

QUICK EVALUATION STUDY
ON
RLTAP OF KBK DISTRICTS IN ORISSA



Programme Evaluation Organisation
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Contents

Chapter (1)	Subject (2)	Page (3)
	Acknowledgement	
	List of Tables	
	List of Annexures	
	Abbreviations	
	Exe Summary	i – xvi
Chapter-1	Introduction	1-7
	1. The KBK Region	1
	2. Development Profile of the KBK Region	1
	3. Background of RLTA	3
	4. Objectives of the RLTA and the Path	4
	5. Programme Components	5
	6. Achievements under RLTA	5
	7. The Study Area	7
Chapter-2	Profile of Study Area	8-17
	1. Administrative Units	8
	2. Area and Population	8
	3. Quality of Life	10
	4. Education Profile of Tribals	10
	5. Health Care Facilities	12
	6. Level of Backwardness	13
	7. Cultivable Area	14
	8. Drinking Water Supply	15
	9. Rural Connectivity	15
	10. Forest Resources	16
	11. Socio-economic Profile	17
Chapter-3	Study Objectives and Methodology	18-52
	1. Reference Period	18
	2. Scope of the Study	18
	3. Study Objectives and Methodology	20
	4. Instructions and Guidelines	51
	5. Method of Investigation	51
	6. Coordination and Supervision	52

Chapter-4	Study Findings	53-215
	Section – 1 : 40 Seated Hostels for ST / SC Girls in KBK Districts	53
	1. Enrolment of SC and ST Girls in Primary Schools	53
	2. Impact on Gender Inequality in Primary Schools	55
	3. Actual Position of Teachers	55
	4. Residential Accommodation	57
	5. Delay in Construction, Operation and Occupancy of Hostel Buildings	59
	6. Quality of Construction of Hostel Buildings and Maintenance	59
	7. Amenities Provided	61
	8. Security Arrangements for Boarders	62
	9. Routine and Discipline among Boarders	63
	10. Payment of Stipend and Distribution of Uniforms	64
	11. Quality of Food	66
	12. Utility of Hostel	66
	13. Opinion of Boarders on Hostel Amenities	69
	14. Opinion of Key Informants (K.Is)	73
	15. Opinion of Programme Managers	77
	Section – 2 : Mobile Health Units in KBK Districts	84
	1. Service Area	84
	2. Village Visits	85
	3. Staff Position	86
	4. Equipment and Medicines	87
	5. Adequacy of Village Visits	88
	6. Other Activities	89
	7. Support Services	89
	8. Rudimentary Problems	90
	9. Opinion of Households	91
	10. Opinion of Key Informants	94
	11. Opinion of Programme Managers	99
	Section – 3 : Emergency Feeding Programme in KBK Districts	103
	1. The Sample Anganwadi Centres	103
	2. Beneficiaries in Sample AWCs	103
	3. Selection of Beneficiaries	104
	4. Supply of Food Components	105
	5. Place of Food Service	106
	6. Quality of Food Served	107
	7. Food Service and Supervision	107
	8. Opinion of Beneficiaries	108
	9. Opinion of Key Informants (K.Is)	113
	10. Opinion of Programme Managers	115
	Section – 4 : Afforestation Programme in KBK Districts	119

	1. The Sample Afforestation Sites	119
	2. Varieties Planted	119
	3. Planning and Implementation	120
	4. Nursery Raising	121
	5. Plantation of different Species	121
	6. Key Activities Undertaken	122
	7. Skill Development	123
	8. Employment Generation	124
	9. Site Supervision	125
	10. Survival at the time of Transfer of Sites	125
	11. Opinion of Households	126
	12. Opinion of Key Informants	129
	13. Opinion of Programme Managers	132
	Section – 5 : Biju Krushak Vikash Yojana (BKVY) in KBK Districts	134
	1. Physical Progress	134
	2. Salient Features of Sample LIPs	135
	3. Project Cost and Beneficiary Involvement	136
	4. Repair and Maintenance of LI Points	137
	5. Difficulties Encountered by Pani Panchayat (PP)	138
	6. Impact of LI Points	138
	7. Opinion of Sample Beneficiaries	139
	8. Opinion of Beneficiaries	145
	9. Opinion of Key Informants	146
	Section – 6 : Watershed Programme in KBK Districts	149
	1. The Sample Watersheds	149
	2. Assets Created	149
	3. Employment Generated	151
	4. Irrigation Potential Created	153
	5. Skill Development	154
	6. Impact Assessment	155
	7. Opinion of Households	156
	8. Opinion of Knowledgeable Persons	162
	9. Opinion of Programme Managers	164
	Section – 7 : Rural Connectivity Programme in KBK Districts	166
	1. The Sample Bridges	166
	2. Employment Generation	167
	3. Quality Control	168
	4. Connectivity Established	169
	5. Views and Opinion of Gram Panchayats	170
	6. Group Discussions	172
	7. Opinion of Programme Managers	174
	8. Overall Impression	174
	Section – 8 : Rural Water Supply Programme in KBK Districts	175
	1. Location of Sample Projects	175

	2. Features of Sample Tube Wells	175
	3. Features of Sample Sanitary Wells	176
	4. Features of Sample Piped Water Supply Projects	177
	5. Operation and Maintenance	178
	6. Opinion of Beneficiaries	180
	7. Opinion of Knowledgeable Persons	185
	8. Opinion of Programme Managers	188
Chapter-5	Summary Conclusions and Recommendations	190
	1. Summary Conclusions	190
	2. Recommendations	210

List of Tables

		Page
Table No: 1.1	Selected Development Indicators for the Districts In KBK Region	02
Table No: 1.2	Year wise Allocation and Utilization of SCA	05
Table No: 2.1	Administrative Units in the KBK Region	08
Table No: 2.2	Area and Population in KBK Districts	09
Table No: 2.3	Few Indicators of Quality of Life in KBK Region	10
Table No: 2.4	The Total Literacy and Tribal Literacy in Orissa	11
Table No: 2.5	Drop out Rates among Girls at Primary and Upper Primary Levels	11
Table No: 2.6	District wise Health Care Facilities in the KBK Region: 2006	12
Table No: 2.7	District-wise Very Backward Blocks in KBK Region	13
Table No: 2.8	District wise Category of Cultivable Land and Paddy Area	14
Table No: 2.9	Status of Coverage of Rural Habitation in the KBK Region - 2001	15
Table No: 2.10	Connectivity Status of Habitations with Population more than 250	16
Table No: 2.11	District wise status of Forest Area (sq km) in KBK Region: 2001	17
Table No: 3.1	Allocation of SCA to Different Sectors and the Flow to Major Components till End of 2005-06	19
Table No: 3.2	Hostels for SC and ST Girls in the KBK Districts	21
Table No: 3.3	Samples Executed under the Hostel Programme in KBK Districts	24
Table No: 3.4	Mobile Health Units Operating in the 8 KBK Districts	25
Table No: 3.5	Samples Executed under the MHU Programme in KBK Districts	27
Table No: 3.6	District wise AWCs and Beneficiaries under Emergency Feeding	28
Table No: 3.7	Samples Executed under the Emergency Feeding	31

	Programme	
Table No: 3.8	District wise Forest Area and Afforestation Undertaken till 2005-06	32
Table No: 3.9	Samples Executed under the Afforestation Programme	34
Table No: 3.10	District wise L.I Points in the KBK Region till 2005-06	36
Table No: 3.11	Samples Executed under the BKVY Programme	39
Table No: 3.12	District wise Micro-watersheds Proposed to be Constructed by end of 2005-06 under RLTA P	39
Table No: 3.13	Samples Executed under the Watershed Programme	42
Table No: 3.14	District wise Rural Bridges constructed till 2005-06	43
Table No: 3.15	Samples Executed under the Rural Connectivity Component	46
Table No: 3.16	District wise Water Supply Projects under RLTA P till 2005-06	47
Table No: 3.17	District wise Allocation of Sample Water Supply Projects	49
Table No: 3.18	Samples Executed under the Rural Water Supply Component	51
Table No: 4.1.1	Enrolment SC and ST Girls in Sample Schools from 1998-99 to 2006-07	54
Table No: 4.1.2	Enrolment in Sample Schools over the Years 1998-99 to 2006-07	55
Table No: 4.1.3	Number of Teachers in Position and Teacher-Pupil Ratio in 2006-07	56
Table No: 4.1.4	Availability of Quarters and Occupancy	57
Table No: 4.1.5	Details about Hostel Superintendents	57
Table No: 4.1.6	Place of Residence of Teachers	58
Table No: 4.1.7	Delay in Construction and Operation Of Hostel Buildings	59
Table No: 4.1.8	District-wise Quality of Sample Hostel Buildings	60
Table No: 4.1.9	Provision of Amenities and Annual Replacements	61

in Sample Hostels

Table No: 4.1.10	Boarders in Sample Hostels during 2006-07 & Home Distance of Students	62
Table No: 4.1.11	Home Visits by Boarders and Health Facility Provided in sample Hostels	63
Table No: 4.1.12	Regularity in Payment of Stipend in Sample Hostels	64
Table No: 4.1.13	Adequacy of Food Component and Receipt of Uniform	65
Table No: 4.1.14	Number of Times Non-veg Served per Week	66
Table No: 4.1.15	Sample Hostels and Habit of their Boarders	67
Table No: 4.1.16	District-wise Number of Pass outs at Class-V level among School Students and Hostel Girls	68
Table No: 4.1.17	Who Advised Girls to Stay in the Hostel	70
Table No: 4.1.18	Benefits of Hostel Life as Perceived by Boarders	70
Table No: 4.1.19	Opinion on Stipend and Other Amenities by Boarders	71
Table No: 4.1.20	Emphasis Given on Various Aspects of Hostel Life	72
Table No: 4.1.21	Opinion of Boarders on Schooling and Hostel Accommodation	73
Table No: 4.1.22	Characteristics of Key Informants	74
Table No: 4.1.23	Primary Sources of awareness of K Is on the RLTAP Hostel	74
Table No: 4.1.24	Perception of K Is on the Objectives of RLTAP Hostels	75
Table No: 4.1.25	Benefits of RLTAP Hostels as Perceived by the K Is	76
Table No: 4.1.26	Opinion of the K Is on the Schooling of Boarders	77
Table No: 4.1.27	District wise number of SC / ST Primary schools & Hostels	78
Table No: 4.1.28	Administrative Aspects Relating to RLTAP Hostels	79
Table No: 4.1.29	Satisfaction of Authorities on Various Aspects of Hostel Administration	80
Table No: 4.1.30	Utilisation of RLTAP Hostels during 2001-02 to 2006-07	81
Table No: 4.2.1	Service Area of Sample MHUs	84

Table No: 4.2.2	Modus of Operandi of Sample MHUs	85
Table No: 4.2.3	MHUs According to Staff Position	86
Table No: 4.2.4	Qualification of Doctors in Sample MHUs	87
Table No: 4.2.5	Sample MHUs with Instruments, Equipments and Medicines	87
Table No: 4.2.6	Inadequate Village Visits by Sample MHUs and the Reasons	88
Table No: 4.2.7	Observance of Timeliness in Provision of Support Services	89
Table No: 4.2.8	Characteristics of Households Respondents Interviewed	91
Table No: 4.2.9	Awareness of HHs on the Services Provided by MHUs	92
Table No: 4.2.10	Opinion of Households on the Services Provided by MHUs	93
Table No: 4.2.11	Quality of Services Provided by MHUs	94
Table No: 4.2.12	Category of K Is, their Awareness and Knowledge about MHUs	95
Table No: 4.2.13	Perception of K Is on Treatment and Facilities Available through MHUs.	96
Table No: 4.2.14	Perception of the K Is on the Services Provided by MHUs	97
Table No: 4.2.15	Perception of K Is on Prevention and Control Measures Taken by MHU	98
Table No: 4.2.16	Expectations of K Is from MHUs	99
Table No: 4.2.17	Opinion of CDMOs on Equipment and Staff Support Provided	100
Table No: 4.3.1	Coverage of Beneficiaries through 32 Sample AWCs during 2001-06	104
Table No: 4.3.2	Opinion of AWW regarding Supply of food Component and Fuel	105
Table No: 4.3.3	Place of Food Service in Sample AWCs	106
Table No: 4.3.4	Quality of Food Served in Sample AWCs	107
Table No: 4.3.5	Food Service and Supervision in Sample AWCs	108

Table No: 4.3.6	Characteristics of Sample Beneficiaries	109
Table No: 4.3.7	Economic Status of Sample Households	110
Table No: 4.3.8	Views on Services Availed by Beneficiaries	111
Table No: 4.3.9	Views on Various aspects of the Programme	112
Table No: 4.3.10	Characteristics of Sample Key Informants	113
Table No: 4.3.11	Awareness of Sample K Is on the Programme	114
Table No: 4.3.12	Perception of Sample K Is about the Programme	115
Table No: 4.3.13	Method Adopted for Selection of Beneficiaries	116
Table No: 4.3.14	Level of Approval of Select List	117
Table No: 4.3.15	Quality of Food Stuff	118
Table No: 4.4.1	Characteristics of Sample Afforestation Sites	119
Table No: 4.4.2	Association of 16 Sample VSS during Planning and Implementation	120
Table No: 4.4.3	Sources of Seedling Planted in 16 Sample Sites	121
Table No: 4.4.4	Percentage of Area under Different Species Planted in Sample Sites	122
Table No: 4.4.5	Number of Times Key Activities Undertaken in Sample Sites	123
Table No: 4.4.6	Number of Persons Availed Skill Development Opportunities	124
Table No: 4.4.7	Mandays Generated through 16 Sample Sites & Engagement of Villagers	124
Table No: 4.4.8	Number of Supervisions to Sample Sites by Higher Authorities during 2005-06	125
Table No: 4.4.9	Characteristics of Sample Households	126
Table No: 4.4.10	Forest as the Source of Livelihood of the Sample Households	127
Table No: 4.4.11	Sample Households Enjoyed Usufructs from Sample Sites.	128
Table No: 4.4.12	Characteristics of Sample Key Informants	129
Table No: 4.4.13	Composition of 16 Sample VSS	130
Table No: 4.4.14	Opinion of K Is on the Usufruct Rights Enjoyed	131

from 16 Sample Sites

Table No: 4.4.15	VSS in Selected Divisions and those Associated with RLTA P Plantation	132
Table No: 4.4.16	Protection of Sites by the VSS from Hazards and their Maintenance.	133
Table No: 4.4.17	Overall Satisfaction of DFOs on the Behaviour of the VSS	133
Table No: 4.5.1	Status of LIPs taken up under RLTA P during 2001-02 to 2006-07	134
Table No: 4.5.2	Salient Features of Sample LIPs	136
Table No: 4.5.3	Project Cost and Beneficiary Involvement	136
Table No: 4.5.4	Details on Repair and Maintenance of Samples LIPs	137
Table No: 4.5.5	Sample PPs Facing different kinds of Problem	138
Table No: 4.5.6	Change in Economic Status of Beneficiaries of Sample PPs	139
Table No: 4.5.7	Operational Area and with in the Command of Sample Beneficiaries.	139
Table No: 4.5.8	Cropping Pattern and Cropping Intensity Before Installation of LIPs	140
Table No: 4.5.9	Cropping Pattern and Cropping Intensity after Installation of LIPs	141
Table No: 4.5.10	FBI per Acre of GCA and NSA and Increases “Before” and “After” LIPs	143
Table No: 4.5.11	Per Acre of NSA Labour Use	144
Table No: 4.5.12	Salient Features of Sample Key Informants	146
Table No: 4.5.13	Perception of Sample K is on the Effectiveness of the System of PP	147
Table No: 4.6.1	Category of Assets Created in the 16 Sample Watersheds	150
Table No: 4.6.2	Assets Created in Sample Watersheds	151
Table No: 4.6.3	Employment Generation through Sample Watersheds	152
Table No: 4.6.4	Creation and Utilisation of Irrigation Potential in	153

Sample Watersheds

Table No: 4.6.5	Training & Visit Programmes Organised under Sample Watersheds	154
Table No: 4.6.6	Employment Opportunities and Occupational Changes in Sample Watershed Areas	155
Table No: 4.6.7	Characteristics of Household Respondents	157
Table No: 4.6.8	Opinion of 48 Sample HHs on the Area, Yield Rate and Production under 16 Sample Watersheds	158
Table No: 4.6.9	Public Participation in Community Programmes through Watersheds	160
Table No: 4.6.10	Perception of Sample HHs on the Impact of Watersheds	161
Table No: 4.6.11	Opinion of Sample K Is on the impact of the Sample Watersheds	163
Table No: 4.6.12	Financial and Physical Achievements under Watersheds	164
Table No: 4.7.1	Details about the Sites and the Sample Bridges	166
Table No: 4.7.2	Employment Generation through Construction of Sample Bridges	167
Table No: 4.7.3	Quality Control Measures taken in respect of Sample Bridges	168
Table No: 4.7.4	Establishment of Missing Links as a result of Sample Bridge Projects	169
Table No: 4.7.5	Problems Experienced “Before” Construction of Bridge Projects	170
Table No: 4.7.6	Opinion of the GPs on the various kinds of Connectivity Established	171
Table No: 4.7.7	Benefits Accrued to Local People as result of Sample Bridge Projects	172
Table No: 4.7.8	Benefits Accrued to Rural Markets as result of Sample Bridge Projects	173
Table No: 4.8.1	Features of 50 Sample Tube Wells	176
Table No: 4.8.2	Features of 12 Sample Sanitary Wells	177
Table No: 4.8.3	Features of 8 Sample Piped Water Supply Projects	178
Table No: 4.8.4	Operation and Maintenance of Sample Water	179

Supply Projects in 2005-06

Table No: 4.8.5	Characteristics of Sample Beneficiaries	180
Table No: 4.8.6	Opinion of Sample Beneficiaries on the Adequacy and Quality of Water	181
Table No: 4.8.7	Reasons of Break down of Sample Water Supply Projects in 2005-06	182
Table No: 4.8.8	Sources of Maintenance Sample Water Supply Projects	183
Table No: 4.8.9	Hygienic Practices in the Use of Water by Sample Beneficiaries	184
Table No: 4.8.10	Perception of Beneficiaries on the Reduction of Water Borne Diseases	185
Table No: 4.8.11	Characteristics of Sample Key Informants	186
Table No: 4.8.12	Perception of K Is on Adequacy of Water Supply from Sample Sources	187
Table No: 4.8.13	Perception of K Is on the Reduction of Water Borne Diseases	188

List of Annexures

		Page
Annexure - 2.1	Socio-economic Profile of Balangir District	A-1
Annexure - 2.2	Socio-economic Profile of Kalahandi District	A-3
Annexure - 2.3	Socio-economic Profile of Koraput District	A-5
Annexure - 2.4	Socio-economic Profile of Malkangiri District	A-7
Annexure - 2.5	Socio-economic Profile of Nawarangpur District	A-9
Annexure - 2.6	Socio-economic Profile of Nuapada District	A-11
Annexure - 2.7	Socio-economic Profile of Rayagada District	A-13
Annexure - 2.8	Socio-economic Profile of Sonepur District	A-15
Annexure - 4.1.1	List of Amenities to be Provided in 40 Seated Hostels for SC and ST Girls (under Revised Long Term Action Plan)	A-17
Annexure - 4.1.2	Perception of Key Informants on the Hostel Life	A-18
Annexure - 4.2.1	Other Activities Performed by Sample MHUs During 1998-99 to 2005-06	A-19
Annexure - 4.2.2	Detection and Treatment of Malaria Cases through MHUs	A-20
Annexure - 4.2.3	Patients Treated through the MHUs during the Period 1998-99 to 2005-06	A-22
Annexure-4.3.1	Coverage of Beneficiaries through AWC during the Period 2001-02 to 2005-06	A-28
Annexure - 4.3.2	Views of Programme Managers on different Aspects of Emergency Feeding Programme	A-34
Annexure - 4.4.1	Different Kinds of Plantation over the Sample Sites	A-35
Annexure - 4.4.2	Participation of Sample Households in different Activities under the Afforestation Programme	A-36
Annexure - 4.4.3	Views and Opinion of Sample Households on the Usefulness of Afforestation Programme	A-37
Annexure - 4.4.4	Participation of Sample VSS in different Activities Under the Afforestation Programme	A-38
Annexure - 4.5.1	Opinion of Beneficiaries (Number and Per cent)	A-39
Annexure - 4.5.2	Suggestion given by Beneficiaries for Improving the Performance of LIPs	A-40
Annexure - 4.6.1	Salient Features of the 16 Sample Watersheds	A-41
Annexure - 4.8.1	Location of Sample Habitations and the Potential Beneficiaries	A-42

Abbreviations

Sl	Abbreviation	Expansion
(1)	(2)	(3)
01	Ac	Acre
02	ACA	Additional Central Assistance
03	ADSWO	Assistant District Social Welfare Officer
04	ADWO	Assistant District Welfare Officer
05	A E	Assistant Engineer
06	APL	Above the Poverty Line
07	ARDCOS	Agricultural and Rural Development Consultancy Society
08	ARI	Acute Respiratory Infection
09	AWC	Anganwadi Centre
10	AWW	Anganwadi Worker
11	B H	Bald Hill
12	BKVY	Biju Krushak Vikash Yojana
13	B P	Blood Pressure / Bhumi Panchayat
14	BPL	Below the Poverty Line
15	B S	Blood Slide
16	CBO	Community Based Organization
17	C D	Community Development
18	CDMO	Chief District Medical Officer
29	CDPO	Child Development Project Officer
20	C E	Chief Engineer
21	C F	Conservator of Forest
22	CHC	Community Health Centre
23	D F	Degraded Forest
24	DFO	Divisional Forest Officer
25	DRDA	District Rural Development Agency
26	DSWO	District Social Welfare Officer
27	DWO	District Welfare Officer
28	DWS	Drinking Water Supply

SI	Abbreviation	Expansion
(1)	(2)	(3)
29	E E	Executive Engineer
30	EFP	Emergency Feeding Programme
31	FBI	Farm Business Income
32	F C	Fully Covered
33	F D	Forest Department
34	FGD	Focus Group Discussion
35	F W	Family Welfare
36	GCA	Gross Cropped Area
37	G P	Gram Panchayat
38	GOI	Government of India
39	GOO	Government of Orissa
40	Ha	Hectare
41	HDI	Human Development Index
42	H & FW	Health and Family Welfare
43	H H	House-hold
44	IEC	Information Education and Communication
45	ITDA	Integrated Tribal Development Agency
46	ITDP	Integrated Tribal Development Project
47	IWDP	Integrated Wasteland Development Project
48	J E	Junior Engineer
49	KBK	Kalahandi, Balangir and Koraput districts
50	K I	Key Informant
51	K P	Knowledgeable Person
52	LIP	Lift Irrigation Project
53	LTAP	Long Term Action Plan
54	MAC	Medical Aid Centre
55	MBBS	Bachelor in Medicine and Bachelor in Surgery
56	MDM	Mid-day-Meal
57	MHU	Mobile Health Unit
58	M P	Malaria Parasite
59	N A	Not Applicable / Not Available

Sl	Abbreviation	Expansion
(1)	(2)	(3)
60	NAC	Notified Area Council
61	N C	Not Covered
62	NGO	Non Government Organization
63	NSA	Net Sown Area
64	NTFP	Non Timber Forest Product
65	OBC	Other Backward Class
66	OLIC	Orissa Lift Irrigation Corporation
67	ORS	Oral Rehydration Solution
68	P C	Planning Commission / Partially Covered
69	PCCF	Principal Chief Conservator of Forest
70	P D	Project Director
71	PEO	Programme Evaluation Organization
72	PHC	Primary Health Centre
73	P M	Programme Manager
74	P P	Pani Panchayat
75	PRI	Panchayati Raj Institution
76	PWS	Piped Water Supply
77	RCP	Rural Connectivity Programme
78	R F	Reserved Forest
79	RKS	Rogi Kalyan Samiti
80	R L	Revenue Land
81	RLTAP	Revised Long Term Action Plan
82	R W	Rural Works
83	RWD	Rural Works Division
84	RWSP	Rural Water Supply Project
85	RWSS	Rural Water Supply Scheme
86	S C	Scheduled Caste / Sub-Centre
87	SCA	Special Central Assistance
88	S E	Superintending Engineer
89	SHC	Subsidiary Health Centre
90	SHG	Self Help Group

SI	Abbreviation	Expansion
(1)	(2)	(3)
91	SNP	Supplementary Nutrition Programme
92	S T	Scheduled Tribe
93	S W	Sanitary Well
94	T B	Tuberculosis
95	TP Ratio	Teacher Pupil Ratio
96	TSP	Tribal sub-Plan
97	T V	Television
98	T & V	Training and Visit
99	T W	Tube Well
100	VSS	Van Samrakhyan Samiti
101	WESCO	Western Electricity Supply Corporation
102	W S	Water Supply
103	WUA	Water User's Association
104	ZSS	Zilla Swathya Samiti

Preface

The KBK region of Orissa comprising of the undivided Koraput, Bolangir and Kalahandi districts was again reorganized and subdivided into 8 revenue districts namely, Koraput, Rayagada, Nawrangpur, Malakangiri, Bolangir, Sonepur, Kalahandi and Nuapada. This region of the State has been suffering from massive poverty and under development due to its geographical as well as historical reasons. As per 2001 census the total population of KBK district is 72,490,691 which accounts for 19.80 % population covering over 30.60% geographical area of the state. 89.95% people of this region still live in villages. Lower population density (153 persons / sq.km) in comparison to 236 for Orissa indicates difficult living conditions and an undeveloped economy. Tribal communities dominate this region. As per 2001 Census, about 38.41% people of these districts belong to the Scheduled Tribes (ST) communities including four primitive tribal groups (PTG), i.e., Bondas, Dadai, Langia Sauras and Dangaria Kandhas. 44 CD blocks are included in Tribal Sub Plan (TSP). In addition, 16.25% population belong to the Scheduled Castes (SC) communities as per 2001 Census. Literacy rates are also far below the State as well as National averages. Female literacy is only 29.10%.

Keeping in view the acute and mass poverty and under development of the KBK region, a Revised Long Term Action Plan (RLTAP), an extension of Long Term Action Plan (LTAP), was launched for a period of 9 years from 1998-99 to 2006-07 with a total outlay of Rs. 6251.06 crore for the overall development of the area. The main features of the RLTAP was to adopt an integrated approach for speeding up the socio-economic development of KBK districts by combining the various developmental

activities and programmes being undertaken by the Central and State Governments. The objective of the RLTAAP for the KBK districts were :

- (i) drought proofing,
- (ii) poverty alleviation, mobilizing local inhabitants on participatory development approach and improvement of infrastructure in rural areas
- (iii) improved quality of life for the local people.

As RLTAAP was a time-bound plan for effective and result oriented development of the area, a new base of infrastructure and services have been created and maintained while implementing the programme.

At the instance of Planning Commission, the Programme Evaluation Organisation (PEO) outsourced the Evaluation study on RLTAAP to Agricultural and Rural Development Consultancy Society (ARDCOS), Rasulgarh, Bhubaneswar, Orissa to look into the real achievement of the objectives. The study was initiated in February, 2006 covering all the eight districts coming under KBK region. The components selected for detailed study were :

1. 40 Seated Hostel for S.C / S.T Girls
2. Mobile Health Units (MHU)
3. Emergency Feeding
4. Afforestation
5. Biju Krushak Vikash Yojana (BKVY)
6. Watersheds
7. Rural Connectivity
8. Rural Water Supply Project

The presentation on the findings of the study was made by a team consisting of Dr. Gyana Chandra Kar, Sri Lokanath Sarangi and Dr. Arati Nanda of ARDCOS under the Chairmanship of Member (Evaluation) and in the presence of Deputy Chairman at Planning Commission on 20th October, 2008. The draft report was revised by the Institute after addressing the issues that emerged during the presentation.

The study received constant support and encouragement from Hon'ble Deputy Chairman, Planning Commission, Member (Evaluation), Secretary, Planning Commission, Government of India.

The design of the study was prepared by Dr. R.C. Dey, Director (PEO), Shri K.N. Pathak, Deputy Adviser (SD&TC), Smt Indu Patnaik, Deputy Adviser (MLP) and Smt Deepti Srivastava, SRO (PEO) under supervision of Shri V.K. Bhatia and Smt. Sudha P. Rao the then Advisers of PEO. The study was also coordinated and finalised with the efforts of Smt. G. Mukherjee, Director, REO, Kolkatta, Shri S. Pradhan, SRO, PEO, Bhubaneswar, Shri Vipin Kumar, Economic Officer and Shri Bhuwan Chander, Economic Investigator of PEO, HQs under my guidance. Shri U.K. Verma, Economic Investigator, Shri K.S. Meena and Shri D.S. Sajwan, Tab. Clerks of PEO were also associated in completing the report.

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EXECUTIVE SUMMARY

1.

Back Ground of RLTA:

On account of acute poverty and underdevelopment of the KBK region, attention of the Civil Societies, Intellectuals and the Administrators were drawn in the past on many occasions for addressing the key problems and bringing in all round developments of the region. On the initiative of Government of India, a Long Term Action Plan (LTAP) was formulated by the Government of Orissa for a holistic development of the KBK region as a special package spread over a period of 7 years from 1995-96 to 2001-02 with the basic objectives (i) drought and distress proofing and (ii) alleviating poverty and creating conditions for faster sustainable development of the region. Subsequently, in 1998, on the advice of Government of India, a Revised Long Term Action Plan (RLTA) extended over a period of 9 years from 1998-99 to 2006-07 was formulated and launched in the region with appropriate modifications in the contents of the LTAP. The central features of the RLTA was to address collectively by adopting integrated approach for speeding up the socio-economic development of KBK region by bringing in synergy among various ongoing developmental activities and programmes being undertaken in the region by the State and the Centre. To fill the critical gaps in developmental efforts, Central Assistance was sought for as a special dispensation in the form of Additional Central Assistance (ACA) and Special Central Assistance (SCA) to meet the financial requirement.

2. The Study Area:

The Revised Long Term Action Plan (RLTA) in Orissa was a time-bound plan taken up in the KBK region for effective delivery of various development opportunities available around them. In the process of implementation of the programme, a large number of infrastructure and service facilities have been created in the region to foster growth. Requisite provisions have been made for operation and maintenance of assets created from out of RLTA fund. Since the programmes have already operated in full swing, the objectives of launching the RLTA in the KBK region must have been achieved to a large extent. Keeping this in view, the Programme Evaluation Organisation, Planning Commission decided to launch a quick evaluation study on programmes of RLTA in the KBK region to make a realistic assessment of the achievements in the direction of fulfillment of the set objectives with appropriate recommendations for taking policy initiatives as required. Accordingly, the study area covers all the 8 districts coming under the KBK region.

3. Scope of the Study:

The objectives of the Revised Long Term Action Plan (RLTA) formulated for the KBK districts were (i) drought proofing, (ii) poverty alleviation, mobilizing local inhabitants on participatory development approach and improvement of infrastructure in rural areas (iii) improved quality of life for the local people. The strategic interventions were (i) creation of rural infrastructure, (ii) conservation of natural resources, and (iii) employment generation. Public participation in the process of implementation of the RLTA through formation of Self-Help Groups (SHGs), Vana Samrakshyana Samities (VSSs), Pani Panchayats (PPs) and Bhumi Panchayats (BPs) were also considered vital and important. In fact, the RLTA covers a large number of critical areas - Watersheds, Horticulture,

Agriculture, Animal Resources, Fisheries, Forest Regeneration, Health and Family Welfare, Drinking Water Supply, Rural Connectivity, Welfare of STs and SCs, Textile and Handloom, Irrigation, Safety Net for Old/ Infirm, Women and Children, Anti-poverty Programmes, and Literacy etc. It is neither possible nor desirable to cover all the components of the programme of RLTP within the scope of this study. It was, therefore, decided in consultation with the Programme Evaluation Organisation (PEO) of the Planning Commission to confine the study to few major components. Keeping this in view, the allocation of the SCA of Rs.1193.95 crore received from Government of India till end of 2005-06, the components receiving the major chunk of funds and the priority attached in implementation of the programme of RLTP, it was decided to make detailed investigation on eight components listed below, so as to assess their impact and the outcome of the investments under the programme of RLTP. Thus, eight components were chosen for quick evaluation.

The 8 Components Selected for Detailed Investigation			
1	40 Seated Hostel for S.C / S.T Girls	5	Biju Krushak Vikash Yojana (BKVY)
2	Mobile Health Units (MHU)	6	Watersheds
3	Emergency Feeding	7	Rural Connectivity
4	Afforestation	8	Rural Water Supply Project

4. Study Objectives and Methodology:

Although the overall objectives of the programme of Revised Long Term Action Plan (RLTP) formulated for the KBK districts were complementary and supplementary in nature such as (i) drought proofing, (ii) poverty alleviation and development saturation and (iii) improved quality of life for the local people, the specific components of the programme have their specific objectives. However, the objectives of implementation of these programmes would be fulfilled provided there have been observed timeliness and quality assurance in the strategic interventions in terms of various activities of a component. More so, fulfillment of the objectives of these components will be smooth and uninterrupted provided there is appropriate post-operative care/monitoring and regular follow-ups. In view of this, the objectives of the study were not only confined to assess the overall achievement of the objectives of the selected components but also extended to assess the timeliness in implementation of various activities as umbrella scheme, the quality of implementation, and regularity in taking appropriate follow-ups. The study objectives of individual components have been enumerated in greater detail in Chapter-III.

5. The Study Design:

The infrastructure created under various components under the programme of RLTP had not been spread uniformly as the intensity of problems varied over the KBK region. As such, the traditional method of selecting sample blocks, villages and households in case of the selected components was not considered suitable. It was,

therefore, decided to select few districts, followed by few blocks and then specific number of infrastructure constructed under the programme known as sample projects.

The number of projects to be selected under each component was decided in advance keeping in view the total number of projects undertaken in respect of each component and the spread of projects over the districts. Detailed study design in respect of each component has been enumerated in Chapter-III.

6. Study Instruments:

For collection of data on different components, a set of 4 schedules; (a) the Project Schedule, (b) the Beneficiary / Household Schedule (c) the Key Informant Schedule, and (d) the Programme Manager Schedule were developed and administered in the field. The Project Schedule was administered with the executing functionary responsible for implementation, operation and maintenance of the project in the field, the Beneficiary / Household Schedule with selected beneficiaries / households, who are supposed to get benefits, the Key Informant Schedule with selected knowledgeable persons of the locality to know their perception about the project in question and its impact, and the Programme Manager Schedule was administered with the officer in overall charge of implementation of the programme in the district to get his views and opinion on the problems and prospects of the programme implementation. Detailed discussion on each of the study instruments in respect of each of the 8 selected components have been made in Chapter-III.

7. The Field Work:

The field work was undertaken through a set of well-qualified and experienced persons through personal interview method by way of administering the study instruments with appropriate informants under respective components as primary data base. For each component, a separate team was formed comprising of 4 Field Investigators and a Team Leader. They were given intensive and adequate training for three days. The study tools along with the instructions and guidelines were provided to each member of the team for undertaking the field work. For ensuring adequate mobility, smooth conduct of the study in the field and its timely completion, the team was provided with exclusive transport and all other logistic support. The field work was undertaken during the period from November 2006 to February 2007 with several revisits during March and April 2007.

8. Samples Executed:

For the purpose of detailed investigation all the 8 KBK districts were covered under the 4 components (a) 40 Seated Hostel, (b) MHU, (c) Emergency Feeding, and (d) Rural Water Supply Programme which have direct impact on the quality of life. In case of the remaining 4 components, 4 districts each were covered that had have positive externalities. The number of sample projects executed and the districts covered under each component is presented in the following table. The beneficiaries, households, knowledgeable persons and the Programme Managers interviewed under each component in the process of field investigation has been indicated in Chapter-III.

Samples Executed under Different Components			
SI	Component	Sample Projects	Districts Covered
(1)	(2)	(3)	(4)
01	40 Seated Hostel	41 Hostels	All the 8 KBK districts
02	Mobile Health Units	17 MHUs	All the 8 KBK districts
03	Emergency Feeding	32 AWCs	All the 8 KBK districts
04	Afforestation	16 Sites	Balangir, Kalahandi, Koraput and Rayagada
05	Biju Krushak Vikas Yojana	20 LIPs	Kalahandi, Koraput, Nawarangpur and Subarnapur
06	Watershed Programme	16 Watersheds	Koraput, Malkangir, Nawarangpur and Rayagada.
07	Rural Connectivity	8 Bridges	Kalahandi, Koraput, Nuapada and Subarnapur.
08	Rural Water Supply Projects	50 TW, 12 SW & 8 PWS	All the 8 KBK districts

9. Summary Conclusions:

In course of this research study, interesting conclusions have emerged in respect of each component. For the sake of briefing, the conclusions drawn in respect of individual components are presented below.

9.1 40 SEATED HOSTELS FOR ST / SC GIRLS IN KBK DISTRICTS

- 9.1.1 Enrolment rate of girls as compared to boys in the sample primary schools had increased due to hostel facilities and provision of stipend.
- 9.1.2 On an average 2-3 teachers were available per school with 5 classes and the teacher pupil ratio in 2006-07 was 1:58. About 70 per cent of teachers and 94 per cent of hostel superintendents were staying in the vicinity of schools.
- 9.1.3 In 93 per cent hostel buildings one or more deficiencies were observed. 17 per cent hostels had no electricity or had some electrical problems even if electricity connection existed. In 15 per cent of hostels, there were no boundary walls or the walls were damaged.
- 9.1.4 Boarders have reported facing problems because of non-repair and non-replacement of amenities. All hostels had night watching arrangements. In only 7 per cent of the hostels there were some written code of conduct.

- 9.1.5 The maximum of distance from home to a school goes up to 60 kms and it is also the same for the day scholars/ boarders. Boarders were usually allowed home visits accompanied by their relatives.
- 9.1.6 As many as 78 per cent of hostels had organised Health Camps for boarders' medical check up and 32 per cent had organised Immunisation Camps. First Aid facility was available in 90 per cent of the hostels.
- 9.1.7 Payment of stipend has been made to the boarders in time for 90 per cent of hostels. About 88 per cent sample hostels reported that food component of stipend is not adequate as prices have gone up.
- 9.1.8 One hostel in Nuapada district reported to have received one pair of uniform in place of two uniform per student, 34 per cent of sample hostels received dress up to 2006-07; 64 per cent up to 2005-06 and only one pair in Balangir district up to 2004-05.
- 9.1.9 Ten per cent of boarders are maintaining the habit of cleanliness and the same percentage have the sense of health and hygiene, 88 per cent are attending schools regularly and 34 per cent boarders are maintaining hostel routine.
- 9.1.10 Pass rates at Class-V stage gradually and steadily increased. The same among the boarders have increased at higher rates as compared to total school pass rates.
- 9.1.11 Only 4 per cent of boarders have no knowledge on payment of stipend and they did not appear to be concerned with adequacy of the same.
- 9.1.12 Most all boarders were satisfied with educational atmosphere, food, clothing and security measures taken by the administration as compared to the measures taken on cleanliness, environmental, sanitation, gardening, sports and games.
- 9.1.13 As many as 82 per cent boarders expressed that they would not have attended school, if there had been no hostel and 95 per cent would not have remained in hostel, if there had been no provision of stipend.
- 9.1.14 knowledgeable persons perceived that hostel programme aimed at increasing enrolment and imparting education to SC and ST girls. They were also of the opinion that boarders could attend school but not remain in hostel without stipend.
- 9.1.15 Capacity utilization of seats in the hostels is more than 95 per cent, which implies that there is high demand for hostel accommodations among SC and ST girls.

9.2 MOBILE HEALTH UNITS IN KBK DISTRICTS

- 9.2.1 On an average, one sample MHU annually serves a population of 55,800 covering 102 villages. About 76 per cent of sample MHUs were visiting all the villages allotted to them each month, 53 per cent sample MHUs were visiting their allotted villages twice and the remaining 47 per cent once in a month.
- 9.2.2 About 94 per cent sample MHUs had three crucial personnels, i.e. a Medical Officer, a Pharmacist and a Health Worker (Female). In case of 47 per cent MHUs, Medical Officers were Allopathic, in 41 per cent it was Ayurvedic and in 12 per cent it was Homeopathic Doctors.

- 9.2.3 About 29 per cent MHUs expressed the view that their village visits had not been adequate, 24 per cent faced constraint of transport and fuel and 6 per cent had problem of lack of medicines and funds.
- 9.2.4 The average number of tour days during a month comes to 20 per month in case of 5 districts and less than 20 in case of 3 districts and the overall average comes to 20 per MHU. As regards night halts, MHUs were not found to comply with the minimum of two night halts per month in any district.
- 9.2.5 Timeliness has been observed in provision of staff and mobile vans in case of all sample MHUs. Supply of medicines was delayed in case of one MHU, equipment in case of 8 and provision of funds in case of 13.
- 9.2.6 Medical Officers in charge felt that modern equipments, quality medicines as per local needs, furniture for camps, ambulance and telephone facility for emergency cases, Microscope, training to the Pharmacists, display board in villages on MHU programme, accommodation and storage facility are the essential requirements.
- 9.2.7 As many as 43 per cent sample beneficiary households said that MHUs are capable of attending emergency cases, 2 per cent said the MHUs to be charging fees from patients, 25 per cent reported the MHUs to be undertaking follow up of patients and their medical records.
- 9.2.8 About 76 per cent beneficiary households expressed the opinion that they are getting service at their door step, 94 per cent of them said that supply of medicine was adequate, 67 per cent expressed MHU staff to be cooperative, 55 per cent admitted to have received timely treatment, 37 per cent opined follow ups to be good, and 33 per cent said MHUs were seen to be attaching importance to rich and influential people. However, 71 per cent expressed their overall satisfaction on functioning of MHUs.
- 9.2.9 As against 90 MHUs operating in KBK region, MHUs in 5 districts were fully equipped with Medical Officers in 87 MHUs, Pharmacists in 70 MHUs and Health Worker (Female) in 81 MHUs respectively. Although CDMOs visited 90 MHUs on 96 occasions during 2005-06, some MHUs were not covered at all during the year.
- 9.2.10 The blood slides collected have been gradually increasing over the years. The malaria positive cases found were 21 per cent of the slides collected over a period of 8 years. Disease specific records of patients treated have not been well maintained except Malaria.
- 9.2.11 The number of patients treated per MHU per annum was around 2784 in 1998-99, which rose to 8385 in 2005-06 indicating a more than three times rise during last 6 years. This shows that there has been a positive response to MHUs as a health care delivery mechanism.
- 9.2.12 The CDMOs expressed that the delivery of health care facilities through the MHUs and establishment of more MHU in the KBK region had positive impact on the health care delivery system in these districts and to check the spread of common diseases.

9.3 EMERGENCY FEEDING PROGRAMME IN KBK DISTRICTS

- 9.3.1 On an average, 31 beneficiaries per annum per AWC were extended the benefit of emergency feeding and overall the number of applicants was same. Around 38 per cent of beneficiaries were men and 62 per cent women.
- 9.3.2 Around 19 per cent of beneficiaries belonged to SCs, 52 per cent to STs and the remaining 29 per cent to other category. As much as 96 per cent were from the BPL and 4 per cent from APL category. Selection of beneficiaries were made at the level of Palli Sabha and recommended for inclusion in one and all cases.
- 9.3.3 59 per cent AWCs, opined that quality of food stuff supplied was not good and 31 per cent AWCs expressed that the supply was not made in time. Fuel is not available free and the funds provided for this purpose is not adequate thus creating a problem for emergency feeding in time.
- 9.3.4 While cooked food is served at Anganwadi Centers, meals are also sent to homes of beneficiaries, when they are physically unable to move out at times. Cooked meals are also sent to homes of beneficiaries even when he/she is absent from the village in certain cases. This practice should be discouraged.
- 9.3.5 Complaints were also received from beneficiaries on quality of food, its adequacy and timeliness. 19 per cent of sample beneficiaries expressed their overall dissatisfaction over the programme.
- 9.3.6 About 96 per cent of sample beneficiaries expressed that the programme of emergency feeding acts as a safety net reducing has a safe net to provide food security among the old and infirm people of the poor families. The programme has a positive impact and supplemented the nutritional standard of the BPL families.
- 9.3.7 The number of beneficiaries to be covered through AWCs is usually allotted in advance for finalizing the select list. While the allotted number of beneficiaries is adequate in certain cases, the same is not sufficient in others requiring rationalization.
- 9.3.8 Procedure of selection of beneficiaries is not uniform across States.
- 9.3.9 The quality of rice in case of Nuapada, Rayagada and Subarnapur district has been reported to be fair by the Programme Managers .
- 9.3.10 Programme Managers expressed their overall satisfaction on the procedure adopted for selection of beneficiaries, maintenance of records, quality of food served, cooperation extended by the AWCs and the local people. However, there was lack of cooperation and awareness on the part of the beneficiaries in certain cases. The problem of storage space in case of two districts may be looked into.

9.4 AFFORESTATION PROGRAMME IN KBK DISTRICTS

- 9.4.1 The average area of a sample plantation site was 41.75 hectares. Plantations were done both in reserved forest (RF) and on revenue land (RL). Plantations were also encouraged in degraded forest (DF) and on bald hills (BH) in the form of block plantation and gap filling.

- 9.4.2 Plantations included economic plantation, NTFP, Bamboo, Fuel wood and mixed plantation, and Regeneration of Degraded Forest (RDF). The VSSs were associated in all stages of operation of the afforestation programme.
- 9.4.3 Except soil work and manuring all other standard activities like weeding, fire tracing, pruning etc were not undertaken in requisite number.
- 9.4.4 Organisation of training, workshop and field visits were more or less adequate for departmental functionary. For VSS members, their participation in workshops and execution of field visits were quite dismal.
- 9.4.5 About 77 per cent of man-days generated were contributed by forest fringe villagers and 23 per cent out of that was contributed by women.
- 9.4.6 The condition of the afforestation sites were reported to be quite good at the time of their transfer to the hands of VSS.
- 9.4.7 About 56 per cent of sample households reported that they are primarily depending on minor forest resources for their livelihood, which indicates that establishment of afforestation sites in the fringe of their villages are certainly useful.
- 9.4.8 As much as 63 per cent sample households were enjoying benefits from the afforestation sites like collecting fuel and fodder, NTFP etc. and they would use the sites intensively as they grow older.
- 9.4.9 Local people were aware of the anticipated benefits of afforestation like (i) green coverage, (ii) environmental improvements, (iii) soil and moisture conservation, (iv) increase in water table, (v) availability fuel and fodder, (vi) availability of NTFP, and (vii) felling of trees on maturity etc.
- 9.4.10 The condition of the sample sites in terms of survival of trees and the quality of growth was better as compared to the time of transfer to VSS, which implies that the impact of the programme is quite appreciable.
- 9.4.11 Although the VSSs were protecting the sites from biotic interference, they were unable to protect sites from illicit felling that required legal action.

9.5 BIJU KRUSHAK VIKAS YOJANA IN KBK DISTRICTS

- 9.5.1 Delay in completion of the LI Points mostly was due to delay in the preparation of estimate, delay in execution of electrical works and non-contribution of beneficiary share.
- 9.5.2 All beneficiaries contributed their share in terms of physical labour. All members of the Pani Panchayats in the selected sample LIPs were paying water rent regularly.
- 9.5.3 All the LIPs are being operated by members of Pani Panchayats. The average annual operation and maintenance cost varied between Rs.30,000/- in Nawarangpur district to Rs.50,000/- in Koraput district. In case of 55 per cent LIPs, OLIC undertakes repairs and maintenance and for remaining 45 per cent private mechanics did the job.
- 9.5.4 The electricity distribution company charges fee as per minimum load factor even if the LIP is not operated during off seasons, which is a cause of resentment among Pani Panchayat members.

- 9.5.5 In Kalahandi, Nawarangpur and Subarnapur districts, all members of the sample PPs expressed that their economic condition has improved a lot due to LIPs. However, in Koraput district the PP members felt that their economic condition has improved marginally.
- 9.5.6 Sample beneficiaries of Kalahandi district revealed that their cropping intensity had gone up from 103.6 per cent to 161.2 per cent, in Koraput from 84.77 to 140.3, in Nawarangpur from 92.1 to 171.5, and in Subarnapur from 81.9 to 180.3 due to installation of LIPs. The overall increase for all the district's crop intensity was from 89.7 per cent to 164.8 per cent.
- 9.5.7 Area under paddy has gone up and paddy is also being cultivated in Rabi season. There have been significant changes in terms of cropping pattern. Inferior cereals have been replaced by superior cereals, vegetables like cabbage, brinjal, tomato, cash crop like sugarcane etc.
- 9.5.8 Farm Business Income went up from Rs.944/- to Rs.3297/- per acre of net sown area in Kalahandi district, from Rs.927/- to Rs.2458/- in Koraput, from Rs.2007/- to Rs.2868/- in Nawarangpur and from Rs.1024/- to Rs.2745/- in Subarnapur districts due to installation of LIPs.
- 9.5.9 Per acre labour employment has gone up from 62 to 168 mandays (171%) in Kalahandi, from 59 to 142 (141%) in Koraput, from 68 to 182 mandays (168%) in Nawarangpur and from 82 to 178 mandays (117%) in Subarnapur districts. Thus, in terms of employment generation, the contribution of BKVY is enormous.
- 9.5.10 All the key informants expressed the view that there was good cooperation among the PP members followed by the PPs and the OLIC. The PPs were conducting regular meetings. They felt that crop diversification and cultivation of cash crops was possible due to Pani Panchayat wise use of water resources. They opined that the system of Pani Panchayat played a significant role in increasing agricultural productivity.
- 9.5.11 The key informants suggested that Government should take steps for installation of additional discharge points, provide regular technological assistance, meet the cost of repair and maintenance, see to regular supply of electricity, reduce water rate, increase labour wage etc.

