users are satisfied with the behaviour of the custodian.
- Useful at the time of festivals and marriages particularly for personal connectivity
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Frequent cut in power supply
- Only local dialing available
- Lack of proper billing system for users. No bill display machine
- Delay in Bill distribution
- Delay in maintenance due to delay in communication to authority and shortage of staff
- People are not aware about the use of VPT other than personal communication
- Senior citizens feel call rate little high

Opportunities

- Provision of battery charging or alternative battery
- STD facility should be added
- Internet facility for more connectivity
- Proper mechanism for delivery and collection of bills in time
- Bi monthly billing cycle
- Reduced call rate for senior citizens
- On line bill payment facility
- Orientation should be provided for wider use of VPT by rural people
- Telephone no of important government and markets links should be made available on VPT
- Timely maintenance for maximum satisfaction for users

Threats

- Frequent cut of power supply in rural areas
- Limited earning attraction for custodian
- Strong presence of other competitive service providers with more attractive options for common users

(5) Village 9 SD

Village 9 SD in Suratgarh Block is located in the shop of the custodian on the advice of the Sarpanch of village. WLL fix wire line VPT is found faulty for last 20 days. Users were

satisfied with the quality of connectivity and voice of VPT. People were complaining about the higher call rates charged by the custodian. Mostly villagers owned mobiles thus were not aware and concern about VPT service in their village.

Strengths

- WLL fix wire line phone installed in convenient location in the shop
- Most of the time available for users
- Regularity in connectivity and Voice clarity due to wire line technology
- Useful at the time of emergency
- Women users are specially happy to use VPT for ease of connectivity to their family members
- Useful at the time of festivals for social networking
- No disconnection due regular power supply

Weakness

- No Display board with tariffs, toll free numbers for emergency and complaints
- Difficult to call inter circle as only local dialing service is available
- Lack of proper billing system for users. No bill display machine
- Higher call rates are charged
- Delay in Bill distribution
- Margin is lower than other service providers
- Bad timeliness in maintenance and repair
- Net work and range problem as in appropriate location of pole
- Minimal use as majority have access to mobile phones
- People are not aware about the use of VPT other than personal communication

Opportunities

- STD facility should be added
- Display board with tariffs, toll free numbers for emergency and complaints
- Proper mechanism for delivery and collection of bills in time
- Action against higher call charges
- Proper and Relocation of pole for high quality of service in the village
- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL

Threats

- Presence of other competitive mobile services
- Good network maintenance and quick delivery system of private operator posing tough competition for BSNL service
- Lack of Profit motive and attitudinal lethargy in maintenance of service by provider

(6) Village 3 HDP

This VPT is covered under the Sriganganagar SSA in Hanumangarh district. Location is convenient in a shop that is almost opened every time. This is suggested by the village panchayat. Accessibility is no issue in the village. Custodian is literate and belongs to OBC. Custodian expressed his satisfaction about the working of the VPT but villagers are not found satisfied with the VPT that's why majority are using mobiles provided by other service provider.

Strengths

- WLL fix wire line phone installed in convenient location in the shop
- Most of the time available for users
- Useful for personal social network
- Display board with tariffs, toll free numbers for emergency and complaints
- Specifically used at the time of new session of school at reopening
- Women users are specially happy to use VPT for ease of connectivity to their family members

Weakness

- Signal and Net work problem due to far away location of Tower
- Difficult to call inter circle as only local dialing service is available
- Lack of proper billing system for users. No bill display machine
- Users feel the existing call rates high
- Delay in Bill distribution
- Maintenance and repair is delayed
- Minimal use as majority have access to mobile phones
- People are not aware about the use of VPT other than personal communication.

Opportunities

- STD facility should be added
- Proper mechanism for delivery and collection of bills in time
- Alternative solution for net work
- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL

Threats

- Presence of other competitive mobile services
- Relatively low attraction for custodian
- Remote location of the village from the tower
- Good network maintenance and quick delivery system of private operator posing tough competition for BSNL service

(7) Village 18 BB

This village is relatively economically prospered as many of the relatives are staying abroad. VPT is installed in the middle of the village in the house with the recommendation of panchayat. Custodian is young businessman belonging to OBC category. Mostly villagers are having mobiles to have connectivity to their family members in USA. They don't feel VPT very useful.

Strengths

- WLL installed in convenient location in central locality
- Most of the time available for users
- Useful for local personal social network
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Signal and Net work problem
- Difficult to call inter circle and international as only local dialing service is available
- Lack of proper billing system for users. No bill display machine
- Users feel the existing call rates high
- Bill distribution not in time
- Margin for custodian is comparatively less
- Problem in timely maintenance and repair
- Minimal use as majority have access to mobile phones
- People are not aware about the use of VPT other than personal communication

Opportunities

- Potential of higher revenue with ISD calls
- STD facility should be added
- Improved delivery of bills for collection of bills in time
- Alternative solution for net work
- Orientation should be provided for wider use of VPT by rural people
- Quick fault repair for higher reliability of service provided by BSNL

Threats

- Presence of other competitive mobile services
- Only local dialing facility without bill display makes VPT less relevant

(8) Village 14 NGC

This Village under Hanumangarh district is under coverage of Sriganganagar SSA. The custodian is functional literate and installed VPT in his cycle repair shop. The location was decided by the advice of Sarpanch of the village, which is 200 meter away from the village. Most of the time it is available but some time it is also found closed.

Strengths

- Useful at the time of need.
- Location in the convenient
- WLL maintenance is relatively less
- Accessible to all
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Fault due to frequent power cut
- Lack of proper billing system. No bill display machine
- Many people are not aware about the VPT
- Lack of orientation about the use of VPT other than personal communication
- Low clarity of voice
- Problem in maintenance Delay due to shortage of staff and delay in communication facilities
- Mainly VPT is used as personal connection

Opportunities

- Provision for high power battery or alternative battery
- Battery charging facility
- Fix time power supply
- Wide and proper orientation should be provided for wider use of VPT by rural people
- Improved technology for clarity of voice
- Internet facility
- Timely maintenance should be provided

Threats

- Severe power shortage in rural area
- Entry of other mobile operators with economical and easy accessible options
- Limited earning attraction for custodian

(9) Village 12 MJD

Village 12 MJD is in Sangariya Block of Hanumangarh district, which is a part of Sriganganagar SSA. VPT location was decided according to the recommendation of villagers. Custodian behaviour is appreciated by most of the villagers, but they do not like BSNL service. VPT is installed in the centrally located shop of OBC owner. Location is quite convenient and accessible to all every time.

Strengths

- Accessible to all, no discrimination
- Custodian is available through out the day as it is installed in a shop

- Villagers paying the bills for their calls.
- Willingness of villagers to use VPT specially for personal network.
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Distant Tower location creating problem of weak signals
- Lack of proper billing system for users. No bill display machine
- Power shortage
- No STD facility
- Delay in fault repair and maintenance
- Limited earning attraction for custodian
- Due to network problem, problem of frequent disconnection
- No separate cabin for phone and also no proper sitting arrangement.
- Delay in distribution of Telephone bills
- Lack of awareness about usage of VPT other than personal connectivity

Opportunities

- Increased awareness about wide use of VPT among villagers
- Strengthen VPT through additional facilities such as STD.
- More responsive mechanism for fault repair
- Facility of recharging of Batteries
- Call rate reduction for BPL
- Add on facility for Internet

Threats

- Location of village is not within of good coverage area of BSNL Tower
- Acute Power shortage in the area

(10) Village 22 NWD

This village of Nohar district also covered under the area of Sriganganagar SSA. VPT technology is WWL fix wire line phone. Villagers are happy with the custodian behaviour, who is functional literate. Complain book was also available there with custodian. Users are highly satisfied with the quality of service of VPT. Location of VPT is in the centre of the village in a shop and was decided by the advice of Sarpanch with the consent of villagers. Usage of VPT is very limited as many people in village have land line phone connections at their home. Only at the time of problem in their landline phone they use VPT. Otherwise there is no reason to use VPT.

Strengths

- Easy and open access to all, no discrimination
- Users highly satisfied with custodian and service both

- Good connectivity and clarity of Voice because of WLL fix wire line phone
- Service available through out the day as it is installed in a shop
- Willingness of villagers to use and maintain VPT generally for personal network.
- No fault in service for long time
- Maintenance is good
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Availability of only intra circle dialing (Local)
- Lack of proper billing system for users. No bill display machine
- No STD facility
- No separate cabin for phone and also no proper sitting arrangement.
- Delay in distribution of Telephone bills
- Lack of awareness about usage of VPT other than personal communication

Opportunities

- Increased awareness about wider use of VPT among villagers for improvement in their quality of Lives
- Strengthen VPT service through additional facilities such as STD.
- Provision of Internet services
- Display machine for billing

Threats

- Limited use as many own land line connection
- Tough competition due to penetration of other mobile service providers
- Limited earning attraction for custodian.

DISTRICT : UDAIPUR

(1) Village Amberi

Amberi village is situated on the roadside of national highway at the outskirts of the Udaipur City. Custodian installed the VPT in his kirana shop after the recommendation and motivation of a BSNL official. He is working in the Gram Sabha of the Village and satisfied with functionality of the VPT. He is happy with the additional income he is receiving from the VPT.

Strengths

- Custodian of the VPT is literate and giving access to all.
- WLL is installed in the shop which is opened whole day long
- WLL is especially convenient as there is frequent and long break up of cable in the area due to highway construction
- Convenient to non-local labour working in the nearby industrial area

- Facilitating regular social connectedness
- Behaviour of the custodian is very cooperative
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Inappropriate location as most of the villagers stay far away from the present location
- Accessibility is difficult after construction of new national highway
- Lack of billing system. At random payment
- Most of the villagers bypass the present location of VPT.

Opportunities

- Village area is big, one more connection is demanded
- Relocation of present VPT is suggested by most of the villagers for easy and equal accessibility
- Awareness generation about VPT usage among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility

Threats

- Availability of economic mobile services at their door steps
- Extensive and wide reach of Other service providers

(2) Village Rapcha

Rapcha village of Block Naw is surrounded by hills. Mobile coverage is poor as there is no tower installed in the area. VPT is best option available and being used by majority of people. VPT is located within the village. Agriculture is the major livelihood of the villagers. Villagers are found highly satisfied with the custodian as well as functionality of the VPT.

Strengths

- Custodian of the VPT is literate and maintaining the VPT well
- WLL is installed in the centre of the village which is available all the time
- In the area surrounding hills WLL is especially useful
- Most of the villagers are using VPT and fully satisfied with its services
- Behaviour of the custodian is very helpful
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Power supply is problem for charging the battery used in WLL
- Lack of proper billing system. No bill display machine
- People are ignorant about the use of VPT other than personal communication
- Problem in maintenance of battery

Opportunities

- Attention should be paid for regular power supply for charging of Battery
- Battery maintenance should be improved for uninterrupted use of VPT
- Orientation should be provided for wider use of VPT by rural people
- Telephone no of important government links should be made available on VPT
- Number of agro markets (MANDIS) should be listed

Threats

- People are awaiting for mobile service to reach the village
- Having perception that mobile is better than VPT

(3) Village Dangiyon ki Hunder

The location of this village is very remote in the Girwa Block. Nearest distance of village in either side of the village is 8 km. Custodian of VPT belongs to OBC and mostly villagers appreciate his behaviour. The location of the VPT was decided by the consensus of the villagers. All are highly satisfied with the facility and maintenance.

Strengths

- Most of the villagers are using VPT and fully satisfied with its services
- Maintenance of the VPT is fine
- WLL is installed as per the agreement of villagers in panchayat
- Behaviour of the custodian is found supportive
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Low clarity of voice because of WLL technology
- Women feel inconvenient to use service in open
- No bill display machine
- Power supply is problem for charging the battery used in WLL
- People are ignorant about the use of VPT other than personal communication

Opportunities

- Wire line technology is preferred for better quality of voice
- Alternative arrangement should be made for charging of Battery
- Awareness should be provided for wider use of VPT by rural people
- Tower installation for all time and quality connectivity

Threats

- Mobile services with additional features are more attractive.

(4) Village Isharwas Daniyana

The custodian of VPT in this village is serving in the department of Police and VPT is installed inside of his house. Although the location was decided by village panchayat, but most of the villagers found this location very inconvenient. Most of them were unhappy with the rude behaviour of the custodian and few had shown interest to know the process of relocation of VPT. They also shared that only yesterday they were informed about this VPT.

Strengths

- Display board with tariffs, toll free numbers for emergency and complaints
- No complain about maintenance and repair
- Installed as per the guidelines
- Influential custodian, quick repair

Weakness

- Many villagers were not aware about the location of the VPT
- Rudeness of custodian desisting people to avail services
- In house location restricting easy and open access to all
- Custodian felt no advantage in VPT because of negligible earnings
- No bill display machine
- Bill payment is inconvenient
- Only local connectivity available on the VPT
- People are unaware about the use of VPT other than personal communication

Opportunities

- VPT should be relocated in convenient to all location like grocery shop
- Custodian should be friendly and business orientated
- Broad band and other add on services should be provided
- Bill collection service should be developed to help in time payment
- Cabin should be provided for privacy
- Battery replacement should be fast
- Awareness generation for wider use of VPT by rural people

Threats

- Mobile service having various advantageous features is giving tough competition
- Wider use of mobile making VPT less relevant

(5) Village Maudi

The VPT in Maudi village is installed right in the centre of the village in a grocery shop. Custodian belonging to OBC is taking full interest in operating VPT. Special feature here was found the existence of barter system in the village. Most of the villagers are very poor. They felt the services of this VPT very convenient, as they are able to use their commodities like

jowar, wheat, milk etc in exchange of accessing telephone services. Many young family members of this village are engaged in waste material business in Maharashtra. This VPT is providing them a great connectivity.

Strengths

- Location of very convenient, easy to access
- Services are available all the time.
- Barter system helping poor villagers to get connectivity
- VPT is providing facility to stay connected with their family members staying out of the state
- Display board with tariffs, toll free numbers for emergency and complaints
- VPT stay functional even after delayed payment

Weakness

- No bill display machine, custodian charges randomly
- Non functionality due to discharged and trip down battery
- No cabin facility, Lack of privacy
- Some time difficult for women to use in the centre and open place
- People are unaware about the use of VPT other than personal communication

Opportunities

- Systematic billing mechanism should be used
- Bill collection service should be developed to help in time payment
- Cabin should be provided for privacy
- Battery charging facility should be made available
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Irregular and limited power supply in rural areas
- Mobile service having various advantageous features is giving tough competition
- Wider use of mobile making VPT less relevant

(6) Village Peepla

The VPT in Peepla village of Gogunda Block was installed in the house of Village Sarpanch. VPT functionality was excellent even it was kept inside the home. VPT service is always accessible, open to all and free of charges. The lady Sarpanch takes care of the VPT shared the feeling of empathy for her fellow poor villagers and expressed that phone facility is being provided without any charge as they have meager income. The uniqueness of the geographical surrounding of this village in Gogunda is that each house is situated on the one hilltop. Before installation of VPT in January 2009, villagers were always using “DRUM BEATING” for tool of communication. Many of the villagers have used phone first time following the installation

of VPT in the Village after independence. Still their relatives are not able to believe that with an instrument like VPT they can talk to their people staying far away. VPT was so widely used that research team could not locate any non-user of VPT. Group discussions were held on two NREGA sites.

Strengths

- All the villagers are using VPT
- Free of charge calling encourage villagers to use VPT at maximum
- VPT functionality was excellent
- VPT was always accessible for all
- Services are available all the time.
- Lady Sarpanch is excessively helpful
- Timely and quick payment of bill
- Lack of mobile converge
- Many youngsters overwhelmed to have connectivity for employment access
- Display board with tariffs, toll free numbers for emergency and complaints
- Solar battery charger
- All the family members of custodian trained to operate

Weakness

- Only local call facility
- OFC length come via Gujarat, so maintenance is a major problem
- Some time problem in clarity of voice in WLL
- No bill display machine
- People are unaware about the use of VPT other than personal communication

Opportunities

- STD facility should be given
- Poor people should get this service free of charge
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality
- Battery charging facility should be made available near by
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Location of hilly area creating limitation for providing service and maintaining it.

(7) Village Kareech

VPT installation in Village Kareech at Gogunda Block in Udaipur district is a commendable task of BSNL. It is an example of outstanding effort of connecting remotest parts of district made by the officials under the Bharat Nirman Yojana. Research Team was overwhelmed to see this site, which is providing connectivity to tribal people absolutely isolated from other areas of the district. This access of telephony was impossible without support of the BSNL officials. CGM, DGM and Divisional engineer with other officials accompanied us to visit this VPT, as this site was extremely remote and difficult to cover in the tribal belt of the district. BSNL have to put more than two days to install this VPT. This VPT is specially included in the study sample to see the DSPT technology of VPT although it is installed in first week of May. This phone is being operated by solar panel. Total cost of this DSPT based VPT is approximately one lakh. In this technology a unique VSAT id is created and call can be made anywhere. BSNL has provision of blocking this VSAT id any time for security reasons. Here no other private operators are showing interest, as margin is very less. This extraordinary successful VPT made research team wish to salute BSNL for their praiseworthy attempt. Most of the villagers were not able to understand the local vernacular language spoken in the district. They were using entirely different dialect. This extremely unusual situation limited the research team to interact with only five beneficiaries and one non-beneficiary. Group discussion was impossible to hold although efforts were made to gauge the feelings with their body language.

Strengths

- First phone installed recently in May first week after more than sixty years of independence
- All the villagers are using VPT
- Call can be made any where
- VPT functionality is excellent
- VPT was always accessible for all
- Services are available all the time.
- Based on the solar battery
- DSPT (Digital Satellite Phone Terminus) technology
- Higher clarity of voice
- Lack of mobile converge
- All villagers were glad to have connectivity for employment access
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- People are not familiar with the use of phone
- First time experience to see the instrument
- Outgoing problem in some area
- No bill display machine

- Feeling Scared to use
- Unaware about the other use of VPT than personal communication
- Possibility of misuse
- Economic non viability as population density is very low

Opportunities

- Awareness should be give for proper use
- Out going facility should be improved
- Provision of spare Battery
- Bill collection service should be developed for ease of payment
- Battery maintenance should be made available near by
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality

Threats

- Location of hilly area creating limitation for providing service and maintaining it.

(8) Village Naion ka Guda

This village is located on the roadside and most people belong to tribe 'Kalbelia'. Their main livelihood is waste collection and their relatives are in Maharashtra. This VPT is helping them to be stay in touch with their relatives and also sometime get information from their contractors. Location is on the tea shop right on the highway road.

Strengths

- Location of very convenient and decided by the villagers
- Services are available all the time.
- VPT is providing facility to stay connected with their family members staying out of the state
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Frequent disconnection in service
- No voice clarity due to weak signals
- Ladies hesitate to use services in open as absence of cabin facility
- Long time for maintenance and repair
- No bill display machine, custodian charges randomly
- Non functionality due to discharged and trip down battery
- People are unaware about the use of VPT other than personal communication

Opportunities

- Underground cable to avoid frequent disconnection in line
- Frequency increment for clarity of voice

- Systematic billing mechanism should be used
- Bill collection service should be developed to help in time payment
- Cabin should be provided for privacy
- Battery charging facility should be made available
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Irregular and limited power supply in rural areas
- Mobile service having various advantageous features is giving tough competition
- Reach of other mobile service providers
- Road widening

(9) Village Baleecha

Village Baleecha of Girwa block is situated on the main national highway connected with west corridor. VPT is located on very convenient location decided by all villagers. All villagers were found satisfied particularly for personal network. Some non-local residents were also using VPT quite often to have connectivity with their family at far off places as it is cheaper than mobile. Custodian was also having another STD PCO available on the same location, which is used more. Women specially mention that VPT is very useful for them to be in touch with their family members who usually own mobile phones.

Strengths

- Location of very convenient and decided by the villagers
- Services are available all the time.
- VPT local charges are cheaper than other service providers (VPT @ Rs. 1, Other services @ Rs. 1.20)
- VPT is providing facility to stay connected with their family members staying away from the village
- Availability of alternative phone in case of non functionality of VPT
- VPT is particularly useful when their own mobile is discharged
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- No bill display machine, custodian charges arbitrarily
- Other phone having STD limits the use of VPT as no display of call charges
- People are unaware about the use of VPT other than personal communication

Opportunities

- Systematic billing mechanism should be used
- Bill collection service should be developed to help in time payment
- Cabin should be provided for privacy
- Awareness generation for wider use of VPT by rural people other than personal use

Threats

- Presence of other mobile operators with extensive marketing
- Mobile service having various advantageous features is giving tough competition
- Road widening

(10) Village Rayna

VPT in Rayna Village is situated in the custodian residence on the hilltop. Location was approved by Gram Sabha. Local dialing was available on this VPT and mostly available 24 hrs to all villagers. All users were satisfied with the services and were basically using for personal connectivity. Most of the houses were kuchha and semi kuchha and constructed on the hillocks in the village. Gathering people from faraway locations of hillock for group discussion was difficult. Group discussion could hold when water tanker arrived and people themselves reached there around the tanker.

Strengths

- Custodian of the VPT is literate and giving access to all.
- WLL is installed in the centre of the village, which is opened all the time
- WLL is especially convenient as location is difficult to cover by line man
- Facilitating regular social connectedness
- Behaviour of the custodian is very cooperative
- Display board with tariffs, toll free numbers for emergency and complaints

Weakness

- Accessibility is difficult as houses are scattered
- Only local dialing facility available
- Lack of billing system. Arbitrary charges

Opportunities

- STD facility is demanded for more use of VPT
- Awareness generation about VPT usage among villagers
- Technical manpower should be made available
- Technical training to local people should be imparted to maintain it well in such kind of geographical locality
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility

Threats

- Extensive and wide reach of other service providers.

State Report - 9 ASSAM



ASSAM

Assam popularly called as the land of the red river and blue hills, Assam is the gateway to the North-Eastern part of India. Situated between 90-96 degree East Longitude and 24-28 degree North Latitude, Assam is bordered in the North and East by the Kingdom of Bhutan and Arunachal Pradesh. Along the south lies Nagaland, Manipur and Mizoram. Meghalaya lies to her South-West, Bengal and Bangladesh to her West.

Assam comprises of 78,438 km² area, of which 35.48 % are forest area. The density of population 340/km². The population figure is 26.66 million (Census- 2001), and the literacy rate is 64.28% (2001 census). Assam is rich in natural resources, minerals, forests and water and has vast tracts of fertile land. It is primarily an agrarian economy, with 74% of it's population engaged in agriculture and allied activities. Cereals like paddy, wheat and plantation crops like tea are grown extensively. Amongst mineral resources, oil takes the top place. Oil was first struck more than one hundred years ago and the oil wells of Digboi and other areas is a major source of fuel for not only the North-East but for the country as a whole.

The economy of Assam can be broadly divided into three sectors- Primary (agriculture, mining etc.) secondary (manufacturing) and tertiary (services like electricity, water, trade, finance, banking, telecommunication etc). In order to boost the economy of Assam, the Central and State Governments are emphasizing on infrastructure development.

The BSNL has been augmenting the development of telecommunication services. The telecommunication service network has undergone a major expansion in the state. BSNL the present telecommunication network in the state is growing fast in comparison to the other parts of the country. Currently, individuals and industry alike face no problems in procuring telephone and other telecommunications facilities. Assam has 1010 telephone exchanges with approximately working connections. Assam Telecom Circle, BSNL is the largest Telecom Operator in Assam providing comprehensive range of telecom services in the state: Landline



phone, WLL Mobile, GSM Mobile, Internet, Broadband, I-Net, IN Services, Telegraph / Telex, Carrier service, MPLS-VPN etc. BSNL Assam Circle is the only service provider, making focused efforts and planned initiatives to bridge the Rural-Urban Digital Divide ICT sector. BSNL has crossed One Million customer base in Assam Circle.

Connectivity and Customer Base of Assam Telephone Circle

Number of Telephone Connection		Rural (Number of Connections)	Urban (Number of Connection)	Total (Number of Connection)
Landline	280638	325597	787872	1113469
WLL	79978			
Mobile	919392			
Broadband	65603			

CGMT, BSNL, Assam Telecom Circle, Panbazar, Guwahati is in charge of implementing VPTs in Assam. The organizational structure of Assam Telecom Circle is given in next page. In the state Assam there are 26,312 numbers of villages, out of which 23,503 numbers of villages were covered by the VPT schemes. In order to mitigate problems of rural connectivity in the state- Assam, BSNL has undertaken an aim to provide at least one telephone connection in the village and extend facility to the villagers. As per the various agreements signed from time to time by BSNL with USO (F) the telecom department prepared an action plan every year. As per Action Plan for the year 2008-09 it has been decided to replace remaining MARR VPTs by DSPTs. Plan have been made to cover balance villages under Bharat Nirman Programme and new VPT agreement by any technology like LL / WLL / GSM and by DSPTs where no other technology is feasible. However, they want to provide VPTs in remaining villages.

If we look into the physical targets and achievement aspects of VPT it was revealed that it achieved only 2955 out of a target of 3853 in 2006-07. In 2007-08 the target was 898 but could achieve only 492 numbers of VPT. The extremist problems, lack of electricity connection, shortage of staff and lack of communication problems were mentioned as major hurdles in achieving the target. The following is the target and performance of VPT expansion performance –

Year	Target No of VPT	Achievement No of VPT
2003-04	8931	1354
2004-05	7577	1965
2005-06	5612	1759
2006-07	3853	2955
2007-08	898	492

The village public telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund.

For managing the VPT in Assam there are no separate staff. The VPTs are maintained by available staff of BSNL by incurring extra expenditure for installation and maintenance.

As far as monitoring and supervision are concerned there are some mechanisms available for monitoring and supervision of VPTs at the State level. This monitoring and supervision work used to be done by the BSNL staff. They prepare a format and guidelines for monitoring and supervision. They do it by maintaining VPT daily testing registers at every exchange as well as from monthly meter reading of TRA billing records. There were no charges for repairing and maintenance. At the block level, the Junior Telecom Officer (JTO) & Telecom Technical Assistant (TTA) are in charge of monitoring and supervision. At the village / exchange level, lineman is in charge of monitoring. Repairs and maintenance of VPTs are solely the responsibility of BSNL. Technical staff (there is no separate staff for VPT) is in charge of the maintenance as reported by JTOs. Due to extremists threat, lack of staff and lack of communication problem it is very difficult in the case BSNL officials to extend regular maintenance service to the VPTs.

The repairing and maintenance activities of VPT used to be done by BSNL staff. There is no outsourcing for it. There is some special technical staff available with BSNL for repair of VPTs. The work distribution is based on number of VPTs. The technical person per VPT depends upon the number of VPTs located in the villages and the available staff. In order to train the technical staff more efficiently sometimes head office used to organize some training programmes. For DSPT (Digital Satellite Phone Terminal) VPT installation and maintenance Training was imparted to field staffs for three days at state level during 2006-07 and 2007-08.

In Assam BSNL did not perceive any competition to VPTs from other private service providers. No private service provider has been appointed for provisioning of VPTs.

Details of Future plans regarding:

1. Expansion of coverage of VPTs: VPTs are being provided in the newly identified villages as per census 2001.
2. Functional efficiency of VPTs : 70%.
3. VPT Technology: Landline, WLL, GSM & DSPT.
4. Providing additional services through VPT: Provisioning of broadband services through VPTs to the villages in progress.
5. Overall review and reorganization of VPT structure: Due to U/G cable damage in most of the villages because of construction of rural roads under PMGSY, the VPTs are restored either through WLL, GSM or DSPT.
6. Future plans for the upgrading the skills of the officers and technical staff:

It is being planned to train staff for DSPT VPT maintenance at SDCA level to reduce non-functionality as well as to educate the VPT custodians.

Strengths and Weaknesses of VPTs

Strengths

- (i) It is one of the sources of the communication for the villagers dwelling in inaccessible areas.
- (ii) In remote rural areas, where there is no telecommunication facility is possible on landline, WLL or GSM due to drastic geographical conditions, VPTs on DSPT are the only source of communication for people of those villages.
- (iii) VPTs are one of the sources of revenue for BSNL.
- (iv) It is very good public utility service provided by BSNL in rural areas, which consists 70 % of the country.

Weaknesses

- (i) Non-availability of commercial power supply in villages creates difficulty in charging of customer premises batteries regularly to provide uninterrupted service.
- (ii) Difficulty in providing landline connection because laying of U/G cable is a problem due to difficulty terrains geographical location.
- (iii) The custodians do not pay the bills in time for which a lot of VPTs are disconnected due to non-payment.
- (iv) The locations are very remote and there is no other telephone working to lodge the complaint.
- (v) Field staffs are facing problems from extremists in some of Jorhat and Bongaigaon areas in maintaining the VPTs.
- (vi) People in villages may not be able to operate the VPTs properly because the installed equipments are of advanced technology.

Constraints in Implementation of VPTs with regard to -

(a) Guidelines of the scheme

- (i) Political interference in most of the villages during installation of VPTs.
- (ii) Due to lack of electricity, the WLL & DSPTs VPTs are not being supplied with power and the maintenance of solar & Battery sets are very difficult.
- (iii) Difficulty is being faced in installing VPT Display boards and details of tariff due to opposition from VPT custodians.
- (iv) Identification of custodians is a problem at some remote places where nobody is willing to accommodate the VPTs in their premises.

(b) Availability and utilization of funds

Fund is available and utilized properly

(c) Staff constraints

There is a limitation of posting of staff in the rural areas due to poor business and being commercially unviable and there is reluctance on part of staff due to lack of infrastructure in these areas.

(d) Repairs and maintenance

- Accessibility to remote villages
- Extremist prone area
- Non-availability of power supply in some rural areas

Identification of custodians in rural/ tribal areas is not an easy task due to lack of awareness among the inhabitants and poor financial conditions. Most of the villagers received threat from the naxalites that they will be in trouble if they kept VPT at their home. This delays the VPT installation work.

Reasons for un-viability of VPT

- a. The maintenance expenditure is very high in remote and inaccessible areas.
- b. The extremists damage the installations frequently.
- c. The custodian does not pay the bills in time hence VPTs get disconnected.

Suggestions for Improvement

VPTs have high relevance in areas where normal telecom networks are yet to reach. In these areas due to insignificant scale of operation by Telecom operators, Payment of bills / availability of pre-paid coupons is the biggest problem area. To overcome this problem, operator needs to be compensated for maintenance and operation of the service and the cost of service to a limited extent is borne by USO fund as a community service.