9.6 WATERSHED DEVELOPMENT IN KBK DISTRICTS

- 9.6.1 The average estimated cost of a sample watershed project was Rs.182.97 lakh. The expenditure incurred was 67.04 per cent of the total allocation, as a number of projects started in 2001-02 and 2002-03 were still incomplete.
- 9.6.2 The area served under sample watersheds includes land under forest, revenue land, land under cultivation, community land and barren land etc.
- 9.6.3 The nature of activities undertaken in the sample watersheds were insitu plantation, soil and moisture conservation, plantation and sowing of seeds of multipurpose trees, shrub, grass, legumes, pasture and land development, agro-forestry, horticulture and floriculture, drainage line treatment, small water harvesting structures, development of orchards and pisciculture etc.

- 9.6.4 Earmarking of funds towards employment generation was 55.25 per cent of the total expenditure. On an average 1048 man-days were generated per Rs.1.00 lakh, equal wage rate was paid both for male and female workers.
- 9.6.5 About 1352 hectare of irrigation potential was created under the 16 sample watersheds, which was fully utilized in Kharif season of 2005-06. The Rabi season utilization was of 540 hectare that accounted for 40 per cent of irrigation potential.
- 9.6.6 The visible changes that had taken place due to the watershed projects are as follows:–
- (i) Employment opportunities have been created through plantation, agro-forestry, horticulture, floriculture, land development, creation of orchards, taking up pisciculture etc. There had been a change in the cropping pattern including cultivation of summer crops.
 - (ii) The local people have been able to earn additional income by engaging in new economic activities that has reduced migration of labour to certain extent.
 - (iii) Health and hygiene condition has improved due to construction of drainage system and installation of safe drinking water sources.
 - (iv) Interpersonal relationship and public and private partnership has improved because of local people/stakeholders becoming members in different user groups.
- 9.6.7 The farm business income per acre, the cropping intensity, the crop diversification and the employment generation has gone up due to irrigation from watersheds.
- 9.6.8 The initial number of 42 SHGs of different types within the area coming under the sample watersheds had gone up to 163 (288%) as a result of watershed programme and involvement of GPs/PRIs.
- 9.6.9 The households in watershed areas had taken multi-dimensional activities like product development, organization of health camps, distribution of goats, cattle and agricultural implements, plantation, fishery activities, watch and ward etc.
- 9.6.10 The Key Informants opined that watersheds have been able to create livelihood opportunities, raise the water table, grow fodder and fire wood, enhance the economic growth of the local people through various income generating activities like agricultural activities, pisciculture, plantation etc.
- 9.6.11 The Programme Managers expressed that impact of the programme of watershed on the local people's activities and attitudes have been positive. It has a clear demonstration effect through:
- i. Better management of natural resources, soil and water conservation, improvement of existing ponds and tanks and taking up of pisciculture, plantation activities and thereby rearing of domestic animals.
 - ii. Collection of fodder and fuel wood, cultivation of vegetables, cash crops, increased scope for livelihood opportunities and employment generation thereby increasing the economic condition of the people and improvement in interpersonal relationship among the local people.

9.7 RURAL CONNECTIVITY PROGRAMME IN KBK DISTRICTS

- 9.7.1 In case of 6 sample bridges, there was previously no link at all ensuring all weather connectivity. In respect of the other two, the existing links were unsafe masonry bridges.
- 9.7.2 The physical and financial progress under the programme was satisfactory. Of the total employment generated, 37 per cent related to skilled labour and 63 per cent to unskilled.
- 9.7.3 Out of the unskilled labour 87 per cent were men and 13 per cent were women. SCs contributed 45 per cent, STs 36 per cent and others 19 per cent of the unskilled labour.
- 9.7.4 It was observed in the course of field study that incomplete information was furnished in certain cases, which implies that either records are not maintained properly or there was lack of transparency.
- 9.7.5 All the GPs contacted opined that construction of these bridges has improved connectivity with other villages and the block headquarters. There have been appreciable improvements in the connectivity to GPs, Blocks, District headquarters, Health Centres, Educational Institutions and other Growth Centres including market places. There is a positive improvement in the socio-economic and interpersonal development.
- 9.7.6 It was the unanimous opinion in all the focus group discussions that local people have been enjoying all weather connectivity, Children are able go to schools across the bridges, local people could go to hospitals, market places, business men could expand their business and contact producers and buyers conveniently, procurement of raw materials and essential commodities were easy due to transport conveniences.
- 9.7.7 Focus group discussions also revealed that as a result of availing connectivity through the bridge projects, some people have opened/expanded small business within their villages and across the bridges. Besides, people are able to save time and distance to go to other places as a result of these bridges and conduct safe night journey.
- 9.7.8 The business men of the local rural market could avail easy access to bigger business centres as a result of bridges. Procurement of materials from outside, contact with big buyers, opening of new ventures have become easier. Earlier, the producers were carrying their produce to the buyers or to market places in small quantities through head loads. The situation has changed and the buyers are now coming to the door steps for which the farmers are getting a competitive price for their produce now.

9.8 RURAL WATER SUPPLY PROGRAMME IN KBK DISTRICTS.

- 9.8.1 The average number of potential beneficiaries per tube well and sanitary well were 167 and 151 respectively and are well within the prescribed norm for KBK districts. But in case of Kalahandi district, one tube well has been installed for an average of 258 population, which seemed to be at higher side.
- 9.8.2 Of the 50 sample tube wells, only 9 were transferred to Water Users Associations. As against a physical target of 167 beneficiaries per tube well on an average, as many as 153 (92%) are receiving benefit at present.
- 9.8.3 Of the 12 sample sanitary wells, none was transferred to Water Users Associations. As against a physical target of 151 beneficiaries per sample sanitary well, as many as 129 (85%) on average are receiving benefit at present.
- 9.8.4 All the 8 sample piped water supply projects were completed. The source was Ground Water, lift in case of 6 and River Lift in case of remaining two. As against a physical target of 2009 beneficiaries per sample piped water supply project, as many as 1927 (96%) on an average, were receiving benefit at present showing less than optimal utilization of projects.
- 9.8.5 There were in all 117 break downs in case of 70 projects during the previous year that comes to two per project an average. As against a total of 117 break downs, 49 break downs were repaired within a reasonable time period. Even if repaired within reasonable time, the average number of days of interruption was 4 days.
- 9.8.6 In all, 20 Water User Associations have been formed and projects have been transferred in 9 cases. However, 12 Associations are taking part in operation and maintenance of projects.
- 9.8.7 Out of 208 beneficiaries contacted, as many as 178 (86%) expressed the view that supply of water through the projects was adequate. In case of inadequate supply, the attributable reasons were frequent break downs, drying up of the source, and delay in repairs etc. About 10 per cent of the break downs were related to electrical problems.
- 9.8.8 In case of 50 per cent of sample water supply projects, it was the feeling that the RWSS organization is not cooperating with the people for timely repair of the break downs. Operation and maintenance of 87 per cent of the projects is vested in the Panchayats.
- 9.8.9 Maintenance of hygienic practices like using clean pots to carry water, storing water with a cover and using clean mugs in using water among the beneficiaries is satisfactory. Only 18 per cent of beneficiaries expressed their views that they used disinfectants at the time of epidemic.
- 9.8.10 About 80 per cent of the sample beneficiaries reported good platforms or stand points have been constructed at water sources. As many as 21 per cent sample beneficiaries reported that waste water is used to irrigate gardens, 15 per cent reported channeling to soak pits, 5 per cent to drains and 59 per cent to open spaces.

- 9.8.11 As many as 99 per cent of the beneficiaries are satisfied and expressed reduction in prevalence of diarrhea and dysentery cases, while 98 per cent are satisfied on the reduction in prevalence of cholera and jaundice cases.
- 9.8.12 All Project Managers were of the opinion that there had been drastic reduction in the prevalence of various kinds of water borne diseases and are enjoying improved quality life of people due to safe and portable drinking water.
- 9.8.13 Majority of the Programme Managers expressed the view that the burden on women to fetch water from distant places has been reduced and the households are getting more water for household consumption.

10. Overall Observation:

The over all observation based on this quick-evaluation study as also the impact of RLTA is considerable in KBK area.

- 10.1 In matters of literacy growth rate it is found from the State government. Report (based on current data) that if a comparison is made between KBK districts and non-KBK districts, we find that between 1981-1991 and 1991-2001, over all literacy growth rate in KBK districts has gone up from 47.30 to 73.21 per cent as against 42.53 to 50.96 per cent for non-KBK districts. During the period, State's over all literacy growth rates has gone up from 43.08 per cent to 53.59 per cent. Significant achievement is found in case of female literacy growth rate which between 1981-91 to 1999-2001 registered an increase from 71.53 per cent to 115.34 per cent. The same was quite low for non-KBK districts which went up from 62.19 per cent to 70.34 per cent while for the State as a whole increased from 63.00 per cent to 74.46 per cent. Much of their achievement could be ascribed to the encouragements given to women education in KBK district through provision of stipends and setting up of hostels for SC / ST girls who comprise a very large share in the total population of KBK district.
- 10.2 Similarly the benefit of these and other programmes have been reflected in enrolment in primary and upper primary schools. Enrolment rate in primary schools in KBK region went up from 75.89 in 1996-97 to 86.44 per cent in 2001-02 and to 107.05 per cent in 2007-08 against 86.49 per cent to 89.11 per cent to 103.23 per cent on average for the state as a whole. In Upper primary schools the enrolment for KBK went down from 56.39 in 1996-97 to 43.83 in 2001-02, but shot up to 84.99 per cent in 2007-08 as against state average of 59.33, 64.45 and 106.09 for the same years respectively.
- 10.3 There was remarkable achievement in drop out rate which at primary school level decreased from 57.13 to 46.20 per cent and to 8.57 for the years 1996-97, 2001-02 and 2007-08, as against the State average decrease being 47.60, 41.00 and 7.76 per cent respectively. At the upper primary level the drop out rate which was 79.10 per cent in 1996-97, came down to 66.56 in 2001-02 per cent and to 14.82 per cent in 2007-08 as against State average fall being 59.60, 56.00 and 13.58 per cent respectively.
- 10.4 Thus, the achievement for KBK districts in matters of primary and upper primary level both in terms of enrolment and drop out rates is very encouraging and the achievement could be ascribed to the substantial

assistance provided to the STs/SCs boys and girls, particularly to girls in terms of hostel for them.

- 10.5 As regards general socio-economic well being, Regional income disparities within Orissa have narrowed during 2000-05. Comparison of household expenditure levels in 1999-2000 (NSS 55th round) and 2004-05 (NSS 61st round) shows that per-capita expenditure increased faster in rural areas (by 12 per cent over five years or 2.3 per cent annually), as compared with urban areas (by 4 per cent, over the period or 0.8 per cent annually). In rural areas, the most rapid growth was recorded in the poorest Southern region where per-capita expenditure increased by 25 per cent (4.6 per cent annually), followed by the Coastal region (12 per cent, or 2.3 per cent annually), and then the Northern region (6 per cent, or 1.2 per cent annually). In urban areas, per-capita expenditure grew overall by only 4 percent over the five-year period. Regional distribution of urban expenditure moved in favour of the Northern region, where per-capita expenditure grew by 14 percent (2.7 per cent annually), spurred by mineral-based industrial growth and its multiplier effects. KBK districts form a major chunk of southern and northern districts of Orissa and RLTAAP could have been a major contributor to this encouraging development.
- 10.6 The findings of this quick evaluation have been more or less corroborated by few of studies conducted by independent agencies like NIRD and few reputed agencies engaged by the State Government as also by NHRC. While NIRD, Hyderabad study has found out that RLTAAP has been instrumental in increasing both area under cultivation as also increase in water table through its watershed programmes. Both area and yield have gone up remarkably in micro watershed areas and forest coverage has gone up.
- 10.7 Independent organizations have shown increase in fish production and substantial increase in annual income. Because of provision of drinking water, distance covered (mostly by women) to fetch drinking water has been reduced to about 0.5 kms. Moreover male folk now fetch water (which was not so earlier) for domestic purpose from the supply point (hand pump / stand etc.)
- 10.8 In spite of few shortcomings and lacunae, the RLTAAP has been instrumental in changing the face of KBK region substantially and therefore, require continuance with greater vigor on a long-term basis.

11. Summary Recommendations:

The major recommendations made in respect of each of the components are presented below for taking policy initiatives with a view to bringing in improvements and midway correction in the programme.

11.1 40 SEATED HOSTELS FOR ST / SC GIRLS IN KBK DISTRICTS

- 11.1.1 For ensuring quality of education, there is an urgent need for appointing at least five teachers for each primary school. If there be any financial constraints, appointment of Shikshya Sahayaks in requisite number could be a viable solution.
- 11.1.2 Government should ensure facility for stay of Head Masters/Mistresses and Hostel Superintendents at school headquarters.

- 11.1.3 Government may consider providing only the non-consumable items to boarders and the consumable items be left to the boarders to purchase. Consumable items may otherwise be provided before the start of the school term. In case of uniform, the time lag needs to be reduced.
- 11.1.4 All hostels should have night watchmen arrangements and there should be a prescribed common code of conduct for the boarders.
- 11.1.5 Timely payment of stipend and distribution of two pairs of uniform to all boarders should be ensured.
- 11.1.6 The question of reducing gender inequality in education front among SCs and STs by way of providing boarding facilities to girls should be highlighted before the local public in different forum.
- 11.1.7 Additional provisions of infrastructure, amenities and stipends should be made in advance at the prevailing level to accommodate the enhanced hostel capacity from 16000 to 18460 (i.e. more 2460 boarders).
- 11.1.8 The DWOs opined that if there had been no provision of stipend, girls would not have preferred to stay in hostels, the boarders would not have attended schools without hostel facilities.
- 11.1.9 There is an urgent need for the hostel authorities to provide good quality of food, maintenance of hostels and study environment by enforcement of discipline among the boarders to have the sense of security.
- 11.1.10 The boarders should have been encouraged and properly guided for good reading habit , maintenance of cleanliness, surrounding sanitation, gardening, games ,sports etc in the hostels.

11.2 MOBILE HEALTH UNITS IN KBK DISTRICTS

- 11.2.1 Zilla Swasthya Samitis should ensure a minimum of two visits by MHUs to each village during a month and MHUs should conduct clinics for villages within a radius of 5 kms. All crucial staff of MHUs like Medical Officer, Pharmacist and Health Worker (Female) should be filled in, for efficient functioning of the project.
- 11.2.2 The CDMOs should review the position at the end of each month and to enforce a minimum of 20 days tour and 2 days of night halts of each MHU to cover the target villages.
- 11.2.3 Government should examine the possibility of making provisions for modern equipment, quality medicines as per local needs, furniture for camps, ambulance and telephone for emergency cases, Microscope training to the Pharmacists, a display board at the village level, accommodation and storage facility to MHUs for effective functioning.
- 11.2.4 IEC programme should be re-vitalized to create adequate awareness among the people on the nature and extent of services a MHU provides for the local people.
- 11.2.5 CDMOs should undertake more of field visits and interact with the villagers which will help increasing attendance to emergency, enhancing follow ups, eliminating the scope of charging fees, and ensuring complete enumeration of expectant mothers and their antenatal check ups.

- 11.2.6 Visit of CDMOs on clinic days will have adequate impact on providing doorstep services, ensuring good cooperation, providing timely treatment, ensuring cent per cent follow ups, in removing bias of MHUs towards the rich and influential people and to make it a more pro-people activity.
- 11.2.7 Since treatment of Panchabyadhi is an important popular component of the MHU programme, the MHUs should maintain records of the patients treated under various diseases particularly those coming under Panchabyadhi, which will help in undertaking policy reviews in future.

11.3 EMERGENCY FEEDING PROGRAMME IN KBK DISTRICTS

- 11.3.1 Provision of accommodations for Anganwadi Centres may be made for efficient management of various ongoing programmes.
- 11.3.2 The select list along with all relevant details of beneficiaries should be made available to the AWCs for record and future reference.
- 11.3.3 The practice of providing meals for the absentee beneficiaries should be discontinued.
- 11.3.4 District administration should take care and ensure provision of quality food, its adequacy and service of food in time.
- 11.3.5 In fitness of things, allocation-cum-identification of beneficiaries to the districts should be based on a potential survey conducted in advance. Such a survey could be carried out along with the BPL Census for better consistency.
- 11.3.6 There should be one prescribed authority to approve the selected list with clear criteria, which can be uniformly applicable in all districts. In case it is already prescribed, the same should be enforced.
- 11.3.7 Since some programme managers have reported the food stuff supplied to be of poor quality, there is need for the State level authorities, as an independent body, to ensure quality of food stuff provided.

11.4 AFFORESTATION PROGRAMME IN KBK DISTRICTS

- 11.4.1 Forest Department should take adequate care to increase the level of association of VSSs in conducting IEC activities and afforestation on common property resources.
- 11.4.2 Higher authorities should ensure availability of a checklist of various standard practices to be undertaken in course of plantation and the same should be recorded in the plantation journal.
- 11.4.3 The departmental authorities should organize more workshops, seminars and demonstration visits for VSS members to sensitize.
- 11.4.4 Forest Department should take care to engage more of local people and increase participation rate of women in implementing various activities under afforestation programme.
- 11.4.5 VSSs should be involved from the stage of site selection, so that a sense of their ownership of the site among the VSS members and the villagers will be created.

- 11.4.6 To prevent Illicit felling, it would be better, if a coordination committee of the neighboring VSSs could be involved for mutual cooperation and broad based interest.
- 11.4.7 Participation in training, workshops and execution of field visits are key instruments in enhancing the knowledge and sense of ownership among VSS members should be given top priority.

11.5 BIJU KRUSHAK VIKASH YOJANA IN KBK DISTRICTS

- 11.5.1 Government should create adequate general awareness on the functional roles and responsibilities of the Pani Panchayats on their efficient operation and timely maintenance of LI points.
- 11.5.2 Pani Panchayats should be provided a repair kit of spare parts to meet immediate nature of repairs.
- 11.5.3 Government may issue instructions to Electrical Companies for timely electrical connections to LI points and to charge economic electrical tariff from Pani Panchayats.
- 11.5.4 Government should organize more training and motivation programmes for the PP members for sustained use of ground water and re-charge of rain water as a scarce resource.
- 11.5.5. The Agriculture Department has a greater role to play in organizing agriculture extension programme, since crop diversification and cultivation of cash crops need to be provided.

11.6 WATERSHED PROGRAMME IN KBK DISTRICTS

- 11.6.1 The district authorities should organize training and visit programmes for the user groups, which will help enhancing their participation in a big way.
- 11.6.2 Impeding problems involved in incomplete micro-watershed projects should be sorted out and resolved
- 11.6.3 To avoid the running cost escalation and maximizing creation of irrigation potential, the early completion of project is must.
- 11.6.4 There is need for imparting training on maintenance of records / provision of captive nurseries for replacement of plants.
- 11.6.5 Low cost agricultural implements should be made available within easy reach.
- 11.6.6 There should be a forum for all the Watershed Development Committees in a district to meet, interact and learn best practices to improve water use efficiency and to meet the gap between demand and supply of water and a system of award and reward for best performing watersheds should be introduced.

11.7 RURAL CONNECTIVITY PROGRAMME IN KBK DISTRICTS

- 11.7.1 Authorities should consult and also involve the local people in regard to suitability of the site selected for bridge projects.
- 11.7.2 Executing authorities have to ensure enhanced participation of women and weaker sections of SCs and STs in construction for employment generation.
- 11.7.3 Executing agencies should maintain records strictly as per prescribed norms.
- 11.7.4 Supervising authorities should ensure inspections of each project site to ensure good quality.
- 11.7.5 Administration should consult local representatives in the process of selection of bridge projects.

11.8 RURAL WATER SUPPLY PROGRAMME IN KBK DISTRICTS.

- 11.8.1 At least two to three persons from each user group should be trained on the operation and maintenance of projects, as water is the vital input for sustaining human life.
- 11.8.2 Departmental authorities as well as the electrical companies have a greater role to play in regard to timely restoration of power in case of electrical break downs, as it is a community based drinking water supply.
- 11.8.3 To avoid break downs due to mishandling, early formation of User Groups and transfer of the projects to them is the best alternative.
- 11.8.4 Formation of Water User Associations, supply of repair kits, and providing training to key members will solve the problem of spare parts and non availability of mechanics and the question of non-cooperation between RWSS and the local people.
- 11.8.5 Government have to create adequate public awareness on the hazards of waste water disposal to open field and use of disinfectants for treatment of water sources to access for safe drinking water supply.
- 11.8.6 Construction of toilets near water sources needs to be strictly prohibited and defunct water sources as well as other sources, where water quality is affected should be rectified on priority basis to check surface and ground water pollution.
- 11.8.7 Government may consider digging more sanitary wells, where water quality is good and more specifically in interior villages. Irregular private connections in case of piped water supply projects should be firmly dealt.
- 11.8.8 The prevailing perception among the public that Government will continue with operation and maintenance of water supply projects for ever should be removed. The SHGs and NGOs should be encouraged come forward to mobilise the mass to bear the operation and maintenance (O & M) costs.
- 11.8.9 The overall findings as gathered from this field study as well as those revealed in other studies conducted by various agencies like NIRD, State government etc. as also from the facts revealed from NSS data go to point out that RLTAAP has contributed substantially in improving the quality of life of the people of KBK region. It is, therefore, emphatically suggested that the Programme should continue on a long-term basis to further bridge the gap between the KBK districts and the rest of the districts of Orissa.

CHAPTER – I

INTRODUCTION

1. The KBK Region:

The region comprising of the undivided Koraput, Balangir and Kalahandi districts of Orissa is popularly known as the KBK region. In course of reorganization of districts in Orissa during 1992-93, the three districts of the KBK region were divided into 8 districts namely the Balangir, Kalahandi, Koraput, Malkangiri, Nawarangpur, Nuapada, Rayagada and Sonepur districts.

2. Development Profile of the KBK Region:

Orissa's poverty is enormous and it ranks the lowest in terms of per capita income among major States of the Country. It has maximum percentage of population living below poverty line. The southern and northern districts of the State are very backward with high concentration of Scheduled Tribes. The KBK region of the State has all along been suffering from massive poverty and underdevelopment on account of its geographical situation as well as for historical reasons. There are as many as 118 tribal sub-plan blocks against a total of 314 blocks in the State out of which 44 tribal sub-plan blocks against a total of 80 blocks are in the KBK region. Besides, the Committee on the Constitution of Separate Development Board in Orissa (1994) have identified 82 out of 314 blocks in the State as very backward. Out of the 82 very backward blocks identified in the State, as many as 53 are situated in the KBK region.

Human Development Index (HDI) is one of the important indicators that indicate the quality of life enjoyed by the people living in a region. The Orissa Human Development Report 2004, shows that out of 30 districts of Orissa the HDI rank of Balangir is 21st, Kalahandi 11th, Koraput 27th, Malkangiri 30th, Nawarangpur 26th, Nuapada 14th, Rayagada 25th and Sonepur 16th. This clearly indicates that the districts coming under the KBK region in general have a lower level of human development index as compared to rest of the districts in the State. In terms of Health Index Ranking as calculated in the said report except Kalahandi, Nuapada and Sonepur, the other 5 districts of the KBK region rank very low as compared to the other districts of Orissa. Selected development indicators relating to the districts in the KBK region vis-à-vis that for the State of Orissa are presented below in Table No: 1.1 for appreciating the

development scenario of the KBK region as compared to the situation prevailing at the state level.

Table No: 1.1
Selected Development Indicators for the Districts in KBK Region.

Sl. No	District	Popn (lakh) 2001	Hosptl Beds*	Malaria Deaths 2001-05*	ST (%) 2001 (+)	Literacy (%) 2001 (+)	% of BPL 1997**	HDI 2004 ***
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	13.37	438	6	20.60	55.70	61.06	0.546
2	Kalahandi	13.35	491	35	28.65	45.94	62.71	0.606
3	Koraput	11.81	349	112	49.62	35.72	83.81	0.431
4	Malkangiri	5.04	286	124	57.43	30.53	81.88	0.370
5	Nawarangpur	10.26	236	38	55.03	33.93	73.66	0.436
6	Nuapada	5.31	158	63	34.71	42.00	85.70	0.581
7	Rayagada	8.31	225	57	55.76	36.15	72.03	0.443
8	Subarnapur	5.42	153	0	9.80	62.84	73.02	0.566
	KBK Total	72.87	2336	435	38.41	43.30	71.97	-
	Orissa	368.05	13936	1635	22.13	63.08	66.37	0.579

*: Papers for CDMO Conference in April 2006.

**: Percentage of families below the poverty line as per BPL Census 1997.

***: Human Development Index published in the Human Development Report of Orissa, 2004.

(+): Annual Action Plan under RLTA 2006-07 of Govt of Orissa.

The table reveals that the hospital beds per lakh of population in the KBK region is around 32 as against a State average of 38. Death due to malaria is higher in this region, during the 5 years from 2001 to 2005 comes to 6 for one lakh population in the KBK region as against a State average of 4. The percentage of tribal to the total population in Orissa is 22.13 and that in the KBK region is 38.41. In the literacy front, the KBK region is far behind the State average. In terms of poverty and Human Development Index the KBK region is also behind the State average. The percentage of people living below the poverty line is much higher than the State average in respect of all the districts in the region except Balangir and Kalahandi.

Poor development profile of the KBK region is the result of inadequate infrastructure in different sectors of the economy as well as inadequate access of the local people to whatever development opportunities available in the region. A two-

pronged strategy was, therefore, felt necessary to bring in all round development of the KBK region, one to bridge the existing gaps in the availability of development infrastructure and the other to create conducive environment for enhancing the access to the local people, so that they realise the development opportunities available and derive benefits out of those programmes.

3. Back Ground of RLTA P:

On account of the acute and widespread poverty and underdevelopment of the KBK region, attention of the Civil Societies, Intellectuals and the Administrators were drawn in the past on many occasions to address the key issues and bring in all round development of the region.

On the initiative of Government of India, a Long Term Action Plan (LTAP) was formulated by the Government of Orissa for a holistic development of the KBK region. The LTAP was spread over a period of 7 years from 1995-96 to 2001-02 with principal objectives in view: (i) drought and distress proofing and (ii) alleviating poverty and development saturation. Subsequently, in 1998, on the advice of Government of India, a Revised Long Term Action Plan (RLTAP) extended over a period of 9 years from 1998-99 to 2006-07 was formulated and launched in the region with a total outlay of Rs.6251.06 crore. The central features of the RLTAP was to address itself by adopting integrated approach for speeding up the socio-economic development of KBK region by bringing in synergy among various developmental activities and programmes being undertaken in the region by the State and the Centre. The critical gaps in the developmental efforts as well as dearth of resources were sought to be bridged through SCA as a special dispensation. However, only a meager allocation of Rs.20.49 crore was received as additional assistance during the first three years from 1995-96 to 1997-98. Therefore, LTAP (1995-2002) did not take off because of insufficient funds.

4. Objectives of the RLTA P and the Path:

The objectives of the Revised Long Term Action Plan (RLTAP) formulated for the KBK districts were;

- (i) Drought proofing of the region
- (ii) Poverty alleviation and development saturation and
- (iii) Improved quality of life for the local people

The following were considered as the most appropriate and strategic interventions needed for a holistic development of the KBK region in implementing the programme of RLTA P;

- (i) Infrastructure: Construction of rural infrastructure likes roads, bridges, irrigation projects, water sheds, tanks, ware-houses, markets etc.
- (ii) Conservation of natural resources - like forest, soil and water etc.
- (iii) Employment Generation on sustainable basis through creation of productive infrastructure and assets under various programmes.
- (iv) Public participation in the process of implementation of the RLTA P through formation of Self-Help Groups (SHGs), Vana Samrakshana Samities (VSSs), Pani Panchayats (PPs) and Bhumi Panchayats (BPs) was also considered vital and important.
- (v) Programmes for restructuring and energizing social security system as emergency feeding programme, special nutrition programme for children under the age of 3, mobile health units, promotion of education among STs / SCs etc.

5. Programme Components:

In course of implementation of the programme of RLTA P, the Special Central Assistance received from Government of India till 2005-06 was spent for creation of development infrastructure and for undertaking social welfare activities on a wide range of activities in the KBK region in the following development sectors.

- i. Watershed Development, Horticulture and Agriculture,
- ii. Animal Resources Development,
- iv. Fisheries Development Programme,
- iv. Forest Regeneration and Development,
- v. Health and Family Welfare Programmes,
- vi. Drinking Water Supply,
- vii. Connectivity in KBK districts,
- viii. Welfare of STs and SCs,

- ix. Textile and Handloom,
- x. Irrigation,
- xi. Other Infrastructure Development,
- xii. Social Safety Net for Old / Infirm, Women and Children,
- xiii. Anti-poverty Programmes and
- xiv. Literacy Programme

6. Achievements under RLTA:

By the end of 2005-06, Special Central Assistance to the tune of Rs.1193.95 crore was received by the State Government and the amount received from the Government of India was fully allocated to different executing Departments for implementation in various components of the programme of RLTA in each of the years. By end of 2005-06 an amount of Rs.1159.00 crore was utilized accounting for 97.07 per cent of the total Special Central Assistance received as per the year wise details given below vide Table No: 1.2.

Table No: 1.2
Year wise Allocation and Utilization of SCA

(Rs. in Crore)

Sl.	Year	SCA Allocated	Utilization	% of Utilization
(1)	(2)	(3)	(4)	(5)
1	1998-99	46.00	10.51	22.84
2	1999-00	57.60	55.91	97.06
3	2000-01	40.35	57.14	141.61
4	2001-02	100.00	61.37	61.37
5	2002-03	200.00	131.99	66.00
6	2003-04	250.00	318.54	127.41
7	2004-05	250.00	279.11	111.64
8	2005-06	250.00	244.43	97.78
	Total	1193.95	1159.00	97.07

As a result of the utilization of Rs.1159.00 crore of Special Central Assistance under the programme of RLTAAP during the period from 1998-99 to 2005-06 in the KBK region over and above the normal plan programmes, a lot of development infrastructure and productive assets were created in the region. The figures incorporated in the Annual Action Plan under RLTAAP in Orissa and the data collected from the executing agencies revealed that the physical achievements have taken place in the region and are enumerated below:

- a. As many as 936 Lift Irrigation Points (LIPs) were taken up under RLTAAP and most of them have been completed and handed over to the Pani Panchayats for their operation and maintenance.
- b. As many as 13830 tube wells, 632 sanitary wells and 85 piped water supply projects were executed for providing safe drinking water to the rural poor.
- c. As many as 54 rural bridges were constructed to provide connectivity to growth centers, schools, health centers, Panchayat, Block and District headquarters.
- d. 400 number of residential hostels exclusively meant for girls were constructed and operationalised. 16,000 pre-matric scholarships are being provided annually to girl students.
- e. Under various kinds of afforestation activities around 1,25,167 hector of area was covered by LTAP funds.
- f. 314 watersheds were taken up and 39,520 ha. of area has been treated.
- g. In 80 blocks of the KBK region, as many as 90 Mobile Health Units were established through which nearly 13 lakh patients are being treated per year at their doorstep.
- h. About 2.00 lakh beneficiaries on an average were covered under Emergency Feeding Programme each year. Under this programme old, infirm and indigent persons are benefited.

7. The Study Area:

Needless to emphasize that it is not merely a question of availability and adequacy of various kinds of infrastructure and amenities, but their accessibility matters to the poor and economically backward people living in the region. Enhanced accessibility to improved infrastructure and amenities was considered as one of the strategic intervention required for all round development of the KBK region. The Revised Long Term Action Plan (RLTAP) in Orissa have appropriately taken up the challenge of tackling the issues of inadequate access to various development opportunities available in the region. In the process of implementation of the programme of Long Term Action Plan (LTAP) and subsequently the Revised Long Term Action Plan (RLTAP) a large number of infrastructure and service facilities were created in the KBK region. Requisite provision was also made for operation and maintenance of the same from RLTAP fund.

Since the programme has already operated in full swing, it was expected to achieve the objectives of RLTAP in the KBK region to a reasonable extent by now. Keeping this in view, the Programme Evaluation Organisation of the Planning Commission decided to launch a quick evaluation study of the programme of RLTAP in the KBK region to make a realistic assessment of the achievements in the direction of fulfillment of the set objectives of RLTAP in KBK districts and come up with appropriate recommendations for taking policy initiatives needed. Accordingly, the study area covers all the 8 districts coming under the KBK region.

CHAPTER - II

PROFILE OF STUDY AREA

1. Administrative Units:

The KBK region, prior to 1994, comprised of 3 tribal dominated districts of Orissa namely, Koraput, Bolangir and Klahanie. These districts locations are in western and southern parts of Orissa were divided into 8 districts in 1992-93. These newly constituted districts are Koraput, Malkangiri, Nawarangpur and Rayagada (constituent parts of erstwhile Koraput district), Kalahandi and Nuapada (constituent parts of erstwhile Kalahandi district) and Balangir and Subarnapur (constituent parts of erstwhile Balangir district). The details of administrative set up in the districts of the KBK region are presented in the following Table No: 2.1.

Table No: 2.1
Administrative Units in the KBK Region.

Sl.No	District	Sub-Divns.	Blocks	TSP	GPs	Villages
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Balangir	3	14	0	285	1,794
2.	Kalahandi	2	13	2	273	2,236
3.	Koraput	2	14	14	226	2,028
4.	Malkangiri	1	7	7	108	1,045
5.	Nawarangpur	1	10	10	169	901
6.	Nuapada	1	5	0	109	663
7.	Rayagada	2	11	11	171	2,667
8.	Subarnapur	2	6	0	96	959
	Total	14	80	44	1,437	12,293

Source: Annual Action Plan, under RLTP for KBK districts 2006-07,
Govt. of Orissa,

Note: TSP-Tribal Sub-Plan, Blocks, GP-Gram Panchayat, Sub-Divn- Subdivision

2. Area and Population:

The 8 districts in the KBK region account for about 30.6 % of the State's total geographical area and 19.8 % of the total population of the State. The district wise area and the composition of population according to social class in the KBK region vis-à-vis that of the State of Orissa is presented below vide Table No: 2.2.

Table No: 2.2
Area and Population in KBK Districts.

Sl. No	District	Geographical Area (Sq Km)	Total Popn	Percentage of Rural Popn	Percentage of SC Popn	Percentage of ST Popn	Popn Density (per sq/ k.m)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Balangir	6,575	1,337,194	88.46	16.92	20.63	203
2.	Kalahandi	7,920	1,335,494	92.50	17.67	28.65	168
3.	Koraput	8,807	1,180,637	83.19	13.04	49.62	134
4.	Malkangir	5,791	504,198	93.13	21.35	57.43	183
5.	Nawarangpur	5,291	1,025,766	94.22	14.10	55.03	192
6.	Nuapada	3,852	530,690	94.34	13.62	34.71	138
7.	Rayagada	7,073	831,109	86.11	13.92	55.76	116
8.	Subarnapur	2,337	541,835	92.61	23.62	9.78	231
	KBK districts	47646	7286923	89.95	16.26	38.41	152
	Orissa	155707	36804660	85.01	16.53	22.13	236

Source: 1. District Statistical Hand Books, 2. Census 2001.

While the percentage of Scheduled Tribes to the total population of the State is 22.13, the same within the KBK region is 38.41.

About 38.41 per cent of the population of the KBK region is Scheduled Tribes and some of the primitive tribes like Bondas, Dadais, Lanjia Sauras and Dangaria Kondhas reside in this region. The tribal population of this region is much above the state average of 22.13 per cent. The SC population of this region is more or less equal to the state average of 16.53 per cent (it is 16.26 per cent for KBK region). The population density of the KBK region is 152 per sq km as against a State population density of 236 which indicates that the region is sparsely populated because of the topography with vast stretches of undulated land. The terrain is difficult to negotiate without planned and all weather roads. The land mass is badly affected due to rivers, rivulets and streams that spate suddenly with rain. Since the region has a vast stretch of stagnant water and unhygienic surrounding, it has become the breeding ground for mosquitoes, responsible for causing cerebral malaria (brain malaria) a major sickness concern of the region.

3. Quality of Life:

The Human Development Index (HDI) of a region gives us a fair idea of the quality of life enjoyed by the people living in this region. District wise literacy, percentage of people living below poverty line and the Human Development Index (HDI) in the KBK region is presented below vide Table No: 2.3.

Table No: 2.3
Few Indicators of Quality of Life in KBK Region.

Sl. No.	District	Literacy (%)			% of BPL 1997	HDI of 2004	HDI rank among 30 dists
		Male	Female	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Balangir	71.67	39.51	55.70	61.06	0.546	21
2.	Kalahandi	62.66	29.27	45.94	62.71	0.606	11
3.	Koraput	47.20	24.26	35.72	83.81	0.431	27
4.	Malkangir	40.14	20.91	30.53	81.88	0.370	30
5.	Nawarangpur	46.70	20.67	33.93	73.66	0.436	26
6.	Nuapada	58.45	25.79	42.00	85.70	0.581	14
7.	Rayagada	48.18	24.56	36.15	72.03	0.443	25
8.	Subarnapur	78.94	46.12	62.84	73.02	0.566	16
	KBK Region	57.55	29.10	43.33	71.97	-	-
	Orissa	75.35	50.51	63.08	66.37	0.579	-

Source: (1). Census 2001, (2). Human Development Report, 2004.

Total literacy in this region is very low being 43.3 per cent on an average which is far below the State average of 63.08 per cent as per 2001 census. Female literacy is extremely low for the region being 29.1 per cent as against the State average of 50.51 per cent. The BPL Census 1997 revealed that the percentage of people living below the poverty line is more in the KBK region as compared to the State average. In terms of Human Development Index, except Kalahandi, Nuapada and Subarnapur, the quality of life enjoyed by all other districts in the region is lower than the overall quality of life enjoyed in the State.

4. Education Profile of the Tribal Population:

Illiteracy stands as the greatest hurdle in ensuring adequate access to various development opportunities available among STs. The tribal literacy in Orissa has been very low all along and 38.41 per cent of the population in the KBK region belongs to Scheduled Tribe category. The female literacy among the tribal women is even lower.

For appreciating the gravity of the situation, the total literacy and the female literacy in the State as well as that among the Scheduled Tribe over the last four decade is presented below vide Table No: 2.4.

Table No: 2.4.
The Total Literacy and Tribal Literacy in Orissa.

Year	Orissa		Schedule Tribe		KBK Region	
	Total	Female	Total	Female	Total	Female
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1971	26.18	13.92	9.46	2.58	-	-
1981	35.37	21.12	13.96	4.76	-	-
1991	51.77	36.54	18.10	8.29	29.24	15.87
2001	63.08	50.51	51.48	23.37	43.33	29.10

Source: Relevant Population Census.

Apart from very low literacy rate among the tribal women, the percentage of out of school girls and the dropout rates among the tribal girls is further disturbing. The drop out rates among the girls in general and the same among the tribal girls at primary and upper primary levels over a 10- year period ending 2004-05 are presented below vide Table No: 2.5.

Table No: 2.5.
Drop Out Rates among Girls at Primary and Upper Primary Levels.
(In per cent)

Year	Primary		Upper Primary	
	All Girls	Tribal Girls	All Girls	Tribal Girls
(1)	(2)	(3)	(4)	(5)
1995-96	52.4	74.7	72.8	84.2
1996-97	51.1	74.1	66.0	79.7
1997-98	50.5	71.3	64.7	78.1
1998-99	42.4	68.3	64.0	78.0
1999-00	42.2	67.9	63.8	77.1
2000-01	41.4	66.5	61.1	76.0
2001-02	40.0	65.0	60.5	80.3
2002-03	36.1	57.4	60.5	78.5
2003-04	35.4	56.6	58.6	98.5
2004-05	32.7	56.0	50.1	72.0
2005-06*	3.3	5.0	9.9	14.5

Source: Compiled from Orissa Human Development Report 2004 and
(ii) Orissa Economic Survey 2005-06 and 2006-07 (figures for 2005-06 are based on the Orissa Child Census 2005).

The factual information presented in the above table reveals that the overall dropout rate among the girls at primary level was as high as 52.4 per cent which was 74.7 per cent among the tribal girls and the overall dropout rate among the girls at upper primary level was as high as 72.8 per cent which was 84.2 per cent among the tribal girls in 1995-96. Over the years, there has been a slow decline in the drop out rates for girls both at primary and upper primary levels. However, the proportion is still very high among the tribal girls. As per 2004-05 data, the drop out rates among primary girls is 32.7 per cent and 50.1 for upper primary level against which the drop out rates among tribal girls are 56.0 per cent and 72.0 per cent respectively. The dropout rates is also higher among the tribal girls as compared to total girls during 2005-06 even though the source is different.

5. Health Care Facilities:

The total number of medical institutions in the State as on 2006 was 1791 and the total sub-centre were 5927. The total number of beds available in 2006 was 13936. However, the health care facilities available in the KBK districts are comparatively lower than that of the State as a whole. More over the KBK districts are more prone to Malaria. The Table No: 2.6 presented below reveals the factual position.

Table No: 2.6
District wise Health Care Facilities in the KBK Region: 2006.

Sl. No	District	Popn (lakh)	Med Inst + MHUs	Sub-Centres	Hosp Beds	Beds per lakh Popn	Malaria Deaths 2001 to 2005	
							Total	Per lakh
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	13.37	75	203	438	33	6	0.45
2	Kalahandi	13.35	76	213	491	37	35	2.62
3	Koraput	11.81	80	253	349	30	112	9.48
4	Malkangiri	5.04	49	134	286	56	124	24.60
5	Nawarangpur	10.26	61	222	236	23	38	3.70
6	Nuapada	5.31	29	85	158	28	63	11.86
7	Rayagada	8.31	61	200	225	27	57	6.86
8	Subarnapur	5.42	33	76	153	28	0	0.00
	KBK Region	72.87	464	1356	2336	32	435	5.97
	Orissa	368.05	1791	5927	13936	37	1635	4.44

Source: Conference of CDMOs 2006.

The table reveals that the medical institutions per lakh of population in the KBK region were 6 (including the 90 MHUs established under the RLTA) and 5 excluding the MHUs against the State average of 5. The availability of hospital beds per lakh of population in the KBK region is 32 against a State average of 37. The major concern of the KBK region is lack of accessibility of the people to the health services available around and the preponderance of malaria attack in the region. It is evident on the basis of available data that the number of malaria deaths during the 5 years from 2001 to 2005 per lakh of population in the KBK region was of the order of 5.97 against the State average of 4.44.

6. Level of Backwardness:

In 1994, the Committee on the Constitution of Separate Development Board in Orissa (Known as P C Ghadei Committee) in its report had given a description of the degree of backwardness of the blocks in the State. The Committee have identified 82 out of 314 blocks in the State as very backward. Out of 82 very backward blocks in the State, 53 were situated in the KBK region. In determining the degree of backwardness of a block the Committee used many development indicators viz (i) density of population, (ii) percentage of agricultural workers to total main workers, (iii) net area sown per agricultural worker, (iv) percentage net irrigated area to net area sown, (v) percentage of cropping intensity, (vi) percentage of literacy, (vii) number of primary schools per lakh population, (viii) percentage of villages connected with all weather roads, (ix) percentage of villages electrified, (x) percentage of problem villages provided with safe drinking water facility, and (xi) number of medical institutions per lakh population. The district-wise picture of very backward blocks in the KBK region as identified by the Committee is presented vide Table No: 2.7 given below.

Table No: 2.7
District-wise Very Backward Blocks in KBK Region.

Sl.No	District	Total Blocks	Very Back-ward Blocks	% to Total
(1)	(2)	(3)	(4)	(5)
1	Balangir	14	10	71.42
2	Kalahandi	13	8	61.54
3	Koraput	14	9	64.28
4	Malkangir	7	5	71.43
5	Nawarangpur	10	5	50.00

Sl.No	District	Total Blocks	Very Back-ward Blocks	% to Total
(1)	(2)	(3)	(4)	(5)
6	Nuapada	5	4	80.00
7	Rayagada	11	9	81.82
8	Subarnapur	6	3	50.00
	KBK Region	80	53	66.25
	Rest of Orissa	234	27	11.54
	Orissa	314	82	26.11

The above table reveals that more than 66 per cent blocks in the KBK region are very backward as against 26.11 per cent in the State as a whole and 11.54 per cent in the rest of Orissa. The degree of backwardness of a region is inversely proportional to the level of development of infrastructure and social amenities available in the region as well as the level of access of the local people to development opportunities available around them.

7. Cultivable Area:

The total cultivable area of the KBK region is 18.80 lakh ha of which 10.78 lakh ha (57.34%) is high land. Paddy, the principal crop is grown in only 10.49 lakh ha (55.78%) of the total cultivable area. The district wise category of cultivable land and the land under paddy cultivation in the KBK region is give below vide Table No: 2.8.

Table No: 2.8
District wise Category of Cultivable Land and Paddy Area

(Area in 000' ha)

Sl.No	District	Cultivable Land Category				Paddy Area			
		High	Medium	Low	Total	High	Medium	Low	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	191	63	84	338	67	63	84	215
2	Kalahandi	232	71	68	371	75	71	68	214
3	Koraput	166	78	58	302	7	50	58	115
4	Malkangir	98	40	23	161	32	40	23	95
5	Nawarangpur	144	42	29	215	84	42	29	155
6	Nuapada	80	70	28	178	2	66	28	96
7	Rayagada	138	43	22	203	10	32	22	64
8	Subarnapur	29	44	39	112	21	36	39	95
	Total	1078	451	351	1880	298	400	351	1049

Source: RLTAAP Annual Action Plan, 2006-07.

Out of a total cultivable area of 10.78 lakh ha of high land only 2.98 lakh ha (27.64%) belongs to paddy cultivation. This is because of the fact that the KBK region is deficient in irrigation facilities. Agriculture in the region is mostly rain fed. The annual rain fall in the region ranges between 1378 to 1522 mms and at the same time the rain fall is erratic in nature. In the absence of adequate irrigation facilities, not only the cropping intensity is low but also the farmers are not able to adopt improved agricultural practices because of which agricultural productivity of the region remains abjectly low.

8. Drinking Water Supply:

Usually one spot source is to be provided for every 250 persons for coverage of habitations. However, the norm was relaxed by Government of India to one spot source for every 150 persons for coverage of habitations in the KBK region since 1998-99. The status of coverage of habitation goes on changing continuously due to various reasons like increase in the population, settlement of new habitations, and slip back of covered or partially covered villages to not covered habitations on account of spot sources becoming defunct or if there be problem of water quality. The status of the coverage of rural habitations in the KBK region as per the 2001 Census is presented below vide Table No: 2.9.

Table No: 2.9
Status of Coverage of Rural Habitation in the KBK Region - 2001

Sl.No	District	Total Habitations	F C Habs	P C Habs	N C Habs
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	3187	2633	436	118
2	Kalahandi	4151	3760	165	226
3	Koraput	4556	4003	266	287
4	Malkangir	2378	2076	172	130
5	Nawarangpur	3116	1850	1039	227
6	Nuapada	2350	1924	83	343
7	Rayagada	4309	3044	685	580
8	Subarnapur	2190	1838	242	110
	Total	26237	21128	3088	2088

9. Rural Connectivity:

The road density in the KBK region is 1.28 km per sq km as against 1.49 for the State. More so, many of the roads in the region are earthen tracks which are

exposed to the risk of frequently developing missing links and villages remain cut off from main growth centre - the towns, market places, schools, hospitals and other administrative offices. There are as many as 7948 habitations in the region with a population of more than 250. As many as 4997 (63%) of these habitations have not yet been adequately connected. The district-wise connectivity status of the 7948 habitations is presented in Table No: 2.10.

Table No: 2.10
Connectivity Status of Habitations with Population more than 250.

Sl	District	Connected with Popn				Unconnected with Popn				Total Habs
		1000+	500+	250+	Total	1000+	500+	250+	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	198	158	120	476	121	480	438	1039	1515
2	Kalahandi	181	183	72	436	181	421	277	879	1315
3	Koraput	127	161	229	517	34	186	471	691	1208
4	Malkangir	34	50	52	136	48	110	152	310	446
5	Nawarangpur	185	278	240	703	50	219	258	527	1230
6	Nuapada	101	84	25	210	67	196	92	355	565
7	Rayagada	72	125	156	353	18	133	625	776	1129
8	Subarnapur	54	40	26	120	88	187	145	420	540
	Total	952	1079	920	2951	607	1932	2458	4997	7948

Source: RLTAAP Annual Action Plan, 2006-07.