Overall opinion of CGM on VPT scheme

VPTs have made huge impact by connecting people who were unconnected. On part of BSNL it required tremendous effort to expand the network to uncovered areas although not justified on commercial considerations. This is unlike provision of rural connections where connections are provided wherever the network is available.

Against the backdrop of discussions on the performance of VPTs at the state level, the next section discusses the performance of VPTs in Jorhat and Bongaigaon.

DISTRICT : JORHAT

Jorhat is located between the Brahmaputra on the north and Nagaland on the south at 26 degree 46 minute's north latitude and 96 degree 16 minute's longitude in the central part of Brahmaputra Valley.

Established as the new capital in the closing years of the 18th century by the decaying and declining Tunkhungia Ahom Dynasty, Jorhat as the name signifies, was just a couple(Jor) of marts (Hut). From these two parallel marts namely Chowkihut and Macharhut, which lay on the eastern and the western banks of the river Bhogdoi. Jorhat today has grown into a thriving cosmopolitan town with a strong sense of character and identity. It is the best laid out town in Upper Assam with broad roads, cutting each other at right angles. The variety of heterogeneity of the town population, specially its business community – comprising of Punjabis, Biharis, Marwaries, Bengalis and even odd South Indian is something commendable. Yet each person, irrespective of his place of origin, who has made Jorhat his home is staunchly loyal to his adopted home and fully identifies with it. Urban, polite and polished behavior is the distinguishing features of an average Jorhat man.

Earlier Jorhat was sub-division of undivided Sibsagar District. In 1983 Jorhat was carved out of Sibsagar District. The present Jorhat District consists of three (3) Sub-divisions namely Jorhat, Majuli and Titabor. The district is divided into 6 revenue circles and 8 development blocks. The area of the district is 2852 sq. km. and population is 1,009,197 (as per 2001 census). The population comprises predominantly Hindus and Muslims. Jorhat is the first fully literate district in Assam.

Jorhat is a most advanced district of Assam. Jorhat is known for very high literacy rate and as tea capital of Assam. The road communication in this district is even better than Kamrup district of Assam. Like any other district it has developed its own communication facilities over the years. The village Public Telephones (VPTs) is being installed in various regions of the district. The TDE, BSNL is acting as head of the implementing agency. The SDE (VSO) is given the charge of VPT.

To provide telephonic communication to rural Jorhat, the scheme is in operational since 2004 in this district. Till date 1651 VPTS were installed in 1651 villages. Out of 1651, there were 1372 numbers of VPT based on WLL and the rest were landline. In case of technology used every custodian reported comfortable and up to date technology for VPTs. The department used to give the VPT connection in consultation with respective Gram Sabha.

If we look into the target and achievement of installation of VPTs in Jorhat district it was found that achievement is always near to the target that is 95 percent. Due to lack of transport facilities and disturbances they failed to achieve the target.

It is mentioned by the officials that there are only 84 staff including the technical and administrative officers working in the Phulbani telephone circle.

There is a certain mechanism available for monitoring and supervision of VPTs. There are no guidelines to do it. It used to be done by the BSNL officials. There are no fixed staff for monitoring work. The BSNL staff used to visit each exchange circles everyday to enquire about the VPTs. In village and booth level they used to visit as and when there is requirement.

The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There are also not so particular expenditure details for VPT repairing and installation. As it is mentioned by official VPT has helped in gathering some revenue for the department. However, it has achieved the goal.

The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staffs that used to help in repairing. There are total 87 technical staff available in this telephone circle. The work distribution to the staff based on number of VPTs available. During last three months all total 100 cases of VPTs are being repaired by the department. Once they get the information that there is some problem with a VPT the department technical staff used to make a visit as soon as possible. Sometimes they used to ask the custodian to come with the VPT to exchange office where they repair it. The department does not charge anything for the repairing activity.

During 2007, a one-week training programme was organized on DSPT at ALTTC, Jorhat and Guwahati. Four persons attended the training programme.

The Department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Strengths

- The villagers are interested to use the VPTs.
- Payment from the users is regular.
- Most of the custodians selected by BSNL and Panchayat are efficient in managing VPTs
- It has helped the villagers in getting the emergency services and market information.

Weakness

- Maintenance is difficult due to lack of communication facilities.
- Around 76 per cent villagers are not electrified in the district.
- Even if some villages are electrified there is frequent power cut.
- Naxalism is a major threat.
- Due to hilly area it is difficult to maintain the network connectivity

The major constraints in implementation of VPTs were faced with regard to staff, monitoring and supervision and repairing and maintenance. The telecom service has not become commercially viable in some villages of rural areas. The number of calls originated from VPTs are very less, most of the villagers are not able to pay the bill because of their low economic condition and some villagers think the phone is allotted by the Government for free calling.

Suggestions for Improvement

- In some villages ISD, Fax and also internet connection is also installed
- VPTs should have SPV
- Road connectivity to rural areas
- Creating awareness regarding the use of VPTs among villagers
- More awareness programme for custodian on operational process VPT should be given.

DISTRICT : BONGAIGAON

The decision of the Government of Assam in 1989, to create a new District of Bongaigaon curving out some areas of the Goalpara and Kokrajhar District with its headquarter located at Bongaigaon was quite challenging. It was the political and administrative exigencies which had necessitated to create this new district suddenly although the people of Bongaigaon and the adjoining areas were demanding a new Sub-Division with its headquarter to be located at Bongaigaon from the very beginning. On 29th September, 1989, the creation of Bongaigaon District was declared by the Government of Assam with its headquarter at Bongaigaon. The major portion of the areas of erstwhile Bijni and Sidli estates along with tracts of Eastern Duars was curved out of Goalpara and Kokrajhar District in October, 1989 in order to create a newest district of Assam, i.e. Bongaigaon. Although the logistic behind the creation of this new district was no doubt an administrative one but the political as well as economic exigencies were also responsible behind its creation.

Under the Bharat Nirman, Bongaigaon district has got a boost. For connectivity development in the rural areas VPT, BSNL has been taking initiative. BSNL is the central agency in installing the VPTS for district of Bongaigaon. BSNL office of Bongaigaon is a secondary switching zone, which covered the districts of Barpeta, Dhubri, Nalbari, Kukrajhar, Bongaigaon District. Till the time of this survey Bongaigaon SSA has provided total 3236 numbers of VPT connections to all these villages. Due to lack of staff the BSNL Bongaigaon could not provide year wise installation record and target achievement during the year 2004-2009.

There is certain mechanism available for monitoring and supervision of VPTs. There are some guidelines the department used to follow to do it. It used to be done by the BSNL officials. There are no fixed staffs for monitoring work. The BSNL staffs used to visit each sectors everyday to enquire about the VPTs. In village and booth level they used to visit as and when

there is requirement. The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staff who used to help in repairing. There are total 14 technical staff available in this telephone circle. The work distribution to the staff is based on equipped capacity. The information regarding repairing of VPTs in last 3 months was not available. However, it is mentioned by the department that the maintenance of VPTs used to be done in a routine manner. Once they get the information that there is some problem with a VPT the department technical staff used to make a visit as soon as possible. Sometimes they used to ask the custodian to come with the VPT to exchange office where they repair it. The department does not charge anything for the repairing activity.

Trainings were conducted at BSNL regional telecom training centre (Guwahati). Technical staff were deputed periodically for refreshment training.

The Department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Strengths

- It is a key for rural communication.
- The villagers are interested to use the VPTs.
- It has helped the villagers in getting the emergency services and market information.

Weakness

- Maintenance is difficult due to lack of communication facilities.
- Shortage of staff
- Around 40 percentage villagers are not electrified in this district.
- Even if villages are electrified there is frequent power cut.
- Frequent bandh by extremist in the region.
- The department has not given any complaint book in each and every VPT booths. However, it was not found in the field.
- Spread of mobile phone from private player has been reducing the interest to use the VPTs in rural villages.

The major constraints in implementation of VPTs were faced with regard to staff, monitoring and supervision and repairing and maintenance as reported by the Telecom staffs and officials of BSNL. All these constraints were due to lack of staff, frequent power cut, unavailability of electricity, threat from extremists, lack of availability of spares, and lack of communication facilities.

The telecom service has become commercially viable in rural areas. The number of calls originated from VPTs has increased. Even though most of the villagers are not able to pay the bill because of their low economic condition and some villagers think the phone is allotted by the Government for free calling, the revenue from VPTs has increased.

Suggestions for Improvement

- Sufficient recruitment of staffs
- Road connectivity to rural areas
- Electrifying rural areas
- Creating awareness regarding the use of VPTs among villagers
- Awareness on the use of VPTs should be created among the custodians too

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Assam – Bongaigaon and Jorhat. In Bongaigaon, 100 VPT users and in Jorhat SSA 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, and details of telephone connectivity. This reflects general profile of villagers, who are using VPTs installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that 44 % users belong to General category in Bongaigaon and 38 % belongs to OBC in Jorhat districts of Assam.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
Bongaigaon	General	44	44.0
	Other Backward Class (OBC)	42	42.0
	Scheduled Caste (SC)	4	4.0
	Scheduled Tribe (ST)	10	10.0
	Total	100	100.0
Jorhat	General	21	21.0
	Other Backward Class (OBC)	38	38.0
	Scheduled Caste (SC)	25	25.0
	Scheduled Tribe (ST)	16	16.0
	Total	100	100.0

Description of gender specification depicts that 91 % and 71 % females in Bongaigaon and Jorhat districts respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
Bongaigaon	91	9	100
Jorhat	71	29	100

Regarding their primary occupation data revealed that majority 54 % were homemakers in Bongaigaon and 48 % homemakers in Jorhat. Educational qualifications of VPT users as reflected in the table is that 26% were having primary education in Bongaigaon and 28 % were having high school literacy in Jorhat.

Table I.A.3. Primary Occupation & Educational Qualification

S. No	Primary Occupation (Self)	Bongaigaon	Jorhat
1	Agriculture	3	13
2	Agriculture Casual Labour	-	6
3	Own Business	2	7
4	Self employed in household industry	2	3
5	Self employed in Services	4	2
6	Salaried work	1	4
7	Homemaker	54	48
8	Livestock Management	1	-
9	Pensioner / Retired	1	-
10	Non-working Adults	1	-
11	Students	-	5
12	Dependents	6	3
13	Others	25	9
	Total	100	100
Educational Qualification			
1	Not literate	7	4
2	Functional literate	24	12
3	Primary	26	16
4	Upper Primary	18	13
5	High School	20	28
6	Intermediate	2	16
7	Graduate	2	9
8	Above Graduation	1	2
	Total	100	100

B. Particulars of Home of VPT Users

- B.1. **Type of House:** Majority owned semi-pucca houses in Bongaigaon (72 %) and in Jorhat (49 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Bongaigaon	Kucha House	14	14.0
	Semi-pucca House	72	72.0
	Pucca House	14	14.0
	Total	100	100.0
Jorhat	Kucha House	10	10.0
	Semi-pucca House	55	55.0
	Pucca House	35	35.0
	Total	100	100.0

- B.2. **Status of Electrification:** Electrification status of respondents reflects that majority are having electricity in their houses (72 % in Bongaigaon and 78% in Jorhat).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Bongaigaon	Electricity not available	28	28.0
	Electricity available	72	72.0
	Total	100	100.0
Jorhat	Electricity not available	22	22.0
	Electricity available	78	78.0
	Total	100	100.0

- B.3. **Distance of House from Pucca Road:** Looking at the proximity of their houses to pucca roads data revealed that 78 % of respondents in Bongaigaon and 49 % in Jorhat were situated at the distance of more than 100 metres but less than 1 km.

Table I.B.3. Distance of house of Users from Pucca Road

Telecom District	Distance	No. of Users	Percent
Bongaigaon	100 metres or less	1	1.0
	More than 100 metres but less than 1 km	78	78.0
	More than 1 km	21	21.0
	Total	100	100.0
Jorhat	100 metres or less	2	2.0
	More than 100 metres but less than 1 km	49	49.0
	More than 1 km	49	49.0
	Total	100	100.0

- B.4. **Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 98 % respondents were staying within 2 km in Bongaigaon and 68 % were staying more than 10 km of distance in Jorhat district of the state.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Bongaigaon	Upto 2 km	98	98.0
	More than 2 but less than 10 km	2	2.0
	More than 10 km	-	-
	Total	100	100.0
Jorhat	Upto 2 km	30	30.0
	More than 2 but less than 10 km	2	2.0
	More than 10 km	68	68.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. **Telephone availability at home:** Majority (90 %) respondents in Bongaigaon district were not having telephone at their home whereas in Jorhat 58 % were not having telephones at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No. of Users	Percent
Bongaigaon	Telephone Not available	90	90.0
	Telephone available	10	10.0
	Total	100	100.0
Jorhat	Telephone Not available	58	58.0
	Telephone available	42	42.0
	Total	100	100.0

- C.2. **Type of Telephone:** Among telephone owners at their home maximum 90 % were having mobiles in Bongaigaon and 82.4 % in Jorhat.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent
Bongaigaon	Landline	1	10.0
	Mobile	9	90.0
	Total	10	100.0
Jorhat	Landline	8	15.7
	Mobile	42	82.4
	Others	1	2.0
	Total	51	100.0

- C.3. **Details of Service Provider:** Regarding the details about service providers to the respondents, BSNL was found to provide services to maximum respondents in Bongaigaon (60.0 %) and 56.9% in Jorhat.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
Bongaigaon	BSNL	3	60.0
	Vodafone	1	20.0
	Reliance Communications	1	20.0
	Total	5	100.0
Jorhat	BSNL	29	56.9
	Reliance Communications	15	29.4
	Airtel	7	13.7
	Total	51	100.0

II. USAGE OF VPT

- A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflects that maximum 90 % VPT beneficiaries in Bongaigaon have

used VPT more than 6 times for local calls in last 60 days. In Jorhat 85 % VPT users have used VPT more than 6 times for local calls.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of calls	Last 60 days	
		No. of Users	Percent
Bongaigaon	No calls	5	5.0
	5 to 6	1	1.0
	More than 6	94	94.0
	Total	100	100.0
Jorhat	No calls	5	5.0
	2 or less	1	1.0
	3 to 4	3	3.0
	5 to 6	6	6.0
	More than 6	85	85.0
	Total	100	100.0

- A.2. Usage of VPT for STD calls in last 60 days revealed that 100% VPT beneficiaries have not made any STD call in Bongaigaon and 99% in Jorhat district. This shows that VPT usage for STD call is very low in both the districts of Assam.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of calls	Last 60 days	
		No. of Users	Percent
Bongaigaon	No calls	100	100.0
	Total	100	100.0
Jorhat	No calls	99	99.0
	5 to 6	1	1.0
	Total	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 76 % in Bongaigaon district were residing within 200-500 mts. Distance and in Jorhat this was found 58 %. That suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Bongaigaon	Within 200 mts from residence	7	7.0
	200-500 mts from residence	76	76.0
	More than 500 mts	17	17.0
	Total	100	100.0
Jorhat	Within 200 mts from residence	11	11.0
	200-500 mts from residence	58	58.0
	More than 500 mts	31	31.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. **Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Bongaigaon district 63 % and in Jorhat district 59 % users were involved in the decision it reflects that more participation of people is required.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Bongaigaon	No	37	37.0
	Yes	63	63.0
	Total	100	100.0
Jorhat	No	41	41.0
	Yes	59	59.0
	Total	100	100.0

- B.1. **Availability of VPT service:** It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Bongaigaon district VPTs were found reliable as respondents communicated that in 59 % cases no fault, 97 % available (not busy), 99 % open and 63 % not engaged during last month. Similarly, Table shows that in Jorhat district also VPT services were reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy		Closed		Engaged	
	No. of Fault	No. of Users	Percent	No. of Users	Percent	No. of Users	Percent	No. of Users	Percent
Bongaigaon	0	59	59.0	97	97.0	99	99.0	63	63.0
	1	9	9.0	2	2.0	1	1.0	2	2.0
	2	23	23.0	1	1.0			5	5.0
	3	8	8.0					19	19.0
	4	1	1.0					5	5.0
	5							3	3.0
	6							1	1.0
	7							1	1.0
	8							1	1.0
	Total	100	100.0	100	100.0	100	100.0	100	100.0
Jorhat	0	44	44.0	81	81.0	91	91.0	59	59.0
	1	14	14.0	4	4.0	7	7.0	14	14.0
	2	16	16.0	6	6.0	1	1.0	11	11.0
	3	11	11.0	7	7.0	1	1.0	5	5.0
	4	3	3.0	1	1.0			4	4.0
	5	1	1.0	1	1.0			2	2.0
	7	1	1.0					1	1.0
	8							1	1.0
	9							1	1.0
	Total	100	100.0	100	100.0	100	100.0	100	100.0

B.2. Same trend could be seen in both the districts of Assam in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Bongaigaon	0	56	56.0	0	95	95.0	0	97	97.0	0	62	62.0
	1	6	6.0	1	2	2.0	0	1	1.0	0	2	2.0
	2	6	6.0	3	2	2.0	1	2	2.0	1	3	3.0
	3	2	2.0	6	1	1.0				2	1	1.0
	4	11	11.0							3	2	2.0
	5	6	6.0							4	2	2.0
	6	2	2.0							5	3	3.0
	7	7	7.0							6	3	3.0
	8	2	2.0							7	14	14.0
	9	1	1.0							8	1	1.0
	17	1	1.0							9	3	3.0
										10	2	2.0
										13	1	1.0
										15	1	1.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0
Jorhat	0	57	57.0	0	77	77.0	0	98	98.0	0	60	60.0
	1	6	6.0	1	8	8.0	1	2	2.0	1	16	16.0
	2	4	4.0	2	3	3.0				2	4	4.0
	3	4	4.0	3	4	4.0				3	3	3.0
	4	12	12.0	4	3	3.0				4	5	5.0
	5	5	5.0	5	1	1.0				5	1	1.0
	7	5	5.0	6	1	1.0				6	1	1.0
	9	5	5.0	7	3	3.0				7	3	3.0
	10	1	1.0							9	2	2.0
	15	1	1.0							10	1	1.0
										12	3	3.0
										13	1	1.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following Table. Not a single VPT in Bongaigaon was displaying tariff and toll free numbers and were also not having book for complaint registration. In Jorhat district 70% VPTs were not displaying numbers for grievance, toll free numbers and tariff rate on their booth. They were also not keeping complaint book with them.

Table III.C. Display of Telephone Numbers, Tariff Rate and Availability of Complaint Book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent	No. of VPTs	Per cent
Bongaigaon	No	10	100.0	6	60.0	10	100.0	10	100.0
	Yes	-	-	4	40.0	-	-	-	-
	Total	10	100.0	10	100.0	10	100.0	10	100.0
Jorhat	No	7	70.0	5	50.0	7	70.0	9	90.0
	Yes	1	10.0	4	40.0	2	20.0	-	-
	Total	8	80.0	9	90.0	9	90.0	9	90.0
	System	2	20.0	1	10.0	1	10.0	1	10.0
	Total	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation was found convenient and very convenient in Bongaigaon. In Jorhat district only 2 % VPT was expressed as not at all convenient that were located in houses.

Table IV.A. Level of Convenience of Place of Installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Bongaigaon	School	-	1	-	1
	Shop	-	10	-	10
	Others	-	88	1	89
	Total	-	99	1	100
Jorhat	Post office	-	1	-	1
	Shop	-	51	12	63
	Others	2	29	5	36
	Total	2	81	17	100

- B. **Convenience of technology used in VPT:** In Bongaigaon district reflects that almost all VPT users found the technology used in VPT convenient. 92 % VPTs are using landline technology in this district. In Jorhat district 97 % users felt the VPT technology convenient in which 61 % were using landline technology in their VPTs.

Table IV.B. Level of Convenience with Technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Bongaigaon	Landline	-	8	-	8
	Mobile	-	79	13	92
	Total	-	87	13	100
Jorhat	Landline	3	30	6	39
	Mobile	-	54	7	61
	Total	3	84	13	100

C. Wireless Technology: Table below indicates information related to wire line technology in VPT. Total 100% users in Bongaigaon shared that WLL FT technology used in their VPTs is convenient and total 97 users in all were feeling the technologies convenient. In Jorhat district all the users in aggregate found the technology convenient.

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Bongaigaon	WLL FX	-	43	57	100
	Total	-	43	57	100
Jorhat	WLL FX	-	43	36	79
	WLL FT	-	13	8	21
	Total	-	56	44	100

D. Level of convenience with type of instrument: It is showed in following Table that confirms that 49% in Bongaigaon do not feel convenient about the instrument used in VPT. In Jorhat mostly have expressed convenience about this.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Bongaigaon	Single touch Key board	-	47	51	98
	Cordless	--	2	-	2
	Total	-	49	51	100
Jorhat	Dial Key Board	2	9	1	12
	Single touch Key board	-	43	45	88
	Total	2	52	46	100

E. Clarity of voice: It is an important indicator of quality assessment of VPT installed. In Bongaigaon district 70 VPT users had expressed that clarity of voice is often convenient. Same way in Jorhat 65 users were having same opinion. In other words majority were satisfied about the clarity of voice.

Table IV.E. Level of Convenience in Clarity of Voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Bongaigaon	Rarely	-	6	2	8
	Often	-	70	14	84
	Always	-	5	3	8
	Total	-	81	19	100
Jorhat	Never	-	1	-	1
	Rarely	4	8	1	13
	Often	1	65	12	78
	Always	-	4	4	8
	Total	5	78	17	100

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. 83 % users in district Bongaigaon and 97 % users in Jorhat district of Assam shared that connectivity of VPT service is reliable. Although 17 % users in Bongaigaon and 3 % users in Jorhat district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT service provider

Telecom District	Reliability	No. of Users	Percent
Bongaigaon	Reliable	83	83.0
	Highly reliable	17	17.0
	Total	100	100.0
Jorhat	Reliable	97	97.0
	Highly reliable	3	3.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 74 % respondents in Bongaigaon and 74 % in Jorhat district found VPT always available in their area. Similarly VPTs were never closed in both the districts of Assam.

Table V.A. Timeliness availability of the service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Bongaigaon	During day time	12	12.0
	Always	74	74.0
	Fixed timings	14	14.0
	Total	100	100.0
Jorhat	During day time	22	22.0
	During night	1	1.0
	Always	74	74.0
	Fixed timings	3	3.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempted to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 100 % users in Bongaigaon were paying in case of VPT usage, 97 % were paying cash. In Jorhat district 97 % users were paying, 89 % were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
Bongaigaon	Yes	100	100.0
	Total	100	100.0
Jorhat	No	3	3.0
	Yes	97	97.0
	Total	100	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
Bongaigaon	Cash	97	97.0
	Partly cash, partly credit	3	3.0
	Total	100	100.0
Jorhat	Cash	89	89.0
	Credit	2	2.0
	Partly cash, partly credit	6	6.0
	Total	97	97.0
	Non Payment	3	3.0
		100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that there was no social restriction in both the districts of Assam.

Table VI.A.3. Restriction in use of VPT

Telecom district		No. of Users	Percent
Bongaigaon	No	100	100.0
Jorhat	No	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Bongaigaon district was less than Rs 250 in 60% cases of VPT whereas in Jorhat ARPU was between Rs 250-500 in 90% VPTs of the district.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No. of VPT	Percent
Bongaigaon	Less than 250	6	60.0
	250-500	4	40.0
	Total	10	100.0
Jorhat	Less than 250	1	10.0
	250-500	9	90.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1 Utility Aspect

Telecom district	Status of Change	No. of Users	Percent
Bongaigaon	No	100	100.0
	Total	100	100.0
Jorhat	No	88	88.0
	Yes	12	12.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Bongaigaon district (100 %) VPT users were of the opinion that VPT usage had no effect on household income but in other district (Jorhat) of the state it was observed that 12 % users believed that VPT had increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Bongaigaon	No change reported	100	100.0
	Total	100	100.0
Jorhat	No change reported	88	88.0
	Upto 5 percent	3	3.0
	5 to 10 percent	4	4.0
	10 to 20 percent	1	1.0
	More than 20 percent	4	4.0
	Total	100	100.0

Further enquiring about the percent change in income revealed that 4 % of users expressed more than 20% increase in their household income.

- B. Improvement in Connectivity:** One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom district	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Bongaigaon	No improvement	5 (5.0)	77 (77.0)	75 (75.0)
	Marginal Improvement	92 (92.0)	23 (23.0)	24 (24.0)
	Significant improvement	3 (3.0)	-	1 (1.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)
Jorhat	No improvement	10 (10.0)	50 (50.0)	58 (58.0)
	Marginal Improvement	66 (66.0)	42 (42.0)	32 (32.0)
	Significant improvement	24 (24.0)	8 (8.0)	10 (10.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom district	Level of Improvement	Medical	Fire	Police	Natural Calamities
Bongaigaon	No improvement	21 (21.0)	23 (23.0)	67 (67.0)	83 (83.0)
	Marginal Improvement	78 (78.0)	77 (77.0)	33 (33.0)	17 (17.0)
	Significant improvement	1 (1.0)	-	-	-
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)
Jorhat	No improvement	19 (19.0)	31 (31.0)	62 (62.0)	73 (73.0)
	Marginal Improvement	79 (79.0)	68 (68.0)	36 (36.0)	24 (24.0)
	Significant improvement	2 (2.0)	1 (1.0)	2 (2.0)	3 (3.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Bongaigaon	Jorhat
a.	Personal communication	92% Marginal	66% marginal
b.	Business networking	77% no	50% No
c.	Emergency Management Medical Fire Police Natural Calamities	78% marginal 77% Marginal 67% No 83% NO	79% Marginal 68% Marginal 62% No 73% No
d.	Official Purposes	75% No	58% No

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

Information on	Bongaigaon					Jorhat				
	Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a. Employment Opportunity	94 (94.0)	6 (6.0)	-	-	100 (100.0)	73 (73.0)	15 (15.0)	12 (12.0)	-	100 (100.0)
b. Market	87 (87.0)	7 (7.0)	6 (6.0)	-	100 (100.0)	42 (42.0)	28 (28.0)	25 (25.0)	5 (5.0)	100 (100.0)
c. Development & Welfare scheme of Govt. on										
1. Health	24 (24.0)	59 (59.0)	16 (16.0)	1 (1.0)	100 (100.0)	11 (11.0)	56 (56.0)	32 (32.0)	1 (1.0)	100 (100.0)
2. Education	35 (35.0)	48 (48.0)	16 (16.0)	1 (1.0)	100 (100.0)	53 (55.8)	19 (19.0)	49 (49.0)	30 (30.0)	100 (100.0)
3. Related to Agrl.	80 (80.0)	2 (2.0)	17 (17.0)	1 (1.0)	100 (100.0)	46 (46.0)	19 (19.0)	33 (33.0)	2 (2.0)	100 (100.0)
4. Others	84 (84.0)	1 (1.0)	13 (13.0)	2 (2.0)	100 (100.0)	67 (67.0)	11 (11.0)	21 (21.0)	1 (1.1)	100 (100.0)
d. Natural Calamity / Weather forecasting	93 (93.0)	6 (6.0)	1 (1.0)	-	100 (100.0)	72 (72.0)	19 (19.0)	9 (9.0)	-	100 (100.0)
e. Rail / Road transport	20 (20.0)	43 (43.0)	37 (37.0)	-	100 (100.0)	26 (26.0)	33 (33.0)	40 (40.0)	1 (1.0)	100 (100.0)
f. Health Services	24 (24.0)	59 (59.0)	17 (17.0)	-	100 (100.0)	11 (11.0)	51 (51.0)	37 (37.0)	1 (1.0)	100 (100.0)
g. Agrl. related	80 (80.0)	10 (10.0)	9 (9.0)	1 (1.0)	100 (100.0)	45 (45.0)	23 (23.0)	27 (27.0)	5 (5.0)	100 (100.0)
h. Business related	81 (81.0)	8 (8.0)	10 (10.0)	1 (1.0)	100 (100.0)	48 (48.0)	15 (15.0)	28 (28.0)	9 (9.0)	100 (100.0)

Table revealed that VPTs were not being used as expected by policy planners of India for accessing information regarding different aspects (referred in the Table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not

well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempted to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair and maintenance, custodian behaviour, etc.

- A. **VPT Location:** VPT location was felt satisfactory by 98 % users in Bongaigaon and by 95 % in Jorhat district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
Bongaigaon	Not satisfactory	-	-
	Satisfactory	98	98.0
	Highly satisfactory	2	2.0
	Total	100	100.0
Jorhat	Not satisfactory	1	1.0
	Satisfactory	95	95.0
	Highly satisfactory	4	4.0
	Total	100	100.0

- B. **VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 96 % users in Bongaigaon and 28% also in Jorhat district. 66% were highly satisfied in Jorhat district. Regarding its quality mostly were satisfied in Bongaigaon and 7% were not satisfied in Jorhat

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Bongaigaon	Not satisfactory	-	-	1	1.0
	Satisfactory	96	96.0	89	89.0
	Highly satisfactory	4	4.0	10	10.0
	Total	100	100.0	100	100.0
Jorhat	Not satisfactory	1	1.0	7	7.0
	Satisfactory	28	28.0	92	92.0
	Highly satisfactory	66	66.0	1	1.0
	Total	100	100.0	100	100.0

- C. **Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined almost all were satisfied in Bongaigaon and Jorhat.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Bongaigaon	Not satisfactory	2	2.0	2	2.0
	Satisfactory	90	90.0	94	94.0
	Highly satisfactory	8	8.0	4	4.0
	Total	100	100.0	100	100.0
Jorhat	Not satisfactory	15	15.0	20	20.0
	Satisfactory	76	76.0	74	74.0
	Highly satisfactory	7	7.0	4	4.0
	4	2	2.0	2	2.0
	Total	100	100.0	100	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodians were articulated as highly satisfactory and satisfactory among 100% users in Bongaigaon and Jorhat.

Table VIII.D. Level of Satisfaction about Cooperativeness and behaviour of Custodians

Telecom district	Level of satisfaction	No. of Users	Percent
Bongaigaon	Not satisfactory	-	-
	Satisfactory	90	90.0
	Highly satisfactory	10	10.0
	Total	100	100.0
Jorhat	Not satisfactory	-	-
	Satisfactory	75	75.0
	Highly satisfactory	25	25.0
	Total	100	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed 96 % satisfaction in Bongaigaon and 87% in aggregate in Jorhat.

Table VIII.E. Level of Satisfaction about Other Alternate Service Providers

Telecom District	Level of satisfaction	No. of Users	Percent
Bongaigaon	Not satisfactory	2	2.0
	Satisfactory	92	92.0
	Highly satisfactory	6	6.0
	Total	100	100.0
Jorhat	Not satisfactory	3	3.0
	Satisfactory	80	80.0
	Highly satisfactory	17	17.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodians in all the villagers in the districts. Observation reflects that all most all the custodians of VPTs were making payment regularly in the both the districts.

Table IX. Regularity in Payment

Telecom District	Regularity	No. of Custodians	Percent
Bongaigaon	Yes	10	100.0
Jorhat	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair and maintenance, and payment.

- A. Problem Resolution related to Location:** It was revealed that 83 % users in Bongaigaon district were not aware about the problem. In Jorhat 29 % VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom district		No. of Users	Percent
Bongaigaon	Internally	2	2.0
	Externally	15	15.0
	Not aware	83	83.0
	Total	100	100.0
Jorhat	Internally	29	29.0
	Externally	32	32.0
	Not resolved	-	-
	Not aware	39	39.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed that 87 % were not aware about this in Bongaigaon and 88 % in Jorhat district. Problem solution of quality accessibility was also solved internally only among 32 % users in Bongaigaon and 34 % in Jorhat.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Bongaigaon	Internally	6	6.0	10	10.0
	Externally	7	7.0	2	2.0
	Not aware	87	87.0	88	88.0
	Total	100	100.0	100	100.0
Jorhat	Internally	32	32.0	34	34.0
	Externally	5	5.0	6	6.0
	Not aware	63	63.0	60	60.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair and Maintenance:** Regarding the problem solution of timely repair & maintenance, 87 % and 88 % users were not aware in

Bongaigaon and Jorhat districts, respectively. Similarly, in the case of the problem of quality repair & maintenance 88 % and 85 % of VPT users were not aware in Bongaigaon and Jorhat districts.

Table X.C. Problem resolution related to repair and maintenance

Telecom district		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Bongaigaon	Internally	11	11.0	10	10.0
	Externally	2	2.0	2	2.0
	Not resolved	-	-	-	-
	Not aware	87	87.0	88	88.0
	Total	100	100.0	100	100.0
Jorhat	Internally	27	27.0	25	25.0
	Externally	16	16.0	18	18.0
	Not resolved	2	2.0	2	2.0
	Not aware	55	55.0	55	55.0
	Total	100	100.0	100	100.0

D. Problem resolution about the payments to the custodians

Table X.D. Problem resolution related to payments to the custodians

Telecom district		No. of Users	Percent
Bongaigaon	Internally	7	7.0
	Externally	6	6.0
	Not resolved	1	1.0
	Not aware	86	86.0
	Total	100	100.0
Jorhat	Internally	21	21.0
	Externally	27	27.0
	Not resolved	3	3.0
	Not aware	49	49.0
	Total	100	100.0

Regarding the problem of payment to custodian 86 % users in Bongaigaon and 49 % in Jorhat district were not aware.

E. Problem resolution about the other alternate service providers

Table X.E. Problem resolution related to other alternate service providers

Telecom district		No. of Users	Percent
Bongaigaon	Not aware	100	100.0
Jorhat	Not aware	100	100.0

No VPT users were aware about this problem in Bongaigaon and Jorhat districts.

SWOT ANALYSIS

DISTRICT : JORHAT

(1) Village Borbamschung

The village is situated 20 Km., away from Jorhat and 20 Km., away from the State Highway. From the pucca road, the house in which VPT was situated was 500 metres from village pucca road. The village people along with the BSNL people selected the custodian since she was a self-employed educated lady and engaged in managing her own shop as the source of income. Moreover, discussion with BSNL officials revealed that since she belonged to the OBC category and the shop is located middle part of the village, it was decided to give preference to her, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- Lady household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the shop but within a separate cabin
- WLL is convenient to all – used by men, women and the elderly
- VPT is located near to middle point in the village, nearby and LP School - used by all including teachers and staff of the school
- The custodian facilitates in receiving the incoming calls, and sometimes informs and holds to pass the information.
- There are display board with tariffs, toll free numbers for emergency and complaints.
- STD facility available.

Weakness

- WLL is connectivity dependent on weather
- Access during winter and rainy season is difficult because of muddy entrance to the VPT, dark road for densely planted bamboo tree.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as Internet and fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(2) Village Chungi Gaon

The village is situated 20 KM away from Jorhat and 20 KM away from State Highway. From the pucca road, the house in which VPT was situated was 20 metres from village pucca road. The house where it was located is club/rest house with many other equipment for entertainment. The club members/people along with the BSNL people selected chairman of the club / rest house as the custodian since he is custodian of other assets of the club. The members and BSNL people did not face any pressures of politics for selecting this place for this VPT.

Strengths

- Custodian of the VPT ensuring equity and social justice.
- Landline is installed in the separate cabin like room away from other rooms where the sound of TV, play does not enter.
- Landline is convenient to all – used by men, women and the elderly whoever the member of the club/rest house.
- VPT is located near to telephone exchange
- The custodian facilitates in receiving the incoming calls, and sometimes informs and holds the call to pass the message.
- There are display of board with tariffs, toll free numbers for emergency and complaints.

Weakness

- It is in the club, women are reluctant to use this VPT services.
- When there are programs and arrivals of guest people feel difficult to use the phone.
- Some women feel difficult to use the VPT service.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.

(3) Village Dewgharia Lakheraj Grant

The village is situated 18 KM away from Jorhat and 18 KM away from State Highway. From the pucca road, the shop in which VPT was situated was 1KM from village semi-pucca road. This village is of mixed community, starting SCs, STs, MOBCs, BCs. The village people along with the BSNL people selected the shopkeeper as the Custodian who belongs to the Kachari Community (ST). He is a permanent resident of the village, and the other are migrated from the other part of the Block. The members and BSNL people did not face any pressures of politics for selecting this place for this VPT.

Strengths

- Custodian of the VPT ensuring equity and social justice.
- Landline is installed in the separate cabin
- Landline is convenient to all – used by men, women and the elderly whoever the member of the club/rest house.
- VPT is located near to telephone exchange; distance is only 1 KM away.

Weakness

- There are no display of board with tariffs, toll free numbers for emergency and complaints.
- Usually shop is closed people of the village cannot avail the services.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation

(4) Village Moran Gaon

The village is situated 20 KM (South East) away from Jorhat and two and 20 KM away from State Highway and 3 KM away from subway to Titabor. From the pucca road, house is which VPT is situated was 1KM from village semi-pucca road. This village is of only ST (Kachari) communities. The village people along with the BSNL people selected the household as the custodian who belongs to Kachari Community (ST) hence no political and pressure tactics in

getting the VPT selection. The members and BSNL people did not face any pressures of politics for selecting this place for this VPT.

Strengths

- Custodian of the VPT is an old man, ensuring equity and social justice.
- Landline is installed in the separate room.
- Landline is convenient to all – used by men, women and the elderly
- Till today no defects has been experienced in normal days.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- In the rainy season the VPT suffers some of the problems like unclear voice, disconnections.
- Since the family is a joint one many member of the villages sometimes feels reluctant to use the VPT services for shyness, and lack of privacy.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(5) Village Bhogpur Satra

The village is situated 40 KM away from Jorhat and 40 KM away from State Highway. The house in which VPT is situated was 1KM from village road. Populations of this village belong to the communities of ST (Miching), SCs and General Caste. The village people along with the BSNL people selected the household as the custodian who belongs to Miching communities, no political and pressure tactics succumbed in selecting the VPT location and custodian.

Strengths

- Custodian of the VPT is having a shop, and firm, could ensuring equity and social justice.
- WLL is installed in the separate room.

- WLL is convenient to all – used by men, women and the elderly, people are conscious in paying the bill.
- Till today no defects has been experienced during the normal days.

Weakness

- There are no display of board with tariffs, toll free numbers for emergency and complaints.
- In the rainy season the VPT suffers some of the problems like unclear voice, disconnections.
- Muddy road, many people are reluctant to come to use VPT services.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.

(6) Village Bhog Miri

The village is situated 36 KM away from Jorhat and 20 KM away from State Highway. The house in which VPT is situated was 1KM from village road. The village is completely a tribal village (Miching Gaon) low lying area of majuli. Populations of this village belong to the communities of STs (Miching), SCs and General Caste. The village people along with the BSNL people selected the household as the custodian who belongs to Milching communities. No political and pressure tactics succumbed in selecting the location of VPT and custodian.

Strengths

- Custodian of the VPT could ensure equity and social justice.
- WLL is installed in the separate room.
- WLL is convenient to all – used by men, women and the elderly, people are conscious in paying the bill.
- VSNL people take care for maintaining the VPT, payment is clear to BSNL and users to custodian.
- Maximum use of VPT.

Weakness

- There are no display of board with tariffs, toll free numbers for emergency and complaints.
- In the rainy season the VPT suffers some of the problems like unclear voice, disconnections.
- Muddy road, many people are reluctant to come to use VPT services.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.
- Defective mobile network.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation

(7) Village Chamaguri

The village is situated 35 KM away from Jorhat and 29 KM away from State Highway. The house in which VPT is situated was 1 KM from village road. Populations of this village belong to the communities of STs (Miching) and OBC. The village people (gram panchayat) along with the BSNL people selected the household as the custodian who belong to OBC communities, no political and pressure tactics succumbed in selecting the VPT location and custodian.

Strengths

- Custodian of the VPT is having a shop, could ensuring equity and social justice.
- WLL is installed in the shop.
- WLL is convenient to all – used by men, women and the elderly
- Till today minor defects experienced during the normal days.
- Utilisation of VPT is optimum.
- Display of board with tariffs, toll free numbers for emergency and complaints.

Weakness

- In the rainy season the VPT suffers from the problems like- unclear voice, misconnections.

- Muddy road, many people are reluctant to come to use VPT services.
- Because of defective network.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.

(8) Village Saykotta

The village is situated in southern part of East South of Jorhat under the block Mariyani well connected to Railway, Road. 30 KM away from Jorhat i.e. 30 KM away from State Highway. Tea Garden Village, located at remote area of Mariyani Area and 10 KM away from Mariyani. Road for the village is kuccha. The house in which VPT is situated was 500 Mts. from village road. Populations of this village are belonging to the Tea Tribe, plains tribe and OBC. The village people along with BSNL people selected the household as the custodian who belongs to OBC communities. Hence, political and pressure tactics succumbed in selecting VPT location and the custodian.

Strengths

- Custodian of the VPT is having a shop, could ensuring equity and social justice by allowing all to enjoy the facilities.
- Land line and WLL both facilities are installed in the separate cabin of the shop.
- WLL is convenient to all – used by men, women and the elderly.
- Utilization of VPT is optimum up to the month of April.
- Payment to BSNL is regular and payment by user of VPT services to the custodian is also regular.

Weakness

- There are no display of board with tariffs, toll free numbers for emergency and complaints.
- In the rainy season the VPT suffers from the problems like- unclear voice and hence both connections were installed under the request of villagers.

Opportunities

- Increased awareness about VPT among villagers
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Mobile connections – BSNL and private in households especially among younger generation is the major threat to survival of VPT.

(9) Village Kathkatiya Gaon

The village is situated in southern part of East South of Jorhat under the block Mariyani. 30 KM away from Jorhat i.e. 30 KM away from State Highway and a Tea Garden Village, 7 KM away from Mariyani. Road for the village is Kuccha. The house in which VPT is situated is nearby village road. Populations of this village are belonging to the Tea Tribe only. The village people along with the BSNL people selected the household as the custodian who belongs to tea tribe communities, no political and pressure tactics succumbed in selecting the VPT location and custodian.

Strengths

- Custodian of the VPT is educated having a big grocery shop, could ensure equity and social justice by allowing all to enjoy the facilities.
- WLL facilities are installed in the separate cabin of the shop.
- WLL is convenient to all – used by men, women and the elderly.
- Utilization of VPT is optimum for the whole year.
- Payment to BSNL is regular and payment by user of VPT services to the custodian is also regular.
- There are display of board with tariffs, toll free numbers for emergency and complaints.

Weakness

- In the rainy season the VPT suffers from the problems like- unclear voice and hence both connections were installed under the request of villagers.

Opportunities

- Increased awareness about VPT among villagers
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Mobile connections – BSNL and private in households especially among younger generation is the major threat to survival of VPT.

(10) Village Balichapari Mazgaon

The village is situated 20 KM (East) from Jorhat and two and 3 KM away from state road of Teok. The house in which VPT installed is 1 KM from village semi-pucca road. This village is of OBC communities and Gen. The village people along with the BSNL people selected the house hold as the custodian who belongs to OBC, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Custodian of the VPT is a young man, ensuring equity and social justice.
- Landline is installed in the separate room.
- Landline is convenient to all – used by men, women and the elderly
- Till today no defects has been experienced in normal days.
- Custodian is mechanics/wireman of the BSNL; hence defect is repaired very quickly.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- People in this village are of affluent class, having landlines connection and mobile.
- Comparatively less used VPT.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

DISTRICT : BONGAIGAON

(1) Village Kerhabari

The village is situated nearby pucca road, approximate distance 15 KM. distance from Bongaigaon town. The VPT is located in the shop located in the centre point of daily market of Kerhabari. This village is of OBC communities and Bodo communities. The village people along with the BSNL people selected the household as the custodian who belongs to OBC, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Custodian of the VPT is a young man, could ensure equity and social justice.
- Landline is installed in the separate cabin, and is convenient to all – used by men, women and the elderly.
- People consider it as the village property and people are regular in paying the call charge as fixed by the custodian.
- Till today no defects has been experienced in normal days.
- Custodian is mechanics/wireman of the BSNL; hence defect is repaired very quickly.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- The last few months people are not coming to use the VPT.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation
- Four five numbers of mobile recharge shop have came up.

(2) Village Chalantapara Part - I

The village is situated nearby the state pucca road and approximate distance is 9 KM. from Bongaigaon town. The VPT is located at the house of custodian. The custodian belongs to

Muslim community. The village population belongs to minority community. The village people along with the BSNL people selected the household as the custodian, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Custodian of the VPT is a young man, could ensure equity and social justice.
- Landline phone is installed in the room, and is convenient to all – used by men, women and the elderly all of them are kith and kin.
- Regularity in payment of bills to BSNL.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- During the last few months people of the village have reduced use the telephone of this VPT.
- Actual utilization of VPT for the rural telephony for village has not been applying.

Opportunities

- VPT should be installed in separate room so that village people can avail the facilities conveniently.
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation

(3) Village Kerkhabari

The village is situated nearby 100 M. away from pucca road and approximate distance is 8 KM. from Bongaigaon town. The VPT is located at the house of custodian. The custodian is a Local Bengali, SC community. The village population is belonging to SC, OBC. The village people along with the BSNL people selected the household as the custodian who belongs to OBC, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Custodian of the VPT is a young man, could ensure equity and social justice.
- WLL is installed in the room, and is convenient to all – used by men, women and the elderly.

- People consider it as the village property during first year of installation and people are regular in paying the call charge as fixed by the custodian.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- During the last few months' people of the village have reduce use the telephone of this VPT.
- Many a time WLL battery remain un-charged, hence village people does not rely on this VPT.

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility more along with educational and employment related information services to youngster
- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide VPT services brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation
- Two three mobile recharge shop have came up within the village.

(4) Village Ghankursha

This VPT located nearby the pucca road (200 Metre), a very low lying area and approximate distance is 8 KM. from Bongaigaon town. The VPT is located at the house of custodian. The custodian belongs to a OBC community. The village population is belonging to OBC, Bodo. The BSNL people selected the household as the custodian, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Custodian of the VPT is a daily waged worker, could ensure equity and social justice.
- WLL is installed in the room, and is convenient to all.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- Many a time WLL battery remain un-charged, hence village people does not rely on this VPT.

- People of this village are not concerned about the VPT. Hardly, in a month twice or thrice the VPT is used by the village people.

Opportunities

- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide repairing services to this VPT along with the service brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(4) Village Bakhnapara

This VPT is located approximate distance of 20 KM. away from Bongaigaon town. The VPT is located at the house of custodian. The custodian belongs to OBC community. The village population is belonging to OBC, Bodo. The BSNL people selected the household as the custodian but later on panchayat people also accepted as the custodian, hence no political and pressure tactics in getting the VPT selection.

Strengths

- Employee of BSNL, maintenance is easy, could maintain equity and justice to the village people.
- VPT is kept in separate room and the users feel convenient to use it.

Weakness

- No display of board with tariffs, toll free numbers for emergency and complaints in the VPT.
- Many a time landline disturbs for fault in network and cross connection.

Opportunities

- Proactive role by BSNL officials to market their products is necessary (especially to highlight the advantages of VPT such as low cost and uninterrupted service).
- BSNL should provide repairing services to this VPT along with the service brochure to the custodians.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(5) Village Bortolowa

The village is situated 10 KM away from Bongaingaon. The house in which VPT was situated was 500 metres from village pucca road. The village people along with the BSNL people selected the custodian. The populations are of mixed community belong to OBCs, STs and Muslims. Moreover, discussion with BSNL officials revealed that since the custodian belongs to OBC community and his house is located middle portion of the village, it was decided to give preference to him, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- The custodian of the VPT could ensure equity and social justice at use of VPT.
- Landline phone is installed in the shop but with in a separate cabin
- This phone is convenient to all – used by men, women and the elderly
- VPT is located near to middle point in the village.
- The custodian facilitates in receiving the incoming calls, and sometimes informs and holds to pass the information.

Weakness

- There are display board with tariffs, toll free numbers for emergency and complaints
- WLL is connectivity dependent on weather
- Access during winter and rainy season is difficult because of muddy entrance to the VPT, dark road for densely planted bamboo tree.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation

(6) Village Kharija Dolaigaon

The village is situated 7 KM away from Bongaingaon town. The house in which VPT was situated was 300 metres from village pucca road. The village people along with the BSNL people selected the custodian. The populations are of mixed community belongs to OBC, ST and Muslims. The village population is not that much educated, remote in the sense of economy. Moreover, discussion with BSNL officials revealed that since the custodian is

belongs to OBC community and his house is located middle portion of the village, it was decided to give preference to him, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- The custodian of the VPT could ensure equity and social justice at use of VPT.
- Landline phone is installed in the shop but within a separate cabin
- This phone is convenient to all – used by men, women and the elderly
- VPT is located near to middle point in the village.
- The custodian facilitates in receiving the incoming calls, and sometimes informs and holds to pass the information.

Weakness

- Many a time custodian has to say the telephone is out of order because of socially sensitive area and users.
- There are display board with tariffs, toll free numbers for emergency and complaints
- WLL is connectivity dependent on weather
- VPT is not used in optimally for the village problem.

Opportunities

- If there is some sort of social order in the village then VPT would be able to provide a good service.
- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation

(7) Village Baikhungaon

The village is situated 15 KM away from Bongaingaon. The house in which VPT was situated was 400 metres from village pucca road. The village people along with the BSNL people selected the custodian. Custodian is a businessman and very learned one. The populations are of mixed community belongs to OBCs, STs and Muslims. Moreover, discussion with BSNL officials revealed that since the custodian is belongs to OBC community and his house is located middle portion of the village, it was decided to give preference to him, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- The custodian of the VPT is maintaining good records regarding VPT could ensure equity and social justice at use of VPT.
- Landline phone is installed in the shop but within a separate cabin
- This phone is convenient to all – used by men, women and the elderly
- VPT is located near to middle point in the village.
- Maintaining good records on VPT.
- People of village using the service of the VPT optimally.

Weakness

- There are display board with tariffs, toll free numbers for emergency and complaints
- WLL is connectivity dependent on weather
- Access during winter and rainy season is difficult because of muddy entrance to the VPT, dark road for densely planted bamboo tree.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation

(8) Village Bhandara

The village is situated 11 KM away from Bongaingaon. The house in which VPT was situated was 150 metres from village pucca road. The village people along with the BSNL people selected the custodian. The population are of mixed community belongs to ST and OBC. Moreover, discussion with BSNL officials revealed that since the custodian belonged to OBC community and his house is located middle portion of the village, it was decided to give preference to him, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- The custodian of the VPT could ensure equity and social justice at use of VPT.
- Landline phone is installed in a separate room where user feels comfortable to use the phone.
- This phone is convenient to all – used by men, women and the elderly

- VPT is located near the middle point of the village.
- People of village using the service of the VPT optimally.

Weakness

- There are display board with tariffs, toll free numbers for emergency and complaints
- Landline connectivity dependent connection and cross connection.
- Access during winter and rainy season is difficult because of muddy entrance to the VPT, dark road for densely planted bamboo tree.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(9) Village Balajani Chechapani

The village is situated 9 KM away from Bongaingaon. The house in which VPT was situated was nearby 30 metres away from pucca road. The village people along with the BSNL people selected the custodian. Custodian is a serviceman and very learned one. The populations are of mixed community belong to OBCs, STs. Moreover, discussion with BSNL officials revealed that since the custodian belong to OBC community and his house is located middle point of the village, it was decided to give preference to him, and they reported that they did not face any pressures of politics for selection of place for the VPT.

Strengths

- The custodian of the VPT is a maintaining good records regarding VPT could ensure equity and social justice at use of VPT.
- Landline phone is installed in the shop but with in a separate cabin
- This phone is convenient to all – used by men, women and the elderly
- VPT is located near to middle point in the village.
- Maintaining good records on VPT.
- People of village using the service of the VPT optimally.

Weakness

- There are display board with tariffs, toll free numbers for emergency and complaints
- WLL is connectivity dependent on weather
- Access during winter and rainy season is difficult because of muddy entrance to the VPT, dark road for densely planted bamboo tree.

Opportunities

- Increased awareness about VPT among villagers
- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service

Threats

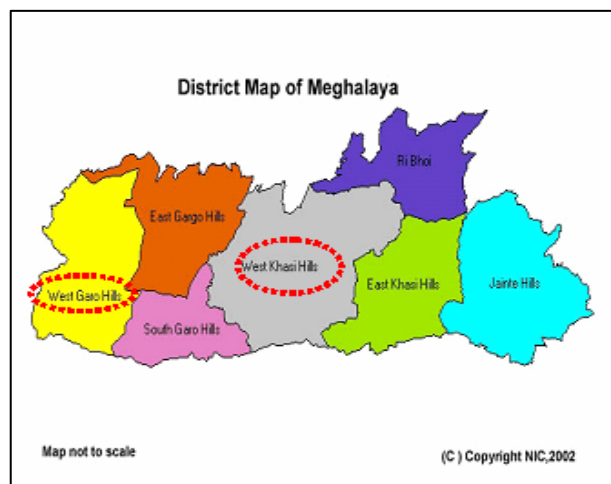
- Multiple mobile connections – BSNL and private in households especially among younger generation.

State Report - 10 MEGHALAYA



Meghalaya

Carved from the erstwhile State of Assam, Meghalaya became a full fledged State on January 21, 1972. Bounded on the North and East by Assam and on the South and West by Bangladesh, Meghalaya is spread over an area of 22, 429 square kilo metres, and lies between 20.1° N and 26.5°N latitude and 85.49 °E and 92.52°E longitude. Meghalaya's capital is Shillong and is also the District Headquarters of East Khasi Hills. This city has been the seat of Government since the consolidation of the British administration in this part of India more than a century ago.



MEGHALAYA AT A GLANCE

The State enjoys a temperate climate. It is directly influenced by the South-West Monsoon and the northeast winter wind. Maximum rainfall occurs over the southern slopes of the Khasi Hills, i.e., over the Sohra and the Mawsynram platform, which receives the heaviest rainfall in the world. The average rainfall in the State is 12,000 mm. The principal languages in Meghalaya are Khasi, Pnar and Garo with English as the official language of the State.

Meghalaya's main ethnic communities, each having its own distinctive customs and cultural traditions are the Khasis (of Mon-Khmer ancestry), the Garos (of Tibeto-Burman origin) and the Jaintias said to be from South East Asia. The common trait binding all three communities is

Area: 22,429 Sq.Kms.
<i>Districts: Total 7-East Khasi Hills, West Khasi Hills, Jaintia Hills, Ri Bhoi District, East Garo Hills, West Garo Hills and South Garo Hills</i>
<i>Number of Villages : 5629</i>
<i>Forest Area : 8510 Sq. Km.</i>
<i>Population : 23,18,822</i>
<i>Density : 103 Per Sq. Km.</i>
<i>Literacy : 62.6%</i>
<i>Racial Origin of the People : Austric, Tibeto-Burman</i>

its matrilineal system in which the family lineage is taken from the mother's side.

The North East Telecom Circle-I has its headquarters at Shillong. GMTD is the head of the implementing department at the state level. It was informed that about 1800 VPT's are installed under BNY. The village public telephone scheme is

operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. A large number of WLL BTS are installed in the state to cover the villages. The remote villages where WLL signals are not reaching VPTs through DSPT technology are

provided. They have planned to install a good number of BTS through which they are trying to provide VPT through GSM technology in the State. Regarding extended services on VPTs, there is no evidence about its availability on any VPT. It was informed that they have set mechanism for monitoring and supervision and it is done with the help of BSNL and outsourced agencies. Repair and maintenance is also outsourced thus no departmental staff is engaged in it.

Regarding future plans in the State they have new agreement to cover 1944 more villages with at least 90 % functional efficiency of VPT. They have plans to use WLL, DSPT or GSM technology in VPT. Internet services may also be provided through VPT and also have planned to impart trainings to associates.

Strengths of the VPT as per the officials at the state level are availability of communication facility in rural areas at affordable and reasonable charges.

Nevertheless, due to the remoteness of the location of VPTs usually in far-flung hilly, at times non-motorable villages in the state, maintenance is difficult and very expensive. Staff mobility is very difficult. It was also observed that sometimes custodian misuse the installed assets like solar panels and battery in their personal use. Moreover, mobile services have penetrated rural areas and this has reduced importance of VPTs. Reason why low ARPU and high MTRR (Mean Time To Repair) there is need to transform the VPT to compete with the multiple services provided by mobile service providers.

The major constraints faced by officials with regard to implementation of VPT services include inability of VPT custodians to install their own billing machine; non payment of VPT bills, difficulty faced by staff in maintenance and repair due to remote / inaccessible locations and shortage of staff; proportionately less revenue in comparison with high capital expenditure and maintenance cost.

Nonetheless, considering their wide coverage, the scheme should be continued with active support of Government of India. The officials maintain that issues of technology, competition, coverage & efficiency can be tackled effectively. CGM suggested that with new technology like DSPT, GSM, WLL the possibility of faults are less and usage will increase. Provision of VPT on the GSM technology is also suggested to connect all those uncovered villages those are not feasible on LL/WLL. Against the backdrop of discussion on VPTs at the state level, the next section discusses the performance of VPTs in West Khasi Hills and West Garo Hills.

DISTRICT : WEST KHASI HILLS

West Khasi Hills, presently the largest district of Meghalaya, was carved out of the erstwhile Khasi Hills District on the 28th October, 1976. The District now comprises of three Sub-

Divisions (including the Sadar Sub-Division), one Administrative Unit viz., Mawshynrut which came into being on the 9th February, 1996 and 6 (six) C&RD Blocks viz., Nongstoin, Mairang, Mawkyrwat, Mawshynrut, Ranikor including Mawthadraishan Block which was created on 20th March, 2001. The District lies in the central part of the State of Meghalaya and is situated between approximately 25 degrees 10' and 25 degrees 51' N latitude, and between 90 degrees 44' and 91 degrees 49' E longitude. It is bounded on the north-west by Kamrup district of Assam, on the north-east by Ri Bhoi district, on the east by East Khasi Hills district, on the south by Bangladesh, on the west by East Garo and South Garo Hills districts. The district comprises of an area of about 5,247 sq. kms, which is 23 percent of the total area of the state. Nongstoin, covering an area of about 76.00 Sq. Kms, is the Headquarter of the District.

Brief Statistics (2001 census)

Total Population	2,94,115
Male Population	1,49,159
Female Population	1,44,956
Literacy Rate	65.64
Male Literacy	67.02
Female Literacy	64.21
% Decadal Variation 1991-2001	33.59
Sex Ratio (Females per 1000 Male)	972
Density of Population	56
Rural Population	2,60,595
Urban Population	33,520

In West Khasi Hills, SDE Nongstoin is the Head of the implementing department at the district level. Under the Bharat Nirman, the scheme is being implemented from 2004 November. As per records, the number of villages covered under Bharat Nirman amounts to 326. The criteria for identifying and selecting the villages for installation of VPTs are based on the statistics available about the infrastructure facilities in the Census of 1991 and 2001. The main objective of the VPT scheme at district level is to implement the scheme in targeted villages as per the plan of the BSNL Headquarters and provide telecom services to these villages. The maintenance of these VPTs under first priority is also emphasized to all the SDCAs and telephone exchanges. Every year action plan is prepared and is executed to achieve the targets.

As per the official records, there are no extended services available (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. The VPT scheme is 100 percent financed by BSNL with the subsidy from USOF. Nevertheless, there is no separate account with respect to flow of funds and the expenditure on VPTs. Details about revenue generated from the VPT is, however, not provided from the department.

With respect to availability of staff, there is no separation specifically for VPT scheme. However, both under technical and administrative staff, there was shortage. With regard to

monitoring and supervision of VPTs, there were clear cut guidelines provided by the BSNL (already discussed in the section dealing with State) and undertaken by BSNL and outsourced agencies. Repair and maintenance is also outsourced in the district.

However, there were no charges for repairing and maintenance. The work distribution is based on area and number of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff. Similar view was echoed by BSNL officials during the field visits to different parts of West Khasi Hills as part of primary survey. Line Man pointed out that they are overburdened due to lack of sufficient staff. The Line Man had to cater widespread area of various hilly terrains, which lead to delay. Moreover, due to geographical terrain, the faults are also continuous and frequent. Similarly, officials also pointed out that while schemes such as VPT are being implemented it should be kept in mind that the geographical terrain which is entirely different from that of many other states in plains. They also indicated, special attention needs to be taken into account while framing any policy at a central level.