10. Forest Resources:

The KBK districts have been historically rich in forest and mineral resources. Although the people in the region have been using the forest resources very intensively and earning their livelihood through the use of these resources, forests of this region have not received adequate investments and managerial inputs over time. Intensive use of forest for sustenance coupled with lack of insufficient investment and managerial input are, thus, continuously leading to forest degradation. The KBK region has a total geographical area of 47,646 sq km of which 16,857.8 sq km (35.34 %) is variously recorded as forest area. The satellite imagery data (1997) suggested that nearly 5473 sq km (around one third) out of a total forest area of 16857.8 sq km is dense forest with crown cover more than 40 per cent that accounts for 11.49 per cent of the total geographical area of the KBK region. However, forest regeneration in the KBK region

has improved since 1997. Dense forest in the region has increased from 5473 sq km in 1997 to 6166 sq km in 2001. The State Forest Report prepared by the FSI based on satellite imagery data of 2001 reveals that there is a forest cover of 12,236 sq km in the KBK region excluding scrubs, the district wise details of which is presented below vide Table No: 2.11.

Table No: 2.11

District wise status of Forest Area (sq km) in KBK Region: 2001.

Sl	District	Goeg. Area	Dense Forest	Open Forest	Total Forest	% to Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	6575	504	488	992	15.09
2	Kalahandi	7920	1161	978	2139	27.01
3	Koraput	8807	667	815	1484	16.85
4	Malkangiri	5791	1076	1112	2188	37.78
5	Nawarangpur	3852	588	649	1237	32.11
6	Nuapada	5291	687	463	1150	21.74
7	Rayagada	7073	1308	1425	2733	38.64
8	Sonepur	2337	173	140	313	13.39
	KBK Region	47646	6166	6070	12236	25.68

Source: State Forest Report – 2001.

11. Socio-economic Profile:

The broad socio-economic and demographic features of each of the eight districts coming under the KBK region are presented vide Annexures-2.1 to 2.8. A perusal of the profile of the KBK districts brings out few distinctive features. Apart from the various features described above, the districts in the KBK region have an overwhelming burden of backwardness and primitive agriculture. The share of workers in primary sector to total main workers is very high. It is 81.20% in case of Balangir, 85.10% in case of Kalahandi, 81.20% in case of Koraput, 91.30% in case of Malkangiri, 88.60% in case of Nawarangpur, 86.90% in case of Nuapada, 82.90% in case of Rayagada and 83.60% in case of Sonepur districts. These 8 districts also have very low per capita income as the dependency in primary sector is the highest.

CHAPTER - III

STUDY OBJECTIVES AND METHODOLOGY

1. Reference Period:

The reference period for the quick evaluation study is from 1998 to the end of 2005-06.

2. Scope of the Study:

The objectives of the Revised Long Term Action Plan (RLTAP) formulated for the KBK districts were (i) drought proofing, (ii) poverty alleviation and development saturation and (iii) improved quality of life for the local people. The strategic interventions were (i) creation of rural infrastructure, (ii) conservation of natural resources and (iii) employment generation. Public participation in the process of implementation of the RLTAP through formation of Self-Help Groups (SHGs), Vana Samrakshyana Samities (VSSs), Pani Panchayats (PPs) and Bhumi Panchayats (BPs) were also considered vital and important.

In fact, the RLTAP covers a large number of activities over almost all development sectors like Watersheds, Horticulture, Agriculture, Animal Resources, Fisheries, Forest Regeneration, Health and Family Welfare, Drinking Water Supply, Rural Connectivity, Welfare of ST and SC, Textile and Handloom, Irrigation, Safety Net for Old / Infirm, Women and Children, Anti-poverty Programmes, and Literacy etc. It is neither possible nor desirable to cover one and all the components of the programme of RLTAP within the scope of this study. It was, therefore, decided in consultation with the Programme Evaluation Organisation (PEO) of the Planning Commission to selectively confine the study to few major components. Keeping this in view, the components receiving the major allocation of SCA till the end of 2005-06 were examined. The analysis is presented below in Table No: 3.1.

Table No: 3.1
Allocation of SCA to Different Sectors and the Flow to Major
Components till End of 2005-06

(Rs. in lakh)

Sl. No	Department	Allocation	Major Components	Flow
(1)	(2)	(3)	(4)	(5)
1	Agriculture	9424.99	Watersheds & Others	7810.00
2	Cooperation	1322.00		
3	Energy	1270.00		
4	Finance	650.00		
5	Fishery & Animal Resources Dev	1816.39		
6	Forest & Environment	13588.00	Afforstrn. & Others	13588.00
7	Food Supply and Consumer Welfare	24.00		
8	General Administration	39.10		
9	Health and Family Welfare	5239.00	Mobile Health Units	3488.00
10	Housing and Urban Development	3850.00	Water Supply for Urban Poor	3850.00
11	Industries	250.00		
12	Law	32.25		
13	Panchayati Raj	800.00		
14	Rural Development	12815.73	Rural Water Supply Scheme	7307.00
			Rural Connectivity Programme	5508.73
15	Science and Technology	300.00		
16	Scheduled Tribe and Scheduled Caste Development	9308.51	40 Seated Hostels for ST & SC Girls	4000.00
			Hostel Amenities	350.00
			Stipend for Girls	1151.00
17	Textile and Handlooms	558.00		
18	Water Resources	9990.32	Biju Krushak Vikash Yojana	7550.32
19	Women and Child Development	17625.30	Emergency Feeding	10479.50
			Spl Nutrin Support	4930.80
20	Works	7200.00	Rural Connectivity Programme	6900.00
21	Planning and Coordination	23291.41	Special Connectivity	18251.41
	TOTAL	119395.00		95164.76

Source: Allocations shown for different sectors and specific components in the Annual Action Plans under RLTA, for KBK districts in Orissa.

It is observed that around Rs.951.65 crore (80%) of the total SCA of Rs.1193.95 received from Government of India under RLTA P till end of 2005-06 was allocated exclusively for specific interventions like Hostels for ST girls, Mobile Health Units (MHUs), Emergency Feeding, Afforestation Programme, installation of LIPs under BKVY, construction of Watersheds, establishment of Rural Connectivity, Rural Water Supply. These are crucial areas of exploration for the overall development of the KBK region. It was, therefore, decided in consultation with the PEO, Planning Commission, to conduct a detailed investigation on the eight components listed below to assess their impact and the resultant benefit of the investments under the programme of RLTA P. Apart from enquiring into the impact of these components, the study was to provide feed back to programme managers for enhancing the effectiveness of RLTA P, identifying gaps and recommending measures for improving the quality of implementation and utilizing the outcomes of the study for taking policy decisions.

The 8 Components Selected for Detailed Investigation			
1	40 Seated Hostel for S.C / S.T Girls	5	Biju Krushak Vikash Yojana (BKVY)
2	Mobile Health Units (MHU)	6	Watersheds
3	Emergency Feeding	7	Rural Connectivity
4	Afforestation	8	Rural Water Supply Project

3. Study Objectives and Methodology:

Although the overall objectives of the programme of Revised Long Term Action Plan (RLTA P) formulated for the KBK districts were; (i) drought proofing, (ii) poverty alleviation and development saturation and (iii) improved quality of life for the local people, the specific components of the programme have their specific objectives. The selected components belong to different development sectors and their objectives are also different but complementary to each other. However, the objectives of any mission are fulfilled provided timeliness and quality assurance are being observed in the strategic interventions in various activities of the component. More so, fulfillment of objectives of a component will be smooth and uninterrupted provided there is appropriate post-operative care and regular follow-ups. In view of this, the objectives of this study was not only to assess the overall objectives of any component but also to

include in it the assessment of timeliness in implementation of various activities, earmarking flow of funds, the quality of implementation, and regularity in taking appropriate follow-ups.

The methodology including the sampling design followed and the study instruments administered for one component has been different from that of the other for obvious reasons. It was decided to cover all the 8 districts for field investigation for the 4 components; i.e. 40 seated hostel for STs/SCs girls, Mobile Health Units, Emergency Feeding and Rural Water Supply Projects which, have direct impact on the quality of life of the local people and to cover 4 districts each in respect of the rest of the 4 components. The study objectives and the methodology adopted in respect of each of the 8 components are explained here under.

3.1 40 Seated Hostel for SC / ST Girl Students.

Establishment of hostel for SC and ST girls studying in primary schools in the KBK districts was initiated during 2000-01, so far 400 hostels have been established. Their district wise break up is given at vide Table No: 3.2. All these hostels are operating at present. Requisite amenities have been provided to these hostels followed by stipend to the boarders which is being paid regularly.

Table No: 3.2
Hostels for SCs and STs Girls in the KBK Districts

Sl.No	Districts	Blocks	KBK Hostels
(1)	(2)	(3)	(4)
1	Balangir	14	25
2	Kalahandi	13	25
3	Koraput	14	105
4	Malkangiri	7	53
5	Nawarangpur	10	56
6	Nuapada	5	36
7	Rayagada	11	92
8	Subarnapur	6	8
	Total	80	400

Source: Annual Action Plan under RLTAAP for KBK districts 2006-07.

3.1.1 The Study Objectives:

Although the broad objective of establishing hostels for SC and ST girls studying in Primary Schools is to bring female literacy close to the state average, the proposed study envisages examining the following aspects.

- a. Whether enrolment of SC and ST girls in primary schools in KBK districts has increased.
- b. Whether dropout among the SC and ST girls in the KBK districts has reduced.
- c. Whether there was observed reduction in the gender inequality in getting education at primary school levels in KBK districts.
- d. Adequate number of teachers in primary schools to carry on teaching activities in I-V classes.
- e. Stay of teachers and more specifically the Head Masters and Hostel Superintendents in the vicinity of Schools.
- f. Timely completion of construction of hostel buildings and their operation.
- g. Deficiencies observed in the construction of hostel buildings and their regular maintenance.
- h. Security arrangements for the younger boarders residing in the hostel.
- i. Maintenance of routine and discipline among the boarders in the hostel.
- j. Timely payment of stipend and distribution of uniform to boarders and the adequacy of various components of the stipend.
- k. Inculcation of civic sense and educating social science among the boarders.
- l. Perception of the boarders and the local people on the objectives of establishing hostels for the SC and ST girls in the KBK districts.
- m. Opinion of the District Welfare Officers on the effectiveness of the establishment of hostels for the SC and ST girls studying in primary schools in KBK districts and the possibilities for improvements.
- n. Feasible recommendations on the policy initiatives needed for bringing in improvements in the management of hostel programme.

- o. Routine medical check up of inmates in hostels through MHUs.

3.1.2 The Study Design:

Establishment of hostels under the RLTA has not been uniform over the region. As such, the traditional procedure of selecting sample blocks, villages and households in case of this component was not considered adequate. As there was wide difference in the number of hostels in a district, adoption of a common sampling fraction in each district was not considered suitable. Keeping in view the distribution of KBK hostels in each district, it was decided to select 3 blocks from each district at the first instance and then to select a minimum of 3 and a maximum of 9 hostels from the sample blocks, so as to cover about 41 hostels in all (Balangir-3, Kalahandi-3, Koraput-9, Malkangiri-5, Nawarangpur-5, Nuapada-4, Rayagada-9 and Subarnapur-3). Blocks having no KBK hostel were dropped from the purview of sampling.

3.1.3 Study Instruments:

For collection of data on this component, a set of 4 schedules; (a) Hostel Schedule, (b) Beneficiary Schedule, (c) Key Informant Schedule and (d) Programme Manager Schedule were developed and administered in the field. A brief of these study instruments is given below.

- (a) Hostel Schedule:** Information in the hostel schedule was collected from the Headmaster of the school, Superintendent of the hostel and the observation of the study team during their visit to the school and hostels in question.
- (b) Beneficiary Schedule:** Information in the Beneficiary Schedule was collected through three boarders (preferably from higher classes) each from the sample hostels on their perceived objectives and benefits of the hostels for them and the advantages and disadvantages being experienced by them in the hostel.
- (c) K I Schedule:** Information in the Key Informant schedule was collected through two knowledgeable persons of the locality in respect of each sample hostel on their perceived objectives and benefits of the hostels for SC and ST girls in the KBK districts.

(d) P M Schedule: Information in the Programme Manager schedule was collected from the District Welfare Officer of each of the KBK districts to elicit their opinion on the usefulness of the hostels for the SC and ST girls studying in primary schools and their suggestions for bringing in improvements in the performance in these hostels.

3.1.4 Samples Executed:

In total, 41 sample hostels out of 400 hostels were selected. From the As against 41 hostels, 123 boarders, that is three per hostel, and 82 Key Informants, that is of two per hostel were interviewed. Discussions were carried out with all the 8 District Welfare Officers to elicit their views and opinion on the effectiveness of the hostel programme in KBK districts under the programme of RLTA. The district wise break up of the samples executed is given below vide Table No: 3.3.

Table No: 3.3

Samples Executed under the Hostel Programme in KBK Districts.

Sl.No	District	Total Blocks	Total Hostels	Sample Blocks	Sample Hostels	Sample Boarders	Sample K Is	P M Schedules
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	14	25	3	3	9	6	1
2	Kalahandi	13	25	3	3	9	6	1
3	Koraput	14	105	3	9	27	18	1
4	Malkangiri	7	53	3	5	15	10	1
5	Nawarangpur	10	56	3	5	15	10	1
6	Nuapada	5	36	3	4	12	8	1
7	Rayagada	11	92	3	9	27	18	1
8	Subarnapur	6	8	3	3	9	6	1
	Total	80	400	24	41	123	82	8

3.2 Mobile Health Units (MHUs):

The number of Mobile Health Units in the KBK region has gone up to 90 against 80 Community Development Blocks ensuring at least one MHU for each block as per the district wise break ups given below vide Table No: 3.4. Although requisite infrastructure, staff, equipments, medicines and other amenities have been provided exclusively to the MHUs for their effective functioning, these MHUs can not be treated as separate outfits but an integral part of the overall health care delivery system in the KBK region. In view of this, the first and foremost objectives of the establishment of MHUs in the KBK region

will be to augment the overall health care delivery system in the region in achieving its objectives as well as to carry on specific tasks as have been assigned to them.

Table No: 3.4
Mobile Health Units Operating in the 8 KBK Districts

Sl.No	Districts	Blocks	MHUs
(1)	(2)	(3)	(4)
1	Balangir	14	15
2	Kalahandi	13	14
3	Koraput	14	15
4	Malkangiri	7	10
5	Nawarangpur	10	11
6	Nuapada	5	6
7	Rayagada	11	12
8	Subarnapur	6	7
	Total	80	90

Source: Annual Action Plan under RLTA for KBK districts 2006-07.

3.2.1 The Study Objectives:

The objective of the study was to examine the following broad and specific aspects of establishing the Mobile Health Units in the KBK region; deriving conclusions on the working of the MHUs at present and come up with recommendations for taking policy initiatives for bringing in improvements in future.

(i) Broad Objectives:

The following broad aspects were proposed to be examined through this study.

- a. Adequate access of the local people to health services.
- b. Improved access of the disadvantaged groups to health services.
- c. Availability of adequate staff in health care institutions.
- d. Effective and prompt treatment of TB, Panchabyadhi and minor ailments.
- e. Extension, awareness and acceptance of available medical facilities.

(ii) Specific Objectives:

The following specific aspects were proposed to be examined through this study.

- a. Whether all villages assigned to the MHUs are being covered each month.
- b. Number of days of village visits by the MHUs.

- c. Distance covered to get services from MHUs.
- d. Adequacy of staff in the MHUs.
- e. Whether the MHUs are well equipped and provided with requisite medicines.
- f. Organisation of community programmes by the MHUs.
- g. The objectives and benefits of the MHUs as perceived by the users and the knowledgeable persons of the locality.
- h. Eliciting the views and opinion of the Chief District Medical Officers on the present level of performance of the MHUs and their suggestions for bringing in improvements in the programme.

3.2.2 The Study Design:

In each district, there is one MHU in each block except one or two where the number of MHUs is more than one. As such, the spread of the MHUs is, more or less uniform over the region. Keeping in view the distribution of MHUs in each district, it was decided to select 17 sample MHUs (Balangir-3, Kalahandi-3, Koraput-3, Malkangiri-2, Nawarangpur-2, Nuapada-1, Rayagada-2 and Subarnapur-1) one per sample block after selecting requisite number of sample blocks from each district with simple random sampling procedure.

3.2.3 Study Instruments:

For collection of data on the MHU component, a set of 4 schedules; (a) MHU Schedule, (b) Household Schedule, (c) Key Informant Schedule and (d) Programme Manager Schedule were developed and administered in the field. A brief of these study instruments is given below.

(a) MHU Schedule: Information in the MHU schedule was collected from the Secretary of the Zilla Swasthya Samiti and the Medical Officer in charge of the sample MHU as well as the field observation made by the study team.

(b) House-hold Schedule: Information in the House-hold Schedule was collected from 5 house-holds each coming under the sample MHU of whom 3 were beneficiaries and 2 non-beneficiaries of the sample MHU on their

perceived objectives and benefits of the MHU established for them as well as their experiences as far as the MHU is concerned.

(c) K I Schedule: Information in the Key Informant Schedule was collected from two knowledgeable persons of the locality in respect of each sample MHU on their perceived objectives of establishment of the MHU in their locality and the benefits derived by the people through this.

(d) P M Schedule: Information in the Programme Manager Schedule was collected from the Chief District Medical Officers of all the 8 KBK districts on the effectiveness and the impact of the establishment of MHUs in the KBK districts as well as their opinion on the problems encountered and their suggestions for bringing in improvements in the performance of MHUs in future.

3.2.4 Samples Executed:

In total, 17 sample MHUs were selected out of 90 MHUs operating in the KBK region. Against these 17 MHUs, 85 households comprising of 51 beneficiary and 34 non-beneficiary households (five per MHU) were interviewed and interactions were made with 34 Key Informants (two per MHU). Discussions were also carried out with all the 8 Chief District Medical Officers to elicit their views and opinion on the effectiveness of the MHU programme in KBK districts under the programme of RLTAP. The district wise break up of the samples executed is given below vide Table No: 3.5.

Table No: 3.5
Samples Executed under the MHU Programme in KBK Districts.

Sl.No	District	Total Blocks	Total MHUs	Sample Blocks	Sample MHUs	Sample HHs	House-holds		Sample K Is	P M Sch
							Beni	Non-bene		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	14	15	3	3	15	9	6	6	1
2	Kalahandi	13	14	3	3	15	9	6	6	1
3	Koraput	14	15	3	3	15	9	6	6	1
4	Malkagiri	7	10	2	2	10	6	4	4	1
5	Nawarangpur	10	11	2	2	10	6	4	4	1
6	Nuapara	5	6	1	1	5	3	2	2	1
7	Rayagada	11	12	2	2	10	6	4	4	1
8	Subarnapur	6	7	1	1	5	3	2	2	1
	Total	80	90	17	17	85	51	34	34	8

3.3 Emergency Feeding:

Intense poverty in the KBK region, caused by low productivity of agriculture, non-availability of non-formal employment opportunities and devastation of forest-based livelihood, have over the years, resulted in poor nutritional status of the population and their low life expectancy. The old and infirm totally lack the capability of earning. The Hon'ble National Human Rights Commission (NHRC) have directed the State Government from time to time to take care of these most vulnerable groups. Therefore, the Emergency Feeding Programme (EFP) with support under RLTA is being implemented in the KBK districts since 1995-96 with the objective of providing nutrition to old, infirm and indigent persons on a sustainable basis so that the poorest and most vulnerable people of the rural population could be able to cope with food insecurity and food distress. Under this programme, old, infirm and indigent persons belonging to BPL households are provided with one prepared meal each day throughout the year through the Anganwadi Centres. On an average 2,00,000 beneficiaries are covered each year. The district wise Anganwadi Centres and the coverage of beneficiaries are given below vide Table No: 3.6.

Table No: 3.6.
District wise AWCs and Beneficiaries under
Emergency Feeding.

Sl.No	Districts	Blocks	AWCs	Beneficiaries per annum
(1)	(2)	(3)	(4)	(5)
1	Balangir	14	1261	33860
2	Kalahandi	13	1214	37200
3	Koraput	14	1342	37315
4	Malkangiri	7	580	14990
5	Nawarangpur	10	994	19270
6	Nuapada	5	585	21000
7	Rayagada	11	1001	22840
8	Subarnapur	6	416	13525
	Total	80	7393	2,00,000

Source: Annual Action Plan under RLTA for KBK districts 2006-07.

3.3.1 The Study Objectives:

Although the main objectives of the programme are;

(i) to tackle the food distress among the old and indigent population of the families with the most intense poverty and (ii) to provide them with the basic nutritional

needs on a sustainable basis to improve their health and nutritional status and in the process to improve the average life expectancy in the region, the study specific objectives are;

- i. Whether the programme benefit has reached the target groups.
- ii. Timeliness and the quality of food served and the quality of food materials.
- iii. Administrative arrangements and timeliness in provision of funds and supply of materials.
- iv. Cooperation of the AWC with the beneficiaries and their grievances if any.
- v. Impact of the programme on the old, infirm and indigent persons belonging to BPL category who are barely in need of nutritional support.
- vi. Problems encountered in implementation of the programme and the suggestions for improvement in the programme in future.
- vii. Opinion of the beneficiaries on the programme and its social effect on their families.
- viii. The objectives and impact of the programme as perceived by knowledgeable persons of the locality, their opinion on the programme and their suggestions for improvements.
- ix. Views and opinion of the Programme Managers on the management of Emergency Feeding Programme in the districts and the impeding problems with a view to improving the programme.
- x. To provide feed back to the administration on the implementation of the programme in the field and to prescribing a set of feasible recommendations to take policy initiatives for future improvements in the programme.

3.3.2 The Study Design:

There are in all 7393 Anganwadi Centres (AWCs) in KBK districts through which the Emergency Feeding programme is being undertaken. On an average, around 2,00,000 beneficiaries are covered under the programme each year. The coverage of beneficiaries under the programmes is more or less even over the KBK districts. Taking the beneficiaries in the districts as weight, 5 AWCs from districts having more than 22 thousand beneficiaries and 3 AWCs from districts having less than 22 thousand beneficiaries have been selected. Final selection of AWCs was confined to 3 blocks

selected from each district through simple random sampling procedure and thereafter the sample AWCs were selected from the sample blocks. In the process 32 AWCs were selected, the district wise break up of which has been indicated vide Table No: 3.7.

3.3.3 Study Instruments:

Information was collected through a set of 4 schedules. The schedules are: (a) Emergency Feeding Schedule to elicit information on the benefits of the programme, (b) Beneficiary Schedule to elicit information from the beneficiaries, (c) Key Informant Schedule to elicit their opinion on the benefits of the programme and (d) Programme Manager Schedule.

a) Em. Feeding Schedule: Information was collected from Anganwadi Workers in-charge of selected AWC on the operational details of emergency feeding programme through the selected AWCs.

(b) Beneficiary Schedule: Against each selected AWCs, 5 beneficiaries (at least 2 women and one infirm if available) were interviewed to get their opinion on the operation of the programme of Emergency feeding for them.

(c) K I Schedule: Two knowledgeable persons in respect of each sample AWC were interviewed to elicit their perception on the objectives of the programme and the benefits of the programme as well as their suggestions for further improvements.

(d) P M Schedule: Information was collected from all the 8 District Social Welfare Officers (DSWO) or Additional District Social Welfare Officers (ADSWO) on the effective implementation of the Emergency Feeding Programme within the district, the impeding problems and their suggestions for future improvements in the programme.

3.3.4 Samples Executed:

In total, 32 sample AWCs were selected of which, 159 beneficiaries comprising of 71 males, 72 females and 16 infirm were interviewed. Interaction with 61 Key Informants and the views of the 8 District Social Welfare Officers, on the effectiveness of the Emergency Feeding programme in their districts along with their suggestions were

sought for further improvements in the programme. The district wise breaks up of the samples executed are given below vide Table No: 3.7.

Table No: 3.7
Samples Executed under the Emergency Feeding Programme.

Sl.No	District	Sample Blocks	Sample AWCs	Sample Beneficiaries				Sample K Is	P M Sch
				Males	Females	Infirm	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	5	10	9	5	24	7	1
2	Kalahandi	3	5	10	10	5	25	10	1
3	Koraput	3	5	12	13	0	25	10	1
4	Malkagiri	3	3	8	7	0	15	6	1
5	Nawarangpur	3	3	7	8	0	15	6	1
6	Nuapara	3	3	6	6	3	15	6	1
7	Rayagada	3	5	12	13	0	25	10	1
8	Subarnapur	3	3	6	6	3	15	6	1
	Total	24	32	71	72	16	159	61	8

3.4 Afforestation:

Afforestation and regeneration of degraded forests has formed a core component of RLTA in the KBK region since 1998-99. Forest development under the RLTA is a logical necessity, since traditionally, large sections of the poor people living in or close to the forest in the KBK region are dependent on forests and minor forest produces (MFPs) for their livelihood. Degradation of the forests in the KBK area over the last few decades has reduced the availability of various forest produce and thereby the income of the poor households declined. Besides, it led to a decline in the productivity of agriculture in the region with reduction in the moisture regime and degradation of the soil through erosion. It has a effect on the forest based livelihood opportunities of the forest fringe dwellers. The forestry development programmes under RLTA are aimed at; regenerating degraded forests with a view to improving availability of forest produces to support forest-based livelihood. Improved forest cover was expected to result in improvement in soil moisture regime leading to improved farm productivity. Besides, during implementation of the programme, huge employment opportunities were expected to be created leading to improvement in the income and consumption level of the poor. The district wise forest area in the KBK region and the area of afforestation activities undertaken under the RLTA till end of 2005-06 is presented vide Table No: 3.8.

Table No: 3.8.

District wise Forest Area and Afforestation Undertaken till 2005-06.

Sl.	Districts	Blocks	Forest area (in sq km.)	Afforestation Area (in hect.)
(1)	(2)	(3)	(4)	(5)
1	Bolangir	14	1554	22793
2	Kalahandi	13	2538	19745
3	Koraput	14	1880	25930
4	Malkangiri	7	3356	9355
5	Nawarangpur	10	2463	10907
6	Nuapada	5	1850	12435
7	Rayagada	11	2812	16870
8	Subarnapur	6	416	7132
	Total	80	16,859	1,25,167

Source: Economic Survey of Orissa 2005-06 and data collected from PCCF, Orissa.

3.4.1 The Study Objectives:

Briefly, the specific objectives of the present study of this component were as follows;

- i. Whether there has been any improvement to the forest cover in the region.
- ii. Has the forest regeneration helped in supporting forest based livelihood?
- iii. Has there been any environmental and soil moisture improvement as a result of forest regeneration programme.
- iv. Whether there was any opportunity for development of skills of the local people and the scope of getting employment through the programme.
- v. Whether there was any gender, caste or class bias in course of implementation of the project or in the process of flow of benefits during the post project period?
- vi. The nature of hurdles / difficulties encountered in course of implementation of the programme (such as delays in fund flow, lack of commitment, lack of cooperation, unrealistic budget estimation).

- vii. Overall impact of the programme, like generation of employment opportunities, increase in forest cover and availability of Non-Timber Forest Produce (NTFP).
- viii. The quality of assets created, involvement of the local people in the programme and cooperation of the implementing agency.
- ix. Quality of post project operation and maintenance of afforestation sites in the hands of Vana Samrakhyan Samiti (VSS).
- x. Views and opinion of stake holders and the programme managers on the impending problems and their suggestions for further improvement in the programme.
- xi. Providing feed back to the administration and giving a set of recommendations for taking policy initiatives.

3.4.2 The Study Design:

The afforestation activity under RLTA has been undertaken in all the KBK districts although the coverage is greater in certain districts and less in others. It was, therefore, been decided to cover only 4 districts with descending order of area covered afforestation. From the 4 sample districts, 16 afforestation sites were selected in proportion to the area under afforestation in the sample district. At the first instance, 3 blocks each having undertaken afforestation activities were selected from the sample districts through simple random sampling procedure and then the requisite number of afforestation sites were selected. For the purpose of selection of samples sites, the list of afforestation sites were collected from the concerned DFOs of sample districts. The 16 sample afforestation sites including 4 sites from the district of Balangir, 4 from Kalahandi, 5 from Koraput and 3 from Rayagada.

3.4.3 Study Instruments:

Information was collected through a set of 4 schedules. The schedules are: (a) Afforestation Schedule to elicit information on the benefits of the programme of Afforestation, (b) Household Schedule to elicit information from the beneficiaries, (c) VSS Schedule to elicit their opinion on the benefits of the programme from the VSS and knowledgeable persons and (d) Programme Manager Schedule.

(a) Afforestation Schedule: It was designed to elicit information on the effectiveness of the programme in respect of coverage, species planted, employment

generated etc. It was administered on each sample site through the Forester / Ranger in charge of the sample site.

(b) H H Schedule: This schedule was designed with the objective of getting information as to what extent the afforestation programme has been useful to the local people in getting employment, enjoying Minor Forest Produces (MFP) usufruct rights and enhancing their economic status. The schedule was administered on three beneficiary households each under the sample sites.

(c) VSS Schedule: This schedule was designed to elicit information on the operation and maintenance of the work site, rapport between the VSS and the FD, sustainability of the programme etc. As many as 2 knowledgeable persons each including the Secretary of the VSS was administered with this schedule in respect of each of the sample afforestation sites.

(d) P M Schedule: This schedule was administered at the DFO (Territorial) concerned in charge of the sample sites to assess the various aspects of the programme like financial and physical progress, people's participation and their perception, problems encountered etc in executing the programme and their suggestions for future improvement in the implementation of this programme.

3.4.4 Samples Executed:

In total, 16 sample afforestation sites were selected from four districts, 48 households and 32 Key Informants were interviewed and the views and opinions of all the 5 DFOs on the effectiveness of the afforestation programme in their district were taken along with their suggestions for further improvement in the programme. The district wise break up of the samples executed is given below vide Table No: 3.9.

Table No: 3.9

Samples Executed under the Afforestation Programme.

Sl.No	District	Sample Blocks	Sample Sites	Sample HHs	Sample K Is	PM Sch
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Bolangir	3	4	12	8	2
2	Kalahandi	3	4	12	8	1
3	Koraput	3	5	15	10	1
4	Rayagada	3	3	9	6	1

Sl.No	District	Sample Blocks	Sample Sites	Sample HHs	Sample K Is	PM Sch
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Total	12	16	48	32	5

3.5 Biju Krushak Vikash Yojana (BKVY):

This innovative scheme, launched by the State Government in 2001-02, aims at taking up various new projects and renovation of derelict projects, particularly in the minor irrigation sector with active involvement of Water Users in participatory mode. Under the scheme, stress has been laid on attracting people's participation in planning and implementation of small irrigation projects by revival of derelict irrigation systems as well as construction of new projects. The water users need to contribute 20% and the State Government will provide 80% of the project cost. In case of tribal sub-plan areas and in the perennially drought prone districts in the KBK region, farmers' contribution will be limited to 10% and the rest of 90 % of the project cost will be borne by the State Government. All the projects will be operated and maintained by the Water User's Association (popularly known as Pani Panchayats) which will be exempted from payment of water tax. The main objectives of the scheme are; i) to encourage water users to take initiative and participate in construction and management of new and derelict lift and flow irrigation projects, ii) to stimulate mobilization of farmers to make them self reliant., iii) to strengthen and expand irrigation infrastructures to accelerate the rate of growth of income, output and employment in the rural areas and iv) to remove regional imbalances in the irrigation front.

As far as the programme of BKVY is concerned, lift irrigation projects are supposed to work efficiently because of their smaller domain and small administrative net-work along with assured water source. It was, therefore, decided to evaluate the minor (lift) irrigation projects only under the BKVY component which have greater fortification as well as stabilized returns in quickest possible time. As per the available information 939 Lift Irrigation (LI) points were taken up under RLTA and most of them have been completed and handed over to Pani Panchayats for their operation and maintenance. The district wise break up of the 939 Lift Irrigation points may be seen from the following Table No: 3.10.

Table No: 3.10.

District wise L.I Points in the KBK Region till 2005-06.

Sl.No	Districts	Blocks	L.I Points
(1)	(2)	(3)	(4)
1	Bolangir	14	117
2	Kalahandi	13	148
3	Koraput	14	159
4	Malkangiri	7	32
5	Nawarangpur	10	148
6	Nuapada	5	63
7	Rayagada	11	67
8	Subarnapur	6	205
	Total	80	939

Source: Data collected from the Lift Irrigation Corporation of Orissa.

3.5.1 The Study Objectives:

Keeping in view the broad objectives of the programme of BKVY, the specific objectives of the present study of Pani Panchayats relating to the operation and maintenance of Lift Irrigation Points are as follows;

- i. Whether there had been timeliness in the completion of LI Points and their transfer to Pani Panchayats.
- ii. Whether the LIPs are providing uninterrupted service to the Water Users.
- iii. Whether operation and maintenance of the LIPs are smooth in the hands of Pani Panchayats and there is uninterrupted supply of electricity.
- iv. Whether the Pani Panchayats are composed of members from all social categories of persons.
- v. Whether water charges are being levied from the water users.
- vi. Whether there is any gender bias or any other bias in providing benefits through the LIP to different caste, political groups or influential persons.
- vii. Whether the assets created are of good quality.
- viii. What hurdles / difficulties have been encountered in the implementation of the programme and the extending of cooperation among the implementing agency and the water user associations.
- ix. Whether crop planning is prepared for the irrigation command and crop rotation is being implemented by the Pani Panchayats.

- x. Overall impact of the programme, like generation of employment opportunities and increase in area under irrigation as well as cropping intensity.
- xi. Long term prospect and sustainability of the programme
- xii. Views and opinion of stake holders and the programme managers on the problems and their suggestions for further improvement in the programme.
- xiii. Providing feed back to the administration and giving a set of recommendations for taking policy initiatives.

3.5.2 The Study Design:

As per Table No.3.10 as many as 939 LIPs have been installed and handed over to Pani Panchayats for their operation and maintenance. It was, therefore, decided to cover only 4 districts with descending order of the number of LIPs in the district. From the 4 sample districts, as many as 20 LIPs were selected in proportion to the number of LIPs in the sample district. At the first instance, 3 blocks each having LIPs were selected from the sample districts through simple random sampling procedure and then the requisite numbers of LIPs were selected. For the purpose of selection of LIPs, the list of LIPs operating in different blocks of the sample districts were collected from the concerned Executive Engineers (Lift Irrigation) of sample districts. The 20 sample LIPs comprised of 4 LIPs from the district of Kalahandi, 5 from Koraput, 4 from Nawarangpur and 7 from Subarnapur districts.

3.5.3 Study Instruments:

Information was collected through a set of 4 schedules specifically designed for the purpose. The schedules were; (a) BKVY Schedule to elicit information on the benefits of the programme of BKVY and its acceptability by the Pani Panchayats, (b) Beneficiary Schedule to elicit information from the beneficiaries on their satisfaction on the role and functions of Pani Panchayats, (c) Key Informant Schedule to elicit their opinion on the benefits of the programme from knowledgeable persons of the locality and (d) the Programme Manager Schedule to be administered on the concerned Executive Engineers in charge of management of LIPs in the sample districts. Briefs on these schedules are;

(a) BKVY Schedule: It was administered in respect of each of the sample LIPs to elicit information on the effectiveness of the programme of BKVY in

respect of timely installation of the LIP, area irrigated, employment generated etc. Relevant information will be collected from the JE / AE of the Orissa Lift Irrigation Corporation (OLIC) concerned.

(b) Beneficiary Schedule: Three households each under the sample LIPs having their land within the command area of the LIP were selected and administered with this schedule with the objective of getting information as to what extent the LIP has useful to them in getting employment, enhancing the area under irrigation, introducing changes in the cropping pattern and enhancing their economic status.

(c) K I Schedule: Two knowledgeable persons each in respect of each sample LIP including the Secretary of the Pani Panchayat were administered with this schedule to elicit information on the operation and maintenance of the LIPs, interpersonal relationship between the Pani Panchayat (PP) and the OLIC, sustainability of the programme etc.

(d) P M Schedule: This schedule was administered to the Executive Engineer, OLIC concerned to get an overall impression of the effectiveness of Pani Panchayats in the district as well as the operational impediments and the future prospect of the system of Pani Panchayats.

3.5.4 Samples Executed:

In total, 20 sample LIPs were selected from four districts of which, 60 beneficiaries and 40 Key Informants were interviewed and the views and opinions of all the 4 Executive Engineers (Lift Irrigation) on the effectiveness of the Pani Panchayats in their respective districts were taken along with their suggestion for further improvement in the programme. The district wise break up of the samples executed is given below vide Table No: 3.11.

Table No: 3.11
Samples Executed under the BKVY Programme.

Sl.No	District	Sample Blocks	Sample LIPs	Sample HHs	Sample K Is	PM Sch
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Kalahandi	3	4	12	8	1
2	Koraput	3	5	15	10	1
3	Nawarangpur	3	4	12	8	1
7	Subarnapur	3	7	21	14	1
	Total	12	20	60	40	4

3.6 Watersheds:

Watersheds are being constructed under the programme of RLTA with the sole objective of drought proofing and improving the moisture regime in the watershed areas with a view to improving agricultural productivity. In addition, watersheds help creating fruit orchards and community forests in degraded common wastelands. Degraded lands may be treated for in-situ soil and moisture conservation through bunding of run off water with the help of check dams, terracing and other soil and water conservation measures. Afforestation and planting of fruit bearing trees in common waste lands are also to be taken up through participatory approach with active involvement of the user communities. The Integrated Wasteland Development Project cost-norms and guidelines were followed in implementation of watershed projects through KBK funding. Under the programme of RLTA, as many as 314 micro-watersheds were proposed to be constructed by end of 2005-06 in the KBK region; the district wise break up is given below vide Table No: 3.12.

Table No: 3.12

District wise Number of Micro-watersheds Proposed to be constructed by end of 2005-06 under RLTA

Sl.No	Districts	Blocks	Watersheds
(1)	(2)	(3)	(4)
1	Balangir	14	28
2	Kalahandi	13	16
3	Koraput	14	84
4	Malkangiri	7	42
5	Nawarangpur	10	60
6	Nuapada	5	10
7	Rayagada	11	66
8	Subarnapur	6	8
	Total	80	314

Source: Annual Action Plan under RLTA for KBK districts 2006-07.

3.6.1 The Study Objectives:

Keeping in view, the overall objectives of the watershed programme, the objectives of the present study of this component are;

- i. Whether watersheds in the sample have actually been constructed.
- ii. Whether moisture content in the watershed area has increased and there has been increase in green cover, area under agriculture, fruit orchards, common forest, fishery etc and whether the users have benefited.
- iii. Whether local people have been associated in the process of construction of watersheds and enjoyed the opportunities of getting employment.
- iv. Whether there was any gender, caste or class bias in course of implementation of the projects or in the process of flow of benefits during the post project period.
- v. What hurdles / difficulties have been encountered in the implementation of the programme; such as delays in fund flow, lack of commitments, lack of cooperation etc.
- vi. Overall impact of the programme, like generation of employment opportunities and creation of avenues for taking up new activities which will help generation of employment as also help increasing income.
- vii. In matters of asset creation, whether the assets created are of good quality.
- viii. Opinion of knowledgeable persons of the locality on the problems in implementation, cooperation of the implementing agency and their suggestions for improvement in implementation, operation and management of watersheds.
- ix. Opinion and views of programme managers in the districts in overall charge of the watersheds on their experiences on the problems and prospects of watersheds in the districts, their sustainability and their suggestions for efficient management of watersheds.
- x. Providing feed back to the administration on the present management scenario of the watersheds under the programme of RLTAAP and giving a set of feasible recommendations for taking policy initiatives for effecting further improvements in the watershed programme.

3.6.2 The Study Design:

As may be seen from the Table No.3.12, as many as 314 watersheds are proposed to be constructed in the KBK region and the distribution of watersheds are not uniform over the districts. It was decided to conduct detailed investigation in 4 districts with higher number of watersheds in descending order. At the first instance, 3 blocks were selected from the sample districts. The sample numbers of watersheds were selected from the sample blocks suitably through simple random sampling procedure in proportion to the watersheds in the sample districts by obtaining the list of watersheds in each block from the District Rural Development Agencies, which are in charge of implementation of watershed projects in the district. Accordingly, it was decided to conduct detailed investigation of total 16 sample watersheds; 5 watersheds from Koraput district, 4 from Malkangiri, 4 from Nawarangpur and 3 from Rayagada districts.

3.6.3 Study Instruments:

Field investigation was done with the help of a set of four schedules developed for the purpose; (a) Watershed Schedule administered in respect of each of the 16 sample watersheds, (b) Household Schedule administered on households which are supposed to get benefit through the watersheds, (c) Key Informant Schedule administered on Knowledgeable Persons of the locality and (d) the Programme Manager Schedule administered to the Project Director, DRDA of the districts, who is in charge of overall management of the watersheds in the district to elicit information.

(a) Watershed Schedule: This schedule was designed to elicit information on the effectiveness of the watershed programme in respect of people's participation, timely completion of projects, employment generated etc. The relevant information was collected from the J E / A E of the DRDA or other Executing Agency in respect of each sample Watershed.

(b) H H Schedule: This schedule was designed to collect the information on the objectives and benefits as perceived by beneficiary households like usefulness of the watershed, generation of employment, enhancement of their capabilities to take up new ventures and enhancing their economic status. The schedule was administered on three stake holder households under each sample watershed.

(c) K I Schedule: Two knowledgeable persons of the locality including the Secretary of the Watershed Committee were administered with this schedule to elicit information on the operation and maintenance of the watershed, interpersonal relationship between the Watershed Committee and the Government agency and sustainability of the programme etc.

(d) P M Schedule: This schedule was administered on the Project Director (PD), DRDA of all the 8 districts to get an overall assessment on the effectiveness of watersheds in the district, the physical and financial progress, role of the Watershed Committees, sustainability of the programme, the impeding problems, the future prospects and their suggestions for further improvement in the programme.

3.6.4 Samples Executed:

Under the watershed component, detailed investigation was done in respect of 16 sample watersheds in 4 districts. Interviews were held with 48 heads of households and 32 knowledgeable persons to know the effectiveness of the watershed programme and their opinion on the same. Interactions were held with and the views of PD, DRDA of the 4 sample districts, were sought to find out problems in execution of watersheds, cooperation of the local people, problems of operation and management and the sustainability aspect of the watershed programme. The district wise break up of the samples executed is presented below vide Table No: 3.13.

Table No: 3.13

Samples Executed under the Watershed Programme.

Sl.No	District	Sample Blocks	Sample Watersheds	Sample HHs	Sample K Is	PM Sch
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Koraput	3	5	15	10	1
2	Malkangiri	3	4	12	8	1
3	Nawarangpur	3	4	12	8	1
4	Rayagada	3	3	9	6	1
	Total	12	16	48	32	4

3.7 Rural Connectivity:

Improved infrastructure, particularly rural connectivity, is necessary for accelerated development of a region and particularly for a region like the KBK districts. As “a road to prosperity” Improved infrastructure is required to ensure improved quality of life and reduction of poverty. Under rural connectivity component of RLAP, funds have been provided for construction and maintenance of roads, construction of rural bridges and for special connectivity programmes. The road net-work in KBK districts are intersected by large numbers of nallas, streams and rivulets at different places. The road links getting broken have posed significant challenges for all weather connectivity, which is critical for providing common man access to market places, educational institutions and health services. In view of this, construction of roads, bridges as well as repairs and renovations, filling in missing links, wherever necessary, were taken up through RLAP funding. Construction of rural bridges is considered extremely vital as they fill in the crucial missing links between unconnected parts of a region. It was, therefore, decided to focus on rural connectivity component of the construction of rural bridges in the region through Rural Works Wing of the Rural Development Department of the State Government. Through the programme of RLAP, 54 rural bridges were constructed by the end of 2005-06; the district wise break up is given below vide Table No: 3.14.

Table No: 3.14

District wise Rural Bridges constructed till 2005-06

Sl.No	Districts	Blocks	Rural Bridges
(1)	(2)	(3)	(4)
1	Balangir	14	1
2	Kalahandi	13	12
3	Koraput	14	16
4	Malkangiri	7	3
5	Nawarangpur	10	4
6	Nuapada	5	6
7	Rayagada	11	5
8	Subarnapur	6	7
	Total	80	54

Source: Data collected from the Chief Engineer, Rural Works, Bhubaneswar.

3.7.1 The Study Objectives:

Keeping in view the overall objectives of the programme of rural connectivity, the objective of the present study of this component are;

- i. Whether the sample bridge project was implemented and completed as per specifications and dedicated for public use in time.
- ii. Whether the material used and the work done was of good quality.
- iii. Whether the local people were involved in the process of construction of the bridge and got employment.
- iv. Whether there has been better access for local people to growth centres like the market places, schools, hospitals and other places of interest through the bridge.
- v. What hurdles / difficulties have been encountered in the process of implementation of the programme; such as delays in fund flow, lack of commitments, lack of cooperation, local problem etc and the possible ways adopted to resolve the same.
- vi. Perception of the public on the implementation of the bridge projects and their satisfaction on the level of benefits received.
- vii. Have the local people been able to expand their economic activities as a result of construction of the rural bridges.
- viii. Opinion and views of the local people on the construction of rural bridges and their usefulness.
- ix. Opinion and views of the Executive Engineer (R W) on the problems encountered at different stages of operation of rural bridges and their suggestions to take precautionary measures in future.
- x. Providing feed back to the administration and giving a set of feasible recommendation for taking policy initiatives to bring in improvement in the programme in future.

3.7.2 The Study Design:

As may be seen from Table No.3.14, 54 rural bridges had been constructed in the KBK region and the number of bridges constructed is not uniform over the districts. It was decided to conduct detailed investigation in 4 districts with higher number of rural bridges constructed. At the first instance, 3 blocks were selected from the sample

districts leaving out the blocks having no rural bridges. The sample number of bridges was selected from requisite number of sample blocks suitably through simple random sampling procedure in proportion to the number of bridges constructed in the sample districts by obtaining the list of bridges constructed in the blocks from the office of the Executive Engineer (Rural Works) who is in charge of implementation of rural bridge projects in the district. Keeping in view the work load, it was decided to conduct detailed investigation of total 8 sample rural bridges i.e., 2 bridges from Kalahandi district, 3 from Koraput, 1 from Nuapada and 2 from Subarnapur district.

3.7.3 Study Instruments:

Field investigation was done with the help of a set of four schedules developed for the purpose; (a) the Rural Connectivity Schedule administered in respect of each of the 8 sample bridges, (b) Gram Panchayat Schedule administered on Sarpanches of 4 Gram Panchayats (GPs) along the road side, (c) Focus Group Discussion (FGD) Schedule administered on Persons of the locality in two sample GPs by way of organizing focus group discussions and (d) the Programme Manager Schedule administered on the Executive Engineer, who was in charge of construction of rural bridges in the sample districts to elicit information keeping in view the objectives of the present study of this component.

(a) R C Schedule: This schedule was designed to elicit information on the effectiveness of the sample bridge projects in respect of timely construction, people's participation, employment generation etc. The relevant information was collected from the J E / A E of Rural Works Division of the district.

(b) G P Schedule: Interviews were held with 4 Sarpanches of all the villages along the road side of each of the sample bridge project. The objective of this schedule was to obtain their views and opinions on the usefulness of the related bridges in getting employment, removing their problem of communication and in expanding their socio-economic activities.

(c) F G D Schedule: Focus group discussions were organised in two of the sample GPs under each of the sample bridge projects to elicit information on the utility of the bridge project in establishing connectivity with schools, market places, hospitals, growth centres etc outside the village boundary and involvement of the local people in implementation.

(d) P M Schedule: This schedule was administered on the Executive Engineer (Rural Works) at the district level to get an overall impression on the effectiveness of rural bridges constructed in the district, the physical and financial progress, the problems encountered and his suggestions for better implementation of this project in future.

3.7.4 Samples Executed:

Under the rural connectivity component, detailed investigation was carried out in respect of 8 sample rural bridges in 4 sample districts. Interactions were held with 32 Sarpanches and two focus group discussions were organized to know the effectiveness of the rural bridges constructed. The Executive Engineers (Rural Works) of 4 sample districts were interviewed to reveal the problems in execution of rural bridges, cooperation of the local people, problems of operation and management and the sustainability aspect of the bridges. The district wise break up of the samples executed is presented below vide Table No: 3.15.

Table No: 3.15

Samples Executed under the Rural Connectivity Component.