With regard to training, training is being imparted to newly appointed staff in the department. There is no direct competition for VPT from other service providers since BSNL is still the only provider of Village Public Telephone (free of cost installation and rent free) in the state. Nevertheless, at the field level, it was observed that mobile connections and STD/PCOS, coin box facilities of both BSNL and other service providers at better quality and cheaper rates are leading to abysmally low patronage of VPT. Across the state, SDOs pointed out that at least five years ago, VPTs used to be the lifeline of every village. Nevertheless, since the introduction of mobiles and especially various attractive plans, the patronage for VPT has reduced drastically.

Strengths of VPTs include the installation of VPTs at remote areas to stay in touch with outer world, although it is challenging to keep them operational due to weather condition and irregular power supply. In additional, lack of awareness among villagers to use and operate telephone facility and non payment of bills also renders them non-functional. Moreover, performance of telecom service is not economically viable in rural areas. This is attributed to the fact that faults are continuous in remote areas in addition to theft, damage to assets and difficulties with respect to geographical terrain. In short, maintenance of these VPTs is quite tedious and expensive. Hence, USO subsidy needs to be continuously provided under Operation & Maintenance Head to make VPT remain functional. It was pointed out that in remote areas where landline and WLL connections in remote areas are non-feasible, DPST are being provided. GSM WLL VPTs are also being planned to provide uninterrupted services.

DISTRICT : WEST GARO HILLS

The West Garo Hills district lies on the western part of the state of Meghalaya bounded by the East Garo Hills district on the east, the South Garo Hills on the south-east, the Goalpara district of Assam on the north and north-west and Bangladesh on the south. The district headquarters of West Garo Hills is Tura, which is the second largest town in the State after Shillong. The district is situated approximately between the latitudes 90° 30' and 89° 40' E, and the longitudes of 26° and 25° 20' N.

Brief Description of the District (2001 Census)

Total Geographical area	3714 Sq. Km.
Sub-Divisions (including Tura Sadar)	3
Development Blocks	8
Towns	1
Population Total	5,18,390
Population Rural	4,59,412
Population Urban	58,978
SC Population	7,436
ST Population	3,97,166
Literates	2,11,499
Illiterates	3,06,891
Total Workers	2,08,361
Main Workers	1,63,008
Marginal Workers	45,353

The West Garo Hills district is mostly hilly with plains fringing the northern, western and the south-western borders. The climate of the district is largely controlled by South–West monsoon and seasonal winds. The West Garo Hills district being relatively lower in altitude to the rest of Meghalaya, experiences a fairly high temperature for most part of the year. The average rainfall is 330 cms., of which more than two-thirds occur during the monsoon, winter being practically dry. The districts have mostly dense tropical mixed forest, and a small patch of temperate forest in the higher parts of the Tura range.

There is a distinction between life in the rural areas and in the urban areas. The acceleration of development work in recent years, particularly after 1950, has contributed greatly to the material progress of the people everywhere, though the impact has naturally been greater in the town areas. The rapid spread of education has inevitably brought about a change in the vocational pattern, with many young people turning away from agriculture and taking up other types of work, either with Government or in business undertakings. The trend is bound to have an effect on village cohesion in the foreseeable future.

In short, the Garos today face the same challenges that tribal communities elsewhere have to face, but in spite of the rapid shift of influence to the urban elite, the backbone of the tribe is still the rural population and many of the rural folk are shrewd enough to appreciate what is

best for them. This fact may help to balance the swing from one extreme to another – from a generally conservative form of society to an ultra-modern one.

In West Garo Hills DE Tura is the Head of the implementing department at the district level. Under the Bharat Nirman, the scheme is being implemented from 2004 November. The criteria for identifying and selecting the villages for installation of VPTs are based on the statistics available about the infrastructure facilities in the Census of 1991 and 2001. The main objective of the VPT scheme at district level is to achieve the targeted villages as per the plan of the BSNL Headquarters and provide telecom services to these villages. The maintenance of these VPTs under first priority is also emphasized to all the SDCAs and telephone exchanges. Every year action plan is prepared and executed to achieve the targets.

As per the official records, there are no extended services available (such as urban multimedia communication amenities such as mobiles, broadband connections) under the existing VPTs in rural areas. The VPT scheme is 100 percent financed by BSNL with the subsidy from USOF. Nevertheless, there is no separate account with respect to flow of funds and the expenditure on VPTs. Details about revenue generated from the VPT is however not provided from the department.

With respect to availability of staff, there is no separate recruitment for the VPT scheme. However, both under technical and administrative staff, there was shortage. With regard to monitoring and supervision of VPTs there were clear cut guidelines provided by the BSNL (already discussed in the section dealing with State) and undertaken by BSNL and outsourced agencies. Repair and maintenance is also outsourced in the district. There were no charges for repair and maintenance. The work distribution is based on area and number of VPTs. The technical persons per VPT depend upon the number of VPTs located in the villages and the available staff. Similar view was echoed by BSNL officials during the field visits to different parts of West Garo Hills as part of primary survey. Line Man pointed out that they are overburdened due to lack of sufficient staff. The Line Man had to cater wide spread area of various hilly terrains which lead to delay. Moreover, due to geographical terrain, the faults are also continuous and frequent. Similarly, officials also pointed out that while schemes such as VPTs are being implemented in the geographical terrain of the area should be kept in mind, which is entirely different from that of many other states in plains. They also indicated that special attention needs to be taken into account while framing any policy at a central level.

With regard to training, training is being imparted to newly appointed staff in the department. There is no direct competition for VPT from other service providers since BSNL is still the only provider of Village Public Telephone (free of cost installation and rent free) in the state. Nevertheless, at the field level it was observed that mobile connections and STD/PCOS, coin box facilities of both BSNL and other service providers at better quality and cheaper rates are leading to abysmally low patronage of VPT. Across the state, SDOs pointed out that at least

five years ago, VPTs used to be the lifeline of every village. Nevertheless, since the introduction of mobiles and especially various attractive plans, the patronage for VPT has reduced drastically.

Strengths of VPTs include the installation of VPTs at remote areas to connect rural India in touch with outer world, although it is challenging to keep them operational due to weather condition and irregular power supply. In addition, lack of awareness among villagers to use and operate telephone facility and non-payment of bills also renders them non-functional. Moreover, performance of this telecom service is not economical viable in rural areas. This is attributed to the fact that faults are continuous in remote areas along with theft, damage and misuse of public assets. In short, maintenance of these VPTs is quite tedious and expensive. Hence, USO subsidy needs to be continuously provided under Operation & Maintenance Head such that VPT remain functional. It was pointed out that in remote areas where landline and WLL connections in remote areas are non-feasible, DPST are being provided. GMS WLL VPTs are also being planned to provide uninterrupted services.

THE PERFORMANCE OF VPTs: AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Meghalaya – West Khasi Hills and West Garo Hills. In West Khasi Hills SSA, 95 VPT users and in West Garo Hills SSA 100 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPT towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, the details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that majority belonged to ST in West Khasi Hills (98.9 %) and in West Garo Hills (100 %) districts of Meghalaya.

Table I.A.1. Social Group of VPT Users

Telecom District		No. of Users	Percent
West Khasi Hills	General	-	-
	Other Backward Class (OBC)	-	-
	Scheduled Caste (SC)	1	1.1
	Scheduled Tribe (ST)	94	98.9
	Total	95	100.0
West Garo Hills	General	-	-
	Other Backward Class (OBC)	-	-
	Scheduled Caste (SC)	-	-
	Scheduled Tribe (ST)	100	100.0
	Total	100	100.0

78.5 % and 90 % of respondents were females in West Khasi Hills and West Garo Hills districts respectively were interacted in present study.

Table I.A.2. Gender Distribution

Telecom District	No. of Users		Total
	Female	Male	
West Khasi Hills	83	12	95
West Garo Hills	90	10	100

Regarding their primary occupation, data revealed that maximum users were homemakers in West Khasi Hills (45.26 %) and also in West Garo Hills (58 %) followed by agriculture. Regarding educational qualification of VPT users, majority had either below primary levels of literacy or was illiterate in both the districts in current study.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	West Khasi Hills	West Garo Hills
1	Agriculture	38	18
2	Agriculture Casual Labour	1	1
3	Self employed in services	-	1
4	Non agriculture casual labour	3	1
5	Salaried work	6	1
6	Homemaker	43	58
7	Livestock Management	-	14
8	Students	4	5
9	Dependents	-	1
10	Others	-	-
	Total	95	100
Educational Qualification			
1	Not literate	44	26
2	Functional literate	22	29
3	Primary	13	15
4	Upper Primary	1	9
5	High School	3	17
6	Intermediate	9	4
7	Graduate	3	-
8	Above Graduation	-	-
	Total	95	100

B. Particulars of Home of VPT Users

B.1. Type of House: Majority owned semi-pucca houses in West Khasi Hills (49.5 %) and West Garo Hills (53 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
West Khasi Hills	Kucha House	45	47.4
	Semi-pucca House	47	49.5
	Pucca House	3	3.2
	Total	95	100.0
West Garo Hills	Kucha House	45	45.0
	Semi-pucca House	53	53.0
	Pucca House	2	2.0
	Total	100	100.0

- B.2. Status of Electrification:** Electrification status of respondents reflects that 50.5% were not having electricity in their houses in West Khasi Hills and 85 % were having electricity in their houses in West Garo Hills.

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
West Khasi Hills	Electricity not available	48	50.5
	Electricity available	47	49.5
	Total	95	100.0
West Garo Hills	Electricity not available	15	15.0
	Electricity available	85	85.0
	Total	100	100.0

- B.3. Distance of House from Pucca Road:** With regard to the proximity of their houses to pucca roads, data revealed that houses of 89.5 % of the respondents were at the distance of more than 1 km in West Khasi Hills and 62 % in West Garo Hills.

Table I.B.3. Distance of house from pucca Road

Telecom District	Distance	No. of Users	Percent
West Khasi Hills	More than 100 metres but less than 1 km	10	10.5
	More than 1 km	85	89.5
	Total	95	100.0
West Garo Hills	100 metres or less	2	2.0
	More than 100 metres but less than 1 km	36	36.0
	More than 1 km	62	62.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway it was revealed that 57.9 % respondents were staying at more than 2 but less than 10 kms. in West Khasi Hills and 40 % in West Garo Hills district of the state of Meghalaya.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
West Khasi Hills	Upto 2 km	10	10.5
	More than 2 but less than 10 km	55	57.9
	More than 10 km	30	31.6
	Total	95	100.0
West Garo Hills	Upto 2 km	40	40.0
	More than 2 but less than 10 km	40	40.0
	More than 10 km	20	20.0
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at home:** Majority (88.4 %) of respondents in West Khasi Hills district were not having telephone at their home whereas in West Garo Hills 92 % were not having telephones at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No. of Users	Percent
West Khasi Hills	Telephone Not available	84	88.4
	Telephone available	11	11.6
	Total	95	100.0
West Garo Hills	Telephone Not available	92	92.0
	Telephone available	8	8.0
	Total	100	100.0

- C.2. Type of Telephone:** Among telephone owners 75 % of phone holders were having mobiles in West Khasi Hills and 88.9 % in West Garo Hills.

Table I.C.2. Type of Telephone

Telecom District	Type of phone	No. of Users	Percent
West Khasi Hills	Landline	3	25.0
	Mobile	9	75.0
	Total	12	100.0
West Garo Hills	Landline	1	11.1
	Mobile	8	88.9
	Total	9	100.0

- C.3. Details of Service Provider:** Regarding the details about service providers to the respondents, BSNL was found to provide services to maximum respondents in West Khasi Hills (72.7 %) and 57.1 % in West Garo Hills.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
West Khasi Hills	BSNL	8	72.7
	Airtel	2	18.2
	Others	1	9.1
	Total	11	100.0
West Garo Hills	BSNL	4	57.1
	Reliance Communications	1	14.3
	Airtel	2	28.6
	Total	7	100.0

II. USAGE OF VPT

- A.1.** Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that maximum 47.4 % of VPT beneficiaries in West Khasi Hills have used VPT more than 6 times for local calls in last 60 days. In West Garo

Hills, only 10 % VPT users have used VPT more than 6 times for local calls instead 40 % have made no calls in last month.

Table II.A.1. Details of Local Calls from VPT

Telecom District	No. of Calls	Last 60 days	
		No. of Users	Percent
West Khasi Hills	No calls	15	15.8
	2 or less	15	15.8
	3 to 4	10	10.5
	5 to 6	10	10.5
	More than 6	45	47.4
	Total	95	100.0
West Garo Hills	No calls	40	40.0
	2 or less	30	30.0
	3 to 4	10	10.0
	5 to 6	10	10.0
	More than 6	10	10.0
	Total	100	100.0

- A.2.** Usage of VPT for STD calls in last 60 days revealed that 97.9 % of VPT beneficiaries have not made any STD call in West Khasi Hills and 100 % in West Garo Hills district. This shows that VPT usage for STD call is negligible in both the districts of Meghalaya.

Table II.A.2. Details of STD Calls from VPT

Telecom District	No. of Calls	Last 60 days	
		No. of Users	Percent
West Khasi Hills	No calls	93	97.9
	5 to 6	1	1.1
	More than 6	1	1.1
	Total	95	100.0
West Garo Hills	No calls	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 46.3 % in West Khasi Hills district were residing within 200-500 mts. Distance and in West Garo Hills this was found to be 61 %. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from House

Telecom District	Distance	No. of Users	Percent
West Khasi Hills	Within 200 mts. from residence	33	34.7
	200-500 mts. from residence	44	46.3
	More than 500 mts.	18	18.9
	Total	95	100.0
West Garo Hills	Within 200 mts. from residence	29	29.0
	200-500 mts. from residence	61	61.0
	More than 500 mts.	10	10.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

- A. Transparency in the decision of VPT location:** Observations regarding involvement of VPT users in the decision of VPT location, data shows that in West Khasi Hills district, 68.4 % involved in the decision whereas in West Garo Hills district only 27 % of users were involved. It means people's participation in West Garo is very less.

Table III.A. Involvement in VPT Location decision

Telecom District		No. of Users	Percent
West Khasi Hills	No	30	31.6
	Yes	65	68.4
	Total	95	100.0
West Garo Hills	No	73	73.0
	Yes	27	27.0
	Total	100	100.0

- B.1. Availability of VPT Service:** It was observed in terms of the functional condition of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In West Khasi Hills district VPTs were mostly found reliable as respondents communicated that in 78.2 % cases there was no fault, for 87.1 % it was available (not busy), 91.1 % found it open and 77.2 % found it not engaged during last month. Similarly, table shows that in West Garo Hills district also VPT services were always reliable in last month.

Table III.B.1. Availability of VPT Services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
West Khasi Hills	0	81	85.2	0	81	85.2	0	91	95.7	1	79	83.0
	1	8	8.4	1	8	8.4	1	3	3.2	2	3	3.2
	2	3	3.2	2	3	3.2	2	1	1.1	3	5	5.3
	3	1	1.1	3	1	1.1				4	4	4.2
	5	2	2.1	5	2	2.1				6	1	1.1
										7	2	2.1
										10	1	1.1
	Total	95	100.0	Total	95	100.0	Total	95	100.0	Total	95	100.0
West Garo Hills	0	68	68.0	0	68	68.0	0	94	94.0	0	63	63.0
	1	20	20.0	1	20	20.0	1	5	5.0	1	12	12.0
	2	6	6.0	2	6	6.0	2	1	1.0	2	10	10.0
	3	2	2.0	3	2	2.0				3	8	8.0
	4	2	2.0	4	2	2.0				4	2	2.0
	6	1	1.0	6	1	1.0				5	2	2.0
	10	1	1.0	10	1	1.0				7	3	3.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Meghalaya in second last month also as maximum percentage of respondents found VPT in their villages reliable.

Table III.B.2. Availability of VPT Services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent	No. of Fault	No. of Users	Per cent
West Khasi Hills	0	82	86.2	0	82	86.2	0	88	92.6	0	84	88.2
	1	11	11.6	1	3	3.2	1	5	5.3	1	4	4.2
	2	1	1.1	2	2	2.1	2	2	2.1	2	1	1.1
	4	1	1.1	3	4	4.2				3	2	2.1
				4	2	2.1				4	1	1.1
				5	1	1.1				7	1	1.1
				6	1	1.1				8	1	1.1
										10	1	1.1
	Total	95	100.0	Total	95	100.0	Total	95	100.0	Total	95	100.0
West Garo Hills	0	69	69.0	0	84	84.0	0	96	96.0	0	71	71.0
	1	18	18.0	1	5	5.0	1	3	3.0	1	10	10.0
	2	5	5.0	2	3	3.0	3	1	1.0	2	6	6.0
	3	4	4.0	3	6	6.0				3	4	4.0
	4	1	1.0	5	2	2.0				4	3	3.0
	5	1	1.0							5	2	2.0
	6	2	2.0							6	1	1.0
										7	1	1.0
										10	2	2.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following table. No VPT in both the districts of the state have displayed tariff, toll free and grievance redressal numbers. Also not keeping book for complaint registration.

Table III.C. Display of Telephone Numbers, Tariff Rate & Availability of Complaint Book

Telecom District	Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
West Khasi Hills	10	100.0	10	100.0	10	100.0	10	100.0
West Garo Hills	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present

evaluation study revealed that all the places of installation except one was found convenient and very convenient in West Khasi Hills. In West Garo Hills district 9 % VPT was expressed as not at all convenient that were located in Gram panchayat and Sarpanch's house but other 91 % VPTs were found convenient and very convenient.

Table IV.A. Level of Convenience of Place of Installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
West Khasi Hills	Gram Panchayat	1	-	-	1
	Sarpanch house	-	27	67	94
	Total	1	27	67	95
West Garo Hills	Gram Panchayat	2	1	6	9
	Sarpanch house	7	49	35	91
	Total	9	50	41	100

- B. Convenience of technology used in VPT:** In West Khasi Hills district observation reflects that almost all VPT users found the technology used in VPT convenient except one. 89.3 % VPTs are using landline technology in this district. In West Garo Hills district 98 % users felt the VPT technology convenient in which all were using landline technology in their VPTs.

Table IV.B. Level of Convenience with Technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
West Khasi Hills	Landline	1	27	66	94
	Mobile	-	-	1	1
	Total	1	27	67	95
West Garo Hills	Landline	2	59	39	100
	Total	2	59	39	100

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. All 95 users in West Khasi Hills shared that WLL FX technology used in their VPTs is convenient. In West Garo Hills district 94% users in aggregate found the technology convenient.

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of Convenience			Total
		Not at all convenient	Convenient	Very convenient	
West Khasi Hills	WLL FX	-	29	66	95
	Total	-	29	66	95
West Garo Hills	WLL FX	6	57	37	100
	Total	6	57	37	100

- D. Level of convenience with type of instrument:** Following table confirms that almost all feel convenient about the instrument used in VPT in West Khasi and 94% in West Garo Hills.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
West Khasi Hills	Dial Key Board	-	28	64	92
	Single touch Key board	-	-	1	1
	Cordless	-	-	2	2
	Total	-	28	67	95
West Garo Hills	Dial Key Board	6	53	40	99
	Cordless	-	-	1	1
	Total	6	53	41	100

- E. Clarity of voice:** It is an important indicator of quality assessment of VPT installed. In West Khasi district only 5 VPT users had expressed that clarity of voice is always convenient 19.95 % users felt clarity of voice rarely. Same way in West Garo Hills 32% were finding clarity rarely and only 13 % felt clarity always available in the district.

Table IV.E. Level of Convenience in Clarity of Voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
West Khasi Hills	Never	-	-	1	1
	Rarely	11	7	3	21
	Often	1	14	53	68
	Always	-	1	4	5
	Total	12	22	61	95
West Garo Hills	Never	2	-	-	2
	Rarely	13	18	1	32
	Often	2	32	19	53
	Always	-	4	9	13
	Total	17	54	29	100

- F. Reliable connectivity of VPT**

VPT users were enquired about the reliability of connectivity of VPT service in their village. 12.6 % users in district West Khasi Hills and 19 % users in West Garo Hills district of Meghalaya shared that connectivity of VPT service is not reliable. Although 65.3 % users in West Khasi Hills and 25% users in West Garo Hills district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT Service Provider

Telecom District	Reliability	No. of Users	Percent
West Khasi Hills	Not reliable	12	12.6
	Reliable	21	22.1
	Highly reliable	62	65.3
	Total	95	100.0
West Garo Hills	Not reliable	19	19.0
	Reliable	56	56.0
	Highly reliable	25	25.0
	Total	100	100.0

V. TIMELINESS OF VPT

- A. Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 71.6 % respondents in West Khasi Hills and 58 % in West Garo Hills district found VPT always available in their area. Except one, no VPT was found closed in both the districts of Meghalaya.

Table V.A. Timeliness Availability of the Service (Working Hours)

Telecom District	Timings	No. of Users	Percent
West Khasi Hills	During day time	27	28.4
	Always	68	71.6
	Total	95	100.0
West Garo Hills	During day time	27	27.0
	During night	1	1.0
	Always	58	58.0
	Fixed timings	14	14.0
	Total	100	100.0

VI. OTHER ASPECTS

- A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 95.8 % users in West Khasi Hills were paying in case of VPT usage, and 71 % were paying cash. In West Garo Hills district only 55 % users were paying, among them 45 % were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT services

Telecom District		No. of Users	Percent
West Khasi Hills	No	4	4.2
	Yes	91	95.8
	Total	95	100.0
West Garo Hills	No	45	45.0
	Yes	55	55.0
	Total	100	100.0

Table VI.A.2. Mode of payment for VPT service usage

Telecom District	Mode of payment	No. of Users	Percent
West Khasi Hills	Cash	71	74.7
	Credit	5	5.3
	Partly cash, partly credit	12	12.6
	Others	3	3.2
	No Payment	4	4.2
	Total	95	100.0
West Garo Hills	Cash	45	45.0
	Partly cash, partly credit	10	10.0
	No Payment	45	45.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in both the districts there was no social restriction observed.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
West Khasi Hills	No	95	100.0
West Garo Hills	No	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in West Khasi Hills district was between Rs 250-500 in 90% cases of VPT whereas in West Garo Hills ARPU was between Rs. 250-500 in all 100 % VPTs of the district.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No of VPT	Percent
West Khasi Hills	Less than 250	1	10.0
	250-500	9	90.0
	Total	10	100.0
West Garo Hills	250-500	10	100.0

VII. ECONOMIC ASPECTS

A. Utility Aspect: It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
West Khasi Hills	No	94	98.9
	Yes	1	1.1
	Total	95	100.0
West Garo Hills	No	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In West Garo Hills district (100%) VPT users were of the opinion that VPT usage has no effect on household income but in other district (West Khasi Hills) of the state it was observed that only 1.1 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Per cent
West Khasi Hills	No change reported	94	98.9
	5 to 10 percent	1	1.1
	Total	95	100.0
West Garo Hills	No change reported	100	100.0

Further enquiring about the percent change in income revealed that 1.1 % of users in West Khasi expressed 5-10 % increase in their household income.

B. Improvement in connectivity: One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1 and VII.B.2 shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
West Khasi Hills	No improvement	42 (44.2)	29 (30.5)	59 (62.1)
	Marginal Improvement	27 (28.4)	32 (33.7)	25 (26.3)
	Significant improvement	26 (27.4)	34 (35.8)	11 (11.6)
	Total	95 (100.0)	95 (100.0)	95 (100.0)
West Garo Hills	No improvement	26 (26.0)	68 (68.0)	97 (97.0)
	Marginal Improvement	40 (40.0)	12 (12.0)	1 (1.0)
	Significant improvement	34 (34.0)	20 (20.0)	2 (2.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
West Khasi Hills	No improvement	55 (57.9)	66 (69.5)	66 (69.5)	66 (69.5)
	Marginal Improvement	23 (24.2)	12 (12.6)	12 (12.6)	12 (12.6)
	Significant improvement	17 (17.9)	17 (17.9)	17 (17.9)	17 (17.9)
	Total	95 (100.0)	95 (100.0)	95 (100.0)	95 (100.0)
West Garo Hills	No improvement	63 (63.0)	72 (72.0)	72 (72.0)	72 (72.0)
	Marginal Improvement	34 (34.0)	26 (26.0)	26 (26.0)	26 (26.0)
	Significant improvement	3 (3.0)	2 (2.0)	2 (2.0)	2 (2.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		West Khasi Hills	West Garo Hills
a.	Personal communication	44.2% No	40% No
b.	Business networking	35.8 % Significant	68% No
c.	Emergency Management Medical Fire Police Natural Calamities	57.9% No 69.5% No 69.5% No 69.5% No	63% No 72% No 72% No 72% No
d.	Official Purposes	62.1%	97% No

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	West Khasi Hills					West Garo Hills				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	68 (71.6)	10 (10.5)	11 (11.6)	6 (6.3)	95 (100.0)	89 (89.0)	8 (8.0)	3 (3.0)	-	100 (100.0)
b.	Market	42 (44.2)	15 (15.8)	32 (33.7)	6 (6.3)	95 (100.0)	59 (59.0)	13 (13.0)	27 (27.0)	1 (1.0)	100 (100.0)
c.	Development & Welfare scheme of Govt. on										
1.	Health	54 (56.8)	18 (18.9)	18 (18.9)	5 (5.3)	95 (100.0)	69 (69.0)	22 (22.0)	9 (9.0)	-	100 (100.0)
2.	Education	53 (55.8)	18 (18.9)	19 (20.0)	5 (5.3)	95 (100.0)	76 (76.0)	21 (21.0)	3 (3.0)	-	100 (100.0)
3.	Related to Agriculture	59 (62.1)	12 (12.6)	15 (15.8)	9 (9.5)	95 (100.0)	76 (76.0)	21 (21.0)	3 (3.0)	-	100 (100.0)
4.	Others	57 (60.0)	10 (10.5)	19 (2.0)	9 (9.5)	95 (100.0)	76 (76.0)	21 (21.0)	3 (3.0)	-	100 (100.0)
d.	Natural Calamity / Weather forecasting	68 (71.6)	9 (9.5)	10 (10.5)	8 (8.4)	95 (100.0)	97 (97.0)	3 (3.0)	-	-	100 (100.0)
e.	Rail / Road transport	66 (69.5)	14 (14.7)	9 (9.5)	6 (6.3)	95 (100.0)	100 (100.0)	-	-	-	100 (100.0)
f.	Health Services	35 (36.8)	32 (33.7)	24 (25.3)	4 (4.2)	95 (100.0)	60 (60.0)	18 (18.0)	22 (22.0)	-	100 (100.0)
g.	Agriculture related	48 (50.5)	21 (22.1)	21 (22.1)	5 (5.3)	95 (100.0)	60 (60.0)	10 (10.0)	28 (28.0)	2 (2.0)	100 (100.0)
h.	Business related	52 (54.7)	18 (18.9)	19 (20.0)	6 (6.3)	95 (100.0)	70 (70.0)	9 (9.0)	20 (20.0)	1 (1.0)	100 (100.0)
i.	Others (specify)	-	-	-	-	-	-	--	-	-	-

Table revealed that VPT is not being used as expected by policy planners of India for access to information regarding different aspects. There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 68.4 % users in West Khasi Hills and Satisfactory by 56 % in West Garo Hills district.

Table VIII.A. Level of satisfaction about convenience of the location

Telecom District	Level of satisfaction	No. of Users	Percent
West Khasi Hills	Not satisfactory	4	4.2
	Satisfactory	26	27.4
	Highly satisfactory	65	68.4
	Total	95	100.0
West Garo Hills	Not satisfactory	5	5.0
	Satisfactory	56	56.0
	Highly satisfactory	39	39.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility was expressed satisfactory among 89.9 % users in West Khasi Hills and 96 % also in West Garo Hills district.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
West Khasi Hills	Not satisfactory	1	1.1	2	2.1
	Satisfactory	28	29.5	27	28.4
	Highly satisfactory	66	69.5	66	69.5
	Total	95	100.0	95	100.0
West Garo Hills	Not satisfactory	4	4.0	9	9.0
	Satisfactory	70	70.0	65	65.0
	highly satisfactory	26	26.0	26	26.0
	Total	100	100.0	100	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined highly satisfactory by 61.1 % users in West Khasi Hills and satisfactory in 67 % in West Garo Hills.

Table VIII.C. Level of satisfaction about repair and maintenance- Time & quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
West Khasi Hills	Not satisfactory	15	15.8	14	14.7
	Satisfactory	22	23.2	24	25.3
	Highly satisfactory	58	61.1	57	60.0
	Total	95	100.0	95	100.0
West Garo Hills	Not satisfactory	16	16.0	15	15.0
	Satisfactory	67	67.0	70	70.0
	Highly satisfactory	17	17.0	15	15.0
	Total	100	100.0	100	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 80 % users in West Khasi Hills and satisfactory among 71 % users of West Garo Hills.

Table VIII.D. Level of satisfaction about cooperativeness and behaviour of custodians

Telecom District	Level of satisfaction	No. of Users	Percent
West Khasi Hills	Not satisfactory	2	2.1
	Satisfactory	17	17.9
	Highly satisfactory	76	80.0
	Total	95	100.0
West Garo Hills	Not satisfactory	-	-
	Satisfactory	29	29.0
	Highly satisfactory	71	71.0
	Total	100	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed 94.7 % satisfaction and more in West Khasi Hills. But in West Garo Hills 39% were not satisfied with other service providers.

Table VIII.E. Level of satisfaction about other alternate service providers

Telecom District	Level of satisfaction	No. of Users	Percent
West Khasi Hills	Not satisfactory	5	5.3
	Satisfactory	28	29.5
	Highly satisfactory	62	65.3
	Total	95	100.0
West Garo Hills	Not satisfactory	39	39.0
	Satisfactory	44	44.0
	Highly satisfactory	17	17.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villagers in the districts. Observation reflects that 80% of the custodian of VPT were making payment regularly in the both the districts

Table IX. Regularity in payment

Telecom District	Regularity	No. of Custodians	Percent
West Khasi Hills	No	2	20.0
	Yes	8	80.0
	Total	10	100.0
West Garo Hills	No	2	20.0
	Yes	8	80.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 60 % users in West Khasi Hills district have resolved problems about VPT location internally and in West Garo Hills 48 % VPT users have resolved it internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
West Khasi Hills	Internally	57	60.0
	Externally	15	15.8
	Not resolved	3	3.2
	Not aware	20	21.1
	Total	95	100.0
West Garo Hills	Internally	48	48.0
	Externally	3	3.0
	Not resolved	2	2.0
	Not aware	47	47.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed 57.9 % internally in West Khasi Hills and 52 % users in West Garo Hills district were not aware about the problem. Problem solution of quality accessibility was also viewed solved internally among 55.8 % users in West Khasi Hills and 54 % users were not aware about this issue in West Garo Hills.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
West Khasi Hills	Internally	55	57.9	53	55.8
	Externally	14	14.7	16	16.8
	Not resolved	11	11.6	11	11.6
	Not aware	15	15.8	15	15.8
	Total	95	100.0	95	100.0
West Garo Hills	Internally	39	39.0	36	36.0
	Externally	7	7.0	6	6.0
	Not resolved	2	2.0	4	4.0
	Not aware	52	52.0	54	54.0
	Total	100	100.0	100	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 40 % and 38 % users have resolved externally in West Khasi Hills and West Garo Hills districts respectively. Similarly in the case of the problem of quality repair & maintenance 38 % of VPT users have solved it externally in West Khasi Hills and in 63 % cases users were not aware in West Garo Hills district.

Table X.C. Problem Resolution related to Repair and Maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
West Khasi Hills	Internally	20	21.1	20	21.1
	Externally	38	40.0	38	40.0
	Not resolved	10	10.5	10	10.5
	Not aware	27	28.4	27	28.4
	Total	95	100.0	95	100.0
West Garo Hills	Internally	14	14.0	14	14.0
	Externally	19	19.0	19	19.0
	Not resolved	3	3.0	4	4.0
	Not aware	64	64.0	63	63.0
	Total	100	100.0	100	100.0

- D. Problem resolution about the payments to the custodians**

Regarding the problem of payment to custodian 57.9% users in West Khasi Hills and 74 % in West Garo Hills were not aware about this issue.

Table X.D. Problem Resolution related to Payments to Custodians

Telecom District		No. of Users	Percent
West Khasi Hills	Internally	13	13.7
	Externally	16	16.8
	Not resolved	11	11.6
	Not aware	55	57.9
	Total	95	100.0
West Garo Hills	Internally	16	16.0
	Externally	8	8.0
	Not resolved	2	2.0
	Not aware	74	74.0
	Total	100	100.0

E. Problem resolution about the other alternate Service Providers

52.5 % VPT users in West Khasi Hills has solved the Problem resolution related to alternate service provider internally and 82 % VPT users in West Garo Hills were not aware about this issue in West Garo Hills district.

Table X.E. Problem Resolution related to Alternate Service Providers

Telecom District		No. of Users	Percent
West Khasi Hills	Internally	50	52.6
	Externally	7	7.4
	Not resolved	6	6.3
	Not aware	32	33.7
	Total	95	100.0
West Garo Hills	Internally	13	13.0
	Externally	3	3.0
	Not resolved	2	2.0
	Not aware	82	82.0
	Total	100	100.0

SWOT ANALYSIS

DISTRICT : WEST GARO HILLS

(1) Village Aminokgre

The village is situated 17 kilometers away from Rongram and 1 kilometer away from State Highway. From the pucca road, the house in which VPT was situated was 100 metres. The BSNL selected Mr Pagen B. Marak as the custodian since he is the Nokma (Village Headman). Moreover, discussions with BSNL officials revealed that since he belonged to the ST category, it was decided to give preference to him, and they reported that they did not succumb to the pressures from the villagers.

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- Delay in repair works is due to shortage of staff and long distance
- Frequent power failure disturbs in charging the WLL battery

Opportunities

- Strengthen VPT through additional facilities such as STD, Internet and Fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation.

(2) Village Annagpara

The village is situated 27 kilometers away from Garobadha and 3 kilometers away from State Highway. From the pucca road, the house in which VPT was situated was 50 metres. The BSNL selected Mr Nani D. Sangma as the custodian. Being the headman of the village he got

the preference to be the custodian of the VPT. Moreover his house is located at the middle of the village, which is convenient for the villagers to use the VPT.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- VPT is located near to upper primary school and village market in the village – used by all including teachers and staff of the school.
- The VPT is providing facilities to the villagers to get the information about the market and the business situation.

Weakness

- No STD facility
- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers

Opportunities

- Strengthen VPT through additional facilities such as STD, interne.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.

Threats

- The frequent power failure is disturbing the villagers to use the VPT during emergency time. The interest of the public might get shifted because of non-availability of VPT during emergency.

(3) Village Boumagre

The village is situated 17 kilometers away from Rongram and 15 kilometers away from State Highway. From the main village road the house in which VPT was situated was 100 metres. Mr Donjeng Ch. Marak is the custodian since he is the Nokma (Village Headman). He has a good influence among the villagers. There is no complaint from the villagers' side making him the custodian of the VPT and keeping the VPT at his house.

Strengths

- It is used by the villagers for different purposes like business, market related information etc.
- VPT is located near the main village market – used by all

Weakness

- No STD facility
- Frequent power failure disturbs in charging the WLL battery
- WLL is connectivity dependent on weather

Opportunities

- Strengthen VPT through additional facilities such as STD, Internet and fax to attract the younger generation to use the facility.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL
- Generate employment opportunities.

Threats

- As the houses are scattered, the VPT is not used by all villagers. More number of VPT is required in the village.

(4) Village Bolsalgri

The village is situated 18 kilometers away from Betasing and 1 kilometer away from State Highway. From the pucca road, the house in which VPT was situated was 50 metres. The BSNL selected Mr. Nondi D. Sangma as the custodian since he is the Nokma (Village Headman). The VPT is kept in his house and it is convenient for all the villagers to use the VPT.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed inside the house for safety purposes for avoiding unnecessary using of WLL by the village people.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility

Opportunities

- Strengthen VPT through additional facilities such as STD, Internet, and fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation.

(5) Village Chibragre

The village is situated 13 kilometers away from the District Headquarter Tura. From the State Highway the house in which VPT was situated was 50 metres. The BSNL selected Mr. Predish Ch. Sangma as the custodian since he is the Nokma (Village Headman). Moreover, discussions with BSNL officials revealed that since he belonged to the ST category, it was decided to give preference to him, and they reported that they did not succumb to the pressures from the villagers.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed inside the house in a separate cabin.
- It is bringing easier mode of communication for the villagers.

Weakness

- Delay in repair works is due to shortage of staff and long distance
- WLL connectivity is dependent on weather
- The houses are scattered. One VPT is not enough.

Opportunities

- There is a requirement of more number of VPT as the village is bigger and the houses are scattered.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(6) Village Dipogre

The village is situated 8 kilometers away from Rongram and 7 kilometers away from State Highway. From the pucca road, the house in which VPT was situated was 200 metres downhill. The BSNL selected Mr Nikal A. Sangma as the custodian since he is the Nokma (Village Headman).

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all –even it is used by ladies also.

Weakness

- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers
- WLL connectivity is dependent on weather and interrupted power supply

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility

Threats

- The call rate of the VPT should be lowered more as the villagers are unable to pay the call rate.
- Proper billing should be there for the user.

(7) Village Mandalgiri

The village is situated 25 kilometers away from Garobadha and 1 kilometer away from State Highway. From the pucca road, the house in which VPT was situated was 300 metres. The BSNL selected Mr. Danjen M. Sangma as the custodian since he is the Nokma (Village Headman) and a leader in the village.

Strengths

- WLL is convenient to all –there is no problem with the location.
- People are getting the incoming calls also.
- The VPT is serving well in case of emergency.

Weakness

- No STD facility
- Delay in repair works is due to shortage of staff and long distance
- WLL connectivity is dependent on weather
- Decreased awareness about VPT among villagers

Opportunities

- WLL helps in information transaction in business dealings.
- The incomes of the households are increasing.

Threats

- The frequent power off problem is making the villagers bore.

(8) Village Sanchonggre

The village is situated 6 kilometers away from Rongram and 4 kilometers away from State Highway. From the main village road the house in which VPT was situated was 100 metres. The BSNL selected Mrs. Wejak Marak as the custodian since she is the Nokma (Village Head). Moreover, discussions with BSNL officials revealed that since she belonged to the ST category, it was decided to give preference to her, and they reported that they did not succumb to the pressures from the villagers.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and the elderly.
- VPT is located near to school in the village – used by all including teachers and staff of the school.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- WLL is installed inside the house, feeling uneasiness to utilize by the villagers
- Delay in repair works is due to shortage of staff and long distance
- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers
- WLL connectivity is dependent on weather

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation

(9) Village Waka Akongre

The village is situated 12 kilometers away from the District Headquarter Tura and 2 kilometers away from State Highway. From the pucca road, the house in which VPT was situated was 100 metres downhill. The BSNL selected Mr Klenson Marak as the custodian. His house is located in the middle of the village. There is no problem for the villagers to come to his house for using VPT.

Strengths

- WLL is installed in the common room of the house
- WLL is convenient to all – used by men, women and the elderly.

- VPT is located near to upper primary school in the village and local village market, which is being used by all.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility

Opportunities

- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult
- Scope for employment opportunity

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation.

(10) Village Warama'sim

The village is situated 5 kilometers away from Rongram and 4.5 kilometers away from State Highway. From the pucca road, the house in which VPT was situated was 25 metres downhill. The BSNL selected Mr Bhim A. Sangma as the custodian since he is the Nokma (Village Headman).

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is used for the different purposes like market information, agricultural information etc.
- It is bringing new light to the communication for the villages.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line man in charge of 7 villages spread across various hills

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult

- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL

Threats

- The younger generation is attracted to the mobile connection.

DISTRICT : WEST KHASI HILLS

(1) Village Kynroh

The village is situated 10 kilometers away from Nongstoin. From the main village road, the house in which VPT was situated was 200 metres. The BSNL selected Mr. (L) Kenson Marngar as the custodian since he is the Rangbah Shnong (Village Headman). The BSNL selected Mr Bhim A. Sangma as the custodian since he is the Nokma (Village Headman).

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is used for the different purposes like market information, agricultural information etc.
- It is bringing new light to the communication for the villages.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Shortage of BSNL Staff for repair is reported – only two line man in charge of 7 villages spread across various hills

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL.

Threats

- The younger generation is attracted to the mobile connection.

(2) Village Mawduh

The village is situated 12 kilometers away from Nongstoin and 5 kilometers away from State Highway. From the main village road, the house in which VPT was situated was 250 metres. The BSNL selected Mr. Spingwell. K. Marshra as the custodian since he is the Rangbah Shnong (Village Headman). His house is located in the middle of the village. There is no problem for the villagers to come to his house for using VPT.

Strengths

- WLL is installed in the common room of the house
- WLL is convenient to all – used by men, women and the elderly.
- VPT is located near to upper primary school in the village and local village market, which is being used by all.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility

Opportunities

- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult
- Scope for employment opportunity

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation.

(3) Village Kynroh

The village is situated 13 kilometers away from Nongstoin. From the main village road, the house in which VPT was situated was 100 metres. The BSNL selected Mr. K.K. Dewsaw as the custodian since he is the Rangbah Shnong (Village Headman). Moreover, discussions with BSNL officials revealed that since she belong to the ST category, it was decided to give preference to her, and they reported that they did not succumb to the pressures from the villagers.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and the elderly.
- VPT is located near to school in the village – used by all including teachers and staff of the school.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- WLL is installed inside the house, feeling uneasiness to utilize by the villagers
- Delay in repair works is due to shortage of staff and long distance
- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers
- WLL connectivity is dependent on weather

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL.

Threats

- Multiple mobile connections – BSNL and private-in households especially among younger generation

(4) Village Mawnai

The village is situated 15 kilometers away from Mairang. From pucca road the house in which VPT was situated was 400 metres. The BSNL selected Mr. Forwarded Lyngdoh Mawnai as the custodian since he is the Rangbah Shnong (Village Headman).

Strengths

- WLL is convenient to all – there is no problem with the location.
- People are getting incoming calls also.
- The VPT is serving well in case of emergency.

Weakness

- No STD facility
- Delay in repair works is due to shortage of staff and long distance
- WLL connectivity is dependent on weather
- Decreased awareness about VPT among villagers

Opportunities

- WLL helps in information transaction in business dealings.
- The incomes of the household are increasing.

Threats

- The frequent power off problem is making the villagers bore.

(5) Village Mawthungpker

The village is situated 13 kilometers away from Nongstoin. From the main village road, the house in which VPT was situated was 150 metres. The BSNL selected Mr. Korne K. Bani as the custodian since he is the Rangbah Shnong (Village Headman). The BSNL selected Mr Nikal A. Sangma as the custodian since he is the Nokma (Village Headman).

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all –eve it is used by ladies also.

Weakness

- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers
- WLL connectivity is dependent on weather and interrupted power supply

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility

Threats

- The call rate of the VPT should be lowered more as the villagers are unable to pay the call rate.
- Proper billing should be there for the user.

(6) Village Nongbah Bynther

The village is situated 13 kilometers away from Mairang. From State Highway the house in which VPT was situated was 100 metres. The BSNL selected Mr Kedarson Marbaniang as the custodian since he is the Rangbah Shnong (Village Headman).

Strengths

- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all – eve it is used by ladies also.

Weakness

- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers
- WLL connectivity is dependent on weather and interrupted power supply

Opportunities

- Strengthen VPT through additional facilities such as STD, Internet, and Fax to attract the younger generation to use the facility

Threats

- The call rate of the VPT should be lowered more as the villagers are unable to pay the call rate.
- Proper billing should be there for the user.

(7) Village Pungsiar, Mawrusyiar

The village is situated 12 kilometers away from Nongstoin. From the main village road, the house in which VPT was situated was 100 metres. The BSNL selected Mr. Phrelington Dkhar as the custodian since he is the Rangbah Shnong (Village Headman). Moreover, discussions with BSNL officials revealed that since he belonged to the ST category, it was decided to give preference to him, and they reported that they did not succumb to the pressures from the villagers.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed inside the house in a separate cabin.
- It is bringing easier mode of communication for the villagers.

Weakness

- Delay in repair works is due to shortage of staff and long distance
- WLL connectivity is dependent on weather
- The houses are scattered. One VPT is not enough.

Opportunities

- There is a requirement of more number of VPT as the village is bigger and the houses are scattered.

Threats

- The call rate of the VPT should be lowered more as the villagers are unable to pay the call rate.
- Proper billing should be there for the user.

(8) Village Steplanglur, Block Nongstoin

The village is situated 19 kilometers away from Nongstoin and from State Highway the house in which VPT was situated was 100 metres. The BSNL selected Mr Brendar Mawlieh as the custodian since he is the Rangbah Shnong (Village Headman). The VPT is kept in his house and it is convenient for all the villagers to use the VPT.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed inside the house for safety purposes for avoiding unnecessary using of WLL by the village people.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility

Opportunities

- Strengthen VPT through additional facilities such as STD, internet, fax to attract the younger generation to use the facility
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.

(9) Village Upper Umsaw Urkali

The village is situated 8 kilometers away from Nongstoin. From the main village road, the house in which VPT was situated was 100 metres. The BSNL selected Mr. V.K. Bani as the custodian since he is the Rangbah Shnong (Village Headman). He has a good influence among the villagers. There is no complaint from the villagers side making him the custodian of the VPT and keeping the VPT at his house.

Strengths

- It is used by the villagers for different purposes like business, market related information etc.
- VPT is located near the main village market – used by all

Weakness

- No STD facility
- Frequent power failure disturbs in charging the WLL battery
- WLL is connectivity dependent on weather

Opportunities

- Strengthen VPT through additional facilities such as STD, Internet, and fax to attract the younger generation to use the facility.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted Proactive role by BSNL
- Generate employment opportunities.

Threats

- As the houses are scattered, the VPT is not used by all villagers. More number of VPT is required in the village.

(10) Village Wahlakhaw

The village is situated 2 kilometers away from Mairang. From State Highway the house in which VPT was situated was 20 metres. The BSNL selected Mr. Jopsing Rani as the custodian since he is the Rangbah Shnong (Village Headman). Being the headman of the village he got the preference to be the custodian of the VPT. Moreover his house is located at the middle of the village, which is convenient for the villagers to use the VPT.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- VPT is located near to upper primary school and village market in the village – used by all including teachers and staff of the school.
- The VPT is providing facilities to the villagers to get the information about the market and the business situation.

Weakness

- No STD facility
- Frequent power failure disturbs in charging the WLL battery
- Decreased awareness about VPT among villagers

Opportunities

- Strengthen VPT through additional facilities such as STD, interne.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult

Threats

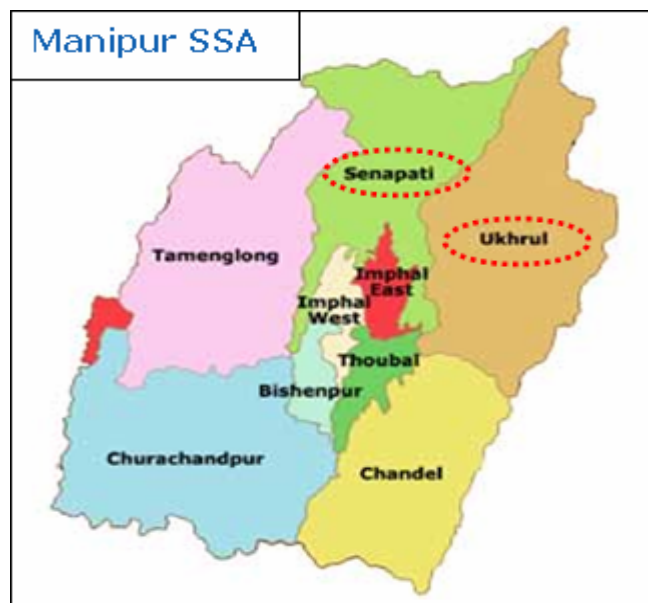
- The frequent power failure is disturbing the villagers to use the VPT during emergency time. The interest of the public might get shifted because of non-availability of VPT during emergency.

State Report - 11 MANIPUR



Manipur

Manipur, one of the seven sisters in North Eastern of India, is an isolated state stretching 92°58'E to 94°45'E longitudes and 23°50' N to 25°42"N latitudes. Imphal is the capital city of Manipur. Manipur is a beautiful place surrounded by nine ranges of hills covering geographical area of 22,327sq.Kms, which constitute 0.7 percent of the total land surface of India. Ninety percent of the total geographical area of the state i.e. 20,089 sq. Km is covered by hills, the remaining area is the valley situated at the centre. The State has 352 Kms., long international border with Myanmar to the southeast and 502 Kms. long border with adjacent states of Nagaland on the north, Cachar District of Assam on the west and Chin hills (Myanmar) and Mizoram on the south and the south west and Surma tract and upper Chindwin of Myanmar on the East. The altitude rises from 790-2020 metres. The state has a salubrious climate.



According to 2001 Census, the state has a population of 22.9 lakhs, out of which 11.6 Lakhs were males and 11.3 Lakhs were females. There are 7 scheduled caste communities and 33 different schedule tribes of different ethnic groups presenting complicated socio-economic phenomenon. There is apparent disparity in the level of income and consumption between the rich and the poor, and haves and have-not and public living in the hills and the valleys.

The state has 33 towns (28 statutory towns and 5 census towns) and 2,391 villages (2315 inhabited and 76 un-inhabited) as per 2001 census. The state of Manipur splits up into hills and valleys. The hills comprised five districts namely - (i) Senapati; (ii) Tamenglong; (iii) Churachandpur; (iv) Chandel; and (v) Ukhrul, while the Valley consist of four districts viz. (i) Imphal East (ii) Imphal West; (iii) Bishnupur and (iv) Thoubal. The valley areas of the state has two constituent parts, one of which is the Imphal valley in the heart of the state and Jiri valley in the west beyond the pale of hill ranges bordering the Cachar District of Assam.

Manipur district is a part of NE-II telecom circle that includes 3 States – Arunachal Pradesh, Manipur and Nagaland. GMTD, BSNL, Manipur is in the head of implementing Department in Manipur and SDE is the incharge of VPT at state level. In order to connect the rural villages over telephone and to provide telecom service to rural mass in a subsidized rate Village Public

Telephones (VPT) were installed. Although VPT's were being installed in 90's but VPT scheme under BNY started functioning in the year 2004.

Out of the 2391 villages, 1824 villages are covered under VPT. As per the various agreements signed from time to time by BSNL with USO(F), the telecom department prepares an action plan every year. As per their action Plan for the year 2008-09, it has been aimed to cover the remaining villages with 33 WLL BTS, 106 mobile towers and 478 DSPT's under Bharat Nirman Programme. The telecom department follows the given criteria before installing the VPT in villages.

Details of Physical Targets & Achievements (No. of newly connected Villages / VPTs) for the last 5 Years are as below as per the information provided by CGM office -

Years	Physical Performance (Newly connected Villages / VPTs)			
	Target No. of VPTs	Achievement No. of VPTs	Reasons for shortfall, if any	Action taken up to overcome the shortfalls
2004-05	350	291	-	Provided in previous year
2005-06	100	26	Insufficient WLL BTS	Provided in the subsequent year
2006-07	200	261	-	-
2007-08	100	106	-	-
2008-09	200	159	WLL set shortage	Will be covered in the year 2009-10 by DSPT

The Village Public Telephone Scheme is financed by BSNL with the full subsidy by USOF of DOT for installation & operation of VPTs under various technologies. Dial up internet facility is extended to all the VPT's in the state.

Regarding expenditure details there is no accounting for expenditure of VPT exclusively. It is covered under overall expenditure of BSNL. Similarly, there is no separate staff for VPT maintenance and performance. VPTs are maintained by the existing staff of BSNL as well as by an outsourced agency. Annual Maintenance Contract (AMC) is given to one agency for maintenance and attending faults of DSPT VPTs.

Monitoring and Supervision: There are some mechanisms available for monitoring and supervision of VPTs at the State level. This monitoring and supervision work is done by the staff of the outsourced agency along with BSNL staff. They prepare a format and guidelines for monitoring and supervision. At the block level, the Junior Telecom Officer (JTO) & Telecom Technical Assistant (TTA) are in charge of monitoring and supervision. At the village/exchange level, line man is in charge of monitoring. Technical staff (there is no separate staff for VPT) is in charge of the maintenance.

Repairs and Maintenance of VPTs: There are no charges for repairing and maintenance. The repairing and maintenance activities of VPT are done by BSNL staff and the outsourced agency. The work distribution is based on telecom sub division. In order to train the technical staff more efficiently sometimes head office organizes two weeks training programmes.

In the State BSNL did not perceive any competition to VPTs from other private service providers. No private service provider is providing VPTs in the state.

Future plans revealed that VPTs are being provided in the newly identified villages as per census 2001, improvement in present functional efficiency of VPTs, provisioning of internet through VPTs to the villages etc., are in progress. There is future plans for the upgrading the skills of the officers and technical staff, to train staff for DSPT VPT maintenance at SDCA level to reduce non-functionality as well as to educate the VPT custodians.

Following issues were highlighted during interface with officials. Regarding strengths of VPTs it was observed that it is one of the sources of the communication for the villagers dwelling in inaccessible areas with additional features of internet. In remote rural areas, where there is no telecommunication facility is possible on landline, WLL or GSM due to extreme geographical conditions, VPTs on DSPT are the only source of communication for people of those villages.

While discussing weaknesses of VPTs it was revealed that shortage of power supply in villages creates difficulty in charging of customer premises batteries regularly to provide uninterrupted service. Another point is that the custodians do not pay the bills in time due to which many VPTs are disconnected due to non-payment. Some time locations are very remote. Lack of ignorance about the full use of VPT beside personal communication in people at villages is also one of the reasons of low ARPU in the area.

GMTD has given his overall opinion about VPT that it has made huge impact by connecting people who were earlier unconnected. Rural-Urban digital divide could be reduced if efforts are made for regular power supply in the villages of the state. Against the backdrop of discussion on the performance of VPTs at the state level, the next section discusses the performance of VPTs in the districts of Senapati and Ukhrul.

DISTRICT : SENAPATI

Senapati district has a total area of 3,271 sq.km and density of population is 116 per sq. km as per 2001 Census. The district is mainly inhabited by the schedule tribes community viz. Nagas, Kukis. Only a few people from Nepali and Meitei community settle in the Senapati district. The district is well connected with the National Highway 39, state highways and district highways. However, inter village connectivity is very poor because of scattered villages in the hilly area.

Table 1: Administrative Division of Senapati District

Name of the District	Name of Sub-Division	Headquarter	Area in sq.km	Population	No. of villages
SENAPATI	Mao Maram	Tadubi	3,271	2,83,621	625
	Paomata	Paomata		69,131	74
	Purul	Purul		27,065	20
	Sadar Hills West	Kangpokpi		30,912	27
	Saitu Gamphazol	Gamnom		60,945	122
	Sadar Hills East	Saparmeina		44,130	161
		Saikul		51,438	221

Source: Registrar General and Census Commissioner of India, New Delhi.

Table 2: Telecommunication facilities in Senapati District

District	Telegraph office	Telephone Exchange	Combined offices	Telephone working (DEL)	P.C.O		
					Local	STD	Total
Senapati	-	10	9	2494	3	51	54

Source: Office of the Telecom, District Manager, Imphal (2005-2006)

Table 3: Rural Electrification in Senapati District as 31st March 2007

District	Number of Village	Number of villages electrified	Percentage of villages electrified	No. of Non-electrified villages	Percentage of Non-electrified villages
Senapati	642	487	75.86	155	24.14

Source: Electricity Department, Government of Manipur.

Till 2007-2008, Senapati district has covered 414 villages by Landline, WLL VPTs. To cover the remaining villages, WLL, Mobile towers and 154 DSPTs are planned for the 2008-2009. Most of the VPTs under survey were on record but connectivity was not reliable. Most of the VPTs were not working for the past 3-4 months.

Like any other districts it has developed its own communication facilities over the years. The village Public Telephones (VPTs) is being installed in various regions of the district. The GMTD, BSNL is acting as head of the implementing agency at the state level and SDET is in charge of VPT at the district level.

To provide telephonic communication to rural India this scheme is in functional since 2004 in this district. Till date 449 VPTs are being installed in 449 villages. The department used to give the VPT connection to inhabited villages in consultation with the respective Gram Sabha.

In the beginning of every financial year, the department prepares an action plan for the forthcoming year. As mentioned by officials, it is being planned to cover remaining 414 villages through WLL, mobile towers and 154 DSPT by end of 2008-09.

If we look into the target and achievement of installation of VPTs in Senapati district it is observed that targets were achieved but in 2005-06 it is lagging behind the target because of insufficient Bare Transceiver Station (BTS). All the VPTs were having extended dial up

facility. It is mentioned by the officials that there are only 8 staff including the technical and administrative officers working in the Senapati district.

There is certain mechanism available for monitoring and supervision of VPTs. Though there are no exclusive guidelines for its implementation. It is done by both the BSNL officials and staff of outsourced agency. There are no exclusive staff for monitoring work. The BSNL staff visits each mandal everyday to enquire about the VPTs. In village and booth level they visit as and when there is requirement.

There is no separate fund allocation for VPT exclusively. There is also no separate particular expenditure details for VPT repairing and installation. The repairing and maintenance work of VPT is done by both BSNL and an outsourced agency in the area. They have certain technical staff who used to help in repairing. During last three months, a total of 71 cases of VPTs repairs were undertaken by the department. The department does not charge the custodian for the repair.

During 2008 and 2009 two weeks training programme was organized for officers at different telecom centre that in turn was imparted to staff at lower levels.

The department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Major Strength of VPT observed in the district is that VPT has enabled villagers to communicate to the rest of the world with additional feature of internet in the district. Main Weakness of VPTs reflected in the area is power shortage and no reduction in Mean Time To Repair.

Officials opined for improvement that if electric supply is made regular, communication gap and digital divide could be bridged by VPT installation in the area.

DISTRICT : UKHRUL

Ukhrul district has an area of 4,544 sq. km and has a population density of 31 per sq. km. The Ukhrul district headquarters is about 80 km from Imphal. The district is well connected by National Highway 150 and state highways. The district is mainly dominated by the Nagas and Kukis.

Table 4: Administrative Division of Ukhrul District

Name of the District	Name of Sub-Division	Headquarter	Area in sq.km	Population	No. of villages
Ukhrul	Ukhrul North	Chingai	4,544	1,40,778	198
	Ukhrul Central	Ukhrul		25,151	27
	Kamjong Chassad	Kamjong		79,191	66
	Phungyar Phaisat	Phungyar		12,937	41
	Ukhrul South	Kasom Khullen		13,293	35
				10,206	29

Source: Registrar General and Census Commissioner of India, New Delhi.

Table 5: Telecommunication facilities in Ukhrul District

District	Telegraph office	Telephone Exchange	Combined offices	Telephone working (DEL)	P.C.O		
					Local	STD	Total
Ukhrul	—	1	3	655	2	33	35

Source: Office of the Telecom, District Manager, Imphal (2005-2006)

Table 6: Rural Electrification in Ukhrul District as 31st March 2007

District	Number of Village	Number of villages electrified	Percentage of villages electrified	No. of Non-electrified villages	Percentage of Non-electrified villages
Ukhrul	198	181	91.14	17	8.59

Source: Electricity Department, Government of Manipur.

VPT Status / Unique Features

In Ukhrul district, 147 villages were provided with landline, WLL, VPTs till 2007-08. To cover remaining villages, WLL BTS, Mobile towers and 43 DSPTs are planned for the year 2008-2009 (Source: BSNL, Imphal). But most of the VPTs were not working after 5-6 months of WLL installation mainly because of the battery damage due to irregular supply of electricity in the district.

FGD and Non-Beneficiary schedule were conducted. As the VPT in these villages were not working for the past 2-3 years, beneficiaries were not canvassed.

Like other districts it has developed its own communication facilities over the years. The village Public Telephones (VPTs) is being installed in various regions of the district. The GMTD, BSNL is acting as head of the implementing agency at the state level and SDET is in charge of VPT at the district level.

To provide telephonic communication to rural India, this scheme is functional since 2004 in this district. Till date 158 VPTs are being installed in 158 villages. The department gives the VPT connection to inhabited villages in consultation with respective Gram Sabha.

In the beginning of every financial year, the department prepares an action plan for the forthcoming year. As it is mentioned by the official that it is being planned to cover remaining 147 villages by WLL, mobile towers and 43 DSPT by end of 2008-09.