Sl.No	District	Sample Blocks	Sample Bridges	Sample GPs	FGDs held	PM Sch
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Kalahaandi	2	2	8	4	1
2	Koraput	3	3	12	6	1
3	Nuapada	1	1	4	2	1
4	Subarnapur	2	2	8	4	1
	Total	8	8	32	16	4

3.8 Rural Water Supply:

Drinking water supply in rural areas of KBK districts focuses on the coverage of all NC (not covered) habitations and coverage of some PC (partially covered) habitations as per the relaxed norm. As against the existing norm of one spot source for 250 populations, the relaxed norm for KBK region was one spot source for 150 persons. The Water Supply Project under RLTAAP also included coverage of primary schools, tackling quality and quantity issues, improving sustainability of the source by promoting sound and sustainable management practices etc. Besides, water supply and sanitation programmes were also to be integrated. In total, there were 13,830 tube wells, 632 sanitary wells and 85 piped water supply projects in the rural areas of KBK region till

2005-06. The district wise a detail of rural water supply projects constructed and established is given vide Table No: 3.16. It was decided to include all categories of water supply projects taken up under the programme of RLTA and to cover all the 8 KBK districts within the purview of the study of this component.

Table No: 3.16
District wise Water Supply Projects under RLTA till 2005-06.

Sl.No	Districts	Blocks	Total		
			Tube wells	Sani wells	PWS
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	14	2378	-	23
2	Kalahandi	13	2719	56	4
3	Koraput	14	1750	192	13
4	Malkangiri	7	751	157	12
5	Nawarangpur	10	2333	64	8
6	Nuapada	5	1114	19	3
7	Rayagada	11	1616	144	17
8	Subarnapur	6	1169	-	5
	Total	80	13830	632	85

Source: Data collected from the Chief Engineer, RWSS, Orissa.

3.8.1 The Study Objectives:

Keeping in view the overall objectives of the programme of water supply projects in the KBK region, the study specific objectives of this component are :

- i. Whether the sample water supply projects were implemented and completed as per specifications and dedicated for public use in time.
- ii. Whether the materials used and the work done was of good quality and the water supply source is providing regular benefit to the local people.
- iii. Whether the local people were involved in the process of construction of the water supply project and got the wage employment.
- iv. Whether there has been better availability of water to the local people on account of these water supply projects as compared to before.
- v. What hurdles / difficulties have been encountered in the process of implementation of these projects; such as delays in fund flow, lack of

commitments, lack of cooperation, local problem etc and the possible ways adopted to resolve the same.

- vi. Perception of the public on the implementation of water supply projects for them and their satisfaction on the level of benefits received in terms of quantity of water and its quality.
- vii. Was there any problem of water quality and the means adopted to resolve the same?
- viii. Opinion and views of the local people on the construction of water supply projects and their usefulness including reduction in the distanced covered to procure water for domestic consumption.
- ix. Opinion and views of the Executive Engineer (RWSS) on the problems encountered at different stages of operation of rural bridges and their suggestions to take precautionary measures in future.
- x. Providing feed back to the administration and giving a set of feasible recommendations for taking policy initiatives to bring in improvements in the construction of rural water supply projects in future.

3.8.2 The Study Design:

As may be seen from the Table No.3.16, as many as 13,830 tube wells, 632 sanitary wells and 85 piped water supply projects were constructed in the KBK region under the RLTP till 2005-06. It was decided to conduct detailed investigation in respect of all the three categories of water supply projects in all the 8 KBK districts. At the first instance, 3 blocks were selected from each of the KBK districts leaving the blocks having no water supply projects. The sample number of tube wells, sanitary wells and the piped water supply projects were selected from requisite number of sample blocks suitably through simple random sampling procedure in proportion to the number of different categories of water supply projects constructed in the districts by obtaining the list of projects constructed in the blocks from the office of the Executive Engineer (RWSS) who is in charge of implementation of rural water supply projects in the district. Keeping in view, the work load, it was decided to conduct detailed investigation in respect of 50 tube wells, 12 sanitary wells and 8 piped water supply projects (PWS) in all; the district wise break up of which is given below vide Table No: 3.17.

Table No: 3.17

District wise Allocation of Sample Water Supply Projects.

Sl.No	Districts	Blocks	Sample Projects		
			Tube wells	Sani wells	PWS
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	14	9	-	1
2	Kalahandi	13	10	1	1
3	Koraput	14	6	4	1
4	Malkangiri	7	3	3	1
5	Nawarangpur	10	8	1	1
6	Nuapada	5	4	1	1
7	Rayagada	11	6	2	1
8	Subarnapur	6	4	-	1
	Total	80	50	12	8

3.8.3 Study Instruments:

Field investigation was done with the help of a set of four schedules designed and developed for the purpose; (a) the Rural Water Supply Project (RWSP) Schedule administered in respect of each of the sample water supply project, (b) the Household Schedule administered on three beneficiary households under each sample project, (c) Key Informant Schedule administered on knowledgeable persons of the locality and (d) the Programme Manager Schedule administered on the Executive Engineer in charge of construction of rural water supply projects in all KBK districts to elicit information keeping in view the objectives of the present study.

(a) RWSP Schedule: This schedule was designed to elicit information on the desirability and effectiveness of the sample rural water supply project as well as its mode of operation and maintenance at the post project period. The schedule was administered on the concerned AE / JE of the RWSP wing in respect of each of the sample rural water supply project.

(b) Household Schedule: This schedule was designed to collect information from the beneficiaries of the sample water supply project on the availability of water as per requirement and the quality of water. Their opinion was also taken on the operation and maintenance of the water source. Information in this schedule was collected from 3 randomly selected households in respect of each sample water supply project taken for survey.

(c) K I Schedule: Two knowledgeable persons of the locality like the Sarpanch, school teacher, ward members were contacted in respect of each of the sample water supply project through administration of this schedule with a view to eliciting information on the operation and maintenance of the sample project, the interpersonal relationship between the local people and the project implementing agency as also the sustainability water supply source.

(d) P M Schedule: This schedule was administered on the Executive Engineers (RWSS) of all the 8 districts to get an overall impression on the effectiveness of the water supply projects constructed, problems like sustainability of the water source, water quality, public cooperation, sustainability of the projects and their opinions and suggestions for further improvement in the programme.

3.8.4 Samples Executed:

Under the rural water supply component, detailed investigation was made in respect of the 50 tube wells, 12 sanitary wells and 8 piped water supply projects. Interactions was held with 148 households for eliciting information regarding for tube wells, with 36 households regarding for sanitary wells and with 24 households regarding piped water supply projects. Similarly, as many as 97 knowledgeable persons for tube wells, 24 for sanitary wells and 24 for piped water supply projects were contacted to know their perception and satisfaction over water supply projects installed. Interaction was also made with the Executive Engineers (RWSS) of all the 8 KBK districts to reveal the problems in execution of rural water supply projects, cooperation of the local people, problems of operation and management and the sustainability aspect of the water supply projects. The district wise break up of the samples executed is presented below vide Table No: 3.18.

Table No: 3.18

Samples Executed under the Rural Water Supply Component.

Sl.No	District	Samp blocks	Tube Wells			Sanitary Wells			Piped W S			PM Sch
			TWs	HHs	KIs	SWs	HHs	KIs	PWS	HHs	KIs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	3	9	25	15	-		-	1	3	2	1
2	Kalahandi	3	10	30	20	1	3	2	1	3	2	1
3	Koraput	3	6	18	12	4	12	8	1	3	2	1
4	Malkangiri	3	3	9	6	3	9	6	1	3	2	1
5	Nawarangpur	3	8	24	16	1	3	2	1	3	2	1
6	Nuapada	3	4	12	8	1	3	2	1	3	2	1
7	Rayagada	3	6	18	12	2	6	4	1	3	2	1
8	Subarnapur	3	4	12	8	-	-	-	1	3	2	1
	Total	24	50	148	97	12	36	24	8	24	16	8

4. Instructions and Guidelines:

Since the objectives of creating the infrastructure and the assets under different components under the study were different, a common set of instructions and guidelines for conducting the field study on all components was not possible. Separate sets of instructions and guidelines for individual components indicating the objectives of the programme component, the study specific objectives, the sampling design, sampling procedure, explanation and clarification on individual study instruments used for different component etc. were finalized with a view to avoid confusion and to ensure clarity in understanding among the Field Investigators and the Supervisors engaged in carrying out the field work under the study. Random number tables were also provided to the study team for facilitating selection of samples at different levels.

5. Method of Investigation:

The field work was conducted by a set of well-qualified and experienced persons through personal interview method by way of administering the study instruments on the appropriate informants under respective components. For each component a separate team was formed. Each team comprised of 4 Field Investigators and a Team Leader. They were given intensive and adequate training of three days. The study tools along with the instructions and guidelines were provided to each member of the team for undertaking the field work. For ensuring adequate mobility, smooth conduct of the study in the field and its timely completion, the team was provided with an exclusive transport facility and all other logistic support. The field work was undertaken during the period from November 2006 to February 2007 followed by several revisits during March and April 2007.

6. Coordination and Supervision:

Apart from the Team Leaders supervising the field work in each district, the senior executives of the Agricultural and Rural Development Consultancy Society (ARDCOS), Bhubaneswar coordinated to ensure quality output and timely completion of the study project. For ensuring quality of work and the output under the study, a Subject Matter Specialist on each of the components was associated right from planning of the study to drafting of the report. They had also done necessary supervision and provided technical input to the study at various levels.

CHAPTER - IV

STUDY FINDINGS

The evaluation study on the RLTA in the KBK Districts of Orissa is based on detailed investigation on 8 programme components those are crucial for the overall development of the KBK region. Not only major share of the RLTA funds were earmarked for different activities under these components but also the strategic interventions were made for success. These are supposed to substantially contribute to the achievements of the set objectives of the programme of RLTA. Keeping in view, the overall objectives of the programme of RLTA, study specific objectives of each of the components selected for detailed investigation were also set and the field survey was undertaken accordingly. In the present chapter efforts have been made to analyse the factual information collected from the field, in order to assess the impact of the programme of RLTA in terms of the study objectives. In the process, conclusions are arrived at and appropriate recommendations will be made for midcourse correction in the implementation of the programme at different levels. The findings of this study in respect of the selected components have been discussed in the following sections.

SECTION – 1

40 SEATED HOSTELS FOR ST & SC GIRLS IN KBK DISTRICTS

1. Enrolment of SC and ST Girls in Primary Schools:

From the field study it was observed that, out of a total of 41 Primary Schools, of which the sample hostels selected were Tribal Schools maintained by the ST, SC and Minorities Development Department and all have coeducation system with Class- I -V. The position of enrolment of girls in these schools during the period from 1998-99 to 2006-07 is presented in Table No: 4.1.1.

Table No: 4.1.1**Enrolment SC and ST Girls in Sample Schools from 1998-99 to 2006-07**

Sl.No	District	LTAP Hostels	Sample Schools	1998-99	1999-00	2000-01	2001-02	2002-03
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	25	3	70	50	87	155	246
2	Kalahandi	25	3	117	103	110	201	216
3	Koraput	105	9	154	163	331	403	461
4	Malkangiri	53	5	0	24	50	334	358
5	Nawarangpur	56	5	250	247	300	434	400
6	Nuapada	36	4	146	205	236	313	373
7	Rayagada	92	9	318	385	436	601	669
8	Subarnapur	8	3	125	113	125	240	298
	Total	400	41	1180	1290	1675	2681	3021
	Increase (%)	-	-	-	9.3	29.8	60.0	12.7
	In Schools	-	-	27	28	37	41	41

Table No: 4.1.1 (contd.....)

Sl	District	LTAP Hostels	Sample Schools	2003-04	2004-05	2005-06	2006-07
(1)	(2)	(3)	(4)	(10)	(11)	(12)	(13)
1	Balangir	25	3	288	314	316	296
2	Kalahandi	25	3	328	213	225	228
3	Koraput	105	9	532	520	605	645
4	Malkangiri	53	5	328	339	361	436
5	Nawarangpur	56	5	485	436	440	483
6	Nuapada	36	4	420	453	412	417
7	Rayagada	92	9	677	651	629	635
8	Subarnapur	8	3	288	246	225	210
	Total	400	41	3256	3172	3213	3350
	Increase (%)	-	-	7.8	-2.6	1.3	4.3
	In Schools	-	-	41	41	41	41

The Table No: 4.1.1 reveals that as against 41 sample schools, admission of girls were confined to 27 schools in 1998-99, to 28 schools in 1999-00, to 37 schools in 2000-01 and thereafter girls were admitted to all the 41 sample schools. This was due to limited hostel facility to a few number of schools in the initial years. The enrolment of girls in 41 sample schools, which was 1180 in 1998-99 rose to 3350 with a registering an overall growth of 183.9% during the period. The increment in enrolment of girls in the sample schools over the period from 1998-99 to 2006-07 was mainly because of establishment of hostel facilities in the KBK districts.

2. Impact on Gender Inequality in Primary Schools:

Although there has been appreciable increase in the enrolment of girls in primary schools in KBK districts, the rate of enrolment of boys is higher than the girls, which remains a major concern. Information collected on the enrolment of boys and girls in the sample primary schools over the years from 1998-99 to 2006-07 is presented vide Table No: 4.1.2.

Table No: 4.1.2
Enrolment in Sample Schools over the Years 1998-99 to 2006-07

Year	Total	Boys	Girls	Girls to 1000 Boys	Girls to Total (%)
(1)	(2)	(3)	(4)	(5)	(6)
1998-99	3081	1901	1180	618	38.30
1999-00	3533	2243	1290	575	36.51
2000-01	4470	2795	1675	599	37.47
2001-02	5751	3070	2681	873	46.62
2002-03	6018	2997	3021	1008	50.20
2003-04	6252	2996	3256	1087	52.08
2004-05	6179	3007	3172	1055	51.34
2005-06	6224	3011	3213	1067	51.62
2006-07	6326	2976	3350	1126	52.96

Table No: 4.1.2 reveals that the enrolment of girls in 41 sample schools has gone up from 1180 in 1998-99 to 3350 (184%) in 2006-07. During the said period the enrolment of boys has gone up from 1901 in 1998-99 to 2976 (57%) in 2006-07. The enrolment of girls per 1000 boys was 618 in 1998-99 rose to 1126 in 2006-07. More so, the enrolment of girls during this period had out numbered the enrolment of boys. The enrolment of girls to total, which was 38.30 per cent in 1998-99, has been gradually increased and reached to 52.96 in 2006-07. This gives to understand that the persisting gender inequality in enrolment at primary school level has considerably been reduced during the period from 1998-99 to 2006-07 because of establishment of hostels for SC and ST girls in the KBK districts.

3. Actual Position of Teachers:

The field survey revealed that in 41 sample primary schools, the sanctioned poST of teachers were 154 of which only 109 (71%) were in position. The district wise

position of teachers in the sample schools along with male-female break-up and the teacher pupil ratio is given in Table No: 4.1.3.

Table No: 4.1.3

Number of Teachers in Position and Teacher-Pupil Ratio in 2006-07

Sl.No	District	Sample Schools	Sanction PoST	Teachers in Position			Student Strength	T P* Ratio
				Male	Female	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	3	10	5	3	8	466	1:58
2	Kalahandi	3	13	12	-	12	526	1:44
3	Koraput	9	33	13	8	21	1130	1:53
4	Malkangiri	5	18	10	5	15	794	1:53
5	Nawarangpur	5	20	8	2	10	895	1:89
6	Nuapada	4	15	7	8	15	823	1:55
7	Rayagada	9	35	13	8	21	1204	1:57
8	Subarnapur	3	10	7	-	7	488	1:70
	Total	41	154	75	34	109	6326	1:58

* T P Ratio = Teacher Pupil Ratio = No of students / No of teachers.

There are 154 sanctioned post of teachers in 41 primary schools accounting for 3 to 4 (on an average 3.8) teachers per school for I–V Classes without considering additional sections. The actual position of teachers is only 109, which means availability of only 2 to 3 (on an average 2.7) teachers per school. The teacher pupil ratio according to enrolment in 2006-07 is 1:41 as per the sanctioned poST and 1:58 as per physical position of teachers. Some amount of circumstantial deviations from the approved teacher pupil ratio is inevitable. There should be at least one teacher for each class. Otherwise, the quality and the system of education will be seriously affected. Since quality of education is not to be compromised, there is an urgent need for at least five teachers for each school over and above the Head Master, who will look after the school administration apart from managing classes in absence of class teachers. There may be some financial constraints to create additional poST or filling up of existing vacancies. In that event, appointment of Shikshya Sahayaks in requisite number would be the appropriate solution to meet the teacher pupil gap.

4. Residential Accommodation:

In 41 sample schools, as many as 26 quarters were available of which 24 were habitable, 22 were occupied and the remaining 2 were vacant. The district wise details of which has been presented in Table No: 4.1.4.

Table No: 4.1.4
Availability of Quarters and Occupancy

Sl.No	District	Sample Schools	Total Teachers	Quarters		
				Total	Habitable	Occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	3	8	1	1	1
2	Kalahandi	3	12	-	-	-
3	Koraput	9	21	11	9	9
4	Malkangiri	5	15	2	2	2
5	Nawarangpur	5	10	3	3	2
6	Nuapada	4	15	-	-	-
7	Rayagada	9	21	9	9	8
8	Subarnapur	3	7	-	-	-
	Total	41	109	26	24	22

Non-occupation of two habitable quarters may be of temporary nature and therefore may not be considered serious. As observed, there were no quarters in the sample schools in the districts of Kalahandi, Nuapada and Subarnapur. While it may not be possible to provide quarters for all the teachers in each school, accommodation for the Head Master and the Hostel Superintendent at school premises is crucially important from administrative point of view. The place of residence of the Hostel Superintendents as revealed from the field survey is presented in Table No: 4.1.5.

Table No: 4.1.5

Details about Hostel Superintendents

Sl.No	District	Sample Hostels	Male Supdts		Female Supdts		Superintendents	
			Total	Married	Total	Married	Hq Stay	With family
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	3	2	1	1	1	1	1
2	Kalahandi	3	3	2	-	-	-	-
3	Koraput	9	7	7	2	2	5	3
4	Malkangiri	5	4	4	1	1	3	3
5	Nawarangpur	5	4	4	1	1	2	4
6	Nuapada	4	3	3	1	1	-	1
7	Rayagada	9	8	8	1	1	7	1
8	Subarnapur	3	3	3	-	-	-	-
	Total	41	34	32	7	7	18	13

Out of 41 Superintendents, 34 (83%) were male and the rest 7 (17%) were female. Of the 41 Superintendents only 18 (44%) were staying at school headquarters. In regard to the place of residence of the school teachers including the Head Masters and Hostel Superintendents, the Table No: 4.1.6 presented below is relevant.

Table No: 4.1.6
Place of Residence of Teachers

Sl.No	District	Sample Schools	Total Teachers	Residence of Teachers			
				Hqs	> 5 Kms	> 10 Kms	> 20 Kms
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	3	8	7	1	-	-
2	Kalahandi	3	12	9	3	-	-
3	Koraput	9	21	16	2	2	1
4	Malkangiri	5	15	9	1	5	-
5	Nawarangpur	5	10	7	-	1	2
6	Nuapada	4	15	11	1	3	-
7	Rayagada	9	21	10	2	7	2
8	Subarnapur	3	7	7	-	-	-
	Total	41	109	76	10	18	5
	% to Total	-	-	70	9	16	5

It is evident that out of 109 teachers in position 76 (70%) are staying at the school headquarters that includes 18 (23%) who are Superintendents. The remaining 33 (30%) teachers are staying away from the School vicinity. It is a good sign that majority of the teachers are staying near the school. At the same time as many as 23 (56%) Hostel Superintendents are staying away from the school headquarters. While there may be reasons for some teachers to stay away from the school, their stay beyond a reasonable distance of say more than 20 kms will necessarily affect the quality and the system of education adversely. Besides, the Head Master and the Hostel Superintendents should normally stay close to school. It is for the Administrative Department to ensure this aspect. Construction of adequate number of quarters is ideal. In case of shortage of funds, arrangement of private accommodation near the school area may be arranged. Government should also think of posting of local teachers.

As far as possible, lady teachers should be appointed as hostel in-charge for the 40 seated girl's hostel as the boarders will feel free to discuss their health related problems with them.

5. Delay in Construction, Operation and Occupancy of Hostel Buildings:

The 41 sample hostels were functioning in 41 out of 400 hostel buildings constructed out of RLTA funds in KBK districts. These 41 sample buildings were completed prior to their occupation by the boarders. Information on the operational status of 41 sample buildings based on the study is presented in Table No: 4.1.7.

Table No: 4.1.7
Delay in Construction and Operation of Hostel Buildings

Sl.No	District	Sample Buildings	Number Completed	Constructed Departmentally			Constructed through Contractor		
				Total	Const Delay	Oprn Delay	Total	Const Delay	Oprn Delay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	3	-	-	-	3	3	1
2	Kalahandi	3	3	-	-	-	3	3	-
3	Koraput	9	9	6	5	-	3	3	-
4	Malkangiri	5	5	-	-	-	5	5	-
5	Nawarangpur	5	5	1	1	-	4	4	-
6	Nuapada	4	4	-	-	-	4	2	2
7	Rayagada	9	9	4	4	-	5	5	-
8	Subarnapur	3	3	1	1	1	2	2	2
	Total	41	41	12	11	1	29	26	5

Of the 41 hostel buildings, 12 were constructed Departmentally and the rest 29 were constructed through Contractors. There was considerable delay in completion of hostel projects. Out of 12 buildings constructed by the Administrative Department, in 11 cases the construction was delayed. In one case there was delay in operation of the hostel. In case of private construction, the delay in completion was much higher as in case of 26 buildings out of 29, construction was delayed. Further, even after completion of the hostels, operation was delayed in case of 5 such hostels. The completion of construction as well as operation of hostels was delayed whether construction was executed departmentally or through Contractors. The Administrative Department should sort out all coordination problems to reduce the time lag in construction and operation of hostel building projects.

6. Quality of Construction of Hostel Buildings and Maintenance:

Provision of Rs. 34.00 crore was made for the Ninth Plan (1997-2002) under RLTA for construction of 400 hostel buildings in the KBK districts. Construction and completion of these buildings had taken place by the terminal year of Ninth Plan i.e.

2001-02 and in some cases within one or two years after that. All of these buildings being new are expected to be in good condition. To know the factual position, construction deficiencies persisting in the sample buildings were collected in course of field visit and the results thereof is presented vide Table No: 4.1.8.

Table No: 4.1.8
District-wise Quality of Sample Hostel Buildings

SL.No	District	Sample Buildings	No Defi	Hostels with different kinds of Deficiencies							No A M
				D1	D2	D3	D4	D5	D6	D7	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	3	-	2	-	-	-	-	1	1	3
2	Kalahandi	3	-	1	1	1	-	-	2	-	3
3	Koraput	9	-	3	-	3	3	-	2	-	3
4	Malkangiri	5	-	5	-	-	3	1	1	-	5
5	Nawarangpur	5	-	3	1	2	1	-	-	-	5
6	Nuapada	4	-	-	1	-	-	-	1	3	3
7	Rayagada	9	2	5	2	1	3	2	-	1	6
8	Subarnapur	3	1	-	-	-	-	-	-	1	3
	Total	41	3	19	5	7	10	3	7	6	31

D1-Water soaking (roof), D2-Toilet damage, D3-Building damage, D4-Floor damage, D5-door & window damage, D6-Electricity, D7-Boundary wall problem, AM-Annual Maintenance

As regards the standard of construction, it was found that 3 out of 41 hostel buildings had no deficiency. In case of remaining 38 (93%) buildings, one or more deficiency was observed on the date of visit of the study team. The details of deficiencies in construction of hostel buildings observed are noted below.

In 19 out of 41 hostel buildings, roofs were leaking and walls were wet with seepage of water. In 5 hostels toilets were damaged, in 7 buildings cracks were observed, in 10 hostels the floors were damaged and in 3 hostels doors and windows were damaged.

In 7 hostel buildings electrical problems were observed that hampered the study of inmates. In addition, 6 hostels had no boundary walls or partly damaged boundary walls which led to insecurity of inmates. As regards the maintenance of the buildings, regular annual maintenance of most of the hostel buildings was not undertaken.

Two points emerge from the above observations. First, the quality of construction is not up to the mark and deficiencies being observed within 5 years of their completion.

Second, even if annual maintenance was not permissible in the initial years of completion, there was no bar for the Administration to inspect all hostels, to take care of the deficiencies and take appropriate corrective measures. Assignment of future construction works to the concerned executing agencies should be done with adequate care along with retention of 5% of project cost as security deposit, meant for maintenance for 5 years to ensure good quality of construction.

7. Amenities Provided

Although it was originally envisaged to admit 16000 boarders in 400 hostels with capacity of 40 per hostel, subsequently it was decided to accommodate 2460 boarders more from 2005-06 onwards aggregating to 18460. However, all the 400 hostels were supposed to be provided with various amenities to the boarders as per the norm, which was originally envisaged including taking care of the excess intake of boarders. The list of amenities supposed to have been provided to each hostel is given vide Annexure-4.1.1. Information as to whether all the amenities were supplied in full or in partial manner in 41 sample hostels, their present stock, whether repairs and replacements are being done annually and the problems encountered, if any, due to non-repair and non-replacements of the damaged and worn out items were collected in course of field study and the same is presented in Table No: 4.1.9.

Table No: 4.1.9
Provision of Amenities and Annual Replacements in Sample Hostels

Sl.No	District	Sample Hostels	Amenities Provided		With full Stock	Annually Replaced	Problems in Replacement
			Partially	In full			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	3	3	-	-	1	1
2	Kalahandi	3	3	-	-	-	2
3	koraput	9	9	-	-	1	3
4	Malkangiri	5	5	-	-	-	-
5	Nawarangpur	5	5	-	-	-	1
6	Nuapada	4	4	-	-	-	3
7	Rayagada	9	9	-	-	-	-
8	Subarnapur	3	3	-	-	1	2
	Total	41	41	-	-	3	12

The field study reveals that all the amenities were not provided to any of the 41 sample hostels as listed in the annexure. Only some of the amenities were there in all the sample hostels. Whatever was supplied, full stock of the same was not there as

some were damaged or some worn out. For the sake of maintenance of records, damaged and worn out items were shown in the stock register. Out of 41 sample hostels, annual repairs and replacements were reported to be undertaken in case of 3 hostels only. Due to non-repairs and non-replacements of amenities, 12 hostels have reported to have faced problems. Majority of the amenities provided are consumable in nature that needs regular repairs and replacements. Since this will be a regular feature, government may provide only the non-consumable items of amenities and the maintenance of consumable items may be left to the boarders. This will create a sense of care among boarders for their own items thereby increasing the longevity of consumable items.

8. Security Arrangements for Boarders:

In 41 sample hostels, the total availability of seats was 1640 against which 1627 boarders in occupation were found at the time of field study (during 2006-07). The district wise position of boarders in the sample hostels, home distance of the students from the schools and the security arrangements etc. is presented below in Table No: 4.1.10.

Table No: 4.1.10
Boarders in Sample Hostels during 2006-07 & Home Distance of Students

(Distance in Kms)

Sl.No	District	No of Hostels	Total Seats	Total Boarders	Watchman facility	Home-School dist.		Home-Hostel dist.	
						Min	Max	Min	Max
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	120	120	3	0	40	3	40
2	Kalahandi	3	120	120	3	0	12	1	12
3	koraput	9	360	358	9	0	50	1	50
4	Malkangiri	5	200	200	4	0	30	0	30
5	Nawarangpur	5	200	200	5	0	45	2	45
6	Nuapada	4	160	160	4	0	60	0	60
7	Rayagada	9	360	360	9	0	52	2	52
8	Subarnapur	3	120	109	3	0	60	1	60
	Total	41	1640	1627	40	0	60	0	60

Almost all the hostels have made night watchman arrangements that provide security to the boarders. The distance between School and home for students as well as boarders was found to vary between 0 to 60 Kms. It is good that students from a distance of 60 kms are coming to schools and are staying in hostels. In order to attract

more girl students from nearby villages with no school, allowing hostel facility to girls coming from the village where the school/hostel is situated, is not permitted. But the study revealed that in some schools of Malkangiri and Naupada districts, girls from the same village are also being provided hostel facility.

9. Routine and Discipline among Boarders:

The primary school boarders are mostly below the age of 10-12 years excepting few who have attained the age of 14-15 years. These boarders have left their parents and their home. They need some amount of child-hood care in the hostels. Since they all are girls, it would perhaps be better, if a lady teacher, available in the school, is put in charge as Hostel Superintendent so that the boarders can feel free to express their problems before the Superintendent without hesitation.

Small children are supposed to be homesick and also need routine health check up and immunisation. Information collected in this regard is presented in Table No: 4.1.11.

Table No: 4.1.11

Home Visits by Boarders and Health Facility Provided in Sample Hostels

Sl.No	District	Sample Hostels	Boarder's age		Code of Cond	Home visit of Boarders			Hostels Organising		
			Min	Max		Alone	Accompanied	Timely Return	Health Camps	Imm Camps	First Aid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	3	5	12	1	0	3	1	2	2	2
2	Kalahandi	3	5	14	1	0	3	0	2	1	2
3	Koraput	9	5	15	-	0	9	5	8	3	7
4	Malkangiri	5	5	12	-	1	4	2	4	2	5
5	Nawarangpur	5	5	12	-	0	5	2	4	0	5
6	Nuapada	4	5	14	1	0	4	1	3	2	4
7	Rayagada	9	5	13	-	0	9	7	6	1	9
8	Subarnapur	3	5	15	-	0	3	1	3	2	3
	Total	41	5	15	3	1	40	19	32	13	37

The above table reveals that in almost all the sample hostels, boarders are not allowed home visit alone but are accompanied by their relatives, which is good from safety and security point of view. It is also revealed that in 19 out of 41 hostels, the boarders return to hostel in time after enjoying their home visits. Non-return of boarders in time after enjoying home visit should be discussed in the Parents Teachers Association and necessary action must be taken to resolve this problem. Out of 41 only

3 sample hostels have written code of conduct that ensured discipline among the boarders.

As regards health care facilities, as many as 32 out of 41 sample hostels reported to have organised Health Camps for their boarders. However, Immunisation Camps have been organised in case of 13 of the sample hostels. First Aid facility is available in 37 of the sample hostels.

10. Payment of Stipend and Distribution of Uniforms:

Each boarder is to get a stipend of Rs.325/- per month consisting of Rs.258/- for food, Rs.42/- for miscellaneous expenses and Rs.25/- for toiletries for 10 months in a year. Table No: 4.1.12 presented below reveals the picture of regularity in payment of stipend to the boarders.

Table No: 4.1.12
Regularity in Payment of Stipend in Sample Hostels

Sl.No	District	Sample Hostels	Time-lag in receipt of Stipend in Months		
			0 month	1 month	2 months
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	3	2	1	-
2	Kalahandi	3	3	-	-
3	Koraput	9	9	-	-
4	Malkangir	5	5	-	-
5	Nawarangpur	5	4	1	-
6	Nuapada	4	4	-	-
7	Rayagada	9	8	1	-
8	Subarnapur	3	9	-	1
	Total	41	37	3	1

The table reveals that out of 41 sample hostels, payment of stipend is regular in case of 37 hostels. Only in case of 4 hostels, the payment is delayed by 1-2 months. Since the major portion of the stipend was meant for expenditure on food items, any delay may cause hardship to the students and the hostel authorities.

Each boarder is supposed to receive two pairs of uniform per year. A sum of Rs.42/- out of the monthly stipend of Rs.325/- is meant for miscellaneous expenses that includes Rs.17/- for uniform per month. The uniform component works out to Rs.170/- per year (from 10 month's stipend) which is spent towards two pairs of uniform or alternatively at a rate of Rs.85/- for one pair on an average.

Table No: 4.1.13 presented below gives the status of supply of uniform to boarders in case of 41 sample hostels and the information on the adequacy of food component.

Table No: 4.1.13
Adequacy of Food Component and Receipt of Uniform

Sl.No	District	Sample Hostels	Food Comp Adeq	Receiving Subsi Ration	Receiving 2 uniform Pairs	Hostels Received Uniform up to		
						2004-5	2005-6	2006-7
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	3	0	2	3	1	2	-
2	Kalahandi	3	1	3	3	-	3	-
3	Koraput	9	0	9	9	-	9	-
4	Malkangiri	5	0	0	5	-	-	5
5	Nawarangpur	5	0	0	5	-	4	1
6	Nuapada	4	1	4	3	-	4	-
7	Rayagada	9	1	2	9	-	1	8
8	Subarnapur	3	2	3	3	-	3	-
	Total	41	5	23	40	1	26	14

Out of 41 sample hostels, 5 of the hostels have reported that the food component of Rs.258/- out of the monthly stipend of Rs.325/- is adequate and the remaining have expressed that the food component of the stipend is not adequate. In the later case, the hostel authorities manage the food of the boarders by way of availing subsidised ration as well as augmenting some food items by way of raising kitchen gardens in the hostel premises.

As regards supply of two pairs of uniform, all sample hostels except one in Subarnapur district have reported that they have received two pairs of uniform per year. Out of 41 sample hostels, 14 of the hostels have received uniform regularly up to 2006-07; 26 hostels up to 2005-06 and one hostel up to 2004-05 by the time of field visit of the study team during December 2006 to March 2007. Supply of uniform in case of majority hostels seem to be regular. But one hostel in Balangir district did not receive uniform after 2004-05. This is an exceptional case of inordinate delay in supply of uniform to the boarders. Identifying hostels, where the time lag is more than one year is needed to resolve the issues and to ensure supply of uniform. The delay of over one year has not only hampered the interest of the existing boarders but also is a loss to students, who have passed out. Such delays are signs of poor administration.

11. Quality of Food:

In earlier section, it was revealed that the food component of the stipend is not adequate. However, food is managed by the hostel authorities by way of availing subsidised ration and raising kitchen garden in the hostel premises. However, the number of non-vegetable meals served per week will give some idea about the efficient management of food in the hostels and its quality. The number of times the sample hostels serving non-vegetable meals per week is presented below in Table No 4.1.14.

Table No: 4.1.14
Number of Times Non-vegetable Served per Week

Sl.No	District	Sample Hostels	Number of times non-veg Served per Week								Average
			0	1	2	3	4	5	6	>6	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	3	0	0	0	1	2	0	0	0	4
2	Kalahandi	3	0	0	1	0	1	1	0	1	4
3	koraput	9	0	0	0	1	5	2	0	2	4
4	Malkangiri	5	0	0	0	0	5	0	0	0	4
5	Nawarangpur	5	0	0	0	1	2	2	0	0	4
6	Nuapada	4	0	0	0	0	3	1	0	0	4
7	Rayagada	9	0	0	0	1	6	1	0	1	4
8	Subarnapur	3	0	0	0	0	2	1	0	0	4
	Total	41	0	0	1	4	26	8	0	2	4

The table reveals that all hostels served non-vegetable meals to the boarders. The minimum number of non-vegetable meals served per week is two. There is only one hostel serving two non-vegetable meals a week and similarly there are two hostels where the non-vegetable meals are served 6 or more times in a week. But service of 3 to 5 non-vegetable meals per week is common and service of 4 non-vegetable meals per week is most common in 26 out of 41 hostels. However, in all the districts, the average number of non-vegetable meals served per week in a hostel is 4. This gives an indication that although the food component of stipend is insufficient the hostel authorities try to manage the food component in a slightly better way.

12. Utility of Hostel:

The objective of establishing 400 hostels for ST and SC girls by way of constructing buildings, providing amenities and sanctioning stipend is to attract girls from the far flung villages, keep them in hostels, and provide them with lodging and boarding

facilities with the sole intention of ensuring their regular schooling over the five years of primary education. At the same time, they will learn various facets of life during their stay in the hostel. With a view to examine as to what extent they have acquired some good habits in course of their stay in the hostel, specific questions were posed to the hostel authorities and the response obtained in respect of sample hostels is presented in Table No: 4.1.15.

Table No: 4.1.15
Sample Hostels and Habit of their Boarders

Sl.No	District	Sample Hostels	Boarders Maintaining the Habit of			
			Cleanliness	School Attendance	Hostel Routine	Health & Hygiene
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	3	2	3	3	2
2	Kalahandi	3	1	3	3	1
3	koraput	9	0	9	0	-
4	Malkangiri	5	0	5	0	-
5	Nawarangpur	5	0	2	0	-
6	Nuapada	4	0	4	4	-
7	Rayagada	9	0	7	1	-
8	Subarnapur	3	1	3	3	1
	Total	41	4	36	14	4

The study reveals that cleanliness is maintained by boarders in case of 4 out of 41 hostels. In case of 36 hostels, boarders are attending schools regularly and in case of 14 hostels, boarders are maintaining hostel routine. Only in 4 hostels, boarders have been taught about health and hygiene. Attending schools is compulsory and mandatory for the boarders for which the percentage of boarders attending school is very high. But other aspects are not mandatory but obligatory. The boarders being small children cannot understand aspect of personal hygiene on their own. As such, greater responsibility lies on the hostel authorities / teachers to teach the boarders good habits of hostel life, especially in respect to health and hygiene.

As a result of establishment of hostels, the enrolment in schools has increased followed by increase in the number of pass-outs at the stage of class-V among the school students and the boarders as evident from the factual information collected from the 41 sample hostels during the period 2001-02 to 2005-06 in Table No 4.1.16.

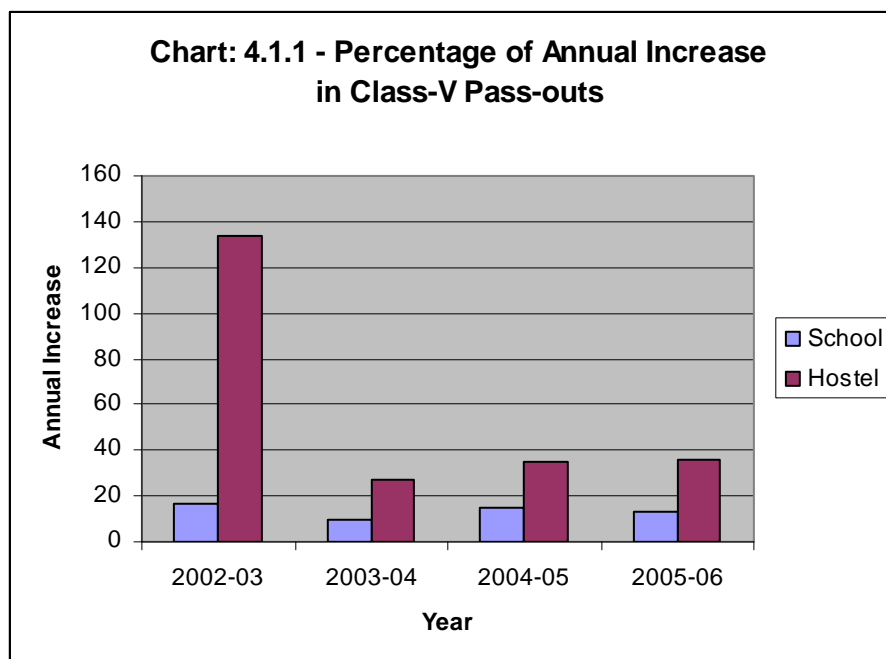
Table No: 4.1.16**District-wise Number of Pass outs at Class-V level among School Students and Hostel Girls**

Sl.No	District	Sample Hostels	2001-02		2002-03		2003-04		2004-05		2005-06	
			Sch	Host	Sch	Host	Sch	Host	Sch	Host	Sch	Host
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	3	48	2	54	10	46	9	66	21	75	48
2	Kalahandi	3	34	2	48	3	37	4	49	23	70	35
3	Koraput	9	112	25	141	56	153	72	191	95	245	123
4	Malkangiri	5	52	16	60	36	89	37	90	39	117	56
5	Nawarangpur	5	77	25	107	45	131	61	133	62	147	57
6	Nuapada	4	85	-	90	6	91	3	106	14	107	25
7	Rayagada	9	134	24	169	62	222	84	256	110	291	131
8	Subarnapur	3	198	-	194	2	174	10	195	13	181	47
	Total	41	740	94	863	220	943	280	1086	377	1233	522
	Annual Increase (%)	-	-	-	16.62	134.04	9.26	27.27	15.16	34.64	13.53	38.46

Sch: School Students. Host: Hostel Girls

The above table reveals that the number of pass outs at the stage of Class-V in the schools has gradually and steadily increased in case of each district. The pass outs at the same stage of Class-V among the boarders is increasing at a higher rate as compared to the school pass outs over the period from 2001-02 to 2005-06. It was observed earlier that enrolment has increased as a result of establishment of hostels under RLTA. Higher number of pass-outs at the stage of Class-V gives us to understand that there have been improvement in education among the boarders. This indicates that establishment of hostels under RLTA in KBK districts has immense utility for the SC and ST girls in the KBK districts.

A graphical representation of the percentage of annual increment in the pass out rates at the stage of Class-V among school students and the boarders in case of 41 sample hostels during the period 2002-03 to 2005-06 is presented Chart No: 4.1.1 for better appreciation.



The above chart gives a clear picture that there has been continuous annual increase in the number pass out at the primary stage of Class-V among the school students and the boarders during the period 2002-03 to 2005-06. More so, the annual increase in the Class-V pass outs among the boarders was more impressive, over all the school results. Thus, establishment of 40 seated hostels for SC and ST girls in KBK districts has been extremely useful for promotion of literacy.

13. Opinion of Boarders on Hostel Amenities:

Apart from collecting information on the sample hostels, steps were taken to elicit information from selected boarders about the programme and their perceived benefits under the programme. For this purpose, a total of 123 boarders, 3 each from 41 sample hostels, were interviewed and the derived result has been compiled as follows: -

13.1 Source of Awareness:

Information on the source of inspiration for the boarders to stay in the hostels and to continue their education was collected and the result obtained is presented in Table No: 4.1.17.

Table No: 4.1.17**Who Advised Girls to Stay in the Hostel**

Sl.No	District	Sample Hostels	Beneficiary Interviewed	Sources of Awareness of Boarders							
				Parents	Relatives	Block	Teachers	Paper	T.V.	Radio	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	3	9	5	0	0	0	0	0	0	4
2	Kalahandi	3	9	8	0	0	1	0	0	0	0
3	Koraput	9	27	17	2	0	0	0	0	0	8
4	Malkagiri	5	15	10	3	1	0	0	0	0	1
5	Nawarangpur	5	15	6	2	1	0	0	0	0	6
6	Nuapara	4	12	11	0	0	0	0	0	0	1
7	Rayagada	9	27	20	4	0	0	0	0	0	3
8	Subarnapur	3	9	9	0	0	0	0	0	0	0
	Total	41	123	86	11	2	1	0	0	0	23
	% to Total	-	-	70	9	2	1	0	0	0	18

The above table shows that the advice of parents and the relatives led children to stay in the hostel for study. The other sources have no such significant impact. Of course, the government officials and the media have their influence on parents to put their children in hostel for better study. The motivation for girl's education and their stay in the hostel should come from teachers after they join school.

13.2 Perceived Benefits:

The boarders were also questioned about the benefits of their hostel life and the results obtained thereof is presented below in Table No: 4.1.18.

Table No: 4.1.18**Benefits of Hostel Life as Perceived by Boarders**

Sl.No	District	Sample Hostels	Beneficiary Interviewed	Perceived Benefits of Boarders					
				Education	Food	Uniform	No travel	Discipline	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	9	9	9	9	6	7	1
2	Kalahandi	3	9	9	9	9	5	9	7
3	Koraput	9	27	26	27	27	5	7	4
4	Malkagiri	5	15	15	15	15	1	9	7
5	Nawarangpur	5	15	15	15	15	1	8	8
6	Nuapara	4	12	12	12	12	8	11	9
7	Rayagada	9	27	27	27	27	15	7	9
8	Subarnapur	3	9	9	9	9	5	9	5
	Total	41	123	122	123	123	41	67	50
	% to Total	-	-	99	100	100	33	54	41

As high as 99 per cent of the sample boarders have expressed that they are receiving education which is a benefit for them. Of course, food and uniform are considered as benefits by all boarders. As many as 33 per cent of the boarders have expressed the view that the hostel facility has reduced their traveling distance to the school from home for which they have been able to concentrate on study. Since the distance from school goes up to 60 kms, boarders from distant villages could not have otherwise availed the benefit of education in absence of hostel facility. Even though the boarders are small children, they have clearly expressed that they have been enjoying disciplined life in the hostel with good friend circle.

13.3 Stipend and Hostel Amenities:

The opinion on availability of stipend and other amenities during their hostel life as expressed by the sample boarders are presented in Table No: 4.1.19.

Table No: 4.1.19
Opinion on Stipend and Other Amenities by Boarders

Sl.No	District	Sample Hostels	Beneficiary Interviewed	Getting Stipend	Know Stpd Bk up	Stipend Adequate	Getting Uniform	Amenities shared		First Aid in Hostels
								Individually	Jointly	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	3	9	-	-	-	9	-	7	3
2	Kalahandi	3	9	3	-	-	9	2	9	3
3	Koraput	9	27	-	-	-	27	3	24	8
4	Malkagiri	5	15	-	-	-	15	-	15	5
5	Nawarangpur	5	15	1	-	-	15	3	12	5
6	Nuapara	4	12	-	-	-	12	-	12	4
7	Rayagada	9	27	-	-	-	27	1	26	8
8	Subarnapur	3	9	1	-	-	9	-	9	3
	Total	41	123	5	-	-	123	9	114	39
	% to Total	-	-	4	0	0	100	7	92	95

Rs. 235/- is provided as stipend to boarders. Out of 123 sample boarders, only 5 had knowledge about the stipend facility to the boarders. None of them have any knowledge about the break-ups of different components of the stipend. Since boarders are young children, it is not possible for them to know whether the stipend is adequate for them or not.

Almost all the sample boarders have expressed the view that they are receiving uniform. As regards, use of health & hygiene provided to the hostel, only 9 expressed to have been utilizing the same individually, whereas a large majority of 114 of the

boarders expressed to have been sharing most of the amenities jointly. Sharing amenities jointly is mainly due to non repair and non replacement of amenities provided to hostels as observed earlier. This will give rise to clash of interest and controversy apart from giving scope for spread of communicable diseases for which it is suggested that there should be provision of adequate amenities as well as repairs and replacements of the same on a regular basis.

13.4 Emphasis on Life Style:

Table No: 4.1.20 presented below is a compilation of the opinions of the sample boarders on the emphasis given on various services provided like education, food, clothing, cleanliness, environmental sanitation, gardening, games and sports, security and the use of cosmetics.

Table No: 4.1.20

Emphasis Given on Various Aspects of Hostel Life

Sl. No	District	Sample Hostels	Sample Boarders	Emphasis Given on different aspects by the Hostel Administration								
				Reading	Food	Clothing	Cleanliness	Environment	Gardening	Games	Security	Cosmetics
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	3	9	9	9	9	7	7	4	3	8	9
2	Kalahandi	3	9	9	9	9	9	6	4	1	9	9
3	Koraput	9	27	24	26	25	14	15	15	11	24	22
4	Malkagiri	5	15	15	15	15	8	9	6	3	11	15
5	N Rangpur	5	15	15	14	15	7	9	6	1	14	14
6	Nuapara	4	12	10	12	12	12	7	2	4	5	12
7	Rayagada	9	27	27	24	27	22	19	22	11	19	27
8	Subarnapur	3	9	9	9	9	9	8	6	9	4	9
	Total	41	123	118	118	121	88	73	65	43	94	117
	% to Total			96	96	98	72	59	53	35	76	95

It is revealing that the percentage of sample boarders acknowledging the emphasis given by hostel administration on different aspects of hostel life is quite encouraging i.e. the hostel authorities are emphasising on the various positive aspects of life style.

13.5 Essentiality of Hostels:

Out of 123 boarders only 22 opined that they would have attended school even without a hostel, while 6 boarders expressed that they would have stayed in the hostel

even if there were no stipend for them. The opinions of the boarders have been presented in Table - 4.1.21.

Table No: 4.1.21
Opinion of Boarders on Schooling and Hostel Accommodation

Sl.No	District	Sample Hostels	Beneficiary Interviewed	Would attend School Without Hostel	Would Stay in Hostel Without Stipend
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	3	9	3	0
2	Kalahandi	3	9	0	0
3	Koraput	9	27	0	0
4	Malkagiri	5	15	5	3
5	Nawarangpur	5	15	3	3
6	Nuapara	4	12	0	0
7	Rayagada	9	27	11	0
8	Subarnapur	3	9	0	0
	Total	41	123	22	6
	% to Total	-	-	18	5

It may be seen from the table that as many as 82 per cent of the boarders would not have attended school had there been no hostel. Thus, the programme of hostels for the SC and ST girls in KBK districts is an extremely useful programme, supplemented award of stipends to the student to bring the target groups into the main stream of development.

14. Opinion of Key Informants (K Is):

As explained in earlier sections, two knowledgeable persons from the locality in respect of each sample hostel aggregating to 82 persons in total were interviewed and their opinion on the effective functioning of the 40-seated hostels for SC and ST girls under the RLTA were obtained. The information so obtained from them have been discussed in the following paragraphs:

14.1 Broad Characteristics of K Is:

Table - 4.1.22 presented below gives the broad characteristics like the sex and educational status of the 82 Key Informants (K Is) interviewed.