If we look into the target and achievement of installation of VPTs in Ukhrul district it is observed that every year targets were achieved. All the VPT were having extended dial up facility. It is mentioned by the official that there are only 4 staff including the technical and administrative officers working in the Ukhrul district.

There is certain mechanism available for monitoring and supervision of VPTs. There are no such guidelines to implement it. It is done by both the BSNL officials and an outsourced agency. There are no fixed staff for monitoring work. There is no separate fund allocation for

VPT exclusively. There is also no particular expenditure details for VPT repairing and installation. The repairing and maintenance work of VPT is done by both BSNL and an outsourced agency in the area. They have certain technical staff who help in repairing. During last three months a total of 57 cases of VPTs were repaired by the department. The department does not charge for the repairing activity. Like in Senapati district during 2008 and 2009 two weeks training programme was organized for officers at different telecom centre that in turn was imparted to staff at lower level.

The department does not perceive any competition to VPTs from any other service providers. However, the introduction of mobiles has reduced the demand for VPTs in rural areas.

Major Strength of VPT observed in the district is that VPT has enabled villagers to communicate to the rest of the world with additional feature of internet in the district. Main Weakness of VPTs reflected in the area is power shortage and no reduction in Mean Time Taken for Repair.

Officials opined that if electric supply is made regular, communication gap and digital divide could be bridged through VPT installation in the area.

POLICY IMPLICATIONS

BSNL is working excellently in connecting remote villages of Senapati and Ukhrul district under the Bharat Nirman Scheme (2004-2009). However, the problem is with the maintenance of these WLL VPTs. Technical staff are not available in the District Telephone exchanges. For repairing of WLL, the custodian had to travel long distances to reach Imphal, and thereby incur huge expenses. Payment of bills is also a problem. Computerized billing system is not available in the district Headquarter. Computerized billing system need to be installed in the district headquarter. Electricity is very irregular in both the districts. This irregularity of electricity power supply has damaged the WLL battery as a result WLL becomes defunct. Thus VPT remain non-beneficial.

Reliability of Mobile service connectivity is a serious blow to VPTs. Hence, VPTs connectivity needs to be made more reliable.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In Manipur state VPT was observed functional only in one district – Senapati during study. In other district no beneficiary could be contacted as no villager could be contacted using VPT in the district. Hence analysis in this section is provided for only one district. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPT. This section of the report analyses all the aspects referred above in details.

I. GENERAL DETAILS OF VPT USERS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, the details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users :** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum per cent belong to ST (97 %) in Senapati in Manipur.

Table I.A.1. Social Group of VPT Users

Telecom District		No of Users	Percent
Senapati	General	3	3.0
	Other Backward Class (OBC)	-	-
	Scheduled Caste (SC)	-	-
	Scheduled Tribe (ST)	97	97.0
	Total	100	100.0

78 % of respondents were females in Senapati in the survey conducted.

Table I.A.2. Gender Distribution

Telecom District	No of Users		Total
	Female	Male	
Senapati	78	22	100

Regarding their primary occupation data revealed that maximum 44 % were engaged in agriculture and 27 % were homemakers as primary occupation in Senapati. 24 % of VPT users were found to be functional literates and 26 % were primary literate in Senapati in the current study.

Table I.A.3. Primary Occupation & Educational Qualification

	Primary Occupation (Self)	Senapati
1	Agriculture	44
2	Home Makers	27
3	Salaried work	29
	Total	100
Educational Qualification		
1	Not literate	7
2	Functional literate	24
3	Primary	26
4	Upper Primary	18
5	High School	20
6	Intermediate	2
7	Graduate	2
8	Above Graduation	1
	Total	100

B. Particulars of Home of VPT Users**B.1. Type of House:** Majority owned semi-pucca houses in Senapati (62 %).**Table I.B.1. Type of House**

Telecom District	Type of House	No of Users	Percent
Senapati	Kucha House	36	36.0
	Semi-pucca House	62	62.0
	Pucca House	2	2.0
	Total	100	100.0

B.2. Status of Electrification: Electrification status of respondents reflects that 98 % of users were having electricity in their houses in Senapati.**Table I.B.2. Status of Electrification**

Telecom District	Availability	No of Users	Percent
Senapati	Electricity not available	2	2.0
	Electricity available	98	98.0
	Total	100	100.0

B.3. Distance of House from Pucca Road: Looking at the proximity of their houses to pucca roads, data revealed that 68 % of respondents in Senapati were situated at the distance of more than 100 metres but less than 1 km.**Table I.B.3. Distance of Users from pucca Road**

Telecom District	Distance	No of Users	Percent
Senapati	More than 100 metres but less than 1 km	68	68.0
	More than 1 km	32	32.0
	Total	100	100.0

- B.4. Distance of House from State Highway:** In terms of the distance from state highway, it was revealed that 90 % respondents were staying at upto 2 km in Senapati district of the state of Manipur.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No of Users	Percent
Senapati	Upto 2 km	90	90
	More than 2 but less than 10 km	10	10
	Total	100	100.0

C. Details of Telephone Connectivity

- C.1. Telephone availability at Home:** Majority of (82 %) respondents in Senapati district were having telephone at their home.

Table I.C.1. Telephones Availability

Telecom District	Availability	No of Users	Percent
Senapati	Telephone not available	18	18.0
	Telephone available	82	82.0
	Total	100	100.0

- C.2. Type of Telephone:** Among telephone owners at their home all were having mobiles in Senapati.

Table I.C.2. Type of Telephone

Telecom District	Type of Telephone	No. of Users	Percent
Senapati	Landline	--	--
	Mobile	82	100
	Total	82	100

- C.3. Details of Service Provider:** Regarding the details about service providers to the respondents, Airtel was found to provide services to maximum respondents in Senapati (82.93 %).

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No of Users	Percent
Senapati	BSNL	14	17.07
	Airtel	68	82.93
	Total	82	100.0

II. USAGE OF VPT

- A.1.** Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflects that maximum 74 % VPT beneficiaries have made no calls in Senapati and only 21% have used VPT more than 6 times for local calls in last 60 days.

Table II.A.1. Details of local calls from VPT

Telecom District	No. of Calls	Last 60 days	
		No. of Users	Percent
Senapati	No calls	74	74.0
	2 or less	1	1.0
	3 to 4	2	2.0
	5 to 6	2	2.0
	More than 6	21	21.0
	Total	100	100.0

A.2. Usage of VPT for STD calls in last 60 days revealed that no VPT beneficiaries have made any STD call in Senapati.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 60 days	
		No. of Users	Percent
Senapati	No calls	100	100.0
	Total	100	100.0

B. Distance of VPT from the House

Data regarding distance of VPT from beneficiary's house reflects that 62% in Senapati district were residing within 200-500 mts. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from House

Telecom District	Distance	No of Users	Percent
Senapati	Within 200 mts from residence	38	38.0
	200-500 mts from residence	62	62.0
	Total	100	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

A. Transparency in the decision of VPT location: Observations regarding involvement of VPT users in the decision of VPT location, data shows that in Senapati district 91 % users were not involved in the decision it means peoples participation is very less.

Table III.A. Involvement in VPT Location decision

Telecom District		No of Users	Percent
Senapati	No	91	91.0
	Yes	9	9.0
	Total	100	100.0

B.1. Availability of VPT Service: Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. In Senapati district, VPTs were found mostly unreliable as respondents communicated that in 53 % cases it remained faulty, 53 % reported it was not available and 48 % users found it engaged although 99 % users found it open during last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No of Users	Percent	No. of Fault	No of Users	Percent	No. of Fault	No of Users	Percent	No. of Fault	No of Users	Percent
Senapati	3	1	1.0	3	1	1.0	0	99	99.0	5	52	52.0
	7	46	46.0	7	46	46.0	1	1	1.0	30	48	48.0
	30	53	53.0	30	53	53.0	-	-	-	-	-	-
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

B.2. Same trend could be seen in both the districts of Manipur in second last month also as maximum percentage of respondents found VPT in their villages not reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Senapati	3	1	1.0	0	34	34.0	0	57	57.0	4	1	1.0
	15	46	46.0	7	42	42.0	1	42	1.0	5	51	51.0
	30	53	53.0	30	24	24.0	2	1		30	48	48.0
	Total	100	100.0	Total	100	100.0	Total	100	100.0	Total	100	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following table. No VPT in both the districts of the state have displayed tariff, toll free and grievance redressal numbers. Also not keeping book for complaint registration.

Table III.C. Display of Telephone Numbers, Tariff Rate and Availability of Complaint Book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Senapati	No	10	100.0	10	100.0	10	100.0	10	100.0
	Total	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and its clarity of voice. Present evaluation study revealed that all the places of installation except one was found convenient (99 %) in Senapati.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Senapati	Gram Panchayat	-	2		2
	Anganwadi	-	1		1
	Sarpanch house	1	96		97
	Total	1	99		100

- B. Convenience of technology used in VPT:** In Senapati district almost all VPT users found the technology used in VPT convenient. 100 % VPTs are using mobile technology in this district.

Table IV.B. Level of Convenience with Technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Senapati	Mobile	-	100	-	100
	Total	-	100	-	100

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. Total 98 % users in Senapati shared that WLL FX technology used in their VPTs is convenient.

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of convenience			Total
		Not at all convenient	Convenient	Very convenient	
Senapati	WLL FX	2	98	-	100
	Total	2	98	-	100

- D. Level of convenience with type of instrument:** It is evident from the following table that almost all feel convenient about the instrument used in VPT.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Senapati	Single touch Key board	-	100	-	100
	Total	-	100	-	100

- E. Clarity of voice:** It is an important indicator of quality assessment of VPT installed. In Senapati district 63 % VPT users had expressed that clarity of voice is not at all convenient. In other words 44 % were getting clarity of voice rarely.

Table IV.E. Level of Convenience in Clarity of Voice

Telecom District	Clarity of voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Senapati	Rarely	38	6	-	44
	Often	12	19	-	31
	Always	13	12	-	25
	Total	63	37	-	100

F. Reliable Connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT service in their village. Ninety three per cent users in district Senapati shared that connectivity of VPT service is not reliable. Although 7 % users in Senapati communicated that VPT service is reliable.

Table IV.F. Reliable Connectivity of VPT Service provider

Telecom District	Reliability	No. of Users	Percent
Senapati	Not reliable	93	93.0
	Reliable	7	7.0
	Total	100	100.0

V. TIMELINESS OF VPT

A. Timeliness aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 73% respondents in Senapati shared that VPT is available only during fixed timings in their area.

Table V.A. Timeliness Availability of the Service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Senapati	During day time	6	6.0
	During night	10	10.0
	Always	11	11.0
	Fixed timings	73	73.0
	Total	100	100.0

VI. OTHER ASPECTS

A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that 95 % users in Senapati were paying in case of VPT usage, all of them were paying in cash. In most of instances in the area, users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT Services

Telecom District		No. of Users	Percent
Senapati	No	5	5.0
	Yes	95	95.0
	Total	100	100.0

Table VI.A.2. Mode of payment for VPT Service usage

Telecom District	Mode of payment	No. of Users	Percent
Senapati	Cash	95	95.0
	Non Payment	5	5.0
	Total	100	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Senapati district there is no social restriction.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Senapati	No	100	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Senapati district was between Rs. 250-500 in 100% cases of VPT.

Table VI.B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No. of VPT	Percent
Senapati	250-500	10	100.0
Ukarul	250-500	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Senapati	No	100	100.0
	Total	100	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Senapati district (100 %) VPT users were of the opinion that VPT usage has no effect on household income.

Table VII.A.2. Percent change in Income Categories

Telecom District	Level of Change	No. of Users	Percent
Senapati	No change reported	100	100.0
	Total	100	100.0

B. Improvement in connectivity: One important advantage of VPT availability is that it has improved connectivity in the villages. Following are the observations regarding improved connectivity in various dimensions. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Senapati	No improvement	12 (12.0)	30 (30.0)	5 (5.0)
	Marginal Improvement	53 (53.0)	67 (67.0)	73 (73.0)
	Significant improvement	35 (35.0)	3 (3.0)	22 (22.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Senapati	No improvement	55 (55.0)	68 (68.0)	75 (75.0)	79 (79.0)
	Marginal Improvement	39 (39.0)	27 (27.0)	22 (22.0)	20 (20.0)
	Significant improvement	6 (6.0)	5 (5.0)	3 (3.0)	1 (1.0)
	Total	100 (100.0)	100 (100.0)	100 (100.0)	100 (100.0)

		Senapati
a.	Personal communication	53% Marginal
b.	Business networking	67% Marginal
c.	Emergency Management Medical Fire Police Natural Calamities	55% No 68% No 75% No 79% No
d.	Official Purposes	73 % Marginal

C. Access of information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Senapati				
		Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	42 (42.0)	15 (15.0)	42 (42.0)	1 (1.0)	100 (100.0)
b.	Market	27 (27.0)	44 (44.0)	29 (29.0)	-	100 (100.0)
c.	Development & Welfare scheme of Govt. on					
1.	Health	14 (14.0)	5 (5.0)	80 (80.0)	1 (1.0)	100 (100.0)
2.	Education	14 (14.0)	7 (7.0)	79 (79.0)	-	100 (100.0)
3.	Related to Agri.	13 (13.0)	8 (8.0)	79 (79.0)	-	100 (100.0)
4.	Others	27 (27.0)	9 (9.0)	64 (64.0)	-	100 (100.0)
d.	Natural Calamity / Weather forecasting	91 (91.0)	7 (7.0)	2 (2.0)	-	100 (100.0)
e.	Rail / Road transport	80 (80.0)	15 (15.0)	5 (5.0)	-	100 (100.0)
f.	Health Services	7 (7.0)	3 (3.0)	90 (90.0)	-	100 (100.0)
g.	Agri. related	2 (2.0)	7 (7.0)	91 (91.0)	-	100 (100.0)
h.	Business related	8 (8.0)	19 (19.0)	73 (73.0)	-	100 (100.0)

Table reveals that VPT is not being used as per the expectations of policy planners of India for access to information regarding different aspects (referred in the table). There is wide scope to increase use for accessing information that can help improve their quality of lives. They are not

well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detailed information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 96 % users in Senapati.

Table VIII.A. Level of Satisfaction about Convenience of the Location

Telecom District	Level of satisfaction	No. of Users	Percent
Senapati	Not satisfactory	4	4.0
	Satisfactory	96	96.0
	Total	100	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings and quality of accessibility was expressed not satisfactory among 93 % users in Senapati.

Table VIII.B. VPT Accessibility

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Senapati	Not satisfactory	93	93.0	93	93.0
	Satisfactory	7	7.0	7	7.0
	Total	100	100.0	100	100.0

- C. Repair Maintenance:** In terms of Level of satisfaction regarding timely repair & maintenance, 98 % users opined satisfactory in Senapati.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Senapati	Not satisfactory	98	98.0	98	98.0
	Satisfactory	2	2.0	2	2.0
	Total	100	100.0	100	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated as satisfactory by 98 % users in Senapati.

Table VIII.D. Level of Satisfaction about Cooperativeness and behaviour of Custodians

Telecom District	Level of satisfaction	No. of Users	Percent
Senapati	Not satisfactory	2	2.0
	Satisfactory	98	98.0
	Total	100	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed that 69 % of users found it satisfactory while 29% found it highly satisfactory in Senapati.

Table VIII.E. Level of Satisfaction about Other Alternate Service Providers

Telecom District	Level of satisfaction	No. of Users	Percent
Senapati	Not satisfactory	2	2.0
	Satisfactory	69	69.0
	Highly satisfactory	29	29.0
	Total	100	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villages in the districts. Observation reflects that 80 % of the custodians of VPT surveyed were making payment regularly in the district.

Table IX. Regularity in Payment

Telecom District	Regularity	No. of Custodians	Percent
Senapati	No	2	20.0
	Yes	8	80.0
	Total	10	100.0
Ukarul	Yes	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about problem solution regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 97 % users in Senapati district have resolved problems about VPT location internally.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Senapati	Internally	97	97.0
	Externally	3	3.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time revealed that 46 % responded that it was solved internally in Senapati. Problem solution of quality accessibility was also solved internally as reported by 46 % users in Senapati.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Senapati	Internally	46	46.0	46	46.0
	Externally	4	4.0	3	3.0
	Not resolved	47	47.0	48	48.0
	Not aware	3	3.0	3	3.0
	Total	100	100.0	75	100.0

- C. Problem Resolution related to Repair and Maintenance:** Regarding the problem solution of timely and quality repair & maintenance, 47 % and 48 % users expressed that it was not resolved in Senapati.

Table X.C. Problem resolution related to repair and maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Senapati	Internally	46	46.0	46	46.0
	Externally	3	3.0	3	3.0
	Not resolved	47	47.0	48	48.0
	Not aware	4	4.0	3	3.0
	Total	100	100.0	100	100.0

D. Problem resolution about the payments to the custodians

The problem of payment to custodian was solved internally as reported by 97 % of users in Senapati district.

Table X.D. Problem Resolution related to Payments to the Custodians

Telecom District		No. of Users	Percent
Senapati	Internally	97	97.0
	Externally	1	1.0
	Not resolved	2	2.0
	Total	100	100.0

E. Problem resolution about the other alternate Service Providers

80 % of VPT users in Senapati were not aware about the problem resolution related to other service providers in Senapati districts.

Table IX.E. Problem Resolution related to Other Alternate Service Providers

Telecom District		No. of Users	Percent
Senapati	Internally	13	13.0
	Externally	4	4.0
	Not resolved	3	3.0
	Not aware	80	80.0
	Total	100	100.0

SWOT ANALYSIS

DISTRICT : SENAPATI

(1) Village S. Keithelmanbi

The village is situated at about 33 km from Imphal and it is situated close to the National Highway 39. From the main road, the house in which VPT was situated was 100 metres. The Village Authority selected Mr. Jangkhohal Kipgen as the custodian since he is the chief of the village.

Strengths

- Village Chief is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the house of the Village Chief.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL for the villagers.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- Shortage of BSNL staff for repair is reported.
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 33 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet, and Fax to attract the younger generation to use the facility optimally.
- VPT (WLL) Staff should be posted in the nearest district telephone exchange.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and other private operators.
- Increase in use of mobile phones especially by the younger generation.
- Reliable connectivity of such mobile phones.

(2) Village Lungphou

This village is situated at about 45 km from Imphal and it is situated near to the National Highway 39. From the national highway the house in which VPT was situated was 500 metres. Mr. T. Misao is the custodian since he is the chief of the village.

Strengths

- Village Chief is the custodian of the VPT ensuring equity and social justice.
- WLL is kept in the house of the custodian.
- Usage of WLL is made convenient to all – used by men, women and elderly.
- Incoming calls were received in WLL for the villagers.
- Usage charge was very low.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- VPT separate booth is not constructed and it is not yet commercialized. There is no privacy in the use of VPT service.
- BSNL staff for WLL repair is not present in the nearest telephone exchange.
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 45 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable and was out of service most of the time.

Opportunities

- Awareness of VPT among villagers is necessary.
- Additional facilities such STD, Internet, Fax needs to be upgraded in the present VPT service.
- Advantages of VPT such as low cost to be highlighted. Uninterrupted connectivity to be maintained at all cost.

Threats

- Mushrooming of mobile service providers an increase of mobile phone users especially the younger generations.
- Non-reliable connectivity of the WLL services.

(3) Village Tumuyon Khunou

The village is situated 35 km from Imphal and it is situated very close to the National Highway 39. From the pucca road, the house in which VPT was situated was 100 metres. Mr. M. David, the village Chief, is the custodian of VPT.

Strengths

- Village chief is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the premises of the Custodian.
- WLL is easy to access. Custodian welcomes everybody.
- Incoming calls were received in WLL for the villagers during day and night- time also.

Weakness

- No separate booth for VPT.
- No STD facility
- Absence of BSNL staff for repair is reported.
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 35 km away.
- Weather plays a great role in WLL connectivity.
- WLL connectivity is not reliable.
- VPT is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Value addition such as Internet and Fax in VPT is needed.
- Staff intake should be increased plus the staff should be present in the nearest district telephone exchange.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers– BSNL and Private – in household especially younger generation.
- Reliable connectivity from the Mobile Service.

(4) Village Natheljang

The village is situated 36 km from Imphal and it is situated close to the National Highway 39. From the pucca road, the house in which VPT was situated was 500 metres. Mr.Seipu Kipgen is the custodian since he is the chief of the village.

Strengths

- Village Chief is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were received in WLL for the villagers.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- No BSNL staff for repair near the telephone exchange.
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 36 km away. No technical staff for WLL at Kangpokpi.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- No separate VPT booth and it is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Value added facilities like STD, Internet, and Fax may be provided by upgrading the VPT to attract the younger generation.
- Low cost and uninterrupted service to the villagers.

Threats

- Mushrooming of mobile service providers – BSNL and private in households.

(5) Village S. Molnom

The village is situated 30 km from Imphal and it is situated close to the National Highway 39. From the pucca road, the house in which VPT was situated was 500 metres. Mr. Haothang Vaiphei, the village chief, is the custodian.

Strengths

- Village Chief is the custodian of VPT to ensure equity and social justice.
- WLL is kept in the house of the custodian.
- WLL access is convenient to all
- Incoming calls were received in WLL for the villagers.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- No BSNL staff near the village.
- For repair the custodian has to come to Imphal, which is 33 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- VPT is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- STD, Internet, Fax in the VPT is needed to attract the younger generation
- Advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households' especially younger generation.

(6) Village Kholjang

The village is situated 27 km., from Imphal and it is situated near the National Highway 39. The house in which VPT is installed is 1 km., from the pucca road. Mr. Lamkholen Kipgen is the custodian since he is the chief of the village.

Strengths

- Village chief is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- No BSNL staff for repair near the village.
- For repair the custodian has to come to Imphal, which is 27 km away. WLL is dependent on weather.
- Battery of the WLL gets damaged very fast.
- WLL connectivity is not reliable.
- No separate VPT booth and it is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- STD, Internet, Fax facilities need to be upgraded in the present VPT to attract the younger generation
- Advantages of VPT such as low cost and uninterrupted service need to be highlighted.

Threats

- Mushrooming of mobile service providers – BSNL and private in households.
- Reliable connectivity from the mobile phones.

(7) Village Haipi

The village is situated 40 km from Imphal and it is situated 3 km away from the National Highway 39. From the pucca road, the distance of the house where the VPT is installed is about 100 metres. Mr. Thangminlien Kipgen is the custodian of VPT as he is the social worker of the village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were received in WLL for the needy villagers.

Weakness

- No display board of VPT booth
- No STD facility
- No technical BSNL staff near the villages.
- For repair the custodian has to come to Imphal, which is 40 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- There is no separate room for VPT service and it is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliable service of the mobile phones.

(8) Village Tumnoupokpi

The village is situated about 40 km from Imphal and it is situated close to the National Highway 39. From the pucca road, the house in which VPT was situated was 200 metres. Mr. S. Johnson, the village chief, is the custodian.

Strengths

- Village chief is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.

- Incoming calls were also received in WLL.
- Calls are cheap.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- WLL battery gets damaged very soon.
- For repair the custodian has to come to Imphal, which is about 40 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet and Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliable mobile phones connectivity.

(9) Village Lower Kalapahar

The village is situated 33 km from Imphal towards Dimapur on the National Highway 39. From the pucca road, the VPT is about 100 meters distant. The Village Authority selected Mr. Balaram Pradhan as the custodian who was the social worker. The village has a large population of Nepali community.

Strengths

- Minority community household is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were received in WLL.
- VPT is at the centrally located place.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- No BSNL staff for repair near the village at emergency.
- For repair the custodian has to come to Imphal, which is 33 km away.

- WLL is dependent on weather.
- WLL connectivity is not reliable.
- VPT service is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet and Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.

(10) Village Kangpokpi

The village is situated 47 km from Imphal and it is near the Kangpokpi sub-division of Senapati District. From the pucca road, the VPT is installed at a distance of about 200 metres. Mr. Haokholen Guite is the custodian. He is the President / Chairman of the village.

Strengths

- The Chairman of the village is the custodian of the VPT ensuring equity and social justice.
- WLL is installed at the place of the custodian and the users are quite convenient for access.
- Incoming calls were received in WLL even at nights.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- No BSNL staff for repair near the village.
- For repair the custodian has to come to Imphal all the time.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- No separate VPT booth and is not yet commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet and Fax
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliable connectivity of the mobile phones.

DISTRICT : UKHRUAL

(1) Village Nungbi Khunou

The village is at about 96 km from Imphal and it is situated close to the National Highway 150. The house in which VPT was installed is about 500 metres from the main road. Mr. R.S. Maringmi is the custodian since he is the village headman. VPT service was not available for the past 1 year in this village after the battery of the WLL was damaged. No response from the BSNL to repair it.

Strengths

- Village head is the custodian of the VPT ensuring equity and social justice.
- WLL was made convenient to all
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- Battery of WLL is damaged
- For repair the custodian has to come to Imphal travelling about 96 km in the hilly region without proper motorable road. Technical staffs to repair the equipment are not available in Ukhrul Telephone Exchange.
- WLL is highly dependent on weather.
- WLL connectivity is not reliable. It was not working for the past 1-2 years.
- No VPT booth

Opportunities

- Awareness of VPT among villagers is necessary.
- STD, Internet, Fax needs to be upgraded in the VPT but it is a distant dream as the VPT was not working as the battery got damaged.
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and other private.
- Reliable connectivity from the mobile phones.

(2) Village Nungbi Khullen

The village is situated about 97 km from Imphal. and it is on the National Highway 150. From the pucca road, the house in which VPT was situated was 500 metres. Mr. A.S. Shaingam, the village head, is the custodian. WLL was not working for the past 2-3 years so villagers did not get any benefits.

Strengths

- Village Head is the custodian of the VPT ensuring equity and social justice.
- WLL was convenient to all – used by men, women and elderly before it was working.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- For repair the custodian has to come to Imphal, which is 98 km away. Technical staff for WLL is not available at Ukhrul Telephone exchange.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- VPT service is not commercialized.

Opportunities

- Awareness of VPT among villagers is necessary.
- Repair and strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliability of mobile phone connections.

(3) Village Tora

The village is at about 120 km from Imphal. From the main inter village road, the house in which VPT was situated is 1 km. Mr. Z. Vachin is the custodian who is the village headman.

Strengths

- Village headman is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the house of the custodian.
- WLL was convenient to all – used by men, women and elderly.

- Incoming calls were also received in WLL.
- For the poor villagers, VPT call is cheap.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 120 km away. Technical staffs not available in Ukhrul Telephone exchange.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- VPT service is not commercialized and maintenance is a problem.

Opportunities

- Awareness of VPT among villagers is necessary.
- Repair and Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliability of mobile phones connectivity.

(4) Village Tanrui (Leisan)

The village is about 130 km away from Imphal. From the pucca road, the VPT is at a distance of about 500 metres. The Village Authority selected Mr. Solomon Horam as the custodian who is the social worker. WLL was not working for the past 2-3 years due to battery damage. No response from the BSNL side to repair it. Shortage of electricity was the main cause of WLL battery damage.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.
- For the poor villagers, VPT call is cheap.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility

- For repair the custodian has to come to Imphal, which is 130 km away. No technical staff of WLL at Ukhrul Head quarters.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- There is no separate room for VPT service and it is not commercialized

Opportunities

- Awareness of VPT among villagers is necessary.
- First VPT needs to be repaired and then Strengthen VPT through additional facilities such STD, Internet, Fax to attract the younger generation
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliability of mobile phone connectivity.

(5) Village Langdang

The village is about 85 km from Imphal. From the pucca road, the house in which VPT was installed is 500 metres. Mr. A.S. Wungmaso, village headman, is the custodian. WLL was not working for the past years since its inception.

Strengths

- Village head is the custodian of the VPT ensuring equity and social justice.
- WLL was convenient to all at the time when it was working – used by men, women and elderly.
- Incoming calls were also received in WLL.
- VPT call rate is cheap as compared to Mobile phones.

Weakness

- No display board with tariffs, toll free numbers
- No STD facility
- Shortage of BSNL staff for repair is reported.
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 85 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation
- Proactive role by the BSNL officials to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.

(6) Village Kachai

The village is about 90 km from Imphal. The VPT is situated about 500 metres from main road. Mr. R. Khamshang is the custodian since he is the village headman. At the time of interview and discussion, VPT was not working.

Strengths

- Village headman is the custodian of the VPT ensuring equity and social justice.
- WLL was convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No STD facility
- No BSNL staff for repair near the village
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 90 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet and Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliability of mobile phone connectivity.

(7) Village Tuinem

The village is situated about 104 km from Imphal. From the pucca road, the house where VPT was installed is about 500 metres. Mr. W. Ngamchuipei is the custodian. He is the Village head.

Strengths

- Village Chief is the custodian of the VPT ensuring equity and social justice.
- WLL access was made convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- No BSNL staff for repair near the village
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 104 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- STD, Internet, Fax to be upgraded to VPT.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.

(8) Village Tolloi

The village is at a distance of 180 km from Imphal. From the pucca road, the VPT was installed at about 500 metres. Mr. R.S. Maringmi is the custodian. He is the village headman.

Strengths

- Village head is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No STD facility
- No BSNL staff for repair

- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 180 km away. No technical staff deployed at Ukhrul Telephone exchange.
- WLL is dependent on weather.
- WLL connectivity is not reliable.

Opportunities

- Awareness of VPT among villagers is necessary.
- Repair and Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.

(9) Village Hungdung

The village is situated on the National Highway 150 at about 85 km from Imphal. From the pucca road, the house in which VPT was installed is 1 km. The Village Authority selected Mr. A.S. Hungnaoyo Zimik as the custodian since he is the village headman.

Strengths

- Village Headman is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal, which is 84 km away.
- WLL is dependent on weather.
- WLL connectivity is not reliable.
- Battery of WLL gets damaged very fast.

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.

- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.

(10) Village Lunghar

The village is at a distance of about 91 km from Imphal on the National Highway 150. The VPT was installed at about 500 metres away from the main road. The Village Authority selected Mr. R.S. Maringmi as the custodian since he is the village headman.