Table No: 4.1.22
Characteristics of Key Informants

Sl	District	Sample Hostels	Key Informants	Sex of K Is		Education of K Is	
				Male	Female	Illiterate	Literate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	3	6	6	0	0	6
2	Kalahandi	3	6	6	0	0	6
3	Koraput	9	18	14	4	0	18
4	Malkangiri	5	10	9	1	0	10
5	Nawarangpur	5	10	10	0	0	10
6	Nuapada	4	8	8	0	0	8
7	Rayagada	9	18	15	3	0	18
8	Subarnapur	3	6	4	2	0	6
	Total	41	82	72	10	0	82

Of the 82 Key Informants (K Is) interviewed, 72 were males and the rest 10 were females. All the 82 persons interviewed were literate.

14.2 Sources of Awareness:

Table No: 4.1.23 gives the primary sources of awareness of the Key Informants on the SC and ST girl's hostels operating in their locality.

Table No: 4.1.23
Primary Sources of awareness of K Is on the RLTA Hostel

Sl.No	District	Sample Hostels	No of K Is	Sources of Awareness of K Is						
				Friends	Block	Teachers	Paper	T.V.	Radio	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	3	6	1	4	0	0	0	0	1
2	Kalahandi	3	6	0	1	5	0	0	0	0
3	Koraput	9	18	4	8	3	0	0	1	2
4	Malkangiri	5	10	0	3	3	2	1	1	0
5	Nawarangpur	5	10	4	2	4	0	0	0	0
6	Nuapada	4	8	0	4	4	0	0	0	0
7	Rayagada	9	18	0	9	7	2	0	0	0
8	Subarnapur	3	6	2	2	2	0	0	0	0
	Total	41	82	11	33	28	4	1	2	3
	% to Total	-	-	13	40	34	5	1	2	4

It is revealed, the block office and the school teachers are the primary sources of information about the operation of hostels for SC and ST girls in the locality. Except friends and relatives, other media do not appear to be contributing factor.

14.3 Objectives as Perceived by K Is:

The objectives of establishment of hostels for SC and ST girls as perceived by 82 Key Informants are presented in Table No: 4.1.24.

Table No: 4.1.24
Perception of K Is on the Objectives of RLTP Hostels

Sl.No	District	Sample Hostels	N of K Is	Objectives as Perceived by K Is					
				Enrolment	Free food	Free uniform	Discipline	Gender Desp.	Don't know
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	6	4	4	1	0	2	0
2	Kalahandi	3	6	4	3	0	0	2	0
3	Koraput	9	18	14	7	3	1	2	0
4	Malkangiri	5	10	10	5	4	4	0	0
5	Nawarangpur	5	10	9	7	6	6	6	0
6	Nuapada	4	8	7	4	0	0	3	0
7	Rayagada	9	18	15	4	4	4	8	0
8	Subarnapur	3	6	6	1	1	1	1	0
	Total	41	82	69	35	19	10	24	0
	% to Total	-	-	84	43	23	12	29	0

While 84 per cent of the Key Informants perceive that the programme aims at increasing enrolment and imparting education to SC and ST girls, by way of providing boarding facilities to them, about 43 per cent opine that the hostels are set up to provide them with food. About 23 per cent think that the purpose is also to provide free uniform etc. However, they are yet to realise that this programme will in the long run help reducing the gender disparity presently existing in the education front in the KBK region. This aspect has to be highlighted.

14.4 Benefits as Perceived by K Is:

Information collected from the Key Informants on their perception about the benefits derived by the boarders on account of their stay in the hostel is presented below, vide Table - 4.1.25.

Table No: 4.1.25

Benefits of RLTAH Hostels as Perceived by the K Is

Sl.No	District	Sample Hostels	No of K Is	Benefits as Perceived by K Is					
				Edn	Food	Uniform	Less Travel	Discipline	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	6	6	6	6	6	6	1
2	Kalahandi	3	6	6	6	6	3	6	5
3	Koraput	9	18	17	18	18	7	11	2
4	Malkangiri	5	10	9	9	9	3	6	6
5	Nawarangpur	5	10	10	10	10	1	4	0
6	Nuapada	4	8	6	8	8	3	8	5
7	Rayagada	9	18	18	18	18	10	6	0
8	Subarnapur	3	6	6	6	6	5	6	0
	Total	41	82	78	81	81	38	53	19
	% to Total			95	99	99	46	65	23

As high as 95 per cent of the Key Informants perceive education as the benefit for the SC and ST girls as a result of hostel programme. At the same time, 99 per cent of them have expressed food and uniform to be the benefit for the boarders on account of the said programme. As many as 46 per cent of the Key Informants opined that the hostel programme has reduced the problem of traveling the distance between home and school of the students and 65 per cent opined that disciplined life is a benefit of hostel life.

14.5 Emphasis in Hostel Life:

Opinion of the Key Informants collected on the emphasis given on various aspects of hostel life is presented in a tabular form vide Annexure-4.1.2. This annexure reveals that more than 70 per cent of the Key Informants opined that emphasis is given on security, discipline, cooperation, education, food, uniform and cleanliness. More than 55 per cent of the K I opined that emphasis is given on environmental sanitation and gardening. As regards games and sports, the opinion of the KIs on games and sports is not encouraging. Since environmental sanitation, gardening, games and sports keep the children mentally free and physically sound, hostel authorities should give overwhelming emphasis on these aspects.

14.6 Schooling of Boarders:

A pertinent question was asked to the key informants regarding relevance of providing hostel facility and extending stipend to the boarders in ensuring their continued schooling. The result obtained is presented in Table No: 4.1.26.

Table No: 4.1.26
Opinion of the K Is on the Schooling of Boarders

Sl.No	District	Sample Hostels	No of K Is	Boarders could attend School without Hostel	Boarders could stay in Hostel without Stipend
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	3	6	1	0
2	Kalahandi	3	6	0	0
3	Koraput	9	18	1	1
4	Malkangiri	5	10	2	0
5	Nawarangpur	5	10	0	0
6	Nuapada	4	8	0	0
7	Rayagada	9	18	4	0
8	Subarnapur	3	6	0	0
	Total	41	82	8	1
	% to Total	-	-	10	1

It is pertinent to note that only 8 out of 41 Key Informants have expressed that the boarders could attend school even without hostel facility. Alternatively in 90 per cent cases, they expressed that boarders would not have been attending school had there been no hostel facility. Furthermore, only 1 out of 41 Key Informants opined that boarders would have stayed in hostel even without any provision of stipend. Alternatively, in 99 per cent cases the Key Informants opined that the boarders would not have remained in the hostel had there been no provision for payment of stipend. In short, establishment of hostels for SC and ST girls and grant of stipend to them have tremendous positive effect on enrolment of SC and ST girls in primary schools. As such, hostel and stipend can be treated as the key inputs to the furtherance of primary education among SC and ST girls in the KBK region.

15. Opinion of Programme Managers:

Funds for construction of 40 seated girls' hostels in the KBK region were provided under the programme of RLTA. Construction activities in a district were looked into by the Project Administrator (P A), ITDA where there is one and by the DRDA where there was no ITDA. Soon after construction activities were over, the boarders handed over the hostel buildings to the school authorities for use. However, efficient management of the primary schools as well as sound administration of the

hostels in a district reST upon the District Welfare Officer of the district. In view of this, views and opinion of the District Welfare Officers on the effective functioning of the hostels established under the programme of RLTA P and their usefulness were obtained. Interactions were made with all the 8 District Welfare Officers of the KBK region to get their views and opinion which have been presented in the following paragraphs.

15.1 Enrolment in Schools and Hostels:

During 2006-07, the number of SC and ST primary schools operating in the KBK region was about 467. Apart from 400 girls hostels under the programme of RLTA P, there were 246 girls hostels established in the KBK region through funds from other sources. The district-wise details of schools, hostels with seats in schools and hostels and the position of admission of students and boarders are given in Table No: 4.1.27.

Table No: 4.1.27
District wise number of SC / ST Primary schools & Hostels

Sl.No	District	Primary Schools	Girls Hostels			Seats in 400 RLTA P Hostels			Boarders in RLTA P Hostel	Occu pancy (%)
			RLTA P	Non-RLTA P	Total	Original	Revised	Reported		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	23	25	12	37	1000	1175	1240	1177	95
2	Kalahandi	26	25	7	32	1000	1175	1000	1000	110
3	Koraput	196	105	91	196	4200	4830	4200	4200	100
4	Malkangiri	45	53	64	117	2120	2440	2120	2120	100
5	Nawarangpur	56	56	45	101	2240	2576	2240	2240	100
6	Nuapada	36	36	11	47	1440	1656	1440	1440	100
7	Rayagada	75	92	14	106	3680	4235	5400	4561	84
8	Subarnapur	10	8	2	10	320	375	320	320	100
	Total	467	400	246	646	16000	18460	17960	17058	95

Although intake in RLTA P hostels is 40 only, the same in respect of other hostels is of the order of around 60. Although the total number of seats under the RLTA P hostels was originally envisaged as 16000 at the rate of 40 per hostel, the State Government decided to enhance the seats from 16000 to 18460 from the academic session 2005-06. But as reported by the DWOs, the total number of seats under 400 RLTA P hostels is 17960. While 6 districts have reported the number of seats as per the original norm of 40, the district of Balangir has reported 1240 seats and the district of Rayagada has reported 5400 seats which neither confirm to the number of seats as originally envisaged nor as per the number as revised by Government. None of the districts have reported the revised number of seats in the hostel during 2006-07. As it appears, due to some

reason or other, Government's decision to enhance the number of seats under the RLTAH hostels has not been given effect to at the district levels. Higher number of admissions to hostels is most welcome. However, if at all Government decides to enhancement of seats, necessary provision of infrastructure, amenities and stipend should be made in advance in the absence of which it may adversely affect the education of the girls and the education system at large.

15.2 Hostel Administration:

In course of field visit, it was revealed that while certain hostels are running smoothly certain others have some problems or other. The views and opinion of the 8 DWOs obtained on various administrative aspects on the functioning of RLTAH hostels in their districts is presented below in a tabular form vide Table No: 4.1.28.

Table No: 4.1.28

Administrative Aspects Relating to RLTAH Hostels

Sl.No	District	Total RLTAH Hostels	Stipend Regular (Yes/No)	2 Uniforms Regular (Yes/No)	Hostel for Hqs Girls (Yes/No)	To School No Hostel (Yes/No)	In Hostel No Stpd (Yes/No)	Food Comp Adequate (Yes/No)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	25	Yes	Yes	Yes	-	-	-
2	Kalahandi	25	Yes	Yes	Yes	-	-	-
3	Koraput	105	Yes	Yes	-	-	-	-
4	Malkangiri	53	Yes	Yes	Yes	Yes	-	-
5	Nawarangpur	56	Yes	Yes	Yes	-	-	Yes
6	Nuapada	36	Yes	Yes	Yes	-	-	-
7	Rayagada	92	Yes	Yes	Yes	Yes	-	-
8	Subarnapur	8	Yes	Yes	-	-	-	Yes
	Total	400	8 dist	8 dist	6 dist	2 dist	Nil	2 dist

One and all the DWOs have expressed the view that stipend is being paid to the boarders regularly. Only two out of 8 DWOs have expressed that the food component of the stipend is adequate. It is, therefore, necessary to take a fresh look on the present value of stipend being paid to the boarders. Although all the DWOs have expressed that two pairs of uniform are issued to the boarders regularly, it was observed in course of the field study that uniform was issued in case of one hostel in Balangir district up to 2004-05. It is, therefore, expedient for the administration to ensure timely issue of uniform to all the boarders. In 6 districts, girl students of the villages where the school is

situated, also admitted as boarders. But this is not permissible. Care should, therefore, be taken by the administration to stop this practice and to create adequate awareness among parents of outskirt villages to send their daughters to schools and keep them in hostels. All the 8 DWOs opined that had there been no provision of stipend, girls would not have preferred to stay on hostels. As regards school attendance of girls, only two DWOs expressed that they would have attended schools even without hostel facilities and 6 other DWOs replied in negative. In the former two districts, they are admitting headquarter girl students as boarders. For such boarders attending school without hostel would not have created any problem, whereas staying in hostels without stipend will rather be troublesome expensive and discriminatory for other entitled boarders. Non-the less, establishment of hostels for SC and ST girls in the KBK region under the RLTA has been an extremely useful programme.

15.3 Quality of Output:

Although hostels have been established and girls have been staying in these hostels, it is important to know as to what extent the hostel management is effective and smooth and how best the boarders have acquired better practices and values of social life. To this end, a few questions were asked and the overall impression of the DWOs in respect of the hostels operating in their district as a whole was obtained which is presented below in Table No: 4.1.29.

Table No: 4.1.29
Satisfaction of Authorities on Various Aspects of Hostel Administration

Sl.No	District	Total RLTA Hostels	Food Quality (Yes/No)	Regular Routine (Yes/No)	Cleanliness Boarders (Yes/No)	Environ. Sanitation (Yes/No)	Reading Habit (Yes/No)	Hostel Discipln (Yes/No)	Overall Admn (Yes/No)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	25	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Kalahandi	25	-	Yes	Yes	Yes	Yes	Yes	Yes
3	Koraput	105	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	Malkangiri	53	-	Yes	Yes	Yes	-	-	Yes
5	Nawarangpur	56	Yes	Yes	Yes	Yes	Yes	Yes	-
6	Nuapada	36	-	Yes	Yes	Yes	-	Yes	Yes
7	Rayagada	92	-	Yes	-	Yes	-	Yes	Yes
8	Subarnapur	8	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Total	400	4 diST	8 diST	7 diST	8 diST	5 diST	7 diST	7 diST

It is revealed from the above table that the quality of food served to the boarders in 4 districts is good. The rest of the districts should, therefore, take care to see that the quality of food served to small children, who have remained in the hostel leaving their parents at home is improved and nutritious. It is good that in case of all the 8 districts boarders are abiding the hostel routine. While boarders in 7 of the districts are maintaining cleanliness, only in case of one district it is not so. As regards environmental sanitation, all the hostels in 8 districts are keeping the surroundings neat and clean. Although the boarders in all the districts are regular in observing the hostel routine, they have developed good reading habit in case of 5 districts and in case of rest of the three districts it is not so satisfactory. Due discipline among the boarders is maintained in case of 7 districts and in respect of one district it is not. On the whole, in respect of 7 districts the DWOs have expressed their overall satisfaction on the qualitative performance of the hostels and the boarders residing in these hostels. In any case, the hostel authorities should give due emphasis on the quality of food served to boarders, maintenance of hostel routine and reading habit by boarders, maintenance of cleanliness among the boarders, environmental sanitation of the hostel surroundings, gardening, games and sports and above all providing security and maintenance of discipline among the boarders.

15.4 Utility of Hostels:

The long-term objectives of the hostel programme are to enhance enrolment and retention of girls in primary schools. Greater the availability of seats in hostels higher shall be the enrolment and retention in schools. In support of this philosophy the number of operating hostels, availability of seats and the actual strength of boarders in each of the academic session from 2001-02 to 2005-07 in respect of each of the districts have been collected and presented below in Table No: 4.1.30.

Table No: 4.1.30

Utilization of RLTA Hostels during 2001-02 to 2006-07

Sl.No	District	2001-02			2002-03			2003-04		
		Hostels	Seats	Boarders	Hostels	Seats	Boarders	Hostels	Seats	Occupied
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	25	1000	1000	25	1000	1000	25	1000	1000
2	Kalahandi	24	960	960	25	1000	1000	25	1294	1294
3	Koraput	102	4200	3864	105	4200	4200	105	4200	4200

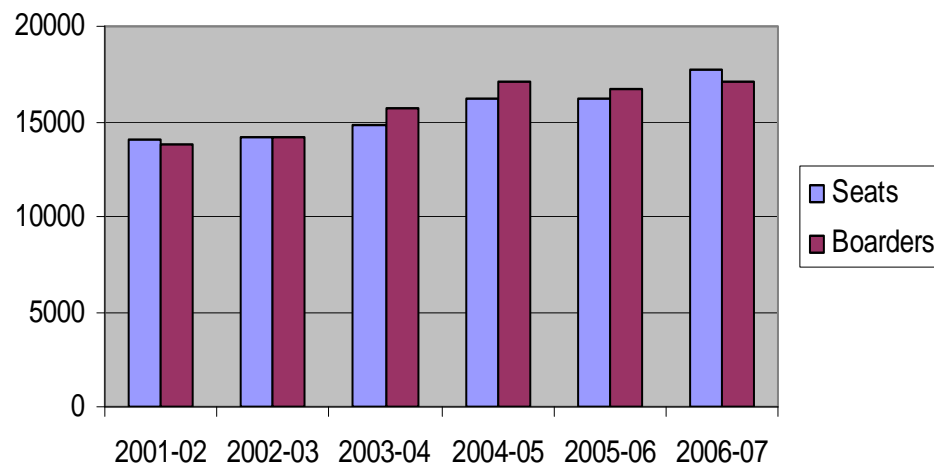
4	Malkangiri	53	2120	2120	53	2120	2120	53	2140	2140
5	N Rangpur	45	1800	1800	45	1800	1800	56	2240	2240
6	Nuapada	0	0	0	0	0	0	0	0	0
7	Rayagada	92	3680	3680	92	3680	3680	92	3680	4580
8	Subarnapur	8	320	320	8	320	320	8	320	320
	Total	249	14080	13744	353	14120	14120	364	14874	15774
	Occupancy			98%			100%			106%

Table No: 4.1.30 (contd.....)

Sl.	District	2004-05			2005-06			2006-07		
		Hostels	Seats	Occupied	Hostels	Seats	Occupied	Hostels	Seats	Occupied
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	Balangir	25	1240	1229	25	1240	1229	25	1240	1177
2	Kalahandi	25	1000	1000	25	1000	1000	25	1000	1000
3	Koraput	105	4200	4200	105	4200	4200	105	4200	4200
4	Malkangiri	53	2120	2120	53	2120	2120	53	2120	2120
5	N Rangpur	56	2240	2240	56	2240	1240	56	2240	2240
6	Nuapada	36	1440	1440	36	1440	1440	36	1440	1440
7	Rayagada	92	3680	4594	92	3680	4199	92	5400	4561
8	Subarnapur	8	320	320	8	320	320	8	320	320
	Total	400	16240	17143	400	16240	16748	400	17960	17058
	Occupancy			106%			103%			95%

The programme of establishing 400 hostels for SC and ST girls was launched in 2001. These 400 hostels were completed in phases and all of them were made operational by 2004-05. Utilization of seats in the hostels is more than 95 per cent in all the years and it has gone beyond 100 per cent during the years 2003-04, 2004-05 and 2005-06. This indicates that there is higher demand for hostel accommodations among SC and ST girls. For better appreciation, the number of seats available in hostel and the number of boarders in each session has been graphically presented below in Chart No: 4.1.2.

Chart No: 4.1.2 - Enrolment in Hostels



SECTION – 2

MOBILE HEALTH UNITS IN KBK DISTRICTS UNDER RLTA

1. Service Area:

The KBK region comprises of both tribal and non-tribal blocks. Out of 80 blocks 44 are tribal blocks and the rest 36 are non-tribal blocks. For the study, MHU samples have been taken from 14 tribal and 3 non-tribal blocks. The villages and the population served by the sample MHUs are presented below vide Table No: 4.2.1.

Table No: 4.2.1

Service Area of Sample MHUs

Sl. No	District	Total Blocks	Total MHUs	Sample Blocks		Coverage of Sample MHUs.		
				No	Popn.	No	Vill.	Popn
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	14	15	3	207184	3	278	182000
2	Kalahandi	13	14	3	391834	3	362	270840
3	Koraput	14	15	3	183786	3	205	108267
4	Malkangiri	7	10	2	133736	2	171	70406
5	Nawarangpur	10	11	2	121337	2	223	113563
6	Nuapada	5	6	1	117082	1	92	93192
7	Rayagada	11	12	2	112369	2	364	85656
8	Subarnapur	6	7	1	52594	1	41	24687
	Total	80	90	17	1319922	17	1736	948611

The selected 17 sample Mobile Health Units are providing service to 1736 villages, at an average of 102 villages per MHU. Similarly the population served per MHU comes to 55801 as against an average population of 77642 in a sample block covering 72 percent of population of a block served by the MHU. The remaining 28 per cent of the block population get their medical services from other nearby medical Institutions e.g. PHC, CHC, MAC, and SHC etc.

2. Village Visits:

The sole objective of the establishment of MHUs is to provide services at the doorstep in inaccessible and outskirt areas. Accordingly, the MHUs are supposed to hold clinics at village levels and visit villages at least 20 days a month, 10 days in each fortnight and make at least two night halts in each village per month. Moreover, each MHU has to visit each of the assigned village twice a month - once in the first fortnight and once in second fortnight respectively. Since the number of villages assigned to a MHU is more than 100 on an average, the MHUs may hold clinics for a group of villages by clubbing them together. In case of any default in holding clinics for certain villages during a fortnight, the said villages should be covered on priority basis during the subsequent fortnight. Information on the modus operandi of the sample MHUs in the districts were collected and presented in Table No: 4.2.2.

Table No: 4.2.2
Modus of Operandi of Sample MHUs.

Sl. No	District	Sample MHUs	Visiting all Villages a month	Freq. of village visits by MHUs per month		Holding Clinics on Holidays	Max Clinic Distance from villages (Km)
				Once	Twice		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	3	2	2	1	3	25
2	Kalahandi	3	2	3	-	3	6
3	Koraput	3	3	-	3	3	5
4	Malkangiri	2	2	-	2	2	2
5	Nabarangpur	2	2	-	2	2	4
6	Nuapada	1	-	1	-	1	1
7	Rayagada	2	1	2	-	2	1
8	Subarnapur	1	1	-	1	1	1
	Total	17	13	8	9	17	25

It was reported that 13 (76%) out of 17 sample MHUs were visiting all the villages allotted to them each month and the rest 24 per cent were not able to visit all villages assigned to them in every month. It was also reported that 9 (53%) of the sample MHUs were visiting their villages twice a month and the rest of 8 (47%) were visiting their villages once a month. All the 17 sample MHUs reported to have been working on holidays to cope with the work-load. When a mobile clinic is held in a particular village for a group of villages, other villagers have to come to this village to avail the services.

The maximum distance covered for coming to the mobile clinics was reported to be around 25 kms. Such patients or their attendants have to suspend all other activities for the day to attend the clinic.

3. Staff Position:

Coming to the staff position in the MHUs, the information collected from the field in respect of the 17 sample MHUs is presented in Table No: 4.2.3. In this table the physical position of the staff which are crucial to the operation of the MHUs has been shown.

Table No: 4.2.3
MHUs according to Staff Position

Sl.No	District	Sample MHUs	MHUs with the Staff			
			M O	Pharmacist	H W (F)	All three
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	3	3	3	2	2
2	Kalahandi	3	3	3	3	3
3	Koraput	3	3	3	3	3
4	Malkangiri	2	2	2	2	2
5	Nawarangpur	2	2	2	2	2
6	Nuapada	1	1	1	1	1
7	Rayagada	2	2	2	2	2
8	Subarnapur	1	1	1	1	1
	Total	17	17	17	16	16

The table reveals that the entire 17 sample MHUs have Medical Officers and Pharmacist. However, one MHU under Balangir district sample has no Female Health Workers.

The Medical Officer of the MHU is the leader of the mobile team who guides the team for efficient delivery of health care services to the people. He should, therefore, be well qualified and adequately experienced to run the MHU under arduous conditions. The educational qualification of the 17 Doctors in position in sample MHUs is presented in Table No: 4.2.4.

Table No: 4.2.4
Qualification of Doctors in Sample MHUs

Sl.No	District	Sample MHUs	Qualified Doctors in		
			Allopathic	Ayurvedic	Homeopathic
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	3	3	0	0
2	Kalahandi	3	2	1	0
3	Koraput	3	0	3	0
4	Malkangiri	2	0	2	0
5	Nawarangpur	2	0	0	2
6	Nuapada	1	1	0	0
7	Rayagada	2	1	1	0
8	Subarnapur	1	1	0	0
	Total	17	8	7	2

As observed only 8 out of 17 Medical Officers are allopathic Doctors, 7 are Ayurvedic and 2 are Homeopaths. Although all are equally qualified and authorized, preferably allopathic doctors should be kept in charge of the MHUs, as they have expoused servicess on modern method of treatment such as immunizations etc. Of course, doctors from other streams can also attend to their jobs in exigency.

4. Equipment and Medicines:

For effective running of MHUs both transport, medical equipments and medicines are most important. Table No: 4.2.5 showed the availability of medicines, instruments and equipments in the sample MHUs.

Table No: 4.2.5
Sample MHUs with Vehicle Instruments, Equipments and Medicines

Sl.No	District	Sample MHU	Vehicle		B P Instmt	Stesth-oscope	Micro-scope	Slides	Rapid Sticks	Medi-cines
			Govt	Pvt						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	3	1	3	3	3	1	3	1	3
2	Kalahandi	3	-	3	3	3	3	3	3	3
3	Koraput	3	1	3	3	3	3	3	3	3
4	Malkangiri	2	-	2	2	1	1	2	2	2
5	Nabarangpur	2	-	2	2	2	2	2	2	2
6	Nuapada	1	1	1	1	1	1	1	1	1
7	Rayagada	2	1	2	2	2	2	2	2	2
8	Subarnapur	1	1	1	1	1	1	1	-	1
	Total	17	5	12	17	16	14	17	14	17

All the 17 sample MHUs had a vehicle each, whether Government or hired with provision of BP instruments, slides and requisite medicines. However, there was no stethoscope in case of one MHU and no microscope in case of 3 MHUs. While no Doctor moves without a stethoscope, the need of a microscope for a clinic in Malaria prone region requires no emphasis as collection of blood slides without having a microscope for examining the blood will be meaningless.

5. Adequacy of Village Visits:

Adequacy of village visits is adjudged by the coverage of all villages assigned to a MHU in each month and ensuring at least two visits to each village either individually or by way of grouping villages. The MHUs, where the village visit was inadequate and the reasons for inadequacy as per the information collected from the field are presented in Table No: 4.2.6.

Table No: 4.2.6

Inadequate Village Visits by Sample MHUs and the Reasons.

Sl.No	District	Sample MHUs	Of which Inadequate visits	Inadequate Village Visits due to lack of					
				Staff	Transport	Fuel	Equipment	Medicine	Funds
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	3	0	0	0	0	0	0	0
2	Kalahandi	3	1	0	1	1	0	0	0
3	Koraput	3	2	0	2	1	0	1	1
4	Malkangiri	2	0	0	0	0	0	0	0
5	Nabarangpur	2	0	0	0	0	0	0	0
6	Nuapada	1	0	0	0	0	0	0	0
7	Rayagada	2	2	0	1	2	0	0	0
8	Subarnapur	1	0	0	0	0	0	0	0
	Total	17	5	0	4	4	0	1	1

Out of 17 sample MHUs, 5 have expressed the view that the village visits have been in-adequate. The reasons for inadequate village visits are lack of requisite number of staff, lack of transport, fuel, equipments, medicines and funds are main constraint. Field information revealed that lack of staff and equipment was not only a reason for inadequate village visits. But also lack of adequate infrastructure inputs - such as fuel, medicine and funds are the main hurdles for smooth functioning of MHUs.

6. Other Activities:

In addition to improvement cum care in the health status of the KBK region at the doorstep, other activities performed by the MHUs are school visits, organisation of health camps, providing relief during calamities and ORS distribution. Information over a period of 8 years from 1998-99 to 2005-06 in respect of each of the 17 sample MHUs were collected and analyzed at annexure 4.2.1. Since the years of operation of each of the sample MHU are different, for the sake of analysis a new term, “MHU Year” has been used, where one MHU operating for one year accounts for one MHU year.

Annexure-4.2.1 reveals that irrespective of the coverage of all the villages assigned to a MHU and the number of visits to a village during a month, the average number of tour days during a month comes to 20 in respect of 5 districts, less than 20 in respect of 3 districts and the overall average comes to 20 per MHU. As regards night halts, none of the districts comply with the minimum requirement of at least two night halts per month. The number of school visits varies between 1 to 8 per month per MHU and the annual distribution of ORS is 833 (minimum 200 and maximum 2174) per MHU. While distribution of ORS is situation specific, school visits by MHUs should be a part of their routine. Apart from holding mobile clinics at village levels, the MHUs have also been associated with other activities like organisation of Health Camps, Immunisation Camps, Family Welfare Camps, and rendering health care services during calamities as and when required. It is obvious that occurrence of calamities will vary from district to district annually with the range 0-8 but no such valid reason for its explanation.

7. Support Services:

It is observed that various support services are made available to the MHUs for their effective functioning and delivery of services at door steps. But the utility of MHUs will be realised if served in time. Information collected in this regard is presented in Table No: 4.2.7.

Table No: 4.2.7**Observance of Timeliness in Provision of Support Services.**

Sl.No	District	Sample MHUs	MHUs where Timely Provisions are made in respect of					
			Van	Staff	Medicines	Equip	Funds	Decisions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	3	3	3	3	2	2	3
2	Kalahandi	3	3	3	2	1	1	3
3	Koraput	3	3	3	3	2	0	3
4	Malkangiri	2	2	2	2	1	0	2
5	Nawarangpur	2	2	2	2	1	0	2
6	Nuapada	1	1	1	1	1	0	1
7	Rayagada	2	2	2	2	0	0	2
8	Subarnapur	1	1	1	1	1	1	1
	Total	17	17	17	16	9	4	17

It is good that in almost all cases of 17 sample MHUs, provision of staff and mobile van was made in time. Supply of medicines was delayed in case of one MHU, equipments in case of 8 MHUs, inadequate funds in 13 MHUs and no delay in communicating decisions of all the MHUs. Unless adequate support services are made in time, there is every likelihood that it will affect effective functioning of the MHUs even if resources are provided and utilised as per requirements.

8. Elementary Problems:

In course of interaction of the study team with the Medical Officers in charge of the MHUs and field observation made by them, certain elementary problems experienced by the MHUs were noticed as listed below. Provision of these amenities and facilities will help improving the effective functioning of the MHUs.

- i. Provision of adequate staff
- ii. Supply of modern equipments
- iii. Supply of good quality medicines
- iv. Supply of furniture for camps
- v. Supply of medicines as per local need
- vi. Ambulance and telephone facility for emergent cases.
- vii. Microscope training to the PharmaciST.

viii. A display board in the villages on MHU programme

ix. Accommodation and storage facility for MHUs

9. Opinion of Households:

Apart from collecting information on the sample MHUs, steps were also taken to elicit information from selected households to know their views on the functioning of MHU and their perceived benefits under the programme. For this, total 85 households were selected comprising of 51 beneficiaries and 34 non-beneficiaries. All the 85 households were interviewed and their views have been discussed in the following paragraphs;

9.1 Characteristics of Respondents:

Table No: 4.2.8 below gives the details of the 85 household heads who were interviewed.

Table No: 4.2.8
Characteristics of Households Respondents Interviewed.

Sl.No	District	Sample MHUs	Sample HHs	Of whom BPL	HH Category		Education		Sex	
					Bene	Non-bene	Illiterate	Literate	Male	Female
(1)	(2)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	3	15	9	9	6	5	10	12	3
2	Kalahandi	3	15	12	9	6	5	10	12	3
3	Koraput	3	15	11	9	6	1	14	13	2
4	Malkangiri	2	10	7	6	4	4	6	7	3
5	Nabarangpur	2	10	9	6	4	1	9	9	1
6	Nuapada	1	5	4	3	2	2	3	3	2
7	Rayagada	2	10	6	6	4	4	6	9	1
8	Subarnapur	1	5	3	3	2	2	3	5	0
	Total	17	85	61	51	34	24	61	70	15

Of the total 85 households, 61 (72%) were BPL households, 24 (28%) of them were illiterate and 70 (82%) of them were male members. Thus the selected sample households were a good mix of different categories of respondents.

9.2 Source of Awareness:

Table No: 4.2.9 below gives the information on the awareness of the sample households towards functioning of MHUs in their locality and the nature of services rendered by them.

Table No: 4.2.9

Awareness of HHs on the Services Provided by MHUs

Sl.No	District	Sample HHs	Aware of MHU	Service Provided to		Availing Tmt
				Individuals	Community	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	15	13	13	4	9
2	Kalahandi	15	13	13	4	9
3	Koraput	15	12	12	4	8
4	Malkangiri	10	8	8	1	6
5	Nabarangpur	10	8	8	0	6
6	Nuapada	5	5	5	0	4
7	Rayagada	10	8	8	1	6
8	Subarnapur	5	4	4	0	3
	Total	85	71	71	14	51

The table reveals that 71 (84%) out of 85 households are aware that MHUs are operating in their locality and are providing treatment to individual patients whereas 14 (16%) of the total 85 sample households are aware that MHUs are organising community health care programmes. As many as 51 (60%) of the sample households are availing treatment through the MHUs.

9.3 Service Provided:

Based on the knowledge of the beneficiary households, the information on the various kinds of services provided by the MHUs in their locality as collected through the 51 sample beneficiary households is presented below in Table No: 4.2.10.

Table No: 4.2.10
Opinion of Households on Various Services Provided by MHUs

Sl.No	District	Sample HHs	Attend Emerg.	Charge Fees	Follow Ups	Children < 1 Yr		Children < 5 Yr		Pregnant Mothers		
						Total	Immu	Total	Immu	Total	Immu	Med
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	9	1	0	5	0	0	10	10	1	1	1
2	Kalahandi	9	0	0	2	2	2	4	4	0	0	0
3	Koraput	9	6	0	1	1	1	7	7	0	0	0
4	Malkangiri	6	5	0	3	0	0	4	4	0	0	0
5	Nabarangpur	6	4	1	1	0	0	4	4	0	0	0
6	Nuapada	3	1	0	0	1	1	4	4	1	1	1
7	Rayagada	6	5	0	1	0	0	2	2	2	1	1
8	Subarnapur	3	0	0	0	0	0	2	2	0	0	0
	Total	51	22	1	13	4	4	37	37	4	3	3

Of the total 51 sample beneficiary households interviewed, 22 households expressed that the MHUs are capable of attending emergency cases; one household said that MHUs charge fees from patients and 13 households said that MHUs take follow up of patients. There were 4 children below the age of one and 37 children below the age of 5 years in the 85 sample households and all of them were reported to have been immunised. One hundred per cent immunisation was unbelievable which was further strengthened because of the respondent's failure to report the various doses and diseases against which the children were immunised. Since there were no means to verify the authenticity of statements made by respondents (as they could not show the Immunisation card), achievement of cent per cent immunisation could be due to sampling aberrations and or inadequate conceptual clarity among the respondents and hence, can not be generalised for the whole region. But out of 4 pregnant women in 85 sample households, only 3 were reported to have been vaccinated and given iron supplements. This gives to understand that unless a patient comes to a clinic or a camp organised for specific purposes, spontaneous netting of events, attendance to emergent cases, and follow up of patients on the part of the MHUs etc do not appear to be encouraging.

9.4 Quality of Services:

Care was also taken to elicit information from the 51 beneficiary households on the quality of services rendered by the MHUs. The response received from them has been presented in Table No: 4.2.11.

Table No: 4.2.11
Quality of Services Provided by MHUs

Sl. No	District	Bene HHs	Door Step Service	Drugs Adeq	MHU Coop.	Timely Tmt	Good Follow-ups	To Rich / Infl.	Overall Good
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	9	8	9	8	3	3	2	6
2	Kalahandi	9	9	8	5	7	2	3	7
3	Koraput	9	5	8	3	5	2	2	5
4	Malkangiri	6	6	6	5	6	3	1	5
5	Nabarangpur	6	4	6	3	2	2	1	5
6	Nuapada	3	2	3	3	2	1	2	2
7	Rayagada	6	3	6	6	3	6	6	6
8	Subarnapur	3	2	2	1	0	0	0	0
	Total	51	39	48	34	28	19	17	36
	% to Total		76	94	67	55	37	33	71

Of the total 51 beneficiary households, 39 expressed that they are getting service at their doorstep because of establishment of the MHUs. While 48 households said that supply of medicine was adequate, 34 expressed the view that the officers in MHUs were proficient, 28 said to have received timely treatment, 19 opined that the follow up of patients was good and 17 of them said that the MHUs are attaching more importance to rich and influential persons. However, majority of 36 of beneficiary households expressed the view their overall satisfaction on the functioning of the MHUs.

10. Opinion of Key Informants:

Apart from interviewing some households, interaction was also carried out with 34 knowledgeable persons of the locality to know their views on the services provided through the MHUs. The responses received from them have been presented in the following paragraphs:

10.1 Broad Characteristics and Awareness of K Is:

The categories of Key Informants interviewed, their awareness about MHUs, and their knowledge about village visits by MHUs is presented below in Table No: 4.2.12.

Table No: 4.2.12
Category of K Is, their Awareness and Knowledge about MHUs.

Sl.No	District	Sample MHUs	Sample K Is	Edn of K Is		Sex of K Is		Aware of MHU	Vill Visits	NH last 6 moths
				Illiterate	Literate	Male	Female			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	3	6	0	6	4	2	6	6	0
2	Kalahandi	3	6	0	6	6	0	6	6	0
3	Koraput	3	6	0	6	4	2	6	6	0
4	Malkangiri	2	4	0	4	3	1	4	4	0
5	Nabarangpur	2	4	0	4	4	0	4	4	0
6	Nuapada	1	2	0	2	2	0	2	2	0
7	Rayagada	2	4	0	4	4	0	4	4	0
8	Subarnapur	1	2	0	2	1	1	2	2	0
	Total	17	34	0	34	28	6	34	34	0
	% to Total			0	100	82	18	100	100	0

All the 34 Key Informants were literate. Out of which 28 were males, 6 were females; 34 of them were aware that a MHU is functioning in their locality and these 34 Key Informants said that the MHUs are conducting regular village visits. However, all of them expressed the view that none of the sample MHUs had made any night halt during the last six months. The position of night halts as observed in the earlier sections was not also encouraging.

10.2 Perception on Treatment Available:

The perception of the Key Informants on the nature of treatment provided and facilities available through the MHUs as expressed by them is presented in Table No: 4.2.13.

Table No: 4.2.13
Perception of K Is on Treatment and Facilities Available through MHUs.

Sl.No	District	No of K Is	Perception on Specific Treatment Available						Pref. Pvt Clinic
			TB	Malaria	Lepro.	Diarrh.	ARI	Scabies	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	6	2	6	1	6	3	6	2
2	Kalahandi	6	3	5	1	5	3	5	1
3	Koraput	6	2	6	2	6	2	6	6
4	Malkangiri	4	3	4	2	4	2	4	4
5	Nabarangpur	4	1	4	1	4	1	4	4
6	Nuapada	2	1	2	0	1	0	2	0
7	Rayagada	4	2	4	3	4	1	4	3
8	Subarnapur	2	0	2	0	2	2	2	2
	Total	34	14	33	10	32	14	33	22
	% to Total		41	97	29	94	41	97	65

The perception of the Key Informants on the treatment facilities available on diseases like Malaria, Diarrhoea and Scabies is quite appreciable and the same in respect of the other diseases like T B, Leprosy and Acute Respiratory Infection (ARI) is quite poor. Even though, the prevalence of the latter category diseases in the region is less as compared to the former ones. It is essential that the various treatment facilities available should be widely known to the local people to derive the benefits/services of the MHUs. As many as 65 per cent of the Key Informants have expressed the view that they would prefer private clinics to MHUs, as private clinics are open to patients 24 hours, where as MHU services are not available on call basis.

10.3 Perception on Community Services Provided:

Information collected from the Key Informants on their perception about the nature of community services provided by the MHUs is presented in Table No: 4.2.14

Table No: 4.2.14**Perception of the K Is on the Community Services Provided by MHUs.**

Sl.No	District	Sample K Is	Perception on the nature of Services Provided by MHU					
			Sch Visit	Immu	Antenal	H Camps	FWCamp	Calamity
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)
1	Balangir	6	6	6	6	5	0	3
2	Kalahandi	6	6	2	2	3	0	0
3	Koraput	6	6	3	1	2	3	1
4	Malkangiri	4	4	4	4	1	1	0
5	Nabarangpur	4	4	3	2	2	1	1
6	Nuapada	2	2	0	0	2	0	0
7	Rayagada	4	2	4	4	0	1	0
8	Subarnapur	2	2	2	2	2	0	0
	Total	34	32	24	21	17	6	5
	% to Total		94	71	62	50	18	15

As many as 94 per cent of the Key Informants have their knowledge about MHUs' conducting school visits followed by immunisation camps, antenatal check ups, health camps and family welfare camps whereas 15 per cent of the Key Informants perceived that attendance to natural calamities by MHUs was one of the important activities.

10.4 Prevention and Control Measures:

The MHUs are supposed to take up various of prevention and control measures. Based on the knowledge of the Key Informants, data collected on the various prevention and control measures undertaken as well as other services provided by the sample MHUs are presented below vide Table No: 4.2.15.

Table No: 4.2.15
Perception of K Is on Prevention and Control Measures Taken by MHU

Sl. No	District	Sample K Is	Prevention and Control Measures Taken					
			TB	Malaria	Lepro.	Diarrh.	ARI	Scabies
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	6	2	6	1	6	1	6
2	Kalahandi	6	2	5	0	2	0	5
3	Koraput	6	1	6	2	4	0	3
4	Malkangiri	4	0	4	0	1	0	1
5	Nabarangpur	4	0	4	0	3	1	4
6	Nuapada	2	2	2	1	1	0	2
7	Rayagada	4	3	4	3	3	0	3
8	Subarnapur	2	0	2	0	2	1	2
	Total	34	10	33	7	22	3	26
	% to Total	-	29	97	21	65	9	76

Table No: 4.2.15 (contd.....)

Sl.No	District	Sample K Is	Positive Opinion on the Activities of MHUs					
			H & H Edn	Sani&Food Hab Edn	B S Colln	B S Follow-up	Charge Fees	MHU with a Doctor
(1)	(2)	(3)	(10)	(11)	(12)	(13)	(14)	(15)
1	Balangir	6	4	3	5	3	0	6
2	Kalahandi	6	2	1	1	2	1	6
3	Koraput	6	1	1	1	4	0	5
4	Malkangiri	4	3	3	4	1	0	3
5	Nabarangpur	4	3	3	3	2	0	3
6	Nuapada	2	1	1	2	1	0	2
7	Rayagada	4	1	2	4	4	0	3
8	Subarnapur	2	0	0	0	0	0	2
	Total	34	15	14	20	17	1	30
	% to Total		44	41	59	50	3	88

Above table revealed that the Key Informants do not positive opinion on the disease prevention control measures and other health care services provided by the MHUs like imparting health and hygiene education, imparting education on sanitation drives, food habit, collection of blood slides and its follow up.

10.5 Expectations from MHUs:

Although the MHUs are rendering various types of services for the people in the locality, the Key Informants indicated that some of their expectations remained unfulfilled. Some of their expectations are presented in Table No: 4.2.16.

Table No: 4.2.16

Expectations of K Is from MHUs

SI No	District	Sample K Is	Expectations from the MHU					
			E1	E2	E3	E4	E5	E6
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	6	4	4	3	3	0	0
2	Kalahandi	6	0	2	4	0	1	0
3	Koraput	6	0	1	0	2	1	0
4	Malkangiri	4	0	1	3	0	0	3
5	Nabarangpur	4	1	2	4	0	0	0
6	Nuapada	2	0	0	1	0	0	0
7	Rayagada	4	0	1	2	0	0	1
8	Subarnapur	2	0	0	2	0	0	0
	Total	34	5	11	19	5	2	4
	% to Total		15	32	56	15	6	12

E1- More night halts, E2- supply of sufficient medicines, E3- Increasing Village visits, E4- Attend emergency cases, E5- Providing tele-communication facility for emergency E6- Adequate IEC (Information, Education and Communication) Programme

All the six items of their expectation appear to be reasonable and need to be attended to.

11. Opinion of Programme Managers:

In the process of field investigations, interactions were made with the Chief District Medical Officers of all the 8 districts in the KBK region to elicit their opinion on the effective functioning of the MHUs and their valuable suggestions for bringing in improvements in the health care delivery system through the MHUs in future. The results of the interaction with the CDMOs are discussed in the following paragraphs.

11.1 Equipment and Staff:

The information collected from the CDMOs on the adequacy of equipment, staff in position, adequacy of village visits and night halts, and the supervision made by the CDMOs to the MHUs in their districts is presented below vide Table No: 4.2.17.

Table No: 4.2.17
Opinion of CDMOs on Equipment and Staff Support Provided

Sl. No	District	Total MHUs	No fully Equipped	Staff in Position			CDMO visits 2005-06	Adq of vill visits		Adq of NHs
				M O	Pharma	H W (F)		DiST	Reason	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	15	0	14	10	10	16	Yes		0
2	Kalahandi	14	1	14	13	14	7	Yes		0
3	Koraput	15	1	14	14	15	12	Yes		0
4	Malkangiri	10	0	10	9	10	12	Yes		1
5	Nawarangpur	11	0	11	11	11	10	No	Trans	0
6	Nuapada	6	1	6	4	3	7	Yes		1
7	Rayagada	12	1	12	4	12	12	Yes		0
8	Subarnapur	7	1	6	5	6	20	Yes		1
	Total	90	5 diST	87	70	81	96	7 diST		3 diST

The above table reveals that the MHUs are fully equipped in case of 5 districts. As against 90 MHUs operating in the KBK region, Officers are available in 87 MHUs, PharmaciST in 70 MHUs and Health Worker (Female) in 81 MHUs respectively. Since a Medical Officer, a Pharmacist and a Health Worker (Female) are the three crucial positions to delivery health services, it is essential to fill up vacant poST at any point of time on priority basis. The total number of CDMO visit to MHUs is 96 times in a year for 90 MHUs, but the numbers of visits are not consistant with the number of MHUs in the districts. This implies that certain MHUs are not visited by the CDMOs during a year at all. Even though a minimum of two night halts per month has been prescribed for MHUs, the CDMOs themselves have expressed that it has not been the case in 5 districts. In

Nawarangpur district, the CDMO said that village visits are affected due to problem of transport.

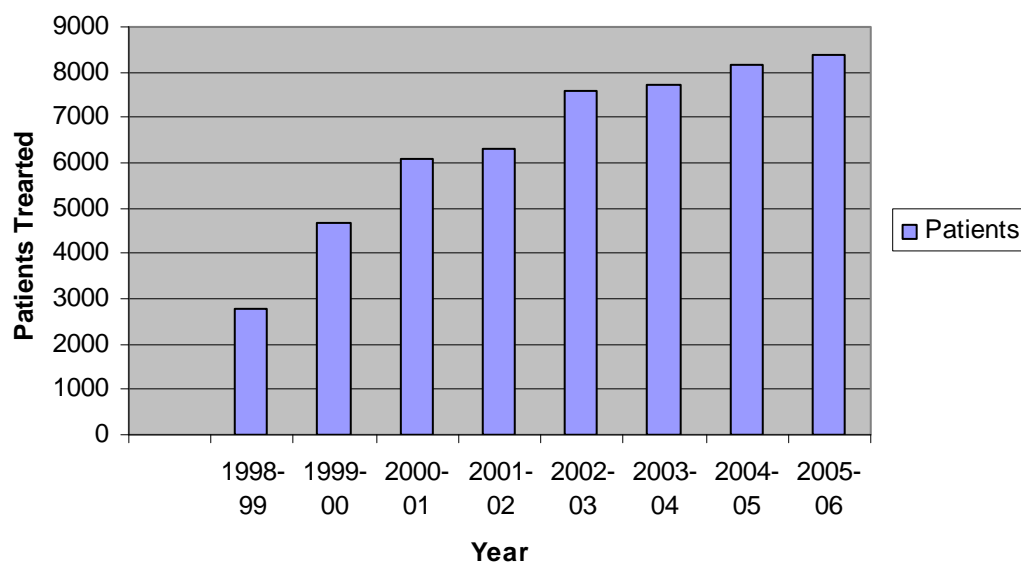
11.2 Treatment of Malaria:

Apart from providing doorstep health care services to the people staying in inaccessible hilly areas, the major objective of the MHUs is to detect Malaria and provide treatment in time. Annexure-4.2.2 presents the number of blood slides collected and the number of Malaria positive cases detected in different districts of KBK region through the MHUs during the period from 1998-99 to 2005-06. As may be seen from this Annexure, malaria positive cases found varies from 17 per cent to 22 per cent of the blood slides collected in the region over the 8 years with an annual average of 21 per cent. Malaria positive cases detected is highest in case of Malkangiri district followed by Nuapada, Koraput, Rayagada, Nawarangpur, Balangir, Kalahandi, and Subarnapur districts.

11.3 Treatment of Patients:

Information on the various categories of patients treated through the MHUs per annum over an eight-year period from 1998-99 to 2005-06 is presented vide Annexure-4.2.3. The Annexure reveals that record on disease specific number of patients treated has not been well maintained except Malaria. Since treatment of Panchabyahi is an important component of the MHU programme, the MHUs should maintain the patients treated under various Panchabyadhi diseases, so as to help in undertaking policy reviews in future. Number of patients treated per MHU per annum was found to be around 2784 in 1998-99, which rose to 8385 in 2005-06 with an overall increase of three times over the same period. This shows that access to rural health delivery system through the MHUs has been gaining rapid momentum. The CDMOs were in agreement, MHUs acted as a means to deliver health care services in the KBK region. Thus, establishment of the MHUs in the KBK region has tremendous bearing on the health care delivery systems in these districts. A graphic representation of number of patients treated per MHU for the period 1998-99 to 2005-06 is given below in Chart No: 4.2.1.

Chart No: 4.2.1 - Patients Treated per MHU per Annum



SECTION – 3

EMERGENCY FEEDING PROGRAMME IN KBK DISTRICTS UNDER RLTA

1. The Sample Anganwadi Centres:

Out of the 32 sample Anganwadi Centres, 26 were functioning in Government accommodations and 6 in private and rented accommodation. Of these 32 Anganwadi Centres 24 were running in pucca, 5 in semi-pucca and 3 in kutcha buildings. For an accommodation to be suitable for running an Anganwadi Centre, it should be easily approachable by the villagers. Based on taken criteria 30 out of 32 sample Anganwadi Centres were fit for running a Centre and the remaining two were not. It will necessarily affect efficient operation of a number of programmes aimed at providing service to the old, infirm, children and the pregnant women in the locality, even though the sample units are small.

As regards the educational qualification of the 32 Anganwadi Workers, 2 were Matriculates, 7 were under Matriculates and the remaining 23 were below Matriculation. Though all the workers were not highly educated, but it is enough for them to go through the literature on the contents of various programmes to implement in the locality as per guidelines and to enable to provide appropriate services.

2. Beneficiaries in Sample AWCs:

An enquiry was made to know the number of applicants desirous of availing the benefit of emergency feeding programme or else their names were recommended for extending benefit under the programme vis-à-vis the number of persons actually availing the benefit. Table No: 4.3.1 presented below shows year wise from 2001-02 to 2005-06 the number of applicants in respect of 32 sample AWCs, the actual number of beneficiaries along with their social category and economic status.

Table No: 4.3.1**Coverage of Beneficiaries through 32 Sample AWCs during 2001-06.**

Year	Applicants	Beneficiaries covered			Social Category			BPL / APL		
		Males	Females	Total	SC	ST	Others	BPL	APL	NA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2001-02	858	332	526	858	180	426	252	648	46	164
2002-03	971	370	601	971	200	506	265	739	21	211
2003-04	1007	386	621	1007	215	502	290	756	15	236
2004-05	1023	398	625	1023	194	558	271	808	14	201
2005-06	1068	409	659	1068	208	606	254	811	41	216
Total	4927	1895	3032	4927	997	2598	1332	3762	137	1028
Per AWC Per Annum	31	12	19	31	6	16	9	24	1	6
% to Total	-	39	61	-	20	53	27	76	3	21

NA: Not Available

It reveals that the number of applicants and the break up of beneficiaries are the same in all cases. On an average, 31 beneficiaries per annum per AWC were extended the benefits of emergency feeding programme by way of providing one cooked meal per day round the year. The coverage of women beneficiaries, which accounted for 61 per cent of total beneficiaries, is a good sign. As regards their social class, 20 per cent of the beneficiaries belong to SC, 53 per cent to ST and the rest 27 per cent to other category. As per the economic status, out of 4927 beneficiaries covered during the last five years through 32 sample AWCs, 3762 family beneficiaries belonged to BPL that accounted 76 per cent of total. As per the guidelines of the programme of emergency feeding, inclusion of beneficiaries from the APL category is not permissible and this category accounts only 3 per cent of total beneficiaries. However, it has happened in the districts of Balangir, Kalahandi, Malkangiri and Nuapada, the intensity of poverty is much deeper and has to cover other groups of beneficiaries, households. Further, details of year-wise and district-wise coverage of beneficiaries for last five years (2001-06) is given vide Annexure: 4.3.1.

3. Selection of Beneficiaries:

As regards the selection of beneficiaries under emergency feeding it is found that, on some occasions, potential beneficiaries had to approach the authorities for their

inclusion to avail the benefit for their poor economic condition. The usual practice was that the beneficiaries to be covered during a year was examined and recommended by the Palli Sabha in one and all cases. In case of 7 out of 32 sample AWCs, few old persons who are potential beneficiaries had approached the govt. authorities to include them under the programme of emergency feeding. However, their cases had to pass through the Palli Sabha. For such a reason, there was no scope for any discontentment or controversy in accommodating the potential beneficiaries under the programme. This is a good sign of systematic selection of beneficiaries involving the Palli Sabha. It implies that record maintenance available at the level of AWCs in regard to the details of the beneficiaries under the programme of emergency feeding is not correct.

4. Supply of Food Components:

Views of the Anganwadi Workers (AWWs) implementing the programme of emergency feeding at the grass root level was obtained to assess the quality of food component supplied its source, and timeliness etc. The information collected from the Anganwadi Workers is presented in Table No: 4.3.2.

Table No: 4.3.2
Opinion of AWW regarding Supply of food Component and Fuel

Sl. No	District	Sample AWCs	Food Comp not good	Supply not timely	Wood not available freely	Local purch fund not adequate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	5	5	2	-	3
2	Kalahandi	5	5	-	-	2
3	Koraput	5	2	1	1	-
4	Malkangiri	3	-	1	1	-
5	Nawarangpur	3	-	1	-	-
6	Nuapada	3	-	-	-	1
7	Rayagada	5	4	4	-	-
8	Subarnapur	3	3	1	4	3
	Total	32	19	10	6	9
	% to Total	-	59	31	19	28

It reveals that out of 32 sample AWCs, 19 (59%) AWCs reported that the quality of food component received was not of good quality. Besides, 10 AWCs reported that the supply of food grains was not in time. The quality of food supplied and timeliness in its supply are the major hurdles in fulfilling the objectives of the programme of emergency feeding. Further fuel is neither available free of cost for the purpose nor the

funds provided for the purpose is adequate to meet the requirement. Funds provided for making local purchases is quite in-adequate for 9 (28%) sample Anganwadis.

5. Place of Food Service:

Information on the place of serving cooked meals and the mode of managing different occasions when the beneficiary is not able to come to the service centers as far as it relates to 32 sample AWCs was collected which is presented below vide Table No; 4.3.3.

Table No: 4.3.3
Place of Food Service in Sample AWCs.

Sl.No	District	Sample AWCs	At the AWC	Sent home if unable	Sent home if absent
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	5	5	5	2
2	Kalahandi	5	5	5	2
3	Koraput	5	5	5	5
4	Malkangiri	3	3	3	3
5	Nawarangpur	3	3	3	3
6	Nuapada	3	3	3	1
7	Rayagada	5	5	5	5
8	Subarnapur	3	3	3	-
	Total	32	32	32	16
	% to Total	-	100	100	50

It is observed that in all cases, cooked food is served at Anganwadi Centers and if the beneficiaries are not available food is sent to their homes subject to physically unable to move out of their home. It is also observed that cooked meals are served to the homes of the beneficiaries even when they are absent from the village, since the Anganwadi worker does not have the discretion of not serving a beneficiary. The practice of supplying meals for the absentee beneficiaries needs to be discontinued forth with.

6. Quality of Food Served:

Information was also collected from the sample AWCs as to whether any complaint was received from beneficiaries on the quality of food served, its adequacy and timeliness etc. The information collected is presented below vide Table No: 4.3.4.

Table No: 4.3.4
Quality of Food Served in Sample AWCs.

Sl.No	District	Sample AWCs	Complains Received	Complains received on Food		
				Quality	Adequacy	Timeliness
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	5	1	1	1	-
2	Kalahandi	5	3	-	2	1
3	Koraput	5	1	-	1	-
4	Malkangiri	3	2	-	2	-
5	Nawarangpur	3	1	1	1	-
6	Nuapada	3	2	1	1	-
7	Rayagada	5	2	2	-	-
8	Subarnapur	3	2	1	1	-
	Total	32	14	6	9	1
	% to Total	-	44	19	28	3

It was revealed that out of a total of 32 AWCs, in 14 cases complaints were received from beneficiaries about the management of emergency feeding programme followed by 6 cases of complaints on the quality of food served, 9 cases on the adequacy of food quantity and only in one case on the timeliness of food served.

7. Food Service and Supervision:

It was observed that in all places cooked food was served each day round the year. The number of times a sample AWC was supervised by higher authorities during 2005-06 is presented in Table No: 4.3.5.

Table No: 4.3.5
Food Service and Supervision in Sample AWCs.

Sl.No	District	Sample AWCs	Food Served		Supervisions in 2005-06	
			Cooked	Round the Year	Thrice	More than three times
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	5	5	5	-	5
2	Kalahandi	5	5	5	-	5
3	Koraput	5	5	5	-	5
4	Malkangiri	3	3	3	-	3
5	Nawarangpur	3	3	3	-	3
6	Nuapada	3	3	3	1	2
7	Rayagada	5	5	5	-	5
8	Subarnapur	3	3	3	1	2
	Total	32	32	32	2	30
	% to Total	-	100	100	6	94

It has been observed that one and all sample AWCs have been supervised by higher authorities during 2005-06. While two of the samples AWCs were supervised thrice, the remaining 30 AWCs were supervised more than three times during 2005-06. In case of services like the emergency feeding, quality of inspection is more relevant as compared to the number of inspections. Supervision of higher authorities should, therefore, focus on the quality of food served, its adequacy and timeliness as far as practicable, so as to minimise complains from beneficiaries.

8. Opinion of Beneficiaries:

As explained in previous chapters, total 159 beneficiaries under the programme were interviewed to know their perception and impact of the programme. The result of the interaction of the study team with the sample beneficiaries is discussed in the following paragraphs.

8.1 Characteristics of Beneficiaries:

Of the 159 sample beneficiaries, 80 were males and the remaining 79 were females. The other characteristics of the sample beneficiaries are presented below in Table No: 4.3.6.

Table No: 4.3.6
Characteristics of Sample Beneficiaries

Sl.No	District	Samp HH	Male	Female	Lite rate	Ilite rate	Beneficiary Group				Social Category		
							Old	Infirm	Poor	Help less	SC	ST	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Balangir	24	13	11	2	22	17	2	21	18	6	16	2
2	Kalahandi	25	12	13	1	24	12	3	7	5	9	4	12
3	Koraput	25	12	13	2	23	21	0	21	20	13	6	6
4	Malkangiri	15	8	7	2	13	15	0	15	12	4	11	0
5	Nawarangpur	15	7	8	0	15	15	0	15	15	3	12	0
6	Nuapada	15	7	8	1	14	7	4	6	1	4	6	5
7	Rayagada	25	14	11	0	25	25	0	25	16	2	18	5
8	Subarnapur	15	7	8	5	10	10	3	2	2	10	4	1
	Total	159	80	79	13	146	122	12	112	89	51	77	31
	% to Total	-	50	50	8	92	77	8	70	56	32	49	19

As it appears, the sample was a fair mix of various socioeconomic groups. Men and women beneficiaries were taken in 50:50 ratio. Among the sample beneficiaries, 32 per cent were SC, 49 per cent ST and 19 per cent were from other category and in total, 92 per cent of the beneficiaries were illiterate. Mostly old, poor and helpless persons were selected as beneficiaries. Around 8 per cent of the beneficiaries were infirm. As regards the selection of beneficiaries, 135 (85%) expressed that they were selected through the Grama Sabha and the rest 24 (15%) expressed that their cases were recommended by the block officials. However, the selection of the latter 24 beneficiaries was considered only after ratification through Grama Sabhas.

8.2 Economic Status:

In regard to the economic status of the households of the beneficiaries Table No: 4.3.7 presented below is relevant.

Table No: 4.3.7
Economic Status of Sample Households.

Sl.No	District	Samp HH	BPL	APL	With land	Land less	Main Source of Livelihood				
							Cult	Agril	NAGL	Diary	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	24	15	9	11	13	6	2	11	1	4
2	Kalahandi	25	24	1	9	16	5	1	16	0	3
3	Koraput	25	25	0	15	10	10	0	15	0	0
4	Malkangiri	15	14	1	11	4	10	1	4	0	0
5	Nawarangpur	15	15	0	12	3	5	5	5	0	0
6	Nuapada	15	15	0	6	9	6	2	5	1	1
7	Rayagada	25	25	0	12	13	8	2	14	0	0
8	Subarnapur	15	15	0	6	9	5	1	6	2	2
	Total	159	148	11	82	77	55	14	76	4	10
	% to Total	-	93	7	52	48	35	9	48	2	6

Around 52 per cent of the households are having some land and the rest 48 per cent are landless. However, as high as 93 per cent of the beneficiary households belong to BPL category. Even though 52 per cent of the beneficiary households have some land, only 35 per cent of the households have taken cultivation as their main source of livelihood. While 9 per cent of the beneficiary households have their main occupation as agricultural labourer, the main source of livelihood of 48 per cent is non-agricultural labourer. The main occupation of 4 households is goat and cow rearing and the rest 10 households live through begging, domestic service etc.

8.3 Quality Services Received:

The views and opinion of sample beneficiaries on the quality of services received through the programme of emergency feeding was obtained and presented in Table No: 4.3.8.

Table No: 4.3.8**Views on Quality of Service Received by Beneficiaries.**

Sl. No	District	Samp HH	Prog not good	Faulty seln	Food not good	Food not adeq	Food not reglr	AWC not coop	Family conflict
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	24	6	-	6	6	5	3	1
2	Kalahandi	25	3	1	2	3	2	-	-
3	Koraput	25	5	-	4	5	1	-	3
4	Malkangiri	15	5	-	5	5	5	5	2
5	Nawarangpur	15	5	-	2	4	-	-	4
6	Nuapada	15	0	-	-	-	-	-	-
7	Rayagada	25	6	-	5	3	3	-	2
8	Subarnapur	15	0	-	-	-	-	-	-
	Total	159	30	1	24	26	16	8	12
	% to Total	-	19	1	15	16	10	5	8

Around 81 per cent of the beneficiaries have expressed their overall dissatisfaction on the quality of services provided through the emergency feeding programme and the remaining 19 per cent are not satisfied. As regards selection of beneficiaries, only one person expressed the view that faulty selection procedure is being adopted in identifying the beneficiaries. To address this problems, it is essential that higher authorities in course of their supervision/ inspection should interact with the beneficiaries and be present during food service to reduce the number of complains by beneficiaries and enhance the rapport of AWCs with the beneficiaries. The Gram Sabha or local NGOs can lead the programme, as it is basically meant for mal-nutrition and food security for the poor.

8.4 Views and Attitude:

To elicit the views and attitude of the beneficiaries on the programme questions were asked. The information received in the process has been presented below in Table No:4.3.9.

Table No: 4.3.9
Views on Various aspects of the Programme.

Sl. No	District	Samp HH	Food Security	Getting Meal	Getting Ration	Prefer Ration	Share food
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	24	24	24	-	24	5
2	Kalahandi	25	25	25	-	25	-
3	Koraput	25	25	25	-	12	11
4	Malkangiri	15	10	15	-	7	7
5	Nawarangpur	15	15	15	-	9	9
6	Nuapada	15	15	15	-	15	2
7	Rayagada	25	24	25	-	12	9
8	Subarnapur	15	15	12	3	11	-
	Total	159	153	156	3	115	43
	% to Total	-	96	98	2	72	27

Out of 159 beneficiaries, 153 (96%) have expressed the opinion that the programme of emergency feeding has been able to break the vicious circle of food insecurity among the old and infirm people from poor families. This is a very good indication that the programme has a positive impact on health status of poor. While 156 (98%) of the beneficiaries have reported that they are receiving cooked ready meals to save time and fuel, 3 (2%) have reported to have been taking ration home. Some AWC had also stated that they are sending meals to the homes of beneficiaries even when they are absent. The present finding corroborates that as many as 115 (72%) of the beneficiaries prefer to take ration to their home in lieu of being served with cooked meals at the AWCs. Even though 43 (27%) say that the ration taken will be shared among all the family members, the hidden intention in certain cases could be to sale away the ration to meet their other household requirements or else to prepare a meal in a better manner. In this regard sending ration or meals to the home of beneficiaries should be strictly banned and due care should be taken to enhance the quality of food and also providing services in time.

9. Opinion of Key Informants:

As many as 61 knowledgeable persons were taken as key informants. They were interviewed and their perception/view on the programme and its impact has been analyzed in the following paragraphs.

9.1 Characteristic of K Is:

Of the 61 sample key informants, 16 were PRI members (PRIM). The details characteristics of the sample key informants are presented below vide Table No: 4.3.10.

Table No: 4.3.10.
Characteristics of Sample Key Informants

Sl No	District	Samp AWCs	Samp K Is	PRIM	Male	Female	Illite rate	Lite rate	SC	ST	Others
1	2	3	4	5	6	7	8	9	10	11	12
1	Balangir	5	7	4	6	1	-	7	-	4	3
2	Kalahandi	5	10	4	9	1	-	10	1	2	7
3	Koraput	5	10	4	8	2	-	10	3	3	4
4	Malkangiri	3	6	1	5	1	-	6	-	4	2
5	Nawarangpur	3	6	-	5	1	-	6	1	5	-
6	Nuapada	3	6	-	5	1	-	6	1	3	2
7	Rayagada	5	10	2	10	-	1	9	1	3	6
8	Subarnapur	3	6	1	6	-	1	5	3	-	3
	Total	32	61	16	54	7	2	59	10	24	27
	% to Total	-	-	26	89	11	3	97	16	40	44

Out of 61 key informants, 54 were males and the remaining 7 were females. As high as 59 of them were literate and the rest 2 were illiterate. The compositions of 61 informants were 10 from SC, 24 from ST and the remaining 27 from other social categories.

9.2 Awareness of K Is:

Structured questions were administered with the sample key informants to know as to their sources of awareness about the programme of emergency feeding and their perception on the method of selection of beneficiaries. The result of the interaction of the study team with the key informants in this regard is presented in a tabular form vide Table No: 4.3.11.

Table No: 4.3.11.
Awareness of Sample K Is on the Programme.

Sl.No	District	Samp K Is	Sources of Awareness			Perception on the method of Selection				
			AWC	Reln	Media	Old	Infirm	Poor	Help less	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	7	7	-	2	7	7	7	6	2
2	Kalahandi	10	10	-	-	10	10	10	10	-
3	Koraput	10	9	-	3	10	-	10	8	-
4	Malkangiri	6	4	1	2	6	1	6	5	-
5	Nawarangpur	6	2	-	4	6	-	6	6	-
6	Nuapada	6	6	-	-	6	6	6	6	-
7	Rayagada	10	5	-	8	10	-	10	10	-
8	Subarnapur	6	4	2	-	6	6	6	6	-
	Total	61	45	3	19	61	30	61	57	2
	% to Total	-	74	5	31	100	49	100	93	3

Majority of key informants i.e. 45 (74%) came to know about the emergency feeding programme from the AWCs and 19 (31%) from media. Hardly, 3 (5%) of them could know about the programme from their relations and the village men. In regard to their perception as to the method of selection of beneficiaries, one and all expressed that the old and the poor are usually given priority. As many as 30 (49%) of the key informants expressed that importance is also given on infirm and 57 (93%) expressed that selection of helpless persons are given due weightage. Only 2 (3%) of them expressed that influential people try to pass through the selection process to get the benefit under the programme even though were not eligible. As such the views expressed by the key informants on the process of selection of beneficiaries adopted at the field level is more fair and genuine.

9.3 Perception of K Is:

In regard to the overall opinion of the key informants on the proper implementation of the programme at the village level, 41 (67%) expressed their satisfaction and the rest 20 (33%) expressed their dissatisfaction as evident from the Table No: 4.3.12 presented below.

Table No: 4.3.12.
Perception of Sample K Is about the Programme.

Sl.No	District	Samp K Is	Prog Satisfactory		Reasons of Dissatisfaction				
			Yes	No	Faulty Seln	Food not good	Food not Adq	Service not Regu	No Coop
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	7	3	4	-	2	1	-	3
2	Kalahandi	10	7	3	1	2	3	-	-
3	Koraput	10	6	4	1	2	4	3	-
4	Malkangiri	6	3	3	-	3	2	3	-
5	Nawarangpur	6	5	1	-	1	1	1	-
6	Nuapada	6	6	-	-	-	-	-	-
7	Rayagada	10	8	2	-	2	1	1	-
8	Subarnapur	6	3	3	-	2	3	1	-
	Total	61	41	20	2	14	15	9	3
	% to Total		67	33	10	70	75	45	15

In regard to the 20 key informants those expressed their overall dissatisfaction over the programme as such, 2 (10%) expressed their doubt on the fairness in the selection process. 14 (70%) expressed that food quality is not good and 15 (75%) expressed food quantity to be inadequate. Further, 9 (45%) expressed their dissatisfaction over the regularity in extending services and 3 (15%) opined that the AWCs were not cooperative with the beneficiaries.

10. Opinion of Programme Managers:

The programme of emergency feeding is operating in all 8 KBK districts and the District Social Welfare Officers (DSWOs) are the sole authority for smooth management/functioning of the emergency feeding programme in their districts. Interactions were made with all the 8 DSWOs to elicit their views and opinion on various aspects of the implementation of the programme. The results of interaction of the study team with the DSWOs are presented in the following paragraphs.

10.1 Selection of Beneficiaries:

It is found that about 2, 00,000 beneficiaries are being covered under the programme per annum and the district-wise quota has been fixed. The Table No: 4.3.13

presented below gives the number of AWCs and the number of beneficiaries in each of the 8 KBK districts.

Table No: 4.3.13.
Method Adopted for Selection of Beneficiaries.

Sl.No	District	Total AWCs	Target Bene	Bene per AWC	Quota Fixed	Quota adquate
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	1261	33860	27	Yes	-
2	Kalahandi	1214	27200	22	Yes	Yes
3	Koraput	1342	37315	28	Yes	Yes
4	Malkangiri	580	14990	26	Yes	-
5	Nawarangpur	994	19270	19	Yes	-
6	Nuapada	585	21000	36	Yes	-
7	Rayagada	1001	22840	23	Yes	Yes
8	Subarnapur	416	13525	33	Yes	-
	Total	7393	2,00,000	27	-	-

Two lakh (2, 00,000) beneficiaries are being covered through 7393 AWCs in 8 KBK districts. The average number of beneficiaries per AWC comes to 27 that vary in between 19 to 36 among the districts. The number of beneficiaries to be covered through an AWC is usually allotted in advance. In case of Kalahandi, Koraput and Rayagada districts the allocated number of beneficiaries becomes adequate and in remaining of 5 districts, it was in-adequate. However, keeping in view the guidelines, the selection list has been prepared on prioritising the potential beneficiaries in terms of different criterion selection.

10.2 Approval of Select List:

In course of the field study it was revealed that the level of approval of the select list has not uniform over the districts shown in Table No: 4.3.14.

Table No: 4.3.14.
Level of Approval of Select List.

Sl.No	District	Quality of the Component			
		Gram Sabha	CDPO	DSWO	Collector
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	-	-	-	Yes
2	Kalahandi	-	-	-	Yes
3	Koraput	Yes			
4	Malkangiri	-	-	-	Yes
5	Nawarangpur	Yes	-	-	-
6	Nuapada	-	Yes	-	-
7	Rayagada	-	-	Yes	-
8	Subarnapur	-	-	-	Yes
	Total	2 diST	1 diST	1 diST	4 diST

In case of Balangir, Kalahandi, Malkangiri and Subarnapur districts, the Collector happened to be the sole authority to approve the select-list of beneficiaries under the programme whereas the DSWO in case of Rayagada district, the CDPO in case of Nuapada district and the Gram Sabha in case of Koraput and Nawarangpur districts played vital roles in the selection of the beneficiaries. No doubt that Gram Sabha is the grass root and the basic forum where the case of each and every applicant should have been examined. However, there is need for uniform practice and prescribed norms for the authority to approve the select list.

10.3 Quality of Food Stuff:

The quality of food stuff is an important aspect of the programme to make the programme more meaningful. The overall impression of the DSWOs on the quality of food stuff is presented below vide Table No: 4.3.15.

Table No: 4.3.15.
Quality of Food Stuff.

Sl.No	District	Quality of the Component			
		Rice	Dal	Oil	Others
(1)	(2)	(3)	(4)	(5)	(6)
1	Balangir	Good	Good	Good	Good
2	Kalahandi	Good	Good	Good	Good
3	Koraput	Good	Fair	Good	Good
4	Malkangiri	Good	Good	Good	Good
5	Nawarangpur	Good	Good	Good	Good
6	Nuapada	Fair	Fair	Fair	Good
7	Rayagada	Fair	Good	Good	Good
8	Subarnapur	Fair	Good	Good	Good
	Total	Fair – 3 dist	Fair – 2 dist	Fair - 1 dist	-

The quality of rice is good in case of Nuapada, Rayagada and Subarnapur districts and fair in other districts. Also the dal in case of Koraput and Nuapada districts and oil in case of Nuapada district have been reported to be fair. Food items should always be of good quality and there should be no compromise on the standard. Since some of the programme managers themselves have reported that the foodstuff supplied is of fair quality, this is a matter of concern.

10.4 Views of Programme Managers:

The views and opinion obtained from the Programme Managers on various aspects of operation of the programme of emergency feeding has been presented vide Annexure-4.3.2. This Annexure reveals that all 8 Programme Managers have expressed their overall satisfaction on the procedure adopted for selection of beneficiaries, maintenance of records in the process, the quality of food served, the cooperation extended by the AWCs and the level of participation of the local people. There is some problem of storage space in case of two districts. In case of Nuapada district, there has been observed that lack of cooperation on the part of the beneficiaries, the reason for which should be investigated by the authorities and the persisting problems resolved. Two Programme Managers expressed that in certain cases the beneficiaries like to take home rations in lieu of receiving cooked food.

SECTION – 4

AFFORESTATION PROGRAMME IN KBK DISTRICTS UNDER RLTA

1. The Sample Afforestation Sites:

As against selection of 16 sample afforestation sites, plantation activities were completed in respect of all sites except 3 in Balangir district. The characteristics of the sample sites are presented below vide Table No: 4.4.1.

Table No: 4.4.1

Characteristics of Sample Afforestation Sites.

Sl.No	District	Samp Sites	Area (Ha)	Land Type		Planta Area		Planta Type	
				R F	R L	D F	B H	Block	Gap
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	4	133	2	2	3	1	4	-
2	Kalahandi	4	140	2	2	2	2	4	-
3	Koraput	5	245	3	2	3	2	4	1
4	Rayagada	3	150	3	-	3	-	1	2
	Total	16	668	10	6	11	5	13	3

The area covered under the 16 afforestation sites were 668 hectares with an average coverage of 41.75 hectares. As many as 10 plantation were attempted to be raised in areas coming under reserved forest (RF) and 6 on revenue land (RL). In case of 11 sites, plantations activities done over degraded forest (DF) and the remaining on bald hills (BH). As regard to the type of plantation, block plantation was undertaken in case of 13 sites and gap filling was done in case of the remaining three sites.

2. Varieties Planted:

An enquiry was made on the various varieties of plant species planted and the area covered under each variety of trees planted in respect of the sample sites. The picture of different varieties of plantation over the 16 sample sites giving the number of plant planted and the area planted over has been presented vide Annexure-4.4.1. From this Annexure, it reveals that under the 16 afforestation sites around 668 hectares of plantations have been undertaken comprising of economic plantation over 160 hectares, Non-Timber Forest Produce (NTFP) plantation over 130 hectares, Bamboo over 40 hectares, Fuel wood and mixed plantation over 108 hectares and regeneration of degraded forest over 230 hectares respectively.

3. Planning and Implementation:

There were as many as 16 Van Samrakhyan Samities (VSS) to look after 16 sample sites. As per the requirements of the afforestation programme under RLTA, there a VSS should be formed for each of the afforestation sites and the VSS should be associated in the process of planning and implementation of the programme from the beginning and ultimately take over the responsibility of its upkeep after its transfer to the VSS on completion of the programme. As such, the VSS should participate in the afforestation programme in carrying out different activities under the programme. The study team collected the information on the level of association of the VSS in the process of undertaking the afforestation programme in respect of each sample site and the result obtained is presented in a tabular form vide Table No: 4.4.2.

Table No: 4.4.2

Association of 16 Sample VSS during Planning and Implementation.

Sl. No	District	Samp Sites	During Planning			During Implementation				
			Site Seln	Stock Mapg	Specie s Seln	Decn Mkng	Lab Cont	IEC	Watch Ward	T & V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	4	3	4	3	4	2	2	3	3
2	Kalahandi	4	4	4	4	2	2	2	4	4
3	Koraput	5	5	5	4	5	4	4	5	5
4	Rayagada	3	3	3	3	2	3	2	3	2
	Total	16	15	16	14	13	11	10	15	14
	% to Total	-	94	100	88	81	69	62	94	88

It reveals that the VSS were associated at different stages of operation like site selection, stock mapping, selection of species, decision making, contribution of labour, organization of IEC and training and exposure visit programmes and also in providing watch and ward facilities for the afforestation sites. Although the level of participation of the VSS in organizing IEC activities is handled, the same in respect of other activities is quite satisfactory.

4. Nursery Raising:

Afforestation programme is usually undertaken in three years. Planning activities like site selection, stock mapping, cleaning, leveling, pitting, burning etc including nursery raising is done during the first year and during the rains of second year plantation takes place. During the second and third year appropriate maintenance including replacements is undertaken and at the end of third year the site is transferred to the VSS for further maintenance and upkeep as well as for enjoying usufruct rights. For plantation on the 16 sample sites, departmental nurseries were raised for 12 sites and the remaining 4 sites; seedlings were purchased from private nurseries. As reported by the executing functionary, due procedure was observed in purchasing seedlings from private nurseries. It was also reported that the seedlings used for plantation programme in the sample sites were of good quality. The district wise details regarding the seedlings used for plantation in the 16 sample sites is presented below vide Table No: 4.4.3.

Table No: 4.4.3
Sources of Seedling Planted in 16 Sample Sites.

Sl. No	District	Samp Sites	Seedlg Suitable	Nursery		Good Seedling
				Dept	Pvt	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	4	4	4	-	4
2	Kalahandi	4	4	4	-	4
3	Koraput	5	5	1	4	5
4	Rayagada	3	3	3	-	3
	Total	16	16	12	4	16
	% to Total	-	100	75	25	100

5. Plantation of Different Species:

In undertaking plantation activities, the species are usually selected by the departmental authorities in consultation with the concerned VSS. The species selected are to suit the local climate, soil, meet the local requirements and the priority given by the local people. As against a total plantation area of 668 hectares taken up under afforestation in 16 sample sites, a maximum of 31.06 per cent is devoted for mixed plantation, followed by 13.37 per cent of economic plantation, 22.21 per cent of timber, 18.62 per cent of fire wood, 7.72 per cent of bamboo and the remaining 7.02 per cent of fruit bearing trees. The district wise break-ups are presented vide Table No: 4.4.4.

Table No: 4.4.4

Percentage of Area under Different Species Planted in Sample Sites.

Sl. No	District	Samp Sites	Area (Ha)	Timber	Bambo	Fire Wood	Fruit Bearg	Econo	Mixed	Total (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	4	133	39.94	-	30.03	-	30.03	-	100.00
2	Kalahandi	4	140	42.29	36.00	3.14	4.29	14.28	-	100.00
3	Koraput	5	245	-	0.48	-	2.88	12.02	84.62	100.00
4	Rayagada	3	150	24.06	-	53.38	22.56	-	-	100.00
	Total	16	668	22.21	7.72	18.62	7.02	13.37	31.06	100.00

While highest priority is given to plantation of timber in case of Balangir and Kalahandi districts, highest priority is given to mixed plantation in Koraput district and to fire wood plantation in case of Rayagada district. Plantation of fruit bearing trees in afforestation sites is given a low priority by all most all districts, due to problems of strict watch and ward during the fruit bearing period.

6. Key Activities Undertaken:

As a standard practice, different afforestation activities are to be undertaken during the plantation period i.e. during the rains in requisite number in absence of which not only the survival rate of plants will go down but also the growth of plants will be affected. The key activities associated with plantation programmes are manuring twice in each of the two years of plantation, weeding thrice during the first year and twice during in the second year, soil work and mulching once in each of the two years, fire tracing once in each year and pruning once in the second year of plantation prior to its handing over to the VSS. The numbers of times, these key activities were undertaken in respect of each of the 16 sample sites are presented below vide Table No: 4.4.5.

Table No: 4.4.5**Number of Times Key Activities Undertaken in Sample Sites.**

Sl. No	District	Samp Sites	Manu ring	Weed ing	Soil work & Mulchg	Fire Trench ing	Prun ing	Water ing
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	4	16	14	8	8	1	-
2	Kalahandi	4	14	14	8	7	-	-
3	Koraput	5	20	20	10	10	2	2
4	Rayagada	3	9	8	6	5	-	1
	Total	16	59	56	32	30	3	3
Norm: (1 st yr + 2 nd yr)			2+2	3+2	1+1	1+1	0+1	0+0
	%age Achv	-	92	70	100	94	19	-

The table reveals that except soil work, all other activities were not undertaken in requisite number. While manuring was undertaken in 92 per cent occasions as compared to the standard practices that in case of weeding was 70 per cent. Fire trenching was done in 94 per cent and pruning in 19 per cent. As observed, none of the districts have undertaken the standard practices in requisite number in respect of all the key activities. Non-adherence to standard practices in requisite number by executing authorities will send a wrong message to the VSS, who will in turn neglect their part of the activities on sites are transferred to VSS, thereby defeating the very objectives of the programme of afforestation.

7. Skill Development:

Development of skill of lower level functionary as well as the stakeholders is necessary for effective implementation of any programme and its future prospect. Under the programme of afforestation, training, workshop and field visit are regarded as key inputs for the skill development of the lower level functionary of the forest department and the VSS members. The number of executing functionary and the VSS members who received training, attended workshops and undertook exposure visits in respect of the 16 sample sites is presented below vide Table No: 4.4.6.

Table No: 4.4.6**Number of Persons Aailed Skill Development Opportunities.**

Sl. No	District	Samp Sites	Training		Workshop		Exposure Visit	
			FD	VSS	FD	VSS	FD	VSS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	4	7	9	5	2	4	-
2	Kalahandi	4	1	1	-	-	-	-
3	Koraput	5	28	15	20	1	20	1
4	Rayagada	3	-	-	-	-	-	-
	Total	16	36	25	25	3	24	1

It reveals that training, workshop and exposure visits were adequate in number for departmental functionary. As regards VSS members, their participation in workshops and exposure visits was low. In case of Rayagada district neither any of the field functionaries nor any of the VSS members in respect of the sample sites were exposed to any of these activities.

8. Employment Generation:

Apart from the long term objectives of the programme of afforestation, one of the immediate objectives is to provide employment to the forest fringe dwellers though various activities undertaken in the process of plantation. The man-days generated in process of plantation in respect of the 16 sample sites and that enjoyed by the villagers and the women groups has been presented below vide Table No: 4.4.7.

Table No: 4.4.7**Mandays Generated through 16 Sample Sites & Engagement of Villagers.**

Sl. No	District	Samp Sites	Total Mandays	Of which Villagers	Villagers (%)	Of which Women	Women (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	4	35074	17974	51.25	3215	9.17
2	Kalahandi	4	20857	20857	100.00	4796	22.99
3	Koraput	5	11394	11394	100.00	4434	38.92
4	Rayagada	3	6858	6858	100.00	4273	62.31
	Total	16	74183	57083	76.95	16718	22.53
	Per Site	-	4636	3568	76.95	1045	22.53

Through the 16 sample afforestation programmes, around 74183 man-days were generated of which 57083 (76.95%) man-days were contributed by the forest fringe villagers leaving 17100 (23.05%) for contributed by people from outside. As regards participation of women, 16718 (22.53%) man-days were contributed by them.

9. Site Supervision:

Supervision of sites by higher authorities in course of implementation is crucially important from the point of ensuring prudent expenditure as well as removing shortcomings in the process of programme implementation. The number of supervisions of higher authorities to the sample afforestation sites during 2005-06 had been collected in the process of field study presented vide Table No: 4.4.8.

Table No: 4.4.8
Number of Supervisions to Sample Sites by Higher Authorities
during 2005-06.

Sl. No	District	Samp Sites	Per Site		Total Supervisions	Supervisions per Site
			Minimum	Maximum		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir	4	1	4	10	2.50
2	Kalahandi	4	1	15	24	6.00
3	Koraput	5	0	5	20	4.00
4	Rayagada	3	0	4	7	2.33
	Total	16	0	15	61	3.81

As observed, the average number of supervisions of higher authorities to afforestation sites during a year comes to around 4 per site which is quite appreciable a number in consideration of total number of sites in the region. But there is a wide range of variation between the minimum and maximum number of inspections per site varied from 0-15. Supervision of higher authorities to afforestation sites is essential, at the same time too much supervision may not add to quality. A minimum number of visits should be prescribed.

10. Survival at the time of Transfer of Sites:

In regard to the rate of survival of plants at the time of transfer of sites to the hands of VSS, the Site Managers expressed the view that the rate of survival was beyond 90 per cent in case of one and all the 16 sample sites. Normally, survival rate at the end of second year of plantation stands at 60-70 per cent despite some

replacements undertaken at the end of first year of plantation required special attention. The condition of the afforestations was reported to be good in all cases. While in no case, it was reported excellent, it was not reported average or poor in any of the cases. Over all, afforestations of good condition at the time of transfer can be taken as satisfactory even though there was no site with excellent condition at the time of transfer.

11. Opinion of Households:

Total 48 households at the rate of three each from forest fringe villages under the 16 sample sites were interviewed to know the impact of the programme. The main findings of the study team with the heads of sample households is given below.

11.1 Characteristics of Households:

Of the 48 sample heads of households, one of them was illiterate and the remaining 47 were literate. The other characteristics of the sample households are presented below vide Table No: 4.4.9.

Table No: 4.4.9
Characteristics of Sample Households

Sl. No	District	Samp Sites	Sam p HH	Lite rate	Illite rate	Eco Class		Social Class		
						BPL	APL	SC	ST	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	4	12	12	-	8	4	2	2	8
2	Kalahandi	4	12	11	1	10	2	2	4	6
3	Koraput	5	15	15	-	12	3	1	11	3
4	Rayagada	3	9	9	-	2	7	-	7	2
	Total	16	48	47	1	32	16	5	24	19
	% to Total	-	-	98	2	67	33	10	50	45

As it appears, the sample drawn was a fair mix various categories of households. Among them, 10 per cent were SC, 50 per cent ST and the remaining 45 per cent from other social groups and 98 per cent of the respondents were literate. Of the 48 sample households, 32 households were from BPL category and the remaining 16 households were from APL category.

11.2 Forest as a Source of Livelihood:

The households selected are the dwellers from forest fringe villages. They depend a great deal on the forest resources for meeting their daily livelihood requirement. The response of the sample households on their dependency on forest resources is given below in Table No: 4.4.10.

Table No: 4.4.10

Forest as the Source of Livelihood of the Sample Households.

Sl. No	District	Sam p Sites	Samp HH	Sources of Livelihood		Land Sacrificed	Afforestation useful
				Forest	Others		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	4	12	6	6	2	12
2	Kalahandi	4	12	6	6	3	12
3	Koraput	5	15	9	6	5	14
4	Rayagada	3	9	6	3	-	9
	Total	16	48	27	21	10	47
	% to Total	-	-	56	44	21	98

As many as 27 (56%) of the households reported that they are primarily depending on forest resources to earn their livelihood. This indicates that re-generation of afforestation sites in the fringe villages is certainly useful to the villagers. Most of all households expressed the view that the programme of afforestation is useful for their suitable and eco-friendly development. All the afforestation programmes were undertaken either on forest land or on revenue land, which has potential to allow for their survival. Out of 48 households interviewed, 10 have expressed the view that there was sacrifice of land, on account of establishment of afforestation programme. Perception is based on the usufruct rights enjoyed over some Government land on encroachment basis. In any case, withdrawal from their possession over some land for the purpose of afforestation sites has led their hostility, which may grow to overcome such misconception. It is necessary to create in them a kind of firm belief that afforestation will ultimately benefit them and benefit their livelihood too. Hence, IEC activities should be promoted vigorously.

11.3 Participation in Plantation:

Information was collected from the heads of sample households to know their active involvement for the success of the existing afforestation programme undertaken in the fringe villages a stakeholder to derive maximum benefit out of the on-going

programme implementation or not. Their response has been presented in a tabular form as Annexure-4.4.2. Annexure reveals that most of them had participated in different activities under the afforestation programmes contributing by physical labour for nursery raising, site preparation, pitting, burning, plantation, soil work, manuring and protection of sites etc. However, their participation was moderate in respect of planning activities like site selection, stock mapping, base line survey and selection of species. As such, the participation of the households in the programme of afforestation appears to be quite satisfactory.

11.4 Benefits Anticipated:

With a view to assessing their perceived knowledge about the programme benefits, information was also collected from the heads of sample households as to their anticipated benefits derived out of the afforestation programme undertaken in the fringe of their villages. Their responses are presented in a tabular form at Annexure-4.4.3. Annexure reveals that majority of them are quite aware about the future usefulness of the afforestation programme undertaken for them.

11.5 Benefits Enjoyed:

Although a number of benefits can be derived through the programme of afforestation, some of them can be derived by individuals and some others by the community as a whole. The benefits actually enjoyed by the sample households from out of the afforestation sites are presented in a tabular form in Table No: 4.4.11.

Table No: 4.4.11
Sample Households Enjoyed Benefits from Sample Sites.

Sl. No	District	Sam p Sites	Samp HH	HHs Enj Benefits	Of whom Enjoyed			
					Fuel & Fodder	NTFP	Maturity felling	Other benefits
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	4	12	9	9	-	-	9
2	Kalahandi	4	12	12	12	6	-	6
3	Koraput	5	15	6	6	-	-	-
4	Rayagada	3	9	3	3	3	-	-
	Total	16	48	30	30	9	-	15
	% to Total	-	-	63	100	30	-	50

Out of 48 sample households, 30 (63%) are enjoying benefits from the afforestation sites. On the face of this, the present finding that 63 per cent of the households are enjoying the usufruct from afforestation sites is a good indication of the impact of the afforestation programme in the KBK districts under the RLTA. All the 30 (100%) households are collecting fuel and fodder from the afforestation sites whereas 9 (30%) of the households are collecting NTFP and 15 (50%) households are getting other benefits. However, more number of households are expected to use the afforestation sites intensively as the sites will grow older. In none of the sites, the households have enjoyed the benefit of felling after maturity as the trees are yet to be matured.

12. Opinion of Key Informants:

In total 32 knowledgeable persons were interviewed to get their perception about the programme and its impact. The result of the interaction of the study team with the sample key informants is discussed in the following paragraphs.

12.1 Characteristic of K Is:

Of the 32 sample key informants, as many as 27 were VSS members. The characteristics of the sample key informants are presented below in Table No: 4.3.12.

Table No: 4.4.12
Characteristics of Sample Key Informants

Sl. No	District	Sam p Sites	Samp K Is	VSS Memb	Lite rates	Illite rates	Male	Female
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	4	8	8	8	-	6	2
2	Kalahandi	4	8	7	7	1	7	1
3	Koraput	5	10	8	9	1	7	3
4	Rayagada	3	6	4	5	1	5	1
	Total	16	32	27	29	3	25	7
	% to Total	-	-	84	91	9	78	22

As many as 29 (91%) out of 32 key informants were literate and the remaining three (9%) were illiterate. Among them as many as 25 (78%) were males and the remaining 7 (22%) were females.

12.2 Composition of VSS:

The total number of VSS members in the 16 sample was 206 and the average number of members per VSS comes to 13. The VSS comprise of around 72 per cent of males and 28 per cent females. The social composition of the VSS members comprises of 22 per cent SC, 45 per cent ST and 33 per cent from other category as given in Table No: 4.4.13.

Table No: 4.4.13
Composition of 16 Sample VSS.

Sl. No	District	Samp Sites	Total Member	Sex		Social Class		
				Males	Females	SC	ST	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	4	52	39	13	9	14	29
2	Kalahandi	4	70	52	18	30	26	14
3	Koraput	5	54	38	16	3	36	15
4	Rayagada	3	30	19	11	4	16	10
	Total	16	206	148	58	46	92	68
	% to Total	-	-	72	28	22	45	33

More or less all VSS have been formed by way of taking women member's from different social categories as a good representative.

12.3 Participation of VSS in Afforestation Activities:

In regard to the participation of VSS in the process of implementation of the afforestation programme, the information presented vide Annexure-4.4.4 is relevant. It is revealed that the involvement of the VSS in plantation activities like nursery raising, site preparation, pitting, burning, plantation, soil work and manuring and protection is cent per cent but their association at the planning stage like selection of sites, stock mapping, base line survey and selection of species etc is moderate. It is obvious that involvement of the VSS increases gradually in course of progress of various activities. However, involvement of the VSS in a big way from the stage of site selection will create a sense of ownership of the site among the VSS members and the villagers.

12.4 Benefits of Afforestation Programme:

The major informants are VSS members as 27 out of the total 32 sample are from members of the sample VSS. All the 32 key informants are aware of the anticipated benefits of the programme of afforestation like (i) green coverage, (ii) environmental improvement, (iii) soil and moisture conservation, (iv) increase in water table, (v) availability of fuel and fodder, (vi) availability of NTFP and (vii) felling of trees after maturity etc. As regards the usufruct rights enjoyed by the villagers, the views and opinion of the key informants is presented below in Table No: 4.4.14.

Table No: 4.4.14

Opinion of K Is on the Usufruct Rights Enjoyed from 16 Sample Sites.

Sl. No	District	Samp Sites	Sample K Is.	Usufruct enjoyed	Enjoyment of		
					Fuel & fodder	NTFP	Maturity felling
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	4	8	6	6	-	-
2	Kalahandi	4	8	8	8	3	-
3	Koraput	5	10	4	4	-	-
4	Rayagada	3	6	2	2	2	-
	Total	16	32	20	20	5	-
	% to Total	-	-	63	63	16	-

Enjoyment of usufruct rights will gradually increase as the sites will grow older even through of felling after maturity of trees has been banned by the State for conservation of forest and environment

12.5 Operation and Maintenance of Sites:

All 32 Key Informants reported that during transfer of afforestation sites to the VSS a document is duly executed between the Forest Department and the VSS for further maintenance of sites along with discharging of their responsibilities towards afforestation programme. All of them reported to protecting the sites from biotic interference, protecting against illicit felling, conducting periodic cleaning, protecting from fire and maintaining the plantation journal regularly. Although there was no way to verify their statements on the spot, the Key Informants reported that the condition of the sample sites in terms of survival of trees and the quality of growth is better as compared

to the time of transfer by the Forest Department to the VSS. It therefore implies that the VSS are happy over the afforestation programme and the benefits derived out of the programme is quite satisfactory.

13. Opinion of Programme Managers:

The programme of afforestation in a district is looked after by one or more Divisional Forest Officers (DFOs) depending on their jurisdiction. The views and opinion of the DFOs of four Divisions i.e. (i) Balangir (East), (ii) Balangir (West), (iii) Koraput and (iv) Rayagada were obtained. The result of the interactions of the study team with the DFOs is presented in the following paragraphs.

13.1 Formation of VSS:

In the above 4 selected sample Forest Divisions, 1692 VSS were formed out of which 1072 (63.36%) VSS were associated with the RLTP plantation programme in KBK districts; the details are in Table No: 4.4.15.

Table No: 4.4.15

VSS in Selected Divisions and those Associated with RLTP Plantation.

Sl. No	Division	Total VSS	Associated with RLTP	Percentage
(1)	(2)	(3)	(4)	(5)
1	Balangir (East)	232	232	100.00
2	Balangir (West)	279	148	53.05
3	Koraput	530	368	69.43
4	Rayagada	651	324	49.77
	Total	1692	1072	63.36

From the above table it is quite evident that a large majority of the afforestation sites belong to the RLTP programme involving sizeable number of VSSs. Thus, the afforestation programme involving VSSs as major stakeholders of the scheme is found to be satisfactory.

13.2 Protection Measures:

The views of the DFOs on the satisfactory discharge of the responsibilities by the VSS in protecting the afforestation sites after its transfer being obtained through interaction with them is presented below vide Table No: 4.4.16

Table No: 4.4.16
Protection of Sites by the VSS from Hazards and their Maintenance.

Sl. NO	Division	Protection from			Maintenance	
		Biotic Interf	Illicity felling	Fire	Periodic cleaning	Regular Pruning
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Balangir (East)	1	1	1	1	1
2	Balangir (West)	1	1	1	-	-
3	Koraput	1	1	1	-	-
4	Rayagada	1	-	-	-	-
	Total	4	3	3	1	1

The four DFOs contacted, reported that the VSSs are capable for protecting the sites from biotic interference. But in certain cases, they are unable to protect the sites from illicit felling in one periods along with lack of sense of ownership over the sites. All the VSSs are not also able to protect the sites from fire in summer. Besides, periodic cleaning and pruning operations are not also being undertaken by most of the VSSs.

13.3 Operation and Maintenance:

The operation and maintenance of the afforestation sites in the hands of VSS and their personal attachment are quite satisfactory as informed by the DFOs. The same is presented in Table No: 4.4.17.

Table No: 4.4.17
Overall Satisfaction of DFOs on the Behaviour of the VSS.