Strengths

- Village head is the custodian of the VPT ensuring equity and social justice.
- WLL is convenient to all – used by men, women and elderly.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility
- No BSNL staff for repair
- Delay in repair works is due to shortage of staff and long distance. For repair the custodian has to come to Imphal which is 91 km away
- WLL is dependent on weather
- WLL connectivity is not reliable

Opportunities

- Awareness of VPT among villagers is necessary.
- Strengthen VPT through additional facilities such as STD, Internet, Fax to attract the younger generation to use the facility optimally.
- Proactive role by the BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service.

Threats

- Mushrooming of mobile service providers – BSNL and private in households especially younger generation.
- Reliability in Mobile connectivity.

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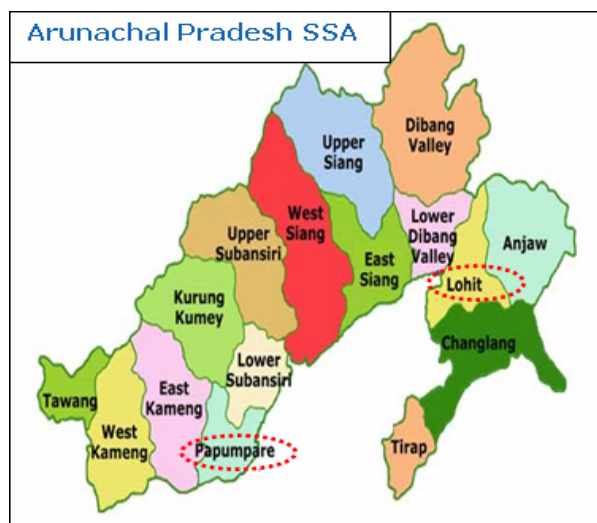
ARUNACHAL PRADESH



Arunachal Pradesh

Arunachal Pradesh is the easternmost state of India, part of which is claimed by China. Arunachal Pradesh borders with the Indian state of Assam to the south and Nagaland to the southeast. Myanmar lies to the east, Bhutan to the west-north. Arunachal Pradesh means "land of the dawn lit mountains" in Sanskrit. It is also known as "land of the rising sun" ("pradesh" means "state" or "region") in reference to its position as the easternmost state of India. Most of the people of Arunachal Pradesh are of Tibeto-Burman origin. A large and increasing number of migrants have reached Arunachal Pradesh from many other parts of India, although no reliable population count of the migrant population has been conducted, and percentage estimates of total population accordingly vary widely.

Arunachal Pradesh attained its statehood on 20th February 1987. It is situated in the North-Eastern part of India with 83743 sq. kms area and has a long international border with Bhutan to the west (160 km), China to the north and north-east (1,080 km) and Myanmar to the east (440 km). It stretches from snow-capped mountains in the north to the plains of Brahmaputra valley in the south. Arunachal is the largest state area-wise in the north-east region, even larger than Assam which is the most populous.



It is situated between latitude 26°30' N and 29°30' N and longitude 91°30' E and 97°30' E. Itanagar is the capital of Arunachal Pradesh and located at an altitude of 530 meters above MSL.

Population of State - 1,091,117
(2001 Census)
Males – 573,951
Females – 517,166
Literate Persons – 487,796
Literacy Rate - 54.74 %
Sex Ratio – 901 females to 1000 males

The climate of Arunachal Pradesh varies with elevation. Areas that are at a very high elevation in the Upper Himalayas close to the Tibetan border enjoy an alpine or Tundra climate. Below the Upper Himalayas are the Middle Himalayas, where people experience a temperate

climate. Areas at the sub-Himalayan and sea-level elevation generally experience humid, sub-tropical climate with hot summers and mild winters. Arunachal Pradesh receives heavy rainfall of 80 to 160 inches (2,000 to 4,100 mm) annually, most of it between May and September.

Arunachal Pradesh is divided into sixteen districts. Especially along the Tibetan border, the Indian army has a considerable presence due to concerns about Chinese intentions in the region. Special permits called Inner Line Permits (ILP) are required to enter Arunachal Pradesh through any of its check gates on the border with Assam

Arunachal Pradesh district is a part of NE-II telecom circle that includes 3 districts – Arunachal Pradesh, Manipur and Nagaland. General Manager, Telecom District is the head of the implementing department in the state. The Incharge officer for the implementation of VPT at the district level is Deputy General Manager. The scheme was implemented in the State from November 2004 under the Bharat Nirman programme. A total of 3863 villages are there in which 1471 VPTs were covered as per the information given by the department.

Details of Physical Targets & Achievements (No. of newly connected Villages / VPTs) for the last 5 Years are as below as per the information provided by CGM office.

Years	Physical Performance (Newly connected Villages / VPTs)	
	Target	Achievement
	No. of VPTs	No. of VPTs
2003-04	189	189
2004-05	51	51
2005-06	47	47
2006-07	195	195
2007-08	129	129
Total	511	511

If we look into the target and achievement of installation of VPTs in the state it is reflected that every year targets were achieved. In the case of providing extended services in the state there is not a single village where they have provided extended services.

The Village Public Telephone scheme is operational with the subsidy support from the Department of Telecom's Universal Service Obligation Fund. There is no separate fund allocation exclusively for VPT. There are also no particular expenditure details specifically for VPT repairing and installation. It is mentioned by the official that there is no separate provision of staff exclusively for this scheme and also existing staff has to take care of its maintenance and repair. Although it was informed that there is shortage of staff in the state as this is the tenure station and very few staff transferred here to join this posting also there is no recruitment for Group 'D' and Group 'C' as per the corporate directions. Work distribution of VPT is based on the geographical area. There is certain mechanism available for monitoring and supervision of VPTs with a given guidelines to do it. It used to be done by the BSNL officials at sub divisional level as and when required. The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staffs who used to help in repairing. Attitudinal and behavioral training are being imparted to line men from time to time.

Strengths of the VPT as per the officials at the state level have provision of communication facility to each citizen in rural areas at affordable and subsidized charges. In hilly and regions like Arunachal Pradesh, VPT still remains the only source of communication to public in remote and far flung area thereby connecting them to other parts of the country. VPTs in this area help save lots of time and expenditure on travel.

Nevertheless, due to the remoteness of the location of VPTs usually in far-flung hilly, at times poor road network in the villages of the state, maintenance is difficult and very expensive. It is also shared that realization of bills of VPTs is another major problem in its performance. High operational cost and high capital cost involved in media planning and low traffic making this service economically non-viable in the area. Moreover, mobile services have penetrated to rural areas and this has reduced importance of VPTs. Reason why low ARPU and high MTRR (Mean Time To Repair) there is need to transform the VPT to compete with the multiple services provided by mobile service providers.

Thus major constraints faced by officials with regard to implementation of VPT services include inability of VPT custodians to install their own monitor for billing, difficulty faced by staff in maintenance and repair due to remote/inaccessible locations and shortage of staff, outstanding bills, proportionately less revenue in comparison with high capital expenditure and maintenance cost.

Nonetheless, considering their wide coverage, the scheme should be continued with active support of Government of India. The officials maintain that issues of technology, competition, coverage & efficiency can be tackled effectively. GM suggested that installation of more VPT's based on new technology like DSPT will make this service more effective that will decrease the possibility of faults and usage will increase.

Against the backdrop of discussion on the performance of VPTs at the state level, the next section discusses the performance of VPTs in Lohit and Papumpare districts.

DISTRICT : LOHIT

Lohit is an administrative district in the state of Arunachal Pradesh in India. The district headquarters are located at Tezu. The district occupies an area of 11,402 km² and has a population of 143,478 (as of 2001), out of which 26,596 is urban and 1,16,882 is rural population. The District is one of the most backward districts of the state where Rural Poverty is still in higher position.

The Lohit District is part of Arunachal Pradesh and its district capital Tezu, where the Holy place of Brahma Kunda also known as Parasuram Kunda is located. Tezu is at an altitude of 21 deg above MSL. The Lohit District is situated on the North Eastern extremity of Arunachal Pradesh. It lies approximately between the latitudes 27 degree 33' and 29 degree 22'N and the

Longitudes 95 degree 15' E and 97 degree 24'E. It has total area of 11402 Sq. KM. It has at North-China and part of Dibang Valley District of Arunachal Pradesh at South-Changlang District of Arunachal Pradesh in the East-China and Burma and in the West-Assam state and a part of Dibang.

The climate is hot and highly humid in the lower elevations and in the Valleys and mildly cold in the higher elevations. The winter prevails during the months from late November to early March. The period from March to May is the pre-monsoon season. It is followed by monsoon from June to October.

The area is highly inaccessible, and it is only in 2004 that a permanent bridge has been made operational across the Lohit at the holy site of Parashuram Kund, giving round-the-year connection to Tezu. East of Tezu (about 100 km.) lies the small town of Hayuliang, and this is slated to become the headquarters of a new district. Like any other district, it has developed its own communication facilities over the years under Bharat Nirman Yojana. The Village Public Telephones (VPTs) is being installed in various regions of the district. The SDOT is the in charge of VPT at district level.

To provide telephonic communication to rural India, this scheme is in function since 2004. Till date 224 VPTs have been installed in 224 villages. The department used to give the VPT connection in consultation with respective Gram Sabha. In the beginning of the financial year the department used to prepare an action plan for the next year. GM informed that total 60 VPT's planed to provide in 2008-09 as per BNY in the uncovered villages. If we look in there is no short fall in the target and achievement of installation of VPTs in the district. No extended services are provided in any VPT in the district.

Whereas in the state there is no separate fund allocation, no particular expenditure details for VPT repairing and installation and also no specific provision of staff exclusively for VPT. Same like in the state, at the district also there is certain mechanism available for monitoring and supervision of VPTs with a given guidelines to do it. It used to be done by the BSNL officials at sub divisional level as and when required.

The repairing and maintenance work of VPT is undertaken by the BSNL department itself. They have certain technical staffs who used to help in repairing during last three months all total 14 cases of VPTs are being repaired by the department. Training programme is being organized for lower staff.

GM shared the strengths of VPT's as VPTs are the only efficient and economical way of communication in remote areas of the District. It saves their time and money. While focusing on the weakness of VPTs in their area it was informed that VPT maintenance is difficult due to remote locations in the villages on the heights. And it is also expensive to maintain and repair and in case of installation particularly DSPT technology is quite expensive. They also face

difficulty in realization of bills. Finally due to low traffic and high capital cost particularly for media planning makes it economically non-viable.

It was suggested by the officials that by installing more VPT's based on DSPT technology will make this scheme more effective in the state.

DISTRICT : PAPUMPARE

Papumpare is an administrative district in the state of Arunachal Pradesh in India. The district headquarters are located at Yupia. The district occupies an area of 2875 km² and has a population of 121,750 (as of 2001). There are 274 villages and 2 towns in the district. The headquarters of the state is located at Itanagar, which is also located at Papumpare.

It is located in between latitude 26 55'N and 28 40' and longitude between 92 40' and 94 21'. It is a land of lush green forests, deep river valleys and beautiful plateau. The land is mostly mountainous with Himalayan ranges. Trees of great size, plentiful of climbers, hundreds of variety of orchids, cane and bamboos are found in the district.

Papumpare is inhabited by members of the Nishi and the Mikir, who are traditionally followers of Donyi-Polo. Some members of the Nishi tribe are followers of the Baptist sect of Christianity.

In Papumpare district SDOT is the incharge officer of VPT under the Bharat Nirman Project. The main objective of VPTs under district level is to achieve the targeted villages as per the plan of the BSNL headquarter and provide telecom services to these villages.

Till date in aggregate total 267 VPTs are being installed in respective villages. In order to identify and select the villages and VPTs the telecom officials follow the census 1991 and 2001. They used to install VPTs on those village panchayats where there are no telecom facilities on priority basis. The department used to give the VPT connection as per policy of Government and in consultation with respective Gram Sabha.

In the beginning of the financial year the department used to prepare an action plan for the next year. In 2008-09 they have targeted to provide VPT's in 45 villages. If we look into the targets and achievement of installation of VPTs in Papumpare district it is observed that there is no shortfall in targets and achievements of VPT installation. Nowhere extended services are provided as per their reference.

The VPT is managed by BSNL department with full subsidy from USOF as else where in India. There is no separate fund allocation for VPT. There are also not so particular expenditure details for VPT repairing and installation. The expenditure details exclusively for VPT are also not available with the department. They used to spend the allotted fund for repairing and maintenance of telephone in general way. Similarly same staff is sharing the maintenance,

repair and installation of VPT. It is mentioned by the officials that staff is overburdened. There is shortage of Staff in this district also as referred in the state section. There is certain mechanism available for monitoring and supervision of VPTs. Department used to follow the given guidelines for it. It was also referred that department don't provide any complaint book.

The repairing and maintenance work of VPT used to be done by the BSNL department itself. They have certain technical staffs who used to help in repairing. The information regarding repairing of VPTs in last 3 months shows 12 fault in last three months. It is mentioned by the department that the maintenance of VPTs used to be done free of cost. Once they got the information that there is some problem with a VPT the department's technical staff used to make a visit as soon as possible.

GM shared the strengths of VPTs are the only efficient and economical way of communication in remote areas of the District. It saves their time and money. While focusing on the weakness of VPTs in their area it was informed that VPT maintenance is difficult due to remote locations in the villages on the heights. It is also expensive to maintain and repair and in the case of installation, particularly DSPT technology is quite expensive. They also face difficulty in realization of bills. Finally due to low traffic and high capital cost particularly for media planning makes it economically non-viable.

It was suggested by the officials that by installing more VPT's based on DSPT technology will make this scheme more effective in the state.

Critical Observations in the State

- Branding exercises and massive awareness campaign Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost, uninterrupted service etc. Branding exercise to position VPT as the lifeline for rural development needs to be established.
- Irregular distribution of bills.
- In case of increasing outstanding bills, VPT (same no. with new instrument) may be awarded to another custodian at the proximal villages. That would not create any cost burden to BSNL rather it will create a culture of regular payment of bills.
- There is a wrong notion and misperception among the villagers that this is the free phone. The users do not pay to the custodian. Naturally, there are two options left either the custodian will not extend this service to the villagers and restrict this facility within his family members or he can not pay the bills and will become defaulter.
- The custodians are generally GB / Sarpanch / ASM / ZPM etc. It is reported that these influential people cannot ask the beneficiary for the payment against the calls they have made. They believe that if they charge money from the beneficiary as per the call rate, they might loose or dilute the image / status of public leader.

- It is observed by the Research team that beneficiaries pay the bills either in cash or kind. When CSD team visited Krishanpur under Namsai (Lohit), they have identified that most of the beneficiaries pay in kinds (veg. products) and surprisingly not in the proportion to the call charge.
- There is no billing system installed with the VPT unit. As a result, it is a very difficult job for the custodian to convince the beneficiary about the call charge. There is a common believe among all, that these phones are free in all respect. On the contrary the dishonest custodian can charge exorbitant amount per unit of call. It was clearly visible while CSD team visited PEECH BASTI (Papumpare District) where per minute local call was charged @ Rs. 6/-. Therefore the undersigned strongly recommends introduction of billing system to be incorporated (billing accessories are to be connected to the existing VPT unit as it is visible in PCO booth).
- CSD team has been encountered with the serious complains from majority of the custodian about the performance of the battery provided by BSNL. Moreover, the battery unit should be compatible with dual charging system, solar cell system as well as the domestic electric supply. Considering the geographical and practical constraints in the hilly and the remote regions of Arunachal Pradesh, continuous power supply is yet to be achieved. As a result inclusion of solar charging system should be incorporated so as to make the VPT long lasting effective and sustainable.
- We visited twenty sample villages for this study; discussed with BSNL officials, line and staff, common people and the focus group. The general understanding of VPT scheme is that its performance can be improved and maximum usage can be ensured if and only if VPTs are installed only in the remote region where none other or limited access to any telecom service is available. Otherwise. Intra / inter competition will dilute the performance of VPT scheme or we can not achieve the objective of greater accessibility of Rural telephony.
- The major objective of the VPT scheme cannot be achieved unless we ensure effective implementation of regular bill payment mechanism. Considering the constraint of hilly state like Arunachal, it is next to impossible for the BSNL authority to send bills on time. Equally, the custodian faces similar problem to lodge complains, to collect duplicate bills or to pay the amounts. Situation is worst in rainy and winter season. Landslides are very frequent. Incase of non receipt of payment, BSNL official cannot visit the custodian's house as it is not feasible all the times (loss of time, energy and resource). Under these above circumstances, it is strongly recommended to introduce impressed / prepaid mode of payment. A message or voice alert system after each call (about phone balance) may be introduced.

THE PERFORMANCE OF VPTs : AN ANALYSIS

In order to assess the performance of VPT in the rural areas, the present study included two districts in Arunachal Pradesh – Lohit and Papumpare. In Lohit 75 VPT users and in Papumpare 32 users were interacted during study period. Performance is evaluated in terms of the level of consumer satisfaction, assessment of revenue collection, nature of impediments, and contribution of VPTs towards economic growth in rural areas, quality of maintenance and usage pattern. The analysis of socio-economic profile of the users of the various telecom services reflects the extent to which DOT has projected the demand of VPTs. This section of the report analyses all the aspects referred above in detail.

I. GENERAL DETAILS

This part throws light on the socio-economic profile of VPT users, the particulars about their home, and details of telephone connectivity. This reflects general profile of villagers who are using VPT installed under Bharat Nirman Yojana.

- A. Socio-Economic Profile of VPT Users:** To understand the socio-economic profile of the respondents covered under the present study it was observed that maximum per cent belong to ST (85.3 %) in Lohit and 75 % in Papumpare districts of Arunachal Pradesh.

Table I.A.1. Social Group of Users

Telecom District		No. of Users	Percent
Lohit	General	5	6.7
	Other Backward Class (OBC)	6	8.0
	Scheduled Caste (SC)	-	-
	Scheduled Tribe (ST)	64	85.3
	Total	75	100.0
Papumpare	General	6	18.7
	Other Backward Class (OBC)	2	6.3
	Scheduled Caste (SC)	-	-
	Scheduled Tribe (ST)	24	75.0
	Total	32	100.0

Description of gender specification depicts that 80 % and 81.25 % females in Lohit and Papumpare districts respectively were interacted in present study.

Table I.A.2. Gender Details

Telecom District	No. of Users		Total
	Female	Male	
Lohit	60	15	75
Papumpare	26	6	32

Their primary occupation data reveals that majority of users depend on agriculture and home making in Lohit and also in Papumpare. Educational qualifications of majority of VPT users were functional literates in Lohit and below primary in Papumpare in current study.

Table I.A.3. Primary Occupation and Educational Qualification

	Primary Occupation (Self)	Lohit	Papumpare
1	Agriculture	28	6
2	Own Business	-	1
3	Non-agriculture casual labour	2	-
4	Salaried work	7	3
5	Homemaker	33	21
6	Non-working Adults	1	1
7	Students	4	-
	Total	75	32
Educational Qualification			
1	Not literate	11	6
2	Functional literate	24	8
3	Primary	14	9
4	Upper Primary	15	4
5	High School	4	1
6	Intermediate	2	3
7	Graduate	4	1
8	Above Graduation	1	-
	Total	75	32

B. Particulars of Home

B.1. Type of House: Majority owned kucha houses in Lohit (61.3 %) and semi-pucca houses in Papumpare (59.4 %) districts.

Table I.B.1. Type of House

Telecom District		No. of Users	Percent
Lohit	Kucha House	46	61.3
	Semi-pucca House	21	28.0
	Pucca House	8	10.7
	Total	75	100.0
Papumpare	Kucha House	5	15.6
	Semi-pucca House	19	59.4
	Pucca House	8	25.0
	Total	32	100.0

B.2. Status of Electrification: Electrification status of respondents reflects that majority are having electricity in their houses (90.7 % in Lohit and 100% in Papumpare).

Table I.B.2. Status of Electrification

Telecom District	Availability	No. of Users	Percent
Lohit	Electricity not available	7	9.3
	Electricity available	68	90.7
	Total	75	100.0
Papumpare	Electricity available	32	100.0
	Total	32	100.0

- B.3. Distance of House from Pucca Road: Looking to the proximity of their houses to pucca roads data revealed that 42.7 % of respondents in Lohit and 50 % in Papumpare were situated at the distance of more than 100 metres but less than 1 km. But 38.7% users were found residing even more than 1 km in Lohit district

Table I.B.3. Distance of house from pucca Road

Telecom District	Distance	No. of Users	Percent
Lohit	100 metres or less	14	18.7
	More than 100 metres but less than 1 km	32	42.7
	More than 1 km	29	38.7
	Total	75	100.0
Papumpare	100 metres or less	11	34.4
	More than 100 metres but less than 1 km	16	50.0
	More than 1 km	5	15.6
	Total	32	100.0

- B.4. Distance of House from State Highway: In terms of the distance from state highway it was revealed that 54.7 % respondents were staying at more than 2 but less than 10 kms. in Lohit and 87 % were staying within 2 km of the VPT in Papumpare district of Arunachal Pradesh.

Table I.B.4. Distance of House from State Highway

Telecom District	Distance	No. of Users	Percent
Lohit	Upto 2 km	41	54.7
	More than 2 but less than 10 km	14	18.7
	More than 10 km	20	26.7
	Total	75	100.0
Papumpare	Upto 2 km	28	87.5
	More than 10 km	4	12.5
	Total	32	100.0

C. Details of Telephone Connectivity

- C.1. **Telephone availability at home:** Majority (88 %) respondents in Lohit district were having telephone at their home whereas in Papumpare 62.5 % were not having telephones at their home.

Table I.C.1. Telephones availability

Telecom District	Availability	No. of Users	Percent
Lohit	Telephone Not available	66	88.0
	Telephone available	9	12.0
	Total	75	100.0
Papumpare	Telephone Not available	20	62.5
	Telephone available	12	37.5
	Total	32	100.0

- C.2. **Type of Telephone:** Among telephone owners at their home majority i.e., 77.8 % were having mobiles in Lohit and 88.2 % in Papumpare.

Table I.C.2. Type of Telephone

Telecom District	Type of Phone	No. of Users	Percent
Lohit	Landline	2	22.2
	Mobile	7	77.8
	Total	9	100.0
Papumpare	Landline	2	11.8
	Mobile	15	88.2
	Total	17	100.0

- C.3. **Details of Service Provider:** BSNL was found to provide services to maximum number of respondents in Lohit (50 %) and 38.5% in Papumpare.

Table I.C.3. Details of Service Provider

Telecom District	Service Provider	No. of Users	Percent
Lohit	BSNL	4	50.0
	Reliance Communications	1	12.5
	Airtel	2	25.0
	Others	1	12.5
	Total	8	100.0
Papumpare	BSNL	5	38.5
	Reliance Communications	3	23.1
	Airtel	4	30.8
	Others	1	7.7
	Total	13	100.0

II. USAGE OF VPT

- A.1. Usage pattern of users is described in terms of making STD and Local Calls in last 60 days. Observations reflect that majority (61.3 %) VPT beneficiaries in Lohit and (46.9%) in Papumpare have used VPT 2 or less times for local calls in last 60 days. This reflects minimum use of VPT by the villagers in the state.

Table II.A.1. Details of Local Calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Lohit	No calls	9	12.0	6	8.0
	2 or less	56	74.7	46	61.3
	3 to 4	10	13.3	17	22.7
	5 to 6	-	-	6	8.0
	Total	75	100.0	75	100.0
Papumpare	No calls	2	6.3	3	9.4
	2 or less	21	65.6	15	46.9
	3 to 4	5	15.6	8	25.0
	5 to 6	1	3.1	3	9.4
	More than 6	3	9.4	3	9.4
	Total	32	100.0	32	100.0

A.2. Usage of VPT for STD calls in last 60 days reveals that none of the VPT beneficiaries have made any STD call in Lohit as well as in Papumpare district. This shows that VPT is not being used for STD calls in both the districts of Arunachal Pradesh covered under the study.

Table II.A.2. Details of STD calls from VPT

Telecom District	No. of Calls	Last 30 days		Last 60 days	
		No. of Users	Percent	No. of Users	Percent
Lohit	No calls	75	100.0	75	100.0
	Total	75	100.0	75	100.0
Papumpare	No calls	32	100.0	32	100.0
	Total	32	100.0	32	100.0

B. Distance of VPT from the House

B. Data regarding distance of VPT from beneficiary's house reflects that 82.7 % in Lohit district were residing within 200 mts. Distance and in Papumpare this was found 90.6%. This suggests that VPT location is quite convenient in terms of distance from their houses.

Table II.B. Distance of VPT from house

Telecom District	Distance	No. of Users	Percent
Lohit	Within 200 mts from residence	62	82.7
	200-500 mts from residence	11	14.7
	More than 500 mts	2	2.7
	Total	75	100.0
Papumpare	Within 200 mts from residence	29	90.6
	200-500 mts from residence	3	9.4
	Total	32	100.0

III. TRANSPARENCY AND AVAILABILITY OF VPT

A Transparency in the decision of VPT location: Observations regarding involvement of VPT users in the decision of VPT location, data shows that in both Lohit and Papumpare districts not a single user was involved in the decision that shows absence of peoples' participation.

Table III.A. Involvement in VPT location decision

Telecom District		No. of Users	Percent
Lohit	No	75	100.0
	Total	75	100.0
Papumpare	No	32	100.0
	Total	32	100.0

B.1. Availability of VPT service: It was observed in terms of the functional conditions of VPT in their villages. Information was collected regarding how many times the VPT is faulty, busy, closed and engaged in last two months. Looking to the usage of VPT by maximum users in this area, it was found that mostly it is used less than 2-3 times in a month, in Lohit district it was found not reliable as respondents communicated that in 74.7 % cases faulty two times, 70.7 % availability two times (not busy), 77.3 % closed two times although 78.7 % not engaged during last month. Similarly, table shows that in Papumpare district also VPT service were always not reliable in last month.

Table III.B.1. Availability of VPT services in Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent	No. of fault	No. of Users	Percent
Lohit	0	19	25.3	0	11	14.7	0	16	21.3	0	59	78.7
	1	--	--	1	11	14.7	1	1	1.3	1	16	21.3
	2	56	74.7	2	53	70.7	2	58	77.3	--	--	---
	Total	75	100.0	Total	75	100.0	Total	75	100.0	Total	75	100.0
Papumpare	0	18	56.3	0	8	25.0	0	17	53.1	0	23	71.9
	1	3	9.4	1	16	50.0	1	3	9.4	1	8	25.0
	2	11	32.4	2	8	25.0	2	12	37.6	3	1	3.1
	Total	32	100.0	Total	32	100.0	Total	32	100.0	Total	32	100.0

B.2. Same trend could be seen in both the districts of Arunachal Pradesh in second last month also as maximum percentage of respondents found VPT in their villages is not very reliable.

Table III.B.2. Availability of VPT services in 2nd Last Month

Telecom District	Faulty			Busy			Closed			Engaged		
	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent	No. of Fault	No. of Users	Percent
Lohit	0	17	22.7	0	13	17.3	0	16	21.3	0	66	88.0
	1	2	2.7	1	9	12.0	1	1	1.3	1	9	12.0
	2	56	74.7	2	53	70.7	2	58	77.3	--	---	---
	Total	75	100.0	Total	75	100.0	Total	75	100.0	Total	75	100.0
Papumpare	0	19	59.4	0	13	40.6	0	16	50.0	0	28	84.4
	1	3	9.4	1	9	28.1	1	5	15.6	1	3	9.4
	2	9	28.1	5	10	3.1	2	11	3.1	2	2	6.3
	3	1	3.1	---	--	28.1	3	10	31.3	--	--	---
	Total	32	100.0	Total	32	100.0	Total	32	100.0	Total	32	100.0

C. Display of telephone numbers, tariff rate and availability of complaint book

Another aspect of transparency and sharing of information could be seen from following table. Display boards and complaint books were not found at any VPT in both the districts.

Table III.C. Display of telephone numbers, tariff rate and availability of complaint book

Telecom District		Display of Grievance Redressal numbers		Display of Toll free numbers		Tariff displayed		Availability of Complaint book	
		No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent	No. of VPTs	Percent
Lohit	No	10	100.0	10	100.0	10	100.0	10	100.0
Papumpare	No	10	100.0	10	100.0	10	100.0	10	100.0

IV. QUALITY ASPECTS OF VPT

- A. Quality of VPT service is assessed in terms of convenience of place of installation, technology used, type of instrument used at booth and clarity of voice. Present evaluation study revealed that all the places of installation were found convenient and very convenient in the both of the districts in Arunachal Pradesh.

Table IV.A. Level of convenience of place of installation

Telecom District	Place of Installation	Level of convenience of place of installation			Total
		Not at all convenient	Convenient	Very convenient	
Lohit	Sarpanch house	-	25	30	55
	Others	-	12	8	20
	Total	-	37	38	75
Papumpare	Sarpanch house	-	15	12	27
	Shop	-	5	-	5
	Total	-	20	12	32

- B. Convenience of technology used in VPT:** In Lohit and Papumpare districts it was observed that almost all the VPT users found the technology used in VPT to be convenient. Mostly VPTs are connected through landline technology in these districts.

Table IV.B. Level of Convenience with Technology used

Telecom District	Accessibility Technology	Level of convenience with technology used			Total
		Not at all convenient	Convenient	Very convenient	
Lohit	Landline	-	27	48	75
	Total	-	27	48	75
Papumpare	Landline	-	17	14	31
	Mobile	-	-	1	1
	Total	-	17	15	32

- C. Wireless Technology:** Table below indicates information related to wire line technology in VPT. All VPTs are based on WLL FX technology in Lohit and except one all shared that technology is convenient. In Papumpare district all users in aggregate found the technology convenient and very convenient. Besides WLL FX technology two VPTs were based on DSPT technology in the district

Table IV.C. Level of Convenience and Technology

Telecom District	Wireless Technology	Level of convenience			Total
		Not at all convenient	Convenient	Very convenient	
Lohit	WLL FX	1	33	41	75
	Total	1	33	41	75
Papumpare	WLL FX	-	13	9	22
	DSPT	-	2	8	10
	Total	-	15	17	32

- D. Level of convenience with type of instrument:** It is showed in following table which confirms that almost all feel convenient about the instrument used in VPT.