Sl. No	Division	Associated at all stages	VSS Cooperative	Site maintenance
(1)	(2)	(3)	(4)	(5)
1	Balangir (East)	1	1	1
2	Balangir (West)	1	1	1
3	Koraput	1	1	1
4	Rayagada	1	-	-
	Total	4	3	3

Three of the DFOs expressed the view that the VSS were close associated in all stages of operation of the afforestation programme. The cooperation of the VSS with the Forest Department was satisfactory and the maintenance of the sites quite satisfactory. In case of Rayagada division, the case is different, as the VSS were associated at all stages of operation of the afforestation programme. But the desirable result has not been derived due to lack of proper co-operation with forest department, followed by adequate trainings, workshops, awareness and sense of ownership among the VSS member.

SECTION – 5

BIJU KRUSHAK VIKASH YOJANA IN KBK DISTRICTS UNDER RLTA

1. Physical Progress:

The number of BKVY projects proposed to be set up under RLTA in the 4 sample districts of KBK region, the proposed ayacut, their present status of completion and also the operational status etc. for the period from 2001-02 to 2006-07 have been presented and consolidated in Table No: 4.5.1.

Table No: 4.5.1

Status of LIPs taken up under RLTA during 2001-02 to 2006-07

(Area in Ac & L I Ps in No.)

Sl.No	District	Position of L I Ps taken up during 2001-02 to 2006-07					
		Taken up	Proposed ayacut	Completed	Handed over to PP	Operating	Defunct
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Kalahandi	148 (100)	8453	136 (92)	136 (100)	126 (93)	10 (7)
2	Koraput	277 (100)	13850	167 (60)	167 (100)	167 (100)	-
3	Nawarangpur	148 (100)	7400	142 (96)	142 (100)	142 (100)	-
4	Subarnapur	205 (100)	4808	171 (83)	171 (100)	171 (100)	-
	Total (%)	778 (100)	34511	616 (79)	616 (100)	606 (98)	10 (2)

It may be seen from the above information collected from the Project Managers of the 4 study districts of LI points under BKVY that in case of Kalahandi district, the physical target for the above period was 148 LI points against which the achievement was 136, i.e. 92 per cent. As many as 126 LI points are in operating stage accounting for 85 per cent with an average purposed ayacut of 57 acres per LI point. For Koraput district the physical target of LI points from 2001 to 2007 was 277 projects of which 167, i.e. 63 per cent were completed and all of them were in operation with average ayacut coverage of 50 acres per LI point. Similarly, in case of Nawarangpur the physical target

was 148 LI points of which 142, i.e, 95 per cent were completed and in operation with average ayacut coverage of 50 acres per LI point.

For Subarnapur district the physical target was 205 LI points of which the completed and operating LI points were 171, i.e., 83 per cent of achievement and the average ayacut was 23 acres per LI point which seemed to be in the lower side and far away from the norm of LI print coverage.

As regards the 4 sample study districts (Kalahandi, Koraput, Nawarangapur and Subarnapur) the physical target of LI points for the period 2002-2007 were 778 of which 616, i.e. 79 per cent were completed and handed over to the Pani Panchayats. The purposed average ayacut for a LI point was 44.4 acres for the 4 sample districts.

The completion of LI point's i.e. the achievement was highest in case of Nawarangpur followed by Kalahandi and Subarnapur. In case of Koraput district, it was only 60 per cent as the proposed ayacut area was to be constructed or high hand with problems of geographical coverage, planning and implementation.

As regards the status of the Lift Irrigation Points, after completion they have been handed over to Pani Panchayats for their management. However, it revealed that although all the completed LIPs under RLTA P handed over to Pani Panchayats for their operation, 10 points in Kalahandi district had already been defunct as a matter of concern.

As reported by the Project Managers, the delays in completion of the LI points were mostly due to delay in the preparation of estimation and execution of electrical works by the electricity distribution company (like WESCO). Delay also occurred due to inability to take of construction with standing crop on the lands in the command for which laying of field channels have been planned. Besides in rainy season no work could be taken up. In the districts of Koraput, large numbers of projects have remained incomplete due to the above reasons. Sometimes, delay was also occurred due to non-payment of beneficiaries share.

2. Salient Features of Sample LIPs:

As per the sampling plan out of the total 20 samples 4 Lift Irrigation Points from Kalahandi district, 5 from Koraput, 4 from Nawarangpur and 7 from Subarnapur were selected for a detailed investigation.

The salient features of these 20 sample LI points have been presented in Table No: 4.5.2. It may be seen that the command for each of the sample LI point is on an average 50 acres. But in two districts, i.e., Kalahandi and Koraput the actual irrigated area under their command is less than the designed ayacut. This indicates that there may be some technical problems associated with the projects, particularly in laying of the field channels or slope of channels in the field for under utilisation of LIPs.

Table No: 4.5.2
Salient Features of Sample LIPs.

Sl.No	District	Sample LIPs	Completed in 1 year	Command area (Ac)	Potential Achiev (Ac)	Operational	Defunct
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Kalahandi	4	4	200	157	4	0
2	Koraput	5	5	250	220	5	0
3	Nawarangpur	4	4	200	200	4	0
4	Subarnapur	7	7	350	350	7	0
	Total	20	20	1000	927	20	0

As observed, all the sample Lift Irrigation Points were completed within a period of one year. It was heartening to observe that none of the sample Lift Irrigation Points was found to be defunct at the time of field study. The command area and potential utilisation of LIPs were satisfactory as it stood to 93 per cent.

3. Project Cost and Beneficiary Involvement:

The average cost of establishing of a LI point is around Rs.6.88 lakh, i.e. Rs.6.16 lakh in case of Kalahandi, Rs.6.28 lakh in case of Koraput, Rs.6.65 lakh in case of Nawarangpur and Rs.7.87 lakh in case of Subarnapur districts respectively shown in Table No: 4.5.3.

Table No: 4.5.3
Project Cost and Beneficiary Involvement.

Sl.No	District	Sample LIPs	Cost per LIP (Rs. lakh)	Beneficiary Contribution			PPs formed	Members paying water rent willingly
				Cash	Kind	Labour		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Kalahandi	4	6.16	-	-	4	4	100%
2	Koraput	5	6.28	-	-	5	5	100%
3	Nawarangpur	4	6.65	-	-	4	4	100%
4	Subarnapur	7	7.87	-	-	7	7	43%
	Total	20	6.88	-	-	20	20	

It is revealed that none of the beneficiaries paid their contribution in cash or kind. All the beneficiaries have contributed their share through labour. All the selected sample LI points have been completed and transferred for their operation and maintenance. All the members of the Pani Panchayats in Kalahandi, Koraput and Nawarangpur district are paying their water rent willingly that is more encouraging whereas in case of Subarnapur district about 43 per cent of the beneficiaries are reported to have been paying their water rent willingly as an user charges.

4. Repair and Maintenance of LI Points:

The operational aspects of selected LI points have been presented in Table No: 4.5.4.

Table No: 4.5.4
Details on Repair and Maintenance of Sample LIPs.

Sl.No	District	Samp LIPs	PP membs Operate	Annl O&M cost (Rs)	LIP Rep aired by		O&M Cost met by		Av Break-downs	
					OLIC	Pvt	PP	OLIC	Days	Times
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Kalahandi	4	4	38000	4	-	4	-	-	-
2	Koraput	5	5	50000	-	5	5	-	1	4
3	Nawarangpur	4	4	30000	-	4	2	2	2	6
4	Subarnapur	7	7	35000	7	-	7	-	1	1
	Total	20	20	38300	11	9	18	2	3	10

All the LI points are operated by some members of respective Pani Panchayat. None have employed any paid pump driver. The average annual operation and maintenance cost ranges between Rs.30,000/- to Rs.50,000/-. It was highest for Koraput and lowest for Nawarangpur. The average operation and maintenance cost worked out to about Rs.38,300/- per LIPs.

In case of Kalahandi and Subarnapur districts, repairs have been undertaken by Orissa Lift Irrigation Corporation (OLIC) whereas in case of Koraput and Nawarangpur districts, repairs have been undertaken by the Pani Panchayats by engaging private mechanics.

As regards meeting the repair expenses, all Pani Panchayats in Kalahandi, Koraput and Subarnapur districts meet them from their own funds. The Pani Panchayats

in Nawarangpur district meet the repair expenses from its own resources as well as with assistance from OLIC. Average period of break-down in Koraput and Subarnapur is one day and it is 4:1 times in a year on an average respectively. For Nawarangpur is for two days and the average number of times in a year is 6 times For Kalahandi it is nil as the Pani Panchayats have played an active role in this regard.

5. Difficulties Encountered by Pani Panchayats:

As regards difficulties encountered by the Pani Panchayats in operation and maintenance of the LIPs is presented in Table No: 4.5.5.

Table No: 4.5.5
Sample PPs Facing different Kinds of Problem.

Sl.No	District	Samp LIPs	Elect failure (freq)	High elect charges	Non-coop	Internal Controversy	Drying of Wells
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Kalahandi	4	3	-	-	-	-
2	Koraput	5	3	-	-	-	-
3	Nawarangpur	4	1	3	1	1	1
4	Subarnapur	7	3	7	-	-	-
	Total	20	10	10	1	1	1

It may be seen from the above table that out of 20 Pani Panchayats, 10 have complained about frequent electricity failure and high electricity charges. In one case ,non-cooperation from members and in another case it is quarrel among members for use of quantity water. In case of one LIP, there is problem of drying of the source for which the beneficiaries face problems. Since the electricity distribution company has fixed charges on minimum load factor of LIPs, the LIP members find that a fixed energy charge is charged even when the LIP is not in use. This problem is common for Pani Panchayats all over State.

6. Impact of LI Points:

The over all impact as visualised by the members of sample Pani Panchayats has been presented in Table No: 4.5.6. In case of 19 out of 20 sample PPs, expressed the view that their economic status have been improved after establishment of the LIPs. In case of only one out of 5 sample PPs in Koraput district expressed that the LIP has positive impact on their economic status and well being.

Table No: 4.5.6**Change in Economic Status of Beneficiaries of Sample PPs.**

SI	District	Samp LIPs	LIPs in Operation	Change in Status of Beneficiaries		
				To great extent	To some extent	Internal Controversy
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Kalahandi	4	4	4	-	-
2	Koraput	5	4	4	1	-
3	Nawarangpur	4	4	4	-	-
4	Subarnapur	7	7	7	-	-
	Total	20	19	19	1	-

7. Opinion of Sample Beneficiaries:

Total 60 sample beneficiaries, i.e., 3 each from 20 sample Pani Panchayats, have been chosen for detailed analysis and the findings are given below:

7.1 Measurable Benefits

Irrigation confers several benefits. It not only increases the area under cultivation and cropping intensity but also enables to adopt changes in cropping pattern for value addition. These changes together lead to realization of higher incomes to the cultivators that contributes significantly to their economic status. Thus, irrigation provision through LIPs both productive and protective in nature.

The 60 sample beneficiaries had a total operational area of 295.65 acres with an operational holding area of 4.93 acres. Out of a total operational area of 295.65 acres of the sample beneficiaries, 228.25 acres were under the command of LIPs with an average operational holding area of 3.80 acres that come to 77.08 per cent of their total holdings given in Table No: 4.5.7.

Table No: 4.5.7**Operational Area and Area within the Command of Sample Beneficiaries.**

SI.No	District	Sample Beneficiaries	Operational Areas of Sample Beneficiaries (Ac)		
			Total	Within Command	Average in Command
(1)	(2)	(3)	(4)	(5)	(6)
1	Kalahandi	12	56.40	50.25 (89 %)	4.19
2	Koraput	15	81.75	55.50 (68 %)	3.7
3	Nawarangpur	12	82.25	48.25 (59 %)	4.02
4	Subarnapur	21	75.25	74.25 (98 %)	3.54
	Total	60	295.65	228.25 (77 %)	3.80

7.2 Cropping Pattern and Cropping Intensity (Before):

The cropping pattern and area under different crops before installation of the LIPs for the 4 sample districts- Kalahandi, Koraput, Nawarangpur and Subarnapur are compiled at Table No. 4.5.8.

Table No: 4.5.8

Cropping Pattern and Cropping Intensity Before Installation of LIPs.

Operational Area in Command			Khariff		Rabi		Gross Cropped Area	Cropping Intensity %
District	Own land	Total Operational area in command	Crop	Area	Crop	Area		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Kalahandi								
O	48.75	50.25	Paddy	36.20	Green Gram	12.25	52.05	103.60
L	1.50		Black Gram	1.35	Horse Gram	2.25		
Total				37.55		14.50		
Koraput								
O	55.15	55.50	Paddy	41.35	Sugarcane	1.25	47.05	84.77
L	0.35		Ragi	3.20				
			Sugarcane	1.25				
Total				45.80		1.25		
Nawarangpur								
O	47.35	48.25	Paddy	41.20	Maize	2.25	44.45	92.12
L	0.90		Ragi	1.00				
Total				42.20		2.25		
Subarnapur								
O	72.5	74.25	Paddy	55.35	Paddy	3.75	60.85	81.95
L	1.75				Peanut	1.25		
					Onion	0.50		
Total				55.35		5.50		
Grand Total		228.28		180.90		23.50	204.40	89.54

The above table revealed that before LIP's installation the cropped areas were 52.05, 47.05, 44.45 and 60.85 acres in the command area of Kalahandi, Koraput, Nawarangpur and Subarnapur districts respectively. The cropping intensity after the installation of LI points was highest for Kalahandi (103.60) followed by (92.12) for Nawarangpur and lowest for Subarnapur (82%). As regards the cropping pattern, the major crops were grown in Kharif Season which accounted for 88.5% and the remaining in Rabi Season due to lack of irrigation facilities.

The overall cropping intensity of these districts prior to LIPs establishment was only 89.54 per cent which is less than 100 per cent reflected the low return from agriculture.

It may also be seen from the Table No: 4.5.8 that crops grown before establishment of the LIPs were mostly cereals like Paddy, Maize, and Grams like Black gram, Green gram and Horse gram for self-consumption and very little cash crops.

7.3 Cropping Pattern and Cropping Intensity (After):

The change in the cropping pattern and the cropping intensity after establishment of LIPs is presented in Table No: 4.5.9.

Table No: 4.5.9
Cropping Pattern and Cropping Intensity after Installation of LIPs.

Sl. No	District	Operational area in command	Khariff		Rabi		Gross Cropped Area	Cropping Intensity %
			Crop	Area	Crop	Area		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	9
1	Kalahandi	50.25	Paddy	46.20	Paddy	22.35	81.01	161.20
			Banana	1.36	Sunflower	4.50		
					Green Gram	4.35		
					Arhar	1.50		
					Vegetable	0.75		
	Total			47.56		33.45		
2	Koraput	55.50	Paddy	49.50	Paddy	9.50	77.85	140.30
			Ragi	1.80	Cabbage	5.85		
			Ginger	1.50	Ginger	1.50		
			Brinjal	1.70	Brinjal	1.70		
			Sugarcane	1.00	Tomato	2.80		
					Sugarcane	1.00		
	Total			55.50		22.35		
3	Nawarangpur	48.25	Paddy	24.75	Paddy	12.25	82.75	171.60
			Sugarcane	20.75	Sugarcane	20.75		
					Radish	2.50		
					Brinjal	1.75		
	Total			45.50		37.25		
4	Subarnapur	74.25	Paddy	72.20	Paddy	53.75	133.85	180.30
					Til	2.15		
					Ground Nut	5.75		
	Total			72.20		61.65		
	Grand Total	228.28		220.71		154.70	375.46	164.47

Establishment of LIPs have had increased the agriculture productivity and the cropping intensity towards more value addition in farming. The Gross Cropped Area in Kalahandi district had gone up to 81.01 acres as against the net sown area of 50.25 acres increased by 61.2 per cent. The cropping intensity has gone up to 57.6 per cent points after the LIPs operation.

The Gross Cropped Area in case of Koraput district had gone up to 77.85 acres from the net sown area of 55.50 acres (enhanced by 40.3 per cent) and the cropping intensity increased by 55.5 per cent points.

In case of Nawarangpur district, the area sown more than once has gone up after establishment of LIPs from 44.45 to 82.75 acres (increased by 86.2 per cent). Similarly, the cropping intensity has gone up from 92.12 per cent to 171.6 per cent by a net gain of 79.5 per cent point proving LIP as a catalyst for economic development.

In case of Subarnapur district, the Gross Cropped Area after installation of LIPs went up to 133.85 acres indicating a cropping intensity of 180.3 per cent (which was earlier only 81.95 per cent). The cropping intensity, thus, has gone up by 98.35 per cent points.

It is observed that a considerable change in the cropping intensity has occurred after establishment of LIPs. The net sown area of 228.28 acres resulted in a gross cropped area of 375.47 acres showing an increase by 83.7 per cent (the cropping intensity in the pre-project period was only 89.54 per cent).

It may be noticed that after establishment of the LIPs there had been a considerable change in the cropping pattern by way of adopting cash crops, vegetables, and pulses etc which are paying in nature. This change in the cropping pattern had been only possible because of the establishment of the LIPs.

Further, it is revealed that the proportion of Rabi crops cultivation as compared to Khariff crops has gone up and their percentage share rose from 11.5 per cent to 41.2 per cent after LIPs showed the shifting of traditional crops to commercial crops.

7.4 Income:

A mere shift from one set of crops to another or from coverage of less area to more through double / multiple cropping have their due significance only when these shifts fructify in generating higher incomes.

In this study, income has been calculated as Farm Business Income (FBI) by using Farm Management technique where output of various agricultural goods have been converted to gross income by taking into account the farm-gate price. In cost estimation, only paid out coST have been taken into account and money equivalent of own and family labour has not been taken into account. Thus, Gross Income output is converted to money by multiplying those with respective farm gate prices of the different produces. Total cost takes into account all paid out coST. The difference between Gross Income and Cost is the Farm Business Income (FBI) that actually accrues to the farmers in terms of either produce or its money equivalence.

The following table (Table No: 4.5.10) gives a picture of the Farm Business Income (FBI), Gross Income from the land operated under the command of the sample beneficiaries and per acre FBI – “without” and “with” the LIPs i.e. “without” and “with” irrigation.

Table No: 4.5.10
FBI per Acre of GCA and NSA and Increases “Before” and “After” LIPs.

Sl.No	District	Per Acre FBI for GCA (in Rs.)			Per Acre FBI for NSA (in Rs.)		
		Before	After	Incre (%)	Before	After	Incre (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Kalahandi	912	2045	124	944	3297	249
2	Koraput	927	1753	89	786	2458	212
3	Nawarangpur	2007	2868	43	1849	4918	166
4	Subarnapur	1024	1523	49	837	2745	227

It may be seen that Farm Business Income (FBI), which is the real earnings of the farmer during ‘pre’ irrigation period was Rs.944 per acre of his holding (i.e., Net Sown Area) and Rs.912 per acre of Gross Cropped Area (i.e., total land actually put to cultivation) for the district of Kalahandi. For Koraput district it was Rs.786 and Rs.927, Rs.1849 and Rs.2007 for Nawarangpur, and Rs.837 and Rs.1024 for Subarnapur districts respectively.

In the ‘post’ irrigation period the scenarios has been changed. The Farm Business Income went up to Rs.3297 per acre of NSA and Rs.2046 per acre of GCA in district Kalahandi. In case of Koraput district went up to Rs.2458 and Rs.1753, for

Nawarangpur Rs.4918 and Rs.2868 and for Subarnapur it was Rs.2745 and Rs.1525 respectively, proved that irrigation is the key input for agricultural development.

One distinguishing feature marked in the district of Subarnapur is that although Cropping Intensity in the “post-project” period is one of the highest among the 4 districts studied, the FBI per acre is comparatively lower. The reason for this could be no crop diversion and the farmers mostly grew paddy as the second crop under irrigated condition in Rabi season without switching towards commercial crops.

In terms of percentage increase in the Farm Business Income per acre of NSA, it is 249 with establishment of the LIPs as compared to the previous situation when there was no LIP in case of Kalahandi district, 212 in case of Koraput, 166 in case of Nawarangpur and 227 in case of Subarnapur districts.

Thus, it is concluded that contribution of BKVY under RLTAAP has quite substantial for generation of income along with rise in farm productivity. Steps should be taken to bring in more agricultural land under the scheme of BKVY on a priority basis for reduction in poverty in the KBK region.

7.5 Employment:

Irrigation accelerated employment opportunities, putting more land for intensive use, diversion of crops and adoption of cash crops and vegetables. In this process more on-farm employment opportunities are created by deploying more labour force per acre.

Labour employment position among the sample farm operators for the districts studied before and after establishment of LIPs may be shown in table 4.5.11.

Table No: 4.5.11
Per Acre of NSA Labour Use

Sl.No	District	Before LIP	After LIP	% age hike in Labour Use
(1)	(2)	(3)	(4)	(5)
1	Kalahandi	62	168	171
2	Koraput	59	142	141
3	Nawarangpur	68	182	168
4	Subarnapur	82	178	117
	Total	271	670	147

It is observed that in Kalahandi district per acre labour employment has gone up from 62 per acre to 168 per acre registering a growth of 171 per cent. In Koraput district, it went up from 59 per acre to 142 after irrigation registering a 141 per cent rise. In Nawarangpur district it went up from 68 per acre to 182 showing a rise of 168 per cent and for Subarnapur district it went up from 82 per acre to 178 per acre registering a growth of 117 per cent.

Thus, in terms of employment generation the contribution of BKVY is enormous. That provision of water for irrigation creates substantial employment opportunities is proved beyond doubt.

Taking into account cropping intensity, crop diversification, employment generation and above all income-generation, it is found that BKVY is a very successful programme to tackle the poverty.

8. Opinion of Beneficiaries:

8.1 Timely Water Availability:

Opinion of 60 beneficiaries about the smooth operation and maintenance of the sample LIPs have been collected and presented in Annexure-4.5.1. It may be seen from this Annexure that out of the total beneficiaries in Kalahandi, one complained about non-availability of water in time. In Koraput, it was 6 (40%), in Nawarangpur one (8%) and in Subarnapur 5 (24%) made similar complaint. About 22 per cent of the beneficiaries expressed that timely non-availability of water as the main constraint.

8.2 Sufficiency of Water:

As regards adequacy of available water, no complaint was received in Kalahandi and Subarnapur districts, while 5 complaints in Koraput and one in Nawarangpur district was received. Thus, while 90 per cent considered supply of water for agricultural use to be adequate, only 10 per cent considered it inadequate.

8.3 Breakdown:

As regards breakdown of LIPs only one complaint in Subarnapur district while none else in the rest 3 districts. The Pani Panchayats are the sole authority to look after LIPs.

8.4 Other Reasons:

No complain about drying up of wells was received. Whereas other complains received were regarding electricity failure, quarrel among members etc, which accounted for 12 per cent of total complains received on operation of the LIPs.

8.5 Benefits:

As regards benefits derived in terms of additional income, 9 beneficiaries (75%) in Kalahandi district admit that their income went up substantially and 3 beneficiaries (25%) considered the rise in income to be nominal. In Koraput district 7 beneficiaries (47%) considered their income rise to substantial level while equal number, i.e 7 beneficiaries (47%) considered the increase as marginal and one (6%) beneficiary considered his income to be stagnant. In Nawarangpur district 6 (50%) households considered income rise to be significant while the rest 6 (50 %) considered the increase to be marginal. In case of Subarnapur district 9 beneficiaries (34%) considered the increase to be substantial and 12 (66%) considered income rise marginal. About 52 per cent of the beneficiaries expressed that their income rise significantly, 46 per cent considered as marginal and 2 per cent considered their income unchanged.

9. Opinion of Key Informants:

In total, 40 knowledgeable persons were taken as key informant of the locality selected at the rate of two each from the 20 sample Pani Panchayats. Their views and opinion were taken on the smooth and effective functioning of the LIPs and maintenance in the hands of the Pani Panchayats. The finding of the key informants is presented below vide Table No: 4.5.12.

Table No: 4.5.12
Salient Features of Sample Key Informants.

Sl.No	District	Samp LIPs	Samp KIs	Sex		Special Identity			Social Group			Edu cated
				M	F	PP Memb	PRI Memb	Oth	SC	ST	Oth	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Kalahandi	4	8	8	-	3	-	5	-	-	8	8
2	Koraput	5	10	9	1	2	3	5	1	3	6	10
3	Nawarangpur	4	8	8	-	3	1	4	1	4	3	8
4	Subarnapur	7	14	14	-	3	1	10	-	-	14	13
	Total	20	40	39	1	11	5	24	2	7	31	39
	% to Total	-	-	97	3	27	13	70	5	18	77	97

Out of 40 key informants, 11 (27%) were PP members like the President and Secretary, 5 (13%) were PRI members and the rest 24 (70%) were from other groups. Regarding social category it was found that 2 (5%) were from SC, 7 (18%) from ST and the rest 31 (70%) were from general category and most of them were educated.

9.1 Perception of Key Informants:

In regard to the perception of the key informants on the effective functioning of the LIPs, smooth management of PPs and benefits accrued to the beneficiaries, their views and opinion obtained through interaction is presented below in a tabular form vide Table No: 4.5.13.

Table No: 4.5.13
Perception of Sample K Is on the Effectiveness of the System of PP.

Sl.No	District	Samp LIPs	Samp KIs	Good coop	Regular Meeting	Crop Diversi	Cash Crop	Impact on Eco Standard		
								Signi ficant	Marginal	Not at all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Kalahandi	4	8	8	8	2	2	1	7	-
2	Koraput	5	10	10	10	7	7	4	6	-
3	Nawarangpur	4	8	8	8	8	8	2	6	-
4	Subarnapur	7	14	14	14	6	7	3	11	-
	Total	20	40	40	40	23	60	10	30	-
	% to Total	-	-	100	100	58	60	25	75	-

The key informants expressed that there was good cooperation among the PP members and the OLIC. The PPs were conducting regular meetings to solve the problems relating to the functioning of their LIPs. As many as 23 (58%) of informants expressed that crop diversification was possible due to setting up of Pani Panchayats and 24 (60%) of them expressed that cultivation of cash crops became feasible due to establishment of the LIPs and formation of PPs. However, only 10 (25%) of the key informants were of the opinion that the impact of the on-going system of Pani Panchayat had significant effect on the economic status of the beneficiaries and the rest 30 (75%) admitted that the impact was nominal.

9.2 Suggestion of the K Is:

Majority of the key informants have given suggestions regarding how to bring improvement in the effectiveness of Pani Panchayat's functioning. Some of suggestions were that the Government should take steps to instal of additional points, provide regular technological assistance, meet the cost of repair and maintenance, ensure regular supply of electricity, reduce water tariff etc. From the suggestions of the key informants it transpires that they have not very well understood the objectives of the system of Pani Panchayats and are still hopeful that Government will go on meeting the cost of repair and maintenance as well as bear the water charges. They are still to comprehend that operation & maintenance of LIPs is no more the responsibility of the Government after its transfer and it is the sole responsibility of the PPs in future. Continuance this impression will have adverse effect on the smooth operation and management of the system of Pani Panchayat.

SECTION – 6

WATERSHED PROGRAMME IN KBK DISTRICTS UNDER RLTA

1. The Sample Watersheds:

The details of the 16 sample watersheds projects benefiting a number of villages, population served, the nature of land covered etc have been presented at Annexure-4.6.1. This annexure reveals that about 15,916 people residing in 39 villages are the potential beneficiaries covered by 16 sample watershed projects. It is seen, one watershed covers an area spread over two to three villages inhabited by around 995 people on an average. Of the 16 sample watersheds, 10 (62%) have been completed and the rest 6 (38%) are still ongoing. Out of the 6 ongoing watersheds, 5 were started in 2002-03 and one in 2001-02. Since these are all micro watersheds, their completion should not extend beyond 4 years. In all these cases, the financial expenditure incurred so far has been Rs.122.66 lakh against their estimated cost of Rs.182.97 lakh that accounts for 67.04 per cent. The progress of the projects seemed to be slow even after 4 years of execution.

The area treated under watersheds includes forest, revenue land, land under cultivation, community land and barren land. While most of watersheds include forest land, revenue land, land under cultivation and community land within their command area as many as 8 sample watersheds (50%) include only barren land.

2. Assets Created:

A number of agriculture and allied activities are usually undertaken in a watershed area depending upon its topography. Even though various assets created within a watershed served multi purposes, the assets created under the 16 sample watersheds classified into 14 broad categories. The number of sample watersheds out of 16 in which these activities were undertaken is given below vide Table No.4.6.1

Table No: 4.6.1
Category of Assets Created in the 16 Sample Watersheds

Sl.No	Category of Assets Created	Watersheds
(1)	(2)	(3)
1	Insitu Soil and Moisture Conservation	16
2	Plantation and sowing of seeds of multipurpose trees, shrub, grass, legumes, pasture and land development.	16
3	Natural Regeneration.	1
4	Agro-forestry, Horticulture and Floriculture.	15
5	Wood and fuel wood substitution	10
6	Drainage line treatment through vegetable bunding.	15
7	Small Water Harvesting Structures.	15
8	Afforestation of degraded forest and waste lands	12
9	Development and conservation of common property resources	13
10	Repair and construction of community and panchayat houses.	8
11	Sanitation Facilities	9
12	Drinking Water Facilities	4
13	Development of Orchards	14
14	Pisciculture	15

Activities like insitu plantation, soil and moisture conservation, plantation and sowing of seeds of multipurpose trees, shrub, grass, legumes, pasture and land development, agro-forestry, horticulture and floriculture, drainage line treatment through vegetable bunding, small water harvesting structures, development of orchards and pisciculture have invariably been undertaken in almost all the watersheds. The remaining activities have been undertaken depending upon the topography of the land coming under the watershed and the local requirement. Programmes on awareness rising, training, extension and people's participation relating to the execution of watershed programme have been undertaken invariably in all the watersheds. Although,

awareness raising, training, extension and people's participation has not created any asset directly, But helps in skill creation and maintenance of assets in a better way.

The distribution of assets created in each of the 16 sample watersheds is given below vide Table No. 4.6.2

Table No: 4.6.2
Assets Created in Sample Watersheds

No. of Assets per Watersheds	No. of Watersheds	Total Assets Created
(1)	(2)	(3)
7	1	7
8	4	32
11	4	44
12	2	24
13	4	52
14	1	14
Total	16	173

The average number of assets created per sample watershed comes around 11, with a minimum of 7 and a maximum of 14 per watershed project. The assets created under these watersheds are such that they will keep the people busy in their operation and maintenance, which will provide them gainful employment over and above what they were doing prior to construction of watersheds.

3. Employment Generated:

All the activities undertaken and assets created in the sample watersheds are highly labour intensive so as to create more employment opportunities for the local people and to arrest the migration of local labour force. Table No. 4.6.3 presented below give the total man-days generated through the 16 sample watersheds, giving the men and women break ups and the flow of funds towards employment generation etc.

Table No: 4.6.3
Employment Generation through Sample Watersheds

Sl. No	Sample Watershed	Expenditure (lakh Rs)			Mandays Generated (thousand)			
		Total	Labor	%age	Male	Female	Total	F (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Marbouguda	21.10	9.29	44.03	10095	6800	16895	40.25
2	Maligaon	21.10	9.31	44.12	10105	6820	16925	40.30
3	Nandidebata	9.37	6.07	64.78	6900	5242	12142	43.17
4	Jagatjanani	20.61	12.03	58.37	13816	8059	21875	36.84
5	Mouli Maa	21.37	12.31	57.60	13817	8558	22375	38.25
6	Palkomla	19.64	7.50	38.19	6740	8260	15000	55.07
7	Pullimetta	20.70	7.89	38.12	7100	8670	15770	54.98
8	Margo	19.00	6.88	36.21	7244	6516	13760	47.35
9	Tongguda	6.10	4.40	72.13	5369	3427	8796	38.96
10	Sriram	20.96	14.07	67.13	20052	8090	28142	28.75
11	Maa Thakurani	20.54	15.22	74.10	19502	8163	27665	29.51
12	Khaira	19.00	14.11	74.26	18810	8062	26872	30.00
13	Jai Maa Thakurani	19.20	15.07	78.49	17500	11200	28700	39.02
14	Gangeidevi	21.89	11.90	54.36	9500	14300	23800	60.08
15	Tamingi	25.15	11.05	43.94	11789	8305	20094	41.33
16	Nukalma	16.28	9.77	60.01	10657	7105	17762	40.00
	Total	302.01	166.87	55.25	188996	127577	316573	40.30

It is revealed that out of total expenditure of Rs.302.01 lakh for 16 sample projects, the flow of funds towards employment generation accounted for Rs.166.87 lakh i.e; 55.25 per cent of the total expenditure meant for the watersheds. Minimum of labour component is 36.21 per cent in case of the Margo watershed in Malkangiri district and a maximum of 78.49 per cent in case of the Jai Maa Thakurani watershed in Nawarangpur district. On an average 1048 man-days have been generated per Rs.1.00 lakh expenditure under watershed programme. It was also revealed that equal wage rate was paid to both for male and female workers in construction of the watershed and no contractor was engaged for construction programmes. As regards the participation of women in the wage employment, 40.30 per cent of the employment enjoyed by them. The participation of women is minimum 28.75 per cent in case of Sriram Watershed in Nawarangpur district and maximum of 60.08 per cent in case of Maa Gangeidevi Watershed in Rayagada district. Thus, participation of women in the employment generation under the watershed programme appears to be quite satisfactory. As regard the employment of the local people, the study revealed that all the employment opportunities created under the sample watersheds were fully enjoyed by the local people and more specifically by the local villagers. The members of Watershed

Committees and the User Groups were all-cooperative and had extended their cooperation in the process of implementation of various activities under the watersheds.

4. Irrigation Potential Created:

Apart from soil and moisture conservation, creation of irrigation potential is one of the major objectives of watershed programme to cover more land under irrigation for agricultural productivity. Under the 16 sample watersheds, irrigation potential to the extent of 1352 ha had been created the details of which are shown in Table No: 4.6.4.

Table No: 4.6.4
Creation and Utilization of Irrigation Potential in Sample Watersheds

Sl.No	Sample Watershed	District	Potential (ha)	Utilisation (ha): 05-06	
				Kharif	Rabi
(1)	(2)	(3)	(4)	(5)	(6)
1	Marbouguda	Koraput	25	25	5
2	Maligaon	Koraput	40	40	10
3	Nandidebata	Koraput	60	60	40
4	Jagatjanani	Koraput	113	113	86
5	Mouli Maa	Koraput	76	76	35
6	Palkomla	Malkangiri	22	22	-
7	Pullimetta	Malkangiri	20	20	-
8	Margo	Malkangiri	20	20	-
9	Tongguda	Malkangiri	500	500	50
10	Sriram	Nawarangpur	22	22	22
11	Maa Thakurani	Nawarangpur	19	19	19
12	Khaira	Nawarangpur	20	20	-
13	Jai Maa Thakurani	Nawarangpur	25	25	25
14	Gangeidevi	Rayagada	42	42	42
15	Tamingi	Rayagada	200	200	150
16	Nukalma	Rayagada	148	148	56
	Total	16	1352	1352	540

As against 1352 hectares of irrigation potential created under the 16 sample watershed, of which cent percent utilisation meant for Kharif in 2005-06. It has also a derived result for Rabi season to put additional 540 hectares of land, which accounts for around 40 per cent of the total potential due to watershed projects and the crop intensity has been increased by 40% after completion of watershed projects.

5. Skill Development:

Training and visit programmes are usually important not only to create a sense of appreciation of the construction of watersheds but also to enhance the skill of the members of Watershed Committees / User Groups for efficient operation and maintenance of different kinds of assets created through watersheds and to derive benefits out of that. The details regarding trainings imparted to the members of User Groups, their visit to successful watershed areas and their perception on the usefulness of training and visit programmes in respect of the 16 sample watersheds is present below vide Table No: 4.6.5.

Table No: 4.6.5
Training & Visit Programmes Organised under Sample Watersheds

Sl.No	Sample Watershed	District	Training Organised		Training Useful
			Within	Outside	
(1)	(2)	(3)	(4)	(5)	(6)
1	Marbouguda	Koraput	Yes	Yes	Yes
2	Maligaon	Koraput	Yes	Yes	Yes
3	Nandidebata	Koraput	Yes	Yes	Yes
4	Jagatjanani	Koraput	Yes	-	Yes
5	Mouli Maa	Koraput	Yes	Yes	Yes
6	Palkomla	Malkangiri	Yes	Yes	Yes
7	Pullimetta	Malkangiri	Yes	Yes	Yes
8	Margo	Malkangiri	Yes	Yes	Yes
9	Tongguda	Malkangiri	Yes	-	Yes
10	Sriram	Nawarangpur	Yes	-	-
11	Maa Thakurani	Nawarangpur	Yes	-	-
12	Khaira	Nawarangpur	Yes	-	Yes
13	Jai Maa Thakurani	Nawarangpur	Yes	Yes	Yes
14	Gangeidevi	Rayagada	Yes	-	Yes
15	Tamingi	Rayagada	Yes	-	Yes
16	Nukalma	Rayagada	Yes	-	Yes
	Total	16	12	8	14

Training programmes were organised for the members of Watershed Committees and User Groups in respect of all the sample watersheds along with visits to successful watersheds. Such visits were organised for 8 watersheds only. Coming to the

usefulness of the training and visit programmes, the members in case of two watersheds have opined that the training is not useful. These two watersheds are Sriram Watershed and Maa Thakurani Watershed in Nawarangpur district for whom no programme of visit to successful outside watersheds was organised. For efficient operation and maintenance of the watersheds, training and visit programmes are essential as the users can develop a sense of appreciation and exposure of the programme.

6. Impact Assessment:

Information was also collected to assess if construction of watersheds had some impact on creation of self-employment opportunities and occupational changes among the local people or not. The response of 16 watersheds is presented below vide Table No: 4.6.6.

Table No: 4.6.6

Employment Opportunities and Occupational Changes in Sample Watershed Areas.

Sl.No	Sample Watershed	District	Self Emp Opp Created	Changes in Occupation
(1)	(2)	(3)	(4)	(5)
1	Marbouguda	Koraput	Yes	Yes
2	Maligaon	Koraput	Yes	Yes
3	Nandidebata	Koraput	Yes	Yes
4	Jagatjanani	Koraput	Yes	Yes
5	Mouli Maa	Koraput	Yes	Yes
6	Palkomla	Malkangiri	Yes	-
7	Pullimetta	Malkangiri	Yes	Yes
8	Margo	Malkangiri	Yes	Yes
9	Tongguda	Malkangiri	Yes	Yes
10	Sriram	Nawarangpur	-	-
11	Maa Thakurani	Nawarangpur	-	-
12	Khaira	Nawarangpur	Yes	Yes
13	Jai Maa Thakurani	Nawarangpur	Yes	Yes
14	Gangeidevi	Rayagada	Yes	Yes
15	Tamingi	Rayagada	Yes	Yes
16	Nukalma	Rayagada	Yes	Yes
	Total	16	14	13

Except two watersheds users, the other 14 watershed users have positive opinion about promotion self employment opportunities whereas in 13 sample watersheds there was positive opinion regarding change of occupational pattern after construction of watersheds and creation of productive assets. In case of Sriram watershed and the Maa Thakurani watersheds in Nawarangpur district, there was

negative opinion in creation of self employment opportunities and changes in occupational pattern even after construction of watersheds. In case of these two watersheds, had also negative opinion on the usefulness of Training and Visit Programme.

In regard to the scope of creation self employment opportunities and changes in occupational pattern of the local people, a reference may be made at table N: 4.6.1. Views about assets created under the watersheds and the interaction with the local people reveals as such:

- (i) The local people have ample scope of their employment through related activities like plantation, agro-forestry, horticulture, floriculture, land development, creation of orchards, taking up pisciculture etc, as a result of the construction of the watersheds.
- (ii) There has been a change in the cropping pattern including cultivation of vegetables during summer in the watershed areas.
- (iii) As a result of these watersheds, the local people have not only enjoyed some kind of employment opportunities but also got some additional income through end products of different economic activities undertaken in the watershed area. As 316.57 millions mandays employment generation took place to check the migration of labor force.
- (iv) To check the migration of labor force It improves the health and hygiene condition of the people on account of construction of drainage system and establishment of safe drinking water as main sources of potable water.
- (v) Promotes interpersonal relationship and public participation in government programmes as a stakeholder in different user groups and taking part in implementation of different activities under the watershed programme.
- (vi) The overall observation is that the objectives of Watershed Programme have considerably been fulfilled as there has been increase in irrigation, cropping intensity, crop diversification, additional employment generation, increase in farm business income, increase in soil and moisture conservation, increase in green cover, adoption of new activities like horticulture, fishery, and plantation etc as also reduction in out-migration.
- (vii) Apart from land lords within the watershed areas, the landless have also been benefited by way of availing additional employment and livelihood opportunities and enjoying benefits as a result of the watersheds.
- (viii) Since additional employment opportunities have been created and additional income generation have occurred on account of watershed projects. There has been considerable participation of the local people in the operation and maintenance of various activities under the watersheds through SHGs and User Groups. However, what is needed in regard to sustainability of watershed projects is to keep up the spirit through enhanced farm activities generating higher incomes over the years.

Overall the watershed under the RLTA has some positive impact in the KBK districts.

7. Opinion of Households:

In the process of field investigation, total 48 households were contacted at an average 3 each for the 16 sample watersheds to know their perception on watershed

and the extent of benefit derived out of the same. Their views and opinion has been discussed in the following paragraphs.

7.1 Characteristics of Respondents:

Out of 48 households interviewed, 44 (92%) were males and rest 4 (8%) were females. Their other characteristics are presented below vide Table No: 4.6.7

Table No: 4.6.7

Characteristics of Household Respondents

Sl. No	District	W S	HHS	SC	ST	Othe rs	M	F	BPL	Awar e	UG Memb
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Koraput	5	15	-	10	5	12	3	14	15	9
2	Malkangiri	4	12	4	7	1	12	-	7	12	9
3	Nawarangpur	4	12	2	10	-	11	1	9	12	4
4	Rayagada	3	9	-	8	1	9	-	5	9	6
	Total	16	48	6	35	7	44	4	35	48	28
	% to Total	-	-	12	73	15	92	8	73	100	58

The sample respondents comprise of 6 (12%) from SC, 35 (73%) from ST and 7 (15%) from other category. As many as 35 (73%) were from BPL category and the remaining 13 (27%) from APL category. All of them were aware about the programme of watershed and the future benefit that can be derived out of that. The main occupation of all the 48 households was cultivation. As many as 28 (58%) of the sample respondents were members of one or other Watershed Committee or User Group.

7.2 Crop Cultivation:

Addition of irrigation potential had been created through the watersheds that helped in diversification of crops due to assured irrigation facilities. It improved agricultural practices to increase agricultural productivity and production. To assess its impact a structured questionnaire was administered with all the 48 sample households. It was revealed that all the sample households had some amount of cultivable land within the command of the watershed area. The opinion in the changes they have experienced in respect of agricultural activities as a result of the watersheds as compared to the past is presented in a tabular form at Table No: 4.6.8.

Table No: 4.6.8
Opinion of 48 Samples HHs on the Area, Yield Rate and Production under 16
Sample Watersheds

Sl. No	Item of Information	Unit	Before Watersheds			After Watersheds		
			Kharif	Rabi	Total	Kharif	Rabi	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Crops Cultivated	Variety	Paddy, Ragi, Onion, Til, Ground nut, Cotton etc			Paddy, Ragi, Onion, Til, Sugar cane, Maiz, Millet, Patato, Onion, Ground Nut, Sun flower, Vegetables etc		
2	Area Cultivated	Acre	119.70	3.50	123.20	127.20	45.00	172.70
3	Gross Income	Rs. Th	337.15	15.25	352.40	652.05	284.90	936.95
4	Exp on Fertiliser	Rs. Th	38.60	2.70	41.30	86.80	42.15	128.95
5	Expr on Seeds	Rs. Th	30.46	0.68	31.14	40.84	28.88	69.72
6	Expr on Pesticides	Rs. Th	8.36	1.00	9.36	21.87	19.42	41.29
7	Expr on Wages	Rs. Th	84.00	1.40	85.40	145.30	50.35	195.65
8	Total (4 to 7)	Rs. Th	161.42	5.78	167.20	294.81	140.80	435.61
9	Farm Business Income (FBI) (3-8)	Rs. Th	175.73	9.47	185.20	357.24	144.10	501.40
10	FBI per Acre	Rupees	1468	2706	1503	2808	3202	2903
11	Incre in FBI per Ac	%age	-	-	-	191	118	193
12	Cult area Increase	%age	-	-	-	106	1285	140
13	Cropping Intensity	%age	-	-	103	-	-	136
14	Hired Labour	Number	1680	28	1708	2906	1007	3913
15	Family Labour	Number	2805	270	3075	2723	2030	4753
16	Total Labour	Number	4485	298	4783	5629	3037	8666
17	% increase of labour		-	-	-	126	1019	181

The information presented in the above table reveals that all the sample households were cultivating 119.70 acre of land during kharif season and 3.50 acre during Rabi aggregating to a gross cultivated area of 123.20 acre within the watershed area prior to the construction of watersheds, the same has gone upto 127.20 acre (6.3%) in Kharif, to 45.00 acre (1185%) in Rabi and to 122.70 acre (40%) in gross after construction of the watersheds. Increase in the area under cultivation has been possible only due to development of barren land under the watersheds and creation of additional irrigation facilities under the programme. In regard to the production and productivity, the

farm business income (FBI) per acre was Rs.1468/- in Kharif, Rs.2706/- in Rabi and Rs.1503/- on the whole prior to the construction of watersheds, the same has gone up to Rs.2808/- (91%), Rs.3202/- (18%) and Rs.2903/- ((93%) respectively as a result of establishment of watersheds. While the cropping intensity was only 103 per cent prior to construction of watersheds, the same has gone up to 136 per cent after construction of watersheds. While the 48 sample households were required to engage labour to an extent of 4783 (hired-1708 and family-3075) for agricultural activities within the watershed area prior to their construction, the same has gone up to 8666 (hired-3913 and family-4753) which is 81 per cent of the former requirement after construction of the watersheds. Besides, there had been diversification of crops including growing of cash crops and vegetables after construction of watersheds. It, therefore, gives a clear cut message that the programme of watershed development has a positive impact on the production and productivity of agricultural crops in the watershed area in terms of diversification of crops, cultivation of cash crops and vegetables, production and productivity, cropping intensity as also generation of employment through various agricultural and allied activities.

7.3 Public Participation:

The extent of public participation in the process of implementation watershed programme can be judged from the involvement of the local people in different activities relating to the watershed and their participation in community based organizations. Information on public participation in different community programmes in the watershed area is compiled in the Table No: 4.6.9.

Table No: 4.6.9
Public Participation in Community Programmes through Watersheds

Sl. No	Sample Watershed	SHGs formed		Sample Households			
		Before	After	Total	Aware of Respsnblty	Member of UGs	Attended Training
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Marbouguda	2	10	3	3	2	2
2	Maligaon	2	10	3	3	1	-
3	Nandidebata	2	10	3	3	2	1
4	Jagatjanani	2	3	3	2	2	2
5	Mouli Maa	3	10	3	3	2	2
6	Palkomla	6	10	3	3	2	1
7	Pullimetta	0	19	3	3	2	2
8	Margo	1	11	3	2	2	1
9	Tongguda	1	6	3	3	3	2
10	Sriram	3	16	3	2	-	-
11	Maa Thakurani	4	12	3	2	-	-
12	Khaira	7	13	3	3	1	1
13	Jai Maa Thakurani	2	12	3	3	3	3
14	Gangeidevi	2	3	3	3	2	2
15	Tamingi	2	4	3	3	2	2
16	Nukalma	3	14	3	3	2	2
	Total	42	163	48	44	28	23
	% to Total	-	288	-	92	58	48

It is revealed that there were a total 42 SHGs of different types within the sample watershed area, which have gone up to 163 (288%) as a result of formation of more number of watershed committees and User Groups. All of them have taken responsibilities of operation and maintenance of the assets created under the sample watersheds through active public participation. Out of 48 sample households, 44 (92%) have requisite knowledge about the role and responsibility of the local public in the operation and management of watersheds. As many as 28 (58%) out of 48 respondents were member of one watershed committee, user group or the other of whom 23 (48%) had attended trainings organized for members of the watershed committees or user groups. Since all the sample households had some cultivable land within the command

of watersheds, had taken part in some kind of activity under the programme such as product development, organization of health camps, distribution of goats, cattle and agricultural implements, plantation, fishery activities, watch and ward etc. Participation of the public in the construction of watershed programme and their self operation and maintenance appears to be quite satisfactory.

7.4 Overall Perception:

To know the overall satisfaction of the sample households on the impact of the watershed programme on their different walks of life, the views and opinion of sample households were obtained and placed in Table No: 4.6.10.