Table IV.D. Level of Convenience with Type of Instrument

Telecom District	Type of Instrument	Level of convenience with type of instrument			Total
		Not at all convenient	Convenient	Very convenient	
Lohit	Dial Key Board	-	3	11	14
	Others	-	16	45	61
	Total	-	19	56	75
Papumpare	Dial Key Board	-	-	2	2
	Single touch Key board	-	1	-	1
	Others	-	13	16	29
	Total	-	14	18	32

- E. Clarity of voice:** It is an important indicator of quality assessment of VPT installed. In Lohit district all VPT users have expressed that clarity of voice is always convenient and very convenient. Same way in Papumpare, 69 users were having same opinion. In other words majority was satisfied about the clarity of voice. Although data shows that in Papumpare 4 users expressed that voice is never clear.

Table IV.E. Level of Convenience in Clarity of Voice

Telecom District	Clarity of Voice	Level of convenience with voice clarity			Total
		Not at all convenient	Convenient	Very convenient	
Lohit	Often	-	13	14	27
	Always	-	15	33	48
	Total	-	28	47	75
Papumpare	Never	-	4	-	4
	Rarely	-	1	-	1
	Often	-	4	3	7
	Always	-	10	10	20
	Total	-	19	13	32

F. Reliable connectivity of VPT

VPT users were enquired about the reliability of connectivity of VPT services in their village. 85.35 users in district Lohit and 59.4 % users in Papumpare district of Arunachal Pradesh shared that connectivity of VPT service is reliable. Moreover 14.7 % users in Lohit and 59.6% users in Papumpare district communicated that VPT service is highly reliable.

Table IV.F. Reliable Connectivity of VPT Service provider

Telecom District	Reliability	No. of Users	Percent
Lohit	Reliable	11	14.7
	Highly reliable	64	85.3
	Total	75	100.0
Papumpare	Reliable	13	40.6
	Highly reliable	19	59.4
	Total	32	100.0

V. TIMELINESS OF VPT

- A.** Timelines aspect of VPT was studied in terms of its availability during day time, fixed time and always. Users response revealed that 90.7 % respondents in Lohit and 78.1 % in Papumpare district found VPT always available in their area. Similarly VPT was never closed in Lohit district but 20% cases shared that it is closed in Papumpare district.

Table V.A. Timeliness Availability of the Service (Working Hours)

Telecom District	Timings	No. of Users	Percent
Lohit	During day time	3	4.0
	Always	68	90.7
	Fixed timings	4	5.3
	Total	75	100.0
Papumpare	During day time	7	21.9
	Always	25	78.1
	Total	32	100.0

VI. OTHER ASPECTS

A. Present evaluation study also attempts to explore whether VPT users are paying for its use, what is the mode and regularity of payment, do they get bill and whether there is any social restriction in terms of religion, caste, gender etc. Study revealed that only 2.7% users in Lohit were paying in case of VPT usage, 1.3 % were paying cash. In Papumpare district 31.3 % users were paying, only 13.3 % were paying cash. In most of instances in the area users were not getting bill for payment.

Table VI.A.1. Paying for use of VPT Services

Telecom District		No. of Users	Percent
Lohit	No	73	97.3
	Yes	2	2.7
	Total	75	100.0
Papumpare	No	22	68.8
	Yes	10	31.3
	Total	32	100.0

Table VI.A.2. Mode of Payment for VPT Service usage

Telecom District	Mode of Payment	No. of Users	Percent
Lohit	Cash	1	1.3
	Others	1	1.3
	Total	2	2.7
	Non payment	73	97.3
	Total	75	100.0
Papumpare	Cash	10	31.3
	Non payment	22	68.8
	Total	32	100.0

Information regarding social restriction reflects the VPT accessibility to all sections of society. Study reflects that in Lohit as well as in Papumpare district there is no social restriction found in present evaluation study.

Table VI.A.3. Restriction in use of VPT

Telecom District		No. of Users	Percent
Lohit	No	75	100.0
Papumpare	No	32	100.0

B. Average Revenue Per Unit of VPT (ARPU)

ARPU gives clear picture about the usage of the VPT in the specific village. ARPU calculation is made on the basis of aggregating income from telephone calls for the last three months at the time of undertaking the present study. Missed values were replaced by the series average in the data. Data revealed that ARPU per month in Lohit district was less than Rs 250 in 100% cases of VPT whereas in Papumpare ARPU was between Rs 250-500 in 80% VPTs and 10% more than Rs 1000 in the district.

VI. B. Average Revenue per VPT

Telecom District	ARPU (Rs.)	No. of Users	Percent
Lohit	250-500	10	100.0
Papumpare	Less than 250	1	10.0
	250-500	8	80.0
	More than 1000	1	10.0
	Total	10	100.0

VII. ECONOMIC ASPECTS

- A. Utility Aspect:** It is expected that VPT would contribute towards economic growth in rural areas with increase in their income, improved connectivity for personal communication, business networking, official dealing and also crisis management. It also provides access to information to villagers that help to increase their economic growth. This information access may relate to employment opportunities, market, information regarding Government welfare schemes, weather forecasting, agriculture, transport and health, etc.

Table VII.A.1. Utility Aspect

Telecom District	Status of Change	No. of Users	Percent
Lohit	No	75	100.0
	Total	75	100.0
Papumpare	No	31	96.9
	Yes	1	3.1
	Total	32	100.0

To examine the impact of VPT on villages, information is collected about whether VPT use has increased their income and what is the percentage change in income of VPT users.

In Lohit district (100 %) VPT users were of the opinion that VPT usage has no effect on household income but in other district (Papumpare) of the state it was observed that 3.1 % users believed that VPT has increased their household income.

Table VII.A.2. Percent change in income categories

Telecom District	Level of Change	No. of Users	Percent
Lohit	No change reported	75	100.0
	Total	75	100.0
Papumpare	No change reported	31	96.9
	5 to 10 percent	1	3.1
	Total	32	100.0

Further enquiring about the percent change in income revealed that 1 % of users expressed upto 5-10 % increase in their household income.

- B. Improvement in connectivity:** One important advantage of VPT availability is that, it has improved connectivity in the villages. Table VII.B.1. and VII.B.2. shows the improvement in connectivity in various dimensions.

Table VII.B.1. Improvement in Connectivity

Telecom District	Level of Improvement	Personal Communication	Business Networking	Official Purposes
Lohit	No improvement	20 (26.7)	72 (96.0)	72 (96.0)
	Marginal Improvement	41 (54.7)	3 (4.0)	3 (4.0)
	Significant improvement	14 (18.7)	-	-
	Total	75 (100.0)	75 (100.0)	75 (75.0)
Papumpare	No improvement	1 (3.1)	26 (81.2)	27 (84.4)
	Marginal Improvement	25 (78.1)	6 (18.8)	4 (10.5)
	Significant improvement	6 (18.8)	-	1 (3.1)
	Total	32 (100.0)	32 (100.0)	32 (100.0)

Table VII.B.2. Emergency Management

Telecom District	Level of Improvement	Medical	Fire	Police	Natural Calamities
Lohit	No improvement	62 (82.7)	62 (82.7)	61 (81.3)	62 (82.7)
	Marginal Improvement	8 (10.7)	9 (12.0)	14 (18.7)	13 (17.3)
	Significant improvement	5 (6.7)	4 (5.3)	-	-
	Total	75 (100.0)	75 (100.0)	75 (100.0)	75 (100.0)
Papumpare	No improvement	22 (68.8)	32 (100.0)	30 (93.8)	31 (96.9)
	Marginal Improvement	9 (28.1)	-	2 (6.2)	1 (3.1)
	Significant improvement	1 (3.1)	-	-	-
	Total	32 (100.0)	32 (100.0)	32 (100.0)	32 (100.0)

Contd ...

Table VII.B.2. Emergency Management (Contd ...)

		Lohit	Papumpare
a.	Personal communication	54.7% Marginal	78.1% Marginal
b.	Business networking	96% No	81.2 %No
c.	Emergency Management		
	Medical	82.7% No	68.85 No
	Fire	82.7% No	100% No
	Police	82.3% No	93.8% No
	Natural Calamities	82.7% No	96.9% No
d.	Official Purposes	96% No	84.4%

C. Access of Information

VPT is instrumental in accessing information that may help improve their income level and lives. VPT users expressed their responses regarding accessing information in various aspects as detailed below –

Table VII.C. Access of Information

	Information on	Lohit					Papumpare				
		Never	Rarely	As per necessity	Frequently	Total	Never	Rarely	As per necessity	Frequently	Total
a.	Employment Opportunity	66 (88.0)	7 (9.3)	2 (2.7)	-	75 (100.0)	17 (53.1)	15 (46.9)	-	-	32 (100.0)
b.	Market	72 (96.0)	3 (4.0)	-	-	75 (100.0)	32 (100.0)	-	-	-	32 (100.0)
c.	Development & Welfare Scheme of Govt. on										
1.	Health	65 (86.7)	3 (4.0)	7 (9.3)	-	75 (100.0)	22 (68.8)	7 (21.9)	3 (9.4)	-	32 (100.0)
2.	Education	72 (96.0)	2 (2.7)	1 (1.3)	-	75 (100.0)	30 (93.8)	-	2 (6.2)	-	32 (100.0)
3.	Related to Agriculture	73 (97.3)	2 (2.7)	-	-	75 (100.0)	31 (96.9)	-	1 (3.1)	-	32 (100.0)
4.	Others	68 (90.7)	6 (8.0)	1 (1.3)	-	75 (100.0)	26 (81.2)	3 (9.4)	3 (9.4)	-	32 (100.0)
d.	Natural Calamity / Weather forecasting	75 (100.0)	-	-	-	75 (100.0)	31 (96.9)	-	1 (3.1)	-	32 (100.0)
e.	Rail / Road transport	75 (100.0)	-	-	-	75 (100.0)	32 (100.0)	-	-	-	32 (100.0)
f.	Health Services	72 (96.0)	2 (2.7)	1 (1.3)	-	75 (100.0)	26 (81.3)	6 (18.8)	-	-	32 (100.0)
g.	Agriculture related	74 (98.7)	1 (1.3)	-	-	75 (100.0)	30 (93.7)	-	2 (6.3)	-	32 (100.0)
h.	Business related	75 (100.0)	-	-	-	75 (100.0)	27 (84.4)	3 (9.4)	1 (3.1)	1 (3.1)	32 (100.0)

Table revealed that VPT is not being used as expected by policy planners of India for access to information regarding different aspects (refereed in the table). There is wide scope to increase usage for accessing information that can help improve their quality of lives. They are not well orientated towards the usage of VPT other than personal communication. Proper orientation and provision of detail information about various sources at VPT booth may help them to access all the required information right from their own village.

VIII. IMPEDIMENTS OF VPT

Present evaluation study attempts to find out the impediments of VPT with reference to location, accessibility of VPT in terms of time and quality, repair & maintenance, custodian behaviour, etc.

- A. VPT Location:** VPT location was felt highly satisfactory by 56 % users in Lohit and satisfactory by 50 % in Papumpare district.

Table VIII.A. Level of Satisfaction about Convenience of the Location

Telecom District	Level of Satisfaction	No. of Users	Percent
Lohit	Not satisfactory	1	1.3
	Satisfactory	32	42.7
	Highly satisfactory	42	56.0
	Total	75	100.0
Papumpare	Not satisfactory	16	50.0
	Satisfactory	16	50.0
	Total	32	100.0

- B. VPT Accessibility:** Satisfaction level of VPT users regarding timings of accessibility in terms of time and quality was expressed satisfactory and highly satisfactory among 100 % users in Lohit and 100 % also in Papumpare district.

Table VIII.B. VPT Accessibility

Telecom District	Level of Satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Lohit	Not satisfactory	-	-	-	-
	Satisfactory	58	77.3	46	61.3
	Highly satisfactory	17	22.7	29	38.7
	Total	75	100.0	75	100.0
Papumpare	Not satisfactory	-	-	-	-
	Satisfactory	18	56.2	19	59.4
	Highly satisfactory	14	43.8	13	40.6
	Total	32	100.0	32	100.0

- C. Repair Maintenance:** Level of satisfaction regarding timely repair & maintenance opined satisfactory by all most all users in Lohit and Papumpare districts.

Table VIII.C. Level of Satisfaction about Repair and Maintenance- Time & Quality

Telecom District	Level of Satisfaction	Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Lohit	Not satisfactory	1	1.3	2	2.7
	Satisfactory	56	74.6	41	54.6
	Highly satisfactory	18	24.0	32	42.7
	Total	75	100.0	75	100.0
Papumpare	Not satisfactory	-	-	-	-
	Satisfactory	21	65.7	20	62.5
	Highly satisfactory	11	34.4	12	37.5
	Total	32	100.0	32	100.0

- D. Behaviour of Custodian:** The cooperativeness and behaviour of custodian was articulated highly satisfactory among 57.3 % users in Lohit and satisfactory among 65.6 % users of Papumpare.

Table VIII.D. Level of Satisfaction about Cooperativeness and Behaviour of Custodians

Telecom District	Level of Satisfaction	No. of Users	Percent
Lohit	Not satisfactory	-	-
	Satisfactory	32	42.7
	Highly satisfactory	43	57.3
	Total	75	100.0
Papumpare	Not satisfactory	-	-
	Satisfactory	11	34.4
	Highly satisfactory	21	65.6
	Total	32	100.0

- E. Other Service Provider:** The response about level of satisfaction of other service providers disclosed highly satisfactory in Lohit (44 %) and in Papumpare (46.9%).

Table VIII.E. Level of Satisfaction about Other Alternate Service Providers

Telecom District	Level of Satisfaction	No. of Users	Percent
Lohit	Not satisfactory	1	1.3
	Satisfactory	41	54.66
	Highly satisfactory	33	44.00
	Total	75	100.0
Papumpare	Not satisfactory	1	3.1
	Satisfactory	16	50.0
	Highly satisfactory	15	46.9
	Total	32	100.0

IX. REGULARITY IN PAYMENT OF TELEPHONE BILLS BY THE CONCERNED CUSTODIAN

Inquiry was made about the regularity of the payment of telephone bills by the concerned custodian in all the villages in the district. Observation reflects that 80% custodians of VPT in Lohit and 60% in Papumpare were making payment regularly in the both the districts

Table X. Regularity in Payment

Telecom District	Regularity	No. of Users	Percent
Lohit	No	2	20.0
	Yes	8	80.0
	Total	10	100.0
Papumpare	No	4	40.0
	Yes	6	60.0
	Total	10	100.0

X. PROBLEM RESOLUTION

VPT users were enquired about to the problems regarding location, accessibility, repair & maintenance and payment.

- A. Problem Resolution related to Location:** It was revealed that 92 % users in Lohit district and 100% users in Papumpare was not aware about this problems.

Table X.A. Problem Resolution related to Location

Telecom District		No. of Users	Percent
Lohit	Internally	2	2.7
	Externally	4	5.3
	Not aware	69	92.0
	Total	75	100.0
Papumpare	Not aware	32	100.0
	Total	100	100.0

- B. Problem Resolution related to Accessibility:** Problem resolution regarding accessibility in terms of time was also revealed most of the users in this state was not aware about this issue.

Table X.B. Problem Resolution related to Accessibility

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Lohit	Not resolved	1	1.3	-	-
	Not aware	74	98.7	75	100.0
	Total	100	100.0	75	100.0
Papumpare	Not aware	32	100.0	32	100.0
	Total	32	100.0	32	100.0

- C. Problem Resolution related to Repair & Maintenance:** Regarding the problem solution of timely repair & maintenance, 96 % and 100% users were not aware in Lohit and Papumpare districts respectively. Similarly in the case of the problem of quality repair & maintenance 97.3 % and 100 % of VPT users were not aware in Lohit and Papumpare districts.

Table X.C. Problem Resolution related to Repair and Maintenance

Telecom District		Time		Quality	
		No. of Users	Percent	No. of Users	Percent
Lohit	Internally	3	4.0	2	2.7
	Not aware	72	96.0	73	97.3
	Total	75	100.0	75	100.0
Papumpare	Not aware	32	100.0	32	100.0
	Total	32	100.0	32	100.0

- D. Problem resolution about the payments to the custodians**

Table X.D. Problem Resolution related to Payments to the Custodians

Telecom District		No. of Users	Percent
Lohit	Internally	17	22.7
	Not aware	58	77.3
	Total	75	100.0
Papumpare	Not aware	32	100.0
	Total	32	100.0

The problem of payment to custodian can be solved internally was viewed by only 22.7 % users in Lohit but in Papumpare district 100% users were not aware about this issue.

- E. Problem resolution about the other alternate service providers**

Table X.E. Problem Resolution related to Other Alternate Service Providers

Telecom District		No. of Users	Percent
Lohit	Not aware	75	100.0
Papumpare	Not aware	32	100.0

No VPT user was aware about this problem resolution in both the districts.

SWOT ANALYSIS

DISTRICT : PAPUMPARE

(1) Village Pachin

The village is situated 2 kilometres away from State Highway. The house in which VPT was installed is 100 metres away from the pucca road. The BSNL Authority awarded Mr. Tadar Karo as the custodian of the said VPT on the recommendation of DC office. Mr. Tadar Karo is also the Gaon Burah (G.B.) of that village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming calls were also received in WLL in special cases.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility.
- Delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- Access during rainy season is difficult due to frequent landslides and during winter is due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In daytime all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(2) Village Papu Nala Gate (CAMPS)

The village is situated beside the State Highway. The house in which VPT was installed is 10 metres away from the pucca road (Highway). The BSNL Authority awarded Mrs. Sonam Dema Thungan as the custodian of the said VPT on the recommendation of DC office. Husband of Mrs. Sonam Dema Thungan is a Doctor and an influential person in this village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming calls are also received for selective persons.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility.
- Delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather.
- Access during rainy season is difficult due to frequent landslides and during winter is mainly due to heavy cold.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. In daytime all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for access.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(3) Village Kharsingsa Complex – Abotani

The village is situated 2 kilometres away from State Highway. The house in which VPT was installed is 1 KM away from the pucca road. The BSNL Authority awarded Mr. Bamang Taying as the custodian of the said VPT on the recommendation of DC office. Mr. Baman Taying is also the Gaon Burah (G.B.) of that village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the verandah of the house in a separate cabin.
- WLL is convenient to all – used by men, women and the elderly.
- VPT is located near to upper primary school in the village - used by all including teachers and staff of the school.
- Incoming calls are also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility.
- Little delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather.
- Access during rainy season is difficult due to frequent landslides and during Winter season is due to heavy cold.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. In daytime all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult.

- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.

(4) Village Naharlagun Model

The village is situated 200 metres away from State Highway. The house in which VPT was installed is 200 metres away from the pucca road. The BSNL Authority awarded Mr. Tayeng Kuma as the custodian of the said VPT on the recommendation of DC office. Mr. Tayeng Kuma is also the Anchal Samity Pradhan (ASM) of that region.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the verandah of the house in a separate cabin
- WLL is convenient to all – used by men, women and the elderly
- Incoming calls are also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints.
- No STD facility.
- Delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather.
- Access during rainy season is difficult due to frequent landslides and during winter is due to heavy cold.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. In daytime all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult.

- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(5) Village Taru – HQ (Sagalee)

The village is situated 200 metres away from State Highway. The house in which VPT was installed is 200 metres away from the pucca road. The BSNL Authority awarded Mr. Nabam Takia as the custodian of the said VPT on the recommendation of DC office. Mr. Nabam Takia is also the Gaon Burah (GB) of that village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- DSPT is installed in the verandah of the house in a separate cabin
- DSPT is convenient to all – used by men, women and the elderly.
- Incoming calls were also received in WLL

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Delay in repair works is due to shortage of staff and long distance
- Access during rainy season is difficult due to frequent landslides and during winter due to heavy cold.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- Access to Multiple mobile connections – BSNL and private is restricted.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult.

- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(6) Village Peech Basti - Sagalee

The village is situated 200 metres away from State Highway. The house in which VPT was installed is 200 metres away from the pucca road. The BSNL Authority awarded Mr. Tana Tada as the custodian of the said VPT on the recommendation of DC office. Mr. Tana Tada is also the Gaon Burah (GB) of that village. Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- DSPT is installed in the verandah of the house in a separate cabin
- DSPT is convenient to all – used by men, women and the elderly.
- Incoming calls were also received in WLL

Weakness

- Custodian charges exorbitant amount per unit of call where per minute local call is charged @ Rs.6/-. As a result, VPT will gradually loose its popularity.
- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Delay in repair works is due to shortage of staff and long distance.
- Access during rainy season is difficult due to frequent landslides and during winter due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize its usage pattern.

- There is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(7) Village Nirjuli 1

The village is situated 15 metres away from State Highway. The house in which VPT was installed is 15 metres away from the pucca road. The BSNL Authority awarded Mr. Taba Kamin as the custodian of the said VPT on the recommendation of DC office. Mr. Taba Kamin is also the Gaon Burah (GB) of that village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the verandah of the house in a separate cabin
- WLL is convenient to all – used by men, women and the elderly
- VPT is located near to the petrol pump – higher possibility of use by all.
- Incoming call facility is also extended to selective individuals.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather
- Access during rainy season is difficult due to frequent landslides and during winter is due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.

(8) Village Nirjuli Complex

The village is situated beside the National Highway. The house in which VPT was installed is 10 metres away from the pucca road (Highway). The BSNL Authority awarded Mr. Pahlad Rai Taporla as the custodian of the said VPT on the recommendation of DC office. Mr. Pahlad Rai Taporla is also the Non Tribal grocery shop owner.

Strengths

- Non Tribal grocery shop owner is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in a small cabin attached to the grocery shop.
- WLL is convenient to all – used by men, women and the elderly.
- VPT is located near to the Esteemed National Institute NERIST – possibility of high usage by all including teachers and staff of the institute.
- Incoming calls were also received in WLL for close relatives friends staying nearby

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather
- Access during rainy season is difficult due to frequent landslides and during winter due to heavy cold.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(9) Village Gumto II

The village is situated beside the State Highway. The house in which VPT was installed is 05 metres away from the pucca road. The BSNL Authority awarded Mr. Chukhu Hagi as the custodian of the said VPT on the recommendation of DC office. Mr. Chukhu Hagi is also the Gaon Burah (GB) of that village. Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – may be accessed by men, women and the elderly
- Incoming calls were also received in WLL

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather
- Access during rainy season is difficult due to frequent landslides and during Winter season is due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(10) Village Peech Basti - Sagalee

The village is situated 3.5 kilometres away from State Highway. The house in which VPT was installed is 2 kilometres away from the pucca road. The BSNL Authority awarded Mr. Tech Doni Taram as the custodian of the said VPT on the recommendation of DC office. Mr. Tech Doni Taram is also the Gaon Burah (GB) of that village.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – may be used by men, women and the elderly.
- VPT is located near to upper primary school in the village – may be used by all including teachers and staff of the school
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Delay in repair works is due to shortage of staff and long distance.
- WLL is connectivity dependent on weather
- Access during rainy season is difficult due to frequent landslides and during winter due to heavy cold.

- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can strengthen VPT scheme through additional facilities such as STD, Internet, Fax to make this scheme popular and hence we can optimize usage pattern.
- There is need to recruit more staff since the geography of the State is extremely different and difficult
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.

DISTRICT : LOHIT

(1) Village Krishanpur

The village is situated 2 kilometres away from State Highway. The house in which VPT was installed is 50 metres away from the pucca road. The BSNL Authority awarded Smt. Rangila Gogoi as the custodian of the said VPT on the recommendation of DC office. Smt. Rangila Gogoi is Ex-ASM (Anchal Samiti Member). She belongs to the ST category. Sometimes, bills are not paid regularly but the custodian clear all the outstanding amount. Some beneficiaries pay the call charge not by cash but in kinds (Vegetable products, Pan etc.)

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
Non-Tribals can also access this facility.
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming call facility is also extended to nearby village people
- Incoming calls are also received and message may be passed to the concerned
- Villagers during emergency.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges; as a result, custodian is not willing to extend this facilities to all the villagers.
- Access during the rainy season is difficult due to frequent landslides and during the winter is due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(2) Village Nampong

The village is situated beside the State Highway. The house in which VPT was installed is 10 metres away from the pucca road (Highway). The BSNL Authority awarded Sri Sila Tana Hapak as the custodian of the said VPT on the recommendation of DC office. Sri Sila Tana Hapak is Ex-ASM (Anchal Samiti Member). He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the drawing room of the house.

- WLL is convenient to all – used by men, women and the elderly.
- Incoming call facility is also extended to village people
- Incoming calls are also received and message may be passed to the concerned villagers.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges; as a result, custodian is not willing to extend this facilities to all the villagers.
- Access during the rainy season is difficult due to frequent landslides and during the winter is due to heavy cold.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(3) Village Innao

The village is situated 2 kilometres away from the State Highway. The house in which VPT was installed is 10 metres away from the pucca road. The BSNL authority awarded Sri T.N. Innao as the custodian of the said VPT on the recommendation of DC office. Sri T.N. Innao is ZPM (Zilla Parishad Member). He belongs to the ST category. Village INNAO originally

comes under Changlang district (political map / district jurisdiction) but as of now, BSNL SDCA jurisdiction of this village is with NAMSAI Exchange, which is under Lohit district.

Strengths

- ST household is the custodian of the VPT
- WLL is installed in the ground floor of the house.
- WLL is not convenient to all – used by men, women and the elderly.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges; as a result, custodian is not willing to extend this facilities to all the villagers.
- Access to VPT for the villagers is limited. It is possible when custodian and his family members are available in the house. This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(4) Village Wingko

The village is situated 18 kilometres away from the State Highway. The house in which VPT was installed is 10 kilometres away from the pucca road. The BSNL authority awarded Sri Indra Vashu Mahetero as the custodian of the said VPT on the recommendation of DC office. Sri Indra Vashu Mahetero is the Buddhist Religious Guru (RIMPHUCHI). He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice.
- Non-Tribals can also access this facility.
- WLL is installed in the First floor of the building premises.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming call facility is also extended to nearby village people
- Incoming calls are also received and messages are passed to the concerned villagers.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges; still the custodian extends this facility to all the villagers on ethical, moral & humanitarian ground.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(5) Village Nongkhon

The village is situated 5 kilometres away from the State Highway. The house in which VPT was installed is 200 metres away from the pucca road. The BSNL Authority awarded Sri Dhanpati Morang as the custodian of the said VPT on the recommendation of DC office. Sri Dhanpati Morang is the GAON BURAH (G.B) of the village. He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice non-tribals can also access this facility.
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming call facility is also extended to nearby village people
- Incoming calls are also received and message may be passed to the concerned villagers during emergency.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges, but the custodian extends this facilities to all the villagers on humanitarian ground.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. In day-time all the family members go for hunting / cultivation in the forest or in the field respectively.
- This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(6) Village Tindolong

The village is situated 5 kilometres away from the State Highway. The house in which VPT was installed is 200 metres away from the pucca road. The BSNL Authority awarded Sri Tashi Sonam Lama as the custodian of the said VPT on the recommendation of DC office. Sri Tashi Sonam Lama is the GAON BURAH (G.B) of the village. He belongs to the ST category. Now this WLL is in the custody of Mr. Srinchen (Ex-GB).

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice
- WLL is installed in the drawing room of the house
- WLL is convenient to all – used by men, women and the elderly as reported.
- Incoming calls were also received in WLL.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- No beneficiaries except this household.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(7) Village Duranallah Hydel Plant

The village is situated 11 kilometres away from the State Highway. The house in which VPT was installed is 500 metres away from the pucca road. The BSNL Authority awarded Sri Surya

Bahadur Tamang as the custodian of the said VPT on the recommendation of DC office. He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice Non-Tribals can also access this facility.
- WLL is installed in the drawing room of the house.
- WLL is convenient to all – used by men, women and the elderly.
- Incoming call facility is also extended to nearby village people.
- Incoming calls are also received and message may be passed to the concerned villagers during emergency.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges, but the custodian extends this facility to all the villagers on humanitarian ground.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his/her personal phone and do not like to extend the facility to the villagers.

(8) Village Huchiliang Block II

The village is situated 2 kilometres away from the State Highway. The house in which VPT was installed is 400 metres away from the pucca road. The BSNL Authority awarded Sri Chomsimso Takaliang as the custodian of the said VPT on the recommendation of DC office. Sri Chomsimso Takaliang is the GAON BURAH (G.B) of the village. He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT .
- WLL is installed in the drawing room of the house.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges, as a result, the custodian does not like to extend this facility to all the villagers.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.

(9) Village Loiliangn

The village is situated 2 kilometres away from the State Highway. The house in which VPT was installed is 500 metres away from the pucca road. The BSNL Authority awarded Sri

Wemullum Tayeng as the custodian of the said VPT on the recommendation of DC office. Sri Wemullum Tayeng is the GAON BURAH (G.B) of the village. He belongs to the ST category.

Strengths

- ST household is the custodian of the VPT.
- WLL is installed in the drawing room of the house.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges, as a result, the custodian does not like to extend this facility to all the villagers.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.

(10) Village SSB Camp Civil Area

The village is situated 5 kilometres away from the State Highway. The house in which VPT was installed is 250 metres away from the pucca road. The BSNL Authority awarded Sri Rinzin Wangchok as the custodian of the said VPT on the recommendation of DC office. He belongs to the ST category. Presently, he is not staying in this residence. His father Sri Dakpa looks after this WLL and acts as custodian.

Strengths

- ST household is the custodian of the VPT ensuring equity and social justice

- WLL is installed inside the house.

Weakness

- No display board with tariffs, toll free numbers for emergency and complaints
- No STD facility
- Little delay in repair works is due to shortage of staff and long distance.
- WLL connectivity is dependent on weather.
- It is reported that majority of the beneficiaries do not pay call charges, as a result, the custodian does not like to extend this facility to all the villagers.
- Access to VPT for the villagers is limited. It is only possible when custodian and his family members are available in the house. This facility is even restricted during odd hours.

Opportunities

- Increased awareness about VPT among villagers.
- We can incorporate additional facilities/ features such as STD, Internet, Fax to the VPT to attract the younger generation for greater access and high usage.
- Geographical terrain specific staff intake to be followed – there is need to recruit more staff since the geography of the State is extremely different and difficult.
- Proactive role by BSNL officials to market their products is necessary especially to highlight the advantages of VPT such as low cost and uninterrupted service. Branding exercise to position VPT as the lifeline for rural development needs to be established.

Threats

- Multiple mobile connections – BSNL and private - in households especially among younger generation.
- Lack of awareness about VPT among villagers is prominent. At times, custodian claims that it is his / her personal phone and do not like to extend the facility to the villagers.