Table No: 4.6.10
Perception of Sample HHs on the Impact of Watersheds

Sl. No	Sample Watershed	Samp HHs	Households satisfied on the following aspects					
			Employ ment opp	Liveli hood opt	Fodder / fire wood	Water Tab / Envvn	Reduced Migration	Econo growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Marbouguda	3	3	3	3	3	2	3
2	Maligaon	3	3	3	3	3	3	3
3	Nandidebata	3	3	3	3	3	2	3
4	Jagatjanani	3	3	3	3	3	3	3
5	Mouli Maa	3	3	3	3	3	2	3
6	Palkomla	3	3	3	3	3	1	1
7	Pullimetta	3	3	3	3	3	1	3
8	Margo	3	3	3	3	3	2	3
9	Tongguda	3	3	3	3	3	2	3
10	Sriram	3	3	3	3	3	3	3
11	Maa Thakurani	3	3	3	3	3	3	3
12	Khaira	3	3	3	3	3	3	3
13	Jai Maa Thakurani	3	3	3	3	2	2	3
14	Gangeidevi	3	3	2	3	3	3	3
15	Tamingi	3	3	2	3	3	2	3
16	Nukalma	3	3	3	3	3	2	3
	Total	48	48	46	48	47	36	47
	% to Total	-	100	96	100	98	75	98

The table reveals that all the sample households expressed that the scope of getting additional employment has been increased as a result of construction of watersheds in their locality. All of them are collecting fire wood for cooking purpose and fodder for their animals from the watershed area. However, 46 households (98%) expressed that they have been enjoying enhanced livelihood opportunities due to watersheds. About 98 per cent of respondents are of the opinion that the water table in the watershed area has gone up, environmental improvements have been noticed and the various economic activities undertaken in the project area has been improved their economic status. 75 per cent of the households expressed the view that due to watershed projects, there has been drastic cut in migration of the local people in search of labour. This gives a clear cut picture on the positive impact of the watershed programme on the local people in the KBK districts is not only to improve their socio-economic conditions but also the environmental balance.

8. Opinion of Knowledgeable persons:

All the 32 sample key informants were aware of the aims and objectives of the watershed programme and also very much aware on the number and varieties of assets created under the watershed constructed in their locality. Besides, they expressed the view that various components of the programme of watersheds were implemented departmentally with the help of the local people.

8.1 Opinion on the Impact:

The information collected from the sample key informants on the impact of the watershed programmes in terms of selected parameters is presented below vide Table No: 4.6.11.

Table No: 4.6.11**Opinion of Sample K Is on the impact of the Sample Watersheds**

Sl. No	Sample Watershed	Samp K Is	K Is satisfied on the following aspects					
			Emloy ment opp	Livelihood opt	Fodder / fire wood	Water Tab / Envvn	Reduced Migration	Econo growth
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Marbouguda	2	2	2	2	2	-	2
2	Maligaon	2	2	2	2	2	-	2
3	Nandidebata	2	2	2	2	2	-	2
4	Jagatjanani	2	2	2	2	2	-	2
5	Mouli Maa	2	2	2	2	2	-	2
6	Palkomla	2	2	2	2	2	-	2
7	Pullimetta	2	2	2	-	2	2	2
8	Margo	2	2	2	-	2	2	2
9	Tongguda	2	2	2	-	2	2	2
10	Sriram	2	2	2	2	2	2	2
11	Maa Thakurani	2	2	2	2	2	2	2
12	Khaira	2	2	2	2	2	2	2
13	Jai Maa Thakurani	2	2	2	2	2	2	2
14	Gangeidevi	2	2	2	2	2	-	2
15	Tamingi	2	2	2	2	2	2	2
16	Nukalma	2	2	2	2	2	-	2
	Total	32	32	32	26	32	16	32
	% to Total	-	100	100	81	100	50	100

It is revealed from the opinion of the key informants, the programme of watershed has been able to create a conducive environment for enhancing livelihood opportunities for the local people, increasing the water table, growing fodder and fire wood, enhancing economic growth of the local people through various income generating activities like agriculture, pisciculture, plantation etc and above all generating employment opportunities for the local people to reduce migration of the local people to outside in search of job. Overall, the programme of watershed has a positive impact on the local people. The opinion expressed by the key informants is more or less similar to that of the sample households.

9. Opinion of Programme Managers:

The District Rural Development Agency oversees and is responsible for smooth implementation, operation and management of the programme of watersheds projects. Although detailed investigation on watershed programme was under taken in Koraput, Malkangiri, Nawarangpur and Rayagada districts, district level information could be collected from three districts except Rayagada. As per the reports of the district authorities, the financial and physical progress of work under the programme of watershed is presented below vide Table No: 4.6.12.

Table No: 4.6.12
Financial and Physical Achievements under Watersheds
(during period 2002-03 to 2004-05)

Sl. No	District	Total Water sheds	Financial (Rs in lakh)			Physical (in Hect)		
			Target	Achievement	% of Ach	Target	Achievement	% of Ach
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Koraput	84	2520.00	1773.34	70.37	42000	29555	70.37
2	Malkangiri	42	1166.21	995.32	85.35	19437	16589	85.35
3	Nawarangpur	60	1773.37	1433.81	80.85	29557	21298	72.06
	Total	186	5459.58	4202.47	76.97	90994	67442	74.12

As against 314 Micro-watersheds programmed under the RLTP in the 8 KBK districts, as many as 186 (39%) have been taken up in the above three districts alone. Against a total estimated cost of Rs.5459.58 lakh the expenditure till the date of this study was of the order of Rs.4202.47 lakh which accounts for 76.97 per cent. In regard to the physical achievement, 90994 hectares of area was targeted for treatment and the achievement was of the order of 67442 hectares which accounts for 74.12 per cent. The physical-achievement appears more or less at par with the financial achievement. The programme of micro-watersheds in KBK districts are being implemented since 2002-03 and a considerable number of them are still incomplete. There is no dearth of funds for micro-watersheds under RLTP for which there appears no valid reason for delay in completion of watershed projects.

9.1 Public participation:

The Programme Managers expressed that the Watershed Development Committees, the Watershed Committees, the User Groups and the public had shown their great interest in the implementation of watershed programmes and also participated

in various activities under the watershed programmes. But complains were still received from them and the complaints were mainly related to low quality of work, irregular act of the watershed committees like misappropriation and favoritism etc. While necessary correctives steps were undertaken in respect of low quality of work, the complaints against the Watershed Committees were addressed through mutual discussion and in extreme cases by changing the Secretary. In any case, receipt of complains were regarded as a positive sign as this is an indication that the people are vigilant about their rights and responsibilities.

9.2 The Impact:

The Programme Managers expressed that there had been considerable impact of the programme of watershed on the development of the command area as well as on the local people and the following are few examples;

- i. Better management of natural resources,
- ii. SHGs movement has received a considerable boost,
- iii. Vigorous implementation of beneficiary oriented programme and participation of the public,
- iv. Soil and water conservation as also improvement to existing ponds and tanks and taking up of pisciculture,
- v. Taking up plantation activities and thereby rearing of domestic animals,
- vi. Collection of fodder and fuel wood, cultivation of vegetables, cash crops etc
- vii. Increased scope for livelihood opportunities and employment generation thereby increasing the economic condition of the people.
- viii. Through programme of watershed, the interpersonal relationship among the local people by way of SHGs movement has increased as also the interface between the government functionary and the public.

SECTION – 7

RURAL CONNECTIVITY PROGRAMME IN KBK DISTRICTS UNDER RLTA

1. The Sample Bridges:

Construction of bridge projects is necessary for bring all weather connectivity due to missing road links or else the existing link over nallah and stream is rather unsafe. Out of construction of the 8 sample bridges, in case of 6 sites there was no link at all, for which communication through out the year was not possible except summer and winter. In regard to the rest two sample bridges, there were no road links to the bridge. However, the existing links were unsafe masonry bridges. Further details on these sample bridge projects is presented below vide Table No: 4.7.1.

Table No: 4.7.1

Details about the Sites and the Sample Bridges.

Sl. No	Sample Bridge	District	Existing Link	Executing Agency	Financial Progress (lakh Rs.)			Completed
					Estimate	Expr	% Expr	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	SB over Jamuna Bahal	Kalahandi	No Bridge	Contractor	37.32	36.02	96.52	No
2	SB over Bileikani	Kalahandi	Unsafe Bridge	Contractor	44.50	44.50	100	Yes
3	HL Bridge at Biriguda	Koraput	No Bridge	Contractor	94.92	94.92	100	Yes
4	Bridge over Daldala Nallah	Koraput	Unsafe Bridge	Dept	42.66	42.66	100	Yes
5	Bridge over Palliguda	Koraput	No Bridge	Dept	106.45	106.45	100	Yes
6	HL Bridge over Sundar	Nuapada	No Bridge	Contractor	120.59	120.59	100	Yes
7	Ganeshpur Bridge	Subarnap-ur	No Bridge	Contractor	40.92	40.92	100	Yes
8	SB over Bijepur	Subarnap-ur	No Bridge	Contractor	45.22	45.22	100	Yes
Total		8	6 + 2	2 + 6	532.58	531.28	99.76	7

Even though the sites were selected and plan estimates were prepared by departmental authorities, construction of 6 sample bridges were entrusted to private party contractors and 2 were executed departmentally. It was good that 7 (88 per cent) out of the 8 sample bridges were completed and put to operation. In one case (i.e. the sub-merge bridge over Jamuna Bahal), in Kalahandi district, the construction was delayed due to stagnation of water on the site. It was a double crop area and there was

no specific nallah passing through. While the former two reasons can be resolved, the later may create perennial problem for all weather communication because of technical reasons associated with selection of sites. As regards financial achievement cent per cent has been achieved in seven cases of sample bridge projects and in case of the incomplete one in Kalahandi district, it was 96.53 per cent.

2. Employment Generation

Data on generation of employment in course of construction of bridge projects was made available for two samples bridges of Koraput district. The details of employment generated through these two bridge projects is presented below vide Table No: 4.7.2.

Table No: 4.7.2

Employment Generation through Construction of Sample Bridges

Sl. No	Bridge	District	Mandays Generated			Break up of Unskilled Labour				
			Skilled	Unskilled	Total	Male	Female	SC	ST	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Daldala Nallah	Koraput	12660	30000	42660	24000	6000	17000	10000	3000
2	Bridge Over Palliguda	Koraput	40000	60000	100000	54000	6000	24000	22000	14000
	Total	2	52660	90000	142660	78000	12000	41000	32000	17000
	% to Total	-	37	63	-	87	13	45	36	19

Of the total employment generated, 37 per cent relates to skilled labour and 63 per cent to unskilled. The unskilled work has to be done through engagement of local labour. As it reveals, about 87 per cent of the unskilled labour was contributed by men and 13 per cent by women. As such, female participation in the employment generation had been quite low which need to be enhanced substantially to at least 30 per cent or more. In regard to participation of labourers from different social class in employment generation, SC contributed 45 per cent, ST 36 per cent and others 19 per cent of the unskilled labour. The participation of ST in employment generation had been appreciably low compared to high concentration of ST population of the locality. One important thing was observed in course of field study that information in respect of employment generation was furnished in case of 2 out of 8 sample bridge projects. In regards to the remaining 6 projects, figure on employment generation had either not been maintained

or else the field functionaries were not inclined to part with the information. In either case, the situation is not conducive. In the former case, it violates the prescribed procedure of maintaining records and in the later, lack of transparency.

3. Quality Control:

The quality of construction of bridge projects depends on adherence to specifications, quality of material, timeliness, supervisions and test- checks. Cube testing and stump testing are two major quality control tools among others in construction of bridge projects. Besides, inspection of higher authorities in course of construction activities plays a vital role in ensuring the quality of work. Table No: 4.7.3 presented below shows the details of quality control measures taken in course of construction of the 8 sample bridge projects.

Table No: 4.7.3
Quality Control Measures taken in respect of Sample Bridges.

Sl. No	Sample Bridge Project	District	Cube test	Stump test	Inspn by Site Engineers			Inspn by Higher Authorities			
					JE	SDO	Total	EE	SE	CE	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	SB over Jamuna Bahal	Kalahandi	Yes	Yes	100	20	120	4	1	-	5
2	SB over Bileikani	Kalahandi	Yes	Yes	90	40	130	5	1	-	6
3	HL Bridge at Biriguda	Koraput	Yes	Yes	100	50	150	10	1	1	12
4	Bridge over Daldala Nallah	Koraput	Yes	-	100	50	150	25	5	2	32
5	Bridge over Palliguda	Koraput	Yes	-	100	50	150	25	5	2	32
6	HL Bridge over Sundar	Nuapada	Yes	Yes	100	50	150	4	1	-	5
7	Ganeshpur Bridg	Subarnapur	Yes	Yes	100	50	150	4	1	-	5
8	SB over Bijepur	Subarnapur	Yes	Yes	90	40	130	2	1	-	3
	Total	8	8	6	780	350	1130	79	16	5	100

As observed, cube testing was done in all the sample bridges, whereas stump testing was done in case of 6 (75 %) sample bridges. The site engineers i.e. the Junior Engineer and the Sub-Divisional Officer who are closely associated through out the construction work, have supervised the work adequate number of times. As regards the inspection of supervising officers i.e. the Executive Engineer (EE), Superintendent Engineer (SE) and the Chief Engineer (CE), their inspection per site comes to 13 on an average with a minimum of 3 and maximum of 32 per site. Of course, more number of inspections by senior officers to problem areas is inevitable, but the frequency of visit to different sites, should not be so widely. In any case, the number of higher-level inspections to project sites should be as prescribed.

4. Connectivity Established:

Construction of bridge projects provide connectivity from uncovered villages to panchayats, blocks and growth centers at what ever distance they may be. The linkage established through construction of the bridge is crucial where there are no alternate means. Keeping this in view, the villages, the Gram Panchayats, blocks, service and growth centers for whom the bridge projects in question provided crucial linkage was examined and the result is presented below vide Table No: 4.7.4.

Table No: 4.7.4

Establishment of Missing Links as a result of Sample Bridge Projects.

Sl. No	Sample Bridge Project	District	Crucial Connectivity Provided in Between							
			Villages	G Ps	Vill to GPs	GPs to Blocks	Block to Dist	Vill to School	To health Centres	Market Linkages
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	SB over Jamuna Bahal	Kalahandi	18	2	14	2	1	8	1	Yes
2	SB over Bileikani	Kalahandi	26	5	13	5	1	33	2	Yes
3	HL Bridge at Biriguda	Koraput	100	7	50	7	2	70	2	Yes
4	Bridge over Daldala Nallah	Koraput	6	2	3	1	1	3	1	Yes
5	Bridge over Palliguda	Koraput	6	2	3	1	1	3	1	Yes
6	HL Bridge over Sundar	Nuapada	28	5	14	5	2	17	2	Yes
7	Ganeshpur Bridge	Subarnapur	17	2	10	1	1	13	4	Yes
8	SB over Bijepur	Subarnapur	23	10	2	1	2	21	2	Yes
	Total	8	224	35	109	23	11	168	15	8 proj.

As it appears from the above table that each of the sample bridge project has provided connectivity between villages, GPs, Blocks, Schools, Health Centers and

markets. As such construction of bridge projects under the programme of RLTA has tremendous positive impact in the KBK districts to deliver various services at doorstep.

5. Views and Opinion of Gram Panchayats:

In total 32 GPs, 4 GPs per 8 sample bridge projects along the major road passing through the bridge projects were consulted and interactions held with the Sarpanches with the objective of getting information to what extent the bridge had been useful to local people in getting employment, improve in communication and help the common man to undertake activities related to income generation etc. The result of the interactions made is presented in the following paragraphs.

5.1 Problem “Before” Construction:

The opinion of the Sarpanches of the 32 GPs on the nature of problems experienced by the local people in absence of the bridge projects in question were obtained and presented in a tabular form in the following Table No: 4.7. 5.

Table No: 4.7.5
Problems Experienced “Before” Construction of Bridge Projects.

Sl. No	Sample Bridge	District	GPs	GPs Opining on Previous Problem				
				P1	P2	P3	P4	P5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	SB over Jamuna Bahal	Kalahandi	4	4	-	4	-	-
2	SB over Bileikani	Kalahandi	4	-	3	1	-	-
3	HL Bridge at Biriguda	Koraput	4	-	-	-	4	-
4	Bridge over Daldala Nallah	Koraput	4	-	-	2	-	-
5	Bridge over Palliguda	Koraput	4	No	No	No	No	No
6	HL Bridge over Sundar	Nuapada	4	-	2	-	-	4
7	Ganeshpur Bridge	Subarnapur	4	2	4	-	-	-
8	SB over Bijepur	Subarnapur	4	4	3	4	-	-
	Total	8	32	10	12	11	4	4

P1: Missing link to Schools, Offices and Market Places, P2: Cut off from main stream, P3: Cut off from Health Centers, P4: Cut off in Rainy Season, P5: Crossing River by Boat

Out of 32 GPs in respect of 8 sample bridge projects, 10 (31%) expressed the view that it was difficult to access schools, offices and market places in absence of this bridge, 12 (38%) opined that their areas were cut off from the main stream of development, 11 (34%) opined that the accessibility to health centers were difficult in absence of these bridges, 4 (13%) opined that connectivity was totally cut off in the rainy season and 4 (13%) opined that connectivity during rainy season was only possible through boat. The nature of problems experienced by the local people prior to the construction of the bridge projects were really very difficult for which construction of these bridge projects were absolutely necessary. One interesting thing has been revealed that in case of the Bridge over Palliguda in Koraput district, 4 Gram Panchayats contacted expressed that there was no problem prior to construction of this bridge. If it is so, funds spent on this bridge project could have been better utilized for some other bridge project. Such a difference opinion between the administration and the GPs is not desirable. Had the public been consulted in the process of selection of bridge sites, this controversy would not have arisen and the resources better utilized.

5.2 Public Involvement:

All the 32 GPs opined that the local people were engaged in the construction activities under the sample bridge projects. Equal wage was paid both to male and female workers and the payment of wage mostly in time.

5.3 Benefits accrued:

The benefits accrued to the people as a result of construction of bridge projects are mostly in the nature of establishing crucial connectivity to various places that helps the people to access various development opportunities. The opinion of the GPs on the various kinds of connectivity established as a result of construction of the sample bridge projects is presented below vide Table No: 4.7.6.

Table No: 4.7.6
Opinion of the GPs on the Various kinds of Connectivity Established .

Sl. No	Bridge Project	District	Samp GPs	Crucial Connectivity Established with,						
				Vill	GP	Block	Dist	Health	Edu	Market s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	SB over Jamuna Bahal	Kalahandi	4	4	4	4	4	4	4	4
2	SB over Bileikani	Kalahandi	4	4	4	4	4	4	4	4
3	HL Bridge at Biriguda	Koraput	4	4	2	4	4	4	4	4
4	Bridge over Daldala Nallah	Koraput	4	4	4	4	2	3	3	1
5	Bridge over Palliguda	Koraput	4	4	4	4	3	4	4	2
6	HL Bridge over Sundar	Nuapada	4	4	4	4	4	4	4	4
7	Ganeshpur Bridge	Subarnapur	4	4	4	4	4	4	4	4
8	SB over Bijepur	Subarnapur	4	4	4	4	4	4	4	4
	Total	8	32	32	30	32	29	31	31	27
	% to Total	-	-	100	94	100	91	97	97	84

All the GPs opined that construction of these bridge projects has enabled connectivity with other villages and the block head quarters. The opinion expressed by them in regard to the connectivity established with GPs, Blocks, District head quarters, Health Centers, Educational Institutions and other Growth Centers including the market places has been quite appreciable. It is very clear that construction of bridge projects under RLTA as means to providing missing links has positive impact in the KBK districts as a basic rural infrastructure to generate multiplier effects linking.

6. Group Discussions:

16 focus group discussions (FGD) were organized at GP levels at the rate of 2 GPs per each bridge project along the road side of the project to elicit information on the utility of the bridge in question, involvement of the local people in implementation, and other aspects relating to the bridge in question. The result of the focus group discussions is presented in the following paragraphs.

6.1 Benefits Derived:

The overall opinion emerged in the 16 focus group discussions on the benefit derived by the local people as a result of construction of the bridge projects is presented in a tabular form vide Table No: 4.7.7

Table No: 4.7.7
Benefits Accrued to Local People as result of Sample Bridge Projects.

Sl.No	Sample Bridge Project	District	No of FGDs Conducted	All weather Connectivity	Access to School, Hosp, GPs etc	Facilitated Edn of Children	Raw material procurement	Trans of Agril Inputs	Good Trassport Service	Access to markets	Door step Services
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	SB over Jamuna Bahal	Kalahandi	2	2	2	2	2	2	2	2	2
2	SB over Bileikani	Kalahandi	2	2	2	2	2	2	2	2	2
3	HL Bridge at Biriguda	Koraput	2	2	2	2	2	2	2	2	2
4	Bridge over Daldala Nallah	Koraput	2	2	2	1	2	2	2	2	2
5	Bridge over Palliguda	Koraput	2	2	2	2	2	2	2	2	2
6	HL Bridge over Sundar	Nuapada	2	2	2	2	2	2	2	2	2
7	Ganeshpur Bridge	Subarnapur	2	2	2	2	2	2	2	2	2
8	SB over Bijepur	Subarnapur	2	2	2	2	2	2	2	2	2
	Total	8	16	16	16	15	16	16	16	16	16

In all the focus group discussion, it was unanimously opined that the people have been enjoying all weather connectivity due to construction of bridges. It makes easier for

the children to go to schools, the local people to go to hospitals and easy access to market places. Businessmen could expand their business, direct contact between producers and buyers, procurement of raw materials, agricultural inputs like seed, fertiliser etc. followed by supply of essential commodities was much faster and cost effective due to construction of the bridge projects. It was further revealed in the focus group discussions that due to better connectivity some people have opened retail trade / small business within their villages as also across the bridge. Besides, people are able to save time and move to distance places easily through bridges and ensure safe night travels across the bridges. Above all, local people have been able to avail door step services and rapport with government officials for redressal of their problems. These benefits have accrued due to the construction of bridges under RLTA in the KBK districts.

6.2 Benefits Accrued to Rural Markets:

The focus group discussions revealed that construction of bridges had considerable impact on the rural markets and availability essential commodities at competitive prices. The opinion of the focus groups on the impact of the bridge projects on the rural markets is presented below vide Table No: 4.7.8.

Table No: 4.7.8

Benefits Accrued to Rural Markets as result of Sample Bridge Projects.

Sl. No	Sample Bridge Project	District	No of FGDs Conducted	Easy access to higher business	Procurement from outside	Contact with big buyers	More Profit	Opening new ventures
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	SB over Jamuna Bahal	Kalahandi	2	2	2	2	2	2
2	SB over Bileikani	Kalahandi	2	2	2	2	2	2
3	HL Bridge at Biriguda	Koraput	2	2	2	2	2	2
4	Bridge over Daldala Nallah	Koraput	2	1	2	2	2	2
5	Bridge over Palliguda	Koraput	2	2	2	2	2	2
6	HL Bridge over Sundar	Nuapada	2	2	2	2	2	2
7	Ganeshpur Bridge	Subarnapur	2	2	2	2	2	2
8	SB over Bijepur	Subarnapur	2	2	2	1	2	-
	Total	8	16	15	16	15	16	14
	% to Total	-	-	94	100	94	100	88

The information contained in the above table reveals that the business men of the local rural market could avail access to markets, as a result of construction of these bridges. Procurement of materials from outside, contact with big buyers, opening of new ventures such as retail trade has also been possible as a result of these bridges. Earlier

the producers were carrying their products to the buyers or to market places. The situation has been changed; the buyers are now coming to pickup his ware produce at market prices.

7. Opinion of Programme Managers:

As per the available reports a total of 54 bridge projects were sanctioned under the programme of RLTA in KBK districts of which 4, i.e., 76% are located in the sample districts i.e. Kalahandi-12, Koraput-16, Nuapada-6 and Subarnapur-7. The bridge projects of all these 4 sample districts sanctioned under RLTA have been completed except 2 in Koraput district as per the reports received from the Executive Engineers. Rural Works Divisions of the districts are in overall charge of execution of rural bridge projects. The delay in completion of bridge project in Koraput district is due to cancellation of previous tenders and finalisation of fresh one.

7.1 Quality Control Measures:

In regard to the quality control measures, all Executive Engineers of the 4 sample districts expressed that cube testing and slump testing has invariably done in case of all bridge projects. They are all satisfied on the quality of material used and adherence to specifications of the projects in question. Besides, the time schedule for completion of the bridge projects was more or less adhered to in all cases. The public cooperation in all cases had been good and thus not received any complaints in implementation of the bridge projects.

8. Overall Impression:

As per the opinion expressed by the Gram Panchayats, the focus group and the programme managers, the programme of Rural Connectivity by way of providing all weather road communication for the villages through construction of bridge projects under the programme of RLTA in the KBK districts has had positive impact on the way of life of the local people due to the improvement in the accessibility.

SECTION – 8

RURAL WATER SUPPLY PROGRAMME IN KBK DISTRICTS

1. Location of Sample Projects:

The location of 50 sample tube wells, 12 sample sanitary wells and 8 sample piped water supply projects as far as they are supposed to provide service to the potential beneficiaries is presented vide Annexure-4.8.1. As it is seen from the said annexure, 56 per cent of the tube wells have been installed within the habitations and the remaining 44 per cent at the end of habitations. In the case of sanitary wells, 83 per cent are located within the habitation and the remaining 17 per cent at the boundary of habitations. Installation of tube wells and sanitary wells on the borders of habitation becomes imperative due to the locational advantages, availability of space and discharge of waste water through drain. Installation of water source at the end of a village becomes necessary when some points have already been located within the habitation. However, in case of piped water supply projects, location of the projects is usually outside villages as the project has to provide water to more than one village. In regard to potential beneficiaries, the average number of potential beneficiaries per tube well is 167 and 151 in case of sanitary wells which is more or less well within the norm prescribed for KBK districts. But in case of Kalahandi, one tube well has been installed for a population of 258 on an average which is quite high as compared to the prescribed norm of 150 for the KBK region. In case of piped water supply projects, the average number of people served per project is 2009 and there may not be any problem in providing water to them through the piped water supply projects.

2. Features of Sample Tube Wells:

As many as 50 sample tube wells were examined under the study 49 (98%) of which were found complete as on the date of survey. However, all the 50 points were in operation, the details of which is presented below vide Table No: 4.8.1.

Table No: 4.8.1
Features of 50 Sample Tube Wells.

Sl	District	Samp TW	Compl eted	Opera tional	Trans WUA	Beneficiary		
						Target	Achiv	Per TW
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	9	9	9	6	1190	1203	134
2	Kalahandi	10	9	10	-	2585	1986	199
3	Koraput	6	6	6	3	910	859	143
4	Malkangiri	3	3	3	-	330	310	103
5	Nawarangpur	8	8	8	-	1230	1282	235
6	Nuapada	4	4	4	-	600	513	128
7	Rayagada	6	6	6	-	900	900	150
8	Subarnapur	4	4	4	-	600	610	153
	Total	50	49	50	9	8345	7663	153
	% to Total / Average	-	98%	100%	18%	167 Avg	153 Avg	-

Of the 50 sample tube wells only 9 were transferred to Water Users Association. As against a target of 167 beneficiaries per tube well on an average, as many as 153 (92%) are receiving benefit at present. In all the districts except Kalahandi the potential beneficiaries are using the tube wells meant for them. But in case of Kalahandi district, 1986 (77%) persons out of 2585 potential beneficiaries are using the 10 tube wells meant for them. This accounts for 199 beneficiaries at present per tube well in Kalahandi district seemed to be higher side in consideration of the prescribed norm of 150 per tube well in KBK districts. This number may go up to 2585 which will account for 255 beneficiaries per tube well in future.

3. Features of Sample Sanitary Wells:

In total 12 sample sanitary wells were examined under the study, all were completed and put to operation as on the date of survey the details of which is presented below vide Table No: 4.8.2.

Table No: 4.8.2
Features of 12 Sample Sanitary Wells.

Sl.No	District	Samp SW	Compl eted	Opera tional	Trans WUA	Beneficiary		
						Target	Achiv	Per one
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	-	-	-	-	-	-	-
2	Kalahandi	1	1	1	-	250	140	140
3	Koraput	4	4	4	-	510	432	108
4	Malkangiri	3	3	3	-	450	450	150
5	Nawarangpur	1	1	1	-	150	150	150
6	Nuapada	1	1	1	-	75	75	75
7	Rayagada	2	2	2	-	380	300	150
8	Subarnapur	-	-	-	-	-	-	-
	Total	12	12	12	-	1815	1547	137
	% to Total / Average	-	100%	100%	-	151 Avg	129 Avg	-

Of the 12 sample sanitary wells examined, none of them had been transferred to Water Users Associations. As against a target of 151 beneficiaries per sample sanitary well on an average, as many as 129 (85%) are receiving benefit at present which is well within the prescribed norm.

4. Features of Sample Piped Water Supply Projects:

In total, 8 piped water supply projects at the rate of one per district were examined under the study and all were found to be complete and put to operation as on the date of survey. The detailed features of the 8 sample piped water supply projects is presented below vide Table No: 4.8.3.

Table No: 4.8.3**Features of 8 Sample Piped Water Supply Projects.**

Sl.No	District	Samp TW	Compl eted	Opera tional	GW / R Lift	Beneficiary		
						Target	Achiv	% ge
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	1	1	1	RL	3000	3000	100
2	Kalahandi	1	1	1	RL	3976	3976	100
3	Koraput	1	1	1	GW	1500	1500	100
4	Malkangiri	1	1	1	GW	1322	1322	100
5	Nawarangpur	1	1	1	GW	2000	1865	93
6	Nuapada	1	1	1	GW	1000	1000	100
7	Rayagada	1	1	1	GW	2525	2000	79
8	Subarnapur	1	1	1	GW	750	750	100
	Total	8	8	8	6 + 2	16073	15413	96
	% to Total / Average	-	100	100	-	2009 Avg	1927 Avg	96%

As it revealed that all 8 sample piped water supply projects were complete. The source was Ground water lift in case of 6 projects and River Lift in case of the other two. As against a target of 2009 beneficiaries per sample piped water supply project on an average, 1927 (96%) are receiving benefit at present and this may not create problem so long there is adequate flow of water from the source.

5. Operation and Maintenance:

Provision of a water supply source will be meaningful if the same provides uninterrupted water supply and this can be possible if the source is not associated with a number of operation and maintenance problems. Information on various aspects of operation and maintenance problems related to the 70 sample water supply projects of different kinds i.e. 50 TW, 12 SW and 8 PWS examined under the study is presented below vide Table No: 4.8.4

Table No: 4.8.4**Operation and Maintenance of Sample Water Supply Projects in 2005-06.**

Sl. No	District	Sample Projects	No of Break downs	Break downs repaired timely	Affected days before repair	WUA formed	WUA takes up repair	WUA collects User fees	Local people trained on O/M
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	10	38	10	11	3	-	-	7
2	Kalahandi	12	16	11	19	3	-	-	11
3	Koraput	11	10	5	35	3	3	-	6
4	Malkangiri	7	11	3	40	2	2	-	7
5	Nawarangpur	10	12	6	34	1	-	1	8
6	Nuapada	6	10	6	15	2	1	1	4
7	Rayagada	9	14	5	28	6	6	-	7
8	Subarnapur	5	6	3	13	-	-	-	2
	Total	70	117	49	195	20	12	2	52
	% to Total / Average	-	2 Avg	42%	4 Avg		60%	10%	-

It is revealed from the information presented in the above table that there were 117 break downs in case of 70 sample projects during 2005-06 at an average of two break downs per project per year. As against a total number of 117 break downs, 49 (42%) break downs were repaired within a reasonable time period and the remaining 68 (58%) break downs had not been repaired in time and resulted in atleast 4 days of time of interruption for operation. Although, it was revealed in earlier paragraphs that 9 projects were transferred to Water User Association, in all 20 such associations have been formed and 12 associations are taking part in repair and maintenance irrespective of transfer of projects to them. Only in the case of two projects, user fees are being collected by Water Users Association. In regard to the general awareness about operation and maintenance and development of skill of the local people to take care of break downs, only 50 persons in all were trained in respect of 70 projects which are quite inadequate. It is necessary that atleast two to three persons from each project area should be imparted training on the operation and maintenance of projects for smooth

operation. Discussions have been made in further detail in regard to formation of Water Users Associations, role played by them and their capabilities to handle the maintenance problem in subsequent paragraphs.

6. Opinion of Beneficiaries:

As explained in previous chapters, a total of 208 households from the 70 water supply projects were interviewed regarding their perception about the programme and its impact. The result of interaction of the study team with the heads of sample households is discussed in the following paragraphs.

6.1 Characteristics of Beneficiaries:

The details of social characteristics of the 208 sample respondents are presented below vide Table No: 4.8.5.

Table No: 4.8.5
Characteristics of Sample Beneficiaries.

Sl. No	District	Samp Proj.	Samp Bene	SC	ST	Othe rs	Males	Fema les
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	10	28	6	11	11	18	10
2	Kalahandi	12	36	7	11	18	28	8
3	Koraput	11	33	3	23	7	29	4
4	Malkangiri	7	21	4	17	-	16	5
5	Nawarangpur	10	30	7	20	3	27	3
6	Nuapada	6	18	8	7	3	14	4
7	Rayagada	9	27	1	10	16	25	2
8	Subarnapur	5	15	4	4	7	13	2
	Total	70	208	40	103	65	170	38
	% to Total	-	-	19	50	31	82	18

The 208 sample respondents is a fair mix of 40 (19%) of SC, 103 (50%) of ST and 65 (31%) from other social classes. Similarly 170 (82%) out of 208 respondents were males and the rest of 38 (18%) were females.

6.2 Opinion on Adequacy and Quality:

Out of 208 beneficiaries contacted, majority 178 (86%) expressed the opinion that supply of water through the projects was adequate and the rest 30 (14%) expressed it to be inadequate. The reasons of inadequate supply of water through the projects as perceived by the beneficiaries are presented below vide Table No: 4.8.6.

Table No: 4.8.6**Opinion of Sample Beneficiaries on the Adequacy and Quality of Water**

Sl. No	District	Sample Projects	Sample Beneficiaries	Water Adequate	Reasons of Inadequacy				Quality of Water		
					Inadequate flow	Frequent Break down	Drying up of Source	Delay in repair	Good	Fair	Poor
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	10	28	23	2	2	4	3	15	8	5
2	Kalahandi	12	36	25	2	2	5	2	18	15	3
3	Koraput	11	33	30	3	-	1	-	32	1	-
4	Malkangiri	7	21	21	-	-	-	-	21	-	-
5	Nawarangpur	10	30	28	2	-	-	-	30	-	-
6	Nuapada	6	18	16	1	-	1	-	16	1	1
7	Rayagada	9	27	27	-	-	-	-	24	3	-
8	Subarnapur	5	15	8	3	-	3	3	12	3	-
	Total	70	208	178	13	4	14	8	168	31	9
	% to Total	-	-	86	43	13	47	27	81	15	4

From among the 30 who opined regarding reasons of inadequacy of water supply, 13 (43%) attributed it to insufficient flow of water from the sources, 4 (13%) attributed it to frequent break downs, 14 (47%) to drying up of the source and 8 (27%) to delay in repairs. Even if only 14 per cent of the beneficiaries expressed inadequacy of water supply, the reasons attributed by them were very pertinent. Out of 208 respondents, majority, i.e., 168 (81%) opined that the quality of water supplied was good, 31 (15%) expressed fair and 9 (4%) expressed water quality to be poor. The results of discussions on these aspects have been given in subsequent paragraphs.

6.3 Reasons of Break Down:

The various reasons of break downs as perceived by the beneficiaries have been presented below vide Table No: 4.8.7.

Table No: 4.8.7**Reasons of Break down of Sample Water Supply Projects in 2005-06.**

Sl.No	District	Sample Projects	No of Break downs	Reasons of Break downs						Non-Coop. of RWSS in WSP
				Electricity Break down	Of which non-resto of power	Mis-handling of source	Village Controversy	Want of parts & Mechanic	Other Reasons	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Balangir	10	38	1	-	11	7	8	11	9
2	Kalahandi	12	16	3	3	7	-	3	3	12
3	Koraput	11	10	1	-	-	-	1	8	-
4	Malkangiri	7	11	-	-	1	-	-	10	-
5	Nawarangpur	10	12	-	-	-	-	1	11	--
6	Nuapada	6	10	2	-	-	1	-	7	5
7	Rayagada	9	14	-	-	-	-	-	14	-
8	Subarnapur	5	6	-	-	-	-	1	5	5
	Total	70	117	7	3	19	8	14	69	29
	% to Total / Average	-	2 Avg	6%	3%	16%	7%	10%	59%	41%

In all, there were 117 break downs in 70 water supply projects during 2005-06 that accounts for two break downs per project, on an average per annum. As many as 7 (6%) of the break downs were electrical related problems of which in 3 (3%) cases was due to restoration of power not done in time. In 19 (16%) cases of break downs were due to mishandling of the water supply projects, more specifically in case of tube wells. This may be due to lack of adequate knowledge or prevailing of good civic sense among the villagers, to address the issues collectively. In either case, the situation is not conducive and requires attitudinal changes. It also transpires that had the installation of water supply projects been taken up after community consultation, such situations would not have arisen. In 14 (10%) cases of the break downs, availability of spare parts and non availability of a mechanic was a problem. Besides, as many as in 29 (41%) out of 70 sample water supply projects it was the feeling that the RWSS organisation is not cooperating with the people in timely repair of the break down.

6.4 Sources of Maintenance:

In previous paragraphs it was seen that very few of the Water User Associations have been formed for which it was further examined as to the agency maintaining the

water sources. Information collected in this regard is presented below vide Table No: 4.8.8.

Table No: 4.8.8
Sources of Maintenance Sample Water Supply Projects.

Sl. No	District	Samp Proj	Samp Bene	Maintained by		Pay fees	Funds Suff	Parts Avble
				WUA	GP			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	10	28	6	4	21	21	23
2	Kalahandi	12	36	-	9	11	21	25
3	Koraput	11	33	3	8	1	16	20
4	Malkangiri	7	21	-	7	-	-	18
5	Nawarangpur	10	30	-	9	-	-	25
6	Nuapada	6	18	-	5	4	5	7
7	Rayagada	9	27	-	9	-	-	26
8	Subarnapur	5	15	-	5	4	4	6
	Total	70	208	9	61	41	67	150
	% to Total	-	-	13	87	20	32	72

It reveals that out of 70 sample projects, the operation and maintenance of 61 (87%) projects is vested on the Panchayats/local bodies and the same in respect of the remaining 9 projects is looked after by Water User Associations. Out of 208 beneficiaries 41 (20%) were reported to have been paying some user charges towards operation and maintenance of the projects. However, 67 (32%) of the beneficiaries were of the opinion that funds either of the Panchayats or of the Water User Associations are not sufficient enough to meet the operation and maintenance cost of the projects. As many as 150 (72%) respondents expressed that spare parts are not available in the local area for the purpose of undertaking repairs in case of break downs.

6.5 Hygienic Practices in Use of Water:

While provision of safe sources of drinking water is essential, hygienic practices relating to the wise use of water is also the most necessity. Information collected from the beneficiaries in this regard is presented below vide Table No: 4.8.9.

Table No: 4.8.9**Hygienic Practices in the Use of Water by Sample Beneficiaries.**

Sl. No	District	Sample Projects	Sample Beneficiaries	Carry in clean pot	Store with cover	Using clean Mug	Using disinfectants	Good platform	Waste to Garden	Waste to Soak pit	Waste to Drain	Waste to Open space
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	10	28	26	23	21	8	21	5	-	-	23
2	Kalahandi	12	36	36	34	34	10	28	16	4	-	16
3	Koraput	11	33	33	25	22	2	24	4	4	-	25
4	Malkangiri	7	21	21	21	21	10	18	-	6	4	11
5	Nawarangpur	10	30	30	30	30	-	24	3	16	2	9
6	Nuapada	6	18	18	18	17	4	16	8	-	-	10
7	Rayagada	9	27	27	27	27	-	27	-	-	5	22
8	Subarnapur	5	15	15	13	13	3	9	7	2	-	6
	Total	70	208	206	191	185	37	167	43	32	11	122
	% to Total	-	-	99	92	89	18	80	21	15	5	59

Among the sample beneficiaries, most of all 206 (99%) were using clean pots to carry water, 191 (92%) storing their water with a cover and 185 (89%) were using clean mugs in using water stored. In case of epidemics, however, only 37 (18%) informed that some kind of disinfectants were used to treat the water sources. As many as 167 (80%) of the beneficiaries reported that adequate good platforms at the water sources or stand points as per requirements. As regards disposal of waste water, 43 (21%) reported that it is used for gardens, 32 (15%) reported channelling to soak pits, 11 ((5%) to drains and 122 (59%) to open spaces. As far as, water is used for gardens or channalised to soak pits, it is well and good. But water channalised to drains is well and good as far as the ultimate disposal is hygienic or else utilised otherwise. But in case, waste water is channalised to open space is not desirable as it may create alarming environmental condition with the likely hood of water borne disease spreading.

6.6 Perception on Water Borne Diseases:

The ultimate objective of the provision of safe drinking water sources is to avoid contamination of diseases and reduce prevalence of various water borne diseases. The

perception of the beneficiaries on the reduction of various water borne diseases as collected through the field study is presented below vide Table No: 4.8.10.

Table No: 4.8.10

Perception of Beneficiaries on the Reduction of Water Borne Diseases.

Sl. No	District	Sample Projects	Sample Beneficiaries	Beneficiaries perceived that use of clean water reduces			
				Diarrhoea	Dysentery	Cholera	Jaundice
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	10	28	27	26	25	25
2	Kalahandi	12	36	36	36	36	36
3	Koraput	11	33	33	33	33	33
4	Malkangiri	7	21	21	21	21	21
5	Nawarangpur	10	30	30	30	30	30
6	Nuapada	6	18	18	18	18	18
7	Rayagada	9	27	27	27	27	27
8	Subarnapur	5	15	14	14	14	14
	Total	70	208	206	205	204	205
	% to Total	-	-	99	99	98	98

As it reveals, 99 per cent of the beneficiaries are satisfied that there has been of reduction in the prevalence of diarrhoea and dysentery cases and similarly 98 per cent are satisfied on the reduction in the prevalence of cholera and jaundice cases as a result of using clean water. This is necessarily a positive impact of the programme of rural water supply project under the programme of RLTA in the KBK districts that saves many man-days for economic development.

7. Opinion of Knowledgeable Persons:

In previous chapters, it was explained that as many as 137 knowledgeable persons were taken as key informant. They were interviewed regarding their perception about the programme and its impact. The result of the interaction of the study team with the sample key informants is discussed in the following paragraphs.

7.1 Characteristics of Key Informants:

The social characteristic of the sample key informants is a fair mix from different social class as is evident from Table No: 4.8.11 presented below.

Table No: 4.8.11
Characteristics of Sample Key Informants.

Sl. No	District	Samp Proj.	Samp K Is	SC	ST	Othe rs	Males	Fema les
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balangir	10	17	-	7	10	16	1
2	Kalahandi	12	24	6	8	10	20	4
3	Koraput	11	22	4	13	5	20	2
4	Malkangiri	7	14	-	11	3	13	1
5	Nawarangpur	10	20	3	10	7	19	1
6	Nuapada	6	12	5	4	3	10	2
7	Rayagada	9	18	2	6	10	17	1
8	Subarnapur	5	10	2	3	5	7	3
	Total	70	137	22	62	53	122	15
	% to Total	-	-	16	45	39	89	11

As regards the composition of key informants, 22 (16%) were from SC, 62 (45%) from ST and 53 (39%) from other social categories. Out of 137 key informants, majority 122 (89%) were males and the remaining 15 (11%) were females.

7.2 Adequacy of Water Supply:

In regard to the perception of the key informants on the adequacy of water from water sources, it was good to observe that as many as 113 (82%) expressed the view that water supply was adequate and the remaining 24 (18%) were of the opinion that water supply was not adequate. The possible reason of inadequate water supply as perceived by these 24 sample beneficiaries is presented vide Table No: 4.8.12.

Table No: 4.8.12**Perception of K Is on Adequacy of Water Supply from Sample Sources.**

Sl. No	District	Sample Projects.	Sample K Is	Water not Adequate	Reasons of Inadequacy				
					Flow not Sufficient	Frequent Bk down	Drying up	Repair Delay	Others
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Balangir	10	17	6	1	2	3	-	1
2	Kalahandi	12	24	4	-	-	1	2	2
3	Koraput	11	22	3	1	-	2	-	-
4	Malkangir	7	14	-	-	-	-	-	-
5	Nawarangpur	10	20	-	-	-	-	-	-
6	Nuapada	6	12	4	1	1	1	2	-
7	Rayagada	9	18	-	-	-	-	-	-
8	Subarnapur	5	10	7	-	3	2	2	2
	Total	70	137	24	3	6	9	5	5
	% to Total	-	-	18	13	25	38	21	21

Out of the 24 sample beneficiaries who expressed the opinion that there was inadequacy of water supply, 3(13%) attributed reasons of inadequate flow from sources, 6 (25%) to frequent break downs, 9 (38%) to drying up of sources and 5 (21%) to delay in repairs. The reasons of inadequate supply through water sources as reported by the key informants appear same as that reported by the beneficiaries. While remedies for other problems have already been discussed, the remedies for tackling the problem of insufficient discharge can be tackled to certain extent by directing the waste water to a nearby soak pits for the purpose of recharging the source.

7.3 Perception on Water Borne Diseases:

Similar to the perception of the beneficiaries, the opinion of the key informants in regard to their perception on the reduction in the prevalence of water borne diseases as a result of the water supply projects was obtained which is presented below vide Table No: 4.8.13.

Table No: 4.8.13**Perception of K Is on the Reduction of Water Borne Diseases.**

Sl. No	District	Sample Projects	Sample K Is	Beneficiaries perceived that use of clean water reduces			
				Diarrhoea	Dysentery	Cholera	Jaundice
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balangir	10	17	17	17	17	17
2	Kalahandi	12	24	24	24	24	24
3	Koraput	11	22	22	22	22	22
4	Malkangir	7	14	14	14	14	14
5	Nawarangpur	10	20	20	20	20	19
6	Nuapada	6	12	12	11	12	11
7	Rayagada	9	18	18	18	17	18
8	Subarnapur	5	10	8	8	8	8
	Total	70	137	135	134	134	133
	% to Total	-	-	99	98	98	97

It reveals from the above table that the opinion of the key informants on the reduction of water borne diseases is all most the same as that of beneficiaries. As such it confirms the view that the programme of rural water supply project has a positive impact on the way of life of the local people and the quality of life enjoyed by them.

8. Opinion Programme Managers:

Interaction by the study team with the Executive Engineers (RWSS) in charge of rural water supply projects in all the KBK districts to elicit their opinion on the various issues relating to construction of water supply projects in the districts and to get their suggestions for further improvements in the implementation water supply projects in future. The reasons of delay in completion of projects, as expressed were delay in preparation of plans and estimates, external electrification and energisation by the electrical companies.

8.1 Perception on the Impact:

All the project managers were of the opinion that there has been reduction in various kinds of water borne diseases and the people are enjoying improved quality of life due to installation of water supply projects in the KBK districts under the programme of RLTA. In regard to reduction in the prevalence of cattle brone diseases, 6 out of 8 programme managers expressed that the impact was positive. The burden on the women to fetch water from distant places has been lessened and households are getting more of water for cleaning purposes besides also saving time. This gives an indication that the programme of rural water supply projects has a positive impact on the quality of life of the local people.

CHAPTER - V

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

The performance of the scheme can be judged by the efficiency of delivery mechanism and the level of satisfaction of the beneficiaries.

Based on the field visits, and interaction with the field level executing functionary, selected beneficiaries as the stakeholders, knowledgeable persons of the locality and also district level officers in overall charge of execution / implementation of various components of the programme of RLTA in the KBK districts, some conclusions have been derived and appropriate recommendations have been made as a feedback for midcourse correction. The conclusions drawn on the basis of factual information have almost remained the same on different occasions. However, the views and opinion expressed by the beneficiaries, key informants and Programme Managers being qualitative in nature, have varied from person to person depending on their level of knowledge, perception, appreciation, and satisfaction level derived from on-going provision of amenity services etc. Their views and opinion may vary. But these form vital feed back from the point of view for taking appropriate policy initiatives in future to revise the existing schemes due to dynamic nature of socio-economic realities, so as to achieve the objectives.

Overall Observation:

The over all observation based on this quick-evaluation study as also the impact of RLTA is considerable in KBK area.

In matters of literacy growth rate it is found from the State government's Report (bases on current data) that if a comparison is made between KBK districts(past undivided) and non-KBK districts, we find that between 1981-1991 and 1991-2001, over all literacy growth rate in KBK districts has gone up from 47.30 to 73.21 per cent as against 42.53 to 50.96 per cent for non-KBK districts. During the same period, State's over all literacy growth rate has gone up from 43.08 per cent to 53.59 per cent. Significant achievement is found in case of female literacy growth rate which between 1981-91 to 1999-2001 registered an increase from 71.53 per cent to 115.34 per cent. The same growth rate was quite lower for non-KBK districts which went up from 62.19 per cent to 70.34 per cent while for the State as a whole increased from 63.00 per cent to 74.46 per cent. Much of their achievement could be ascribed to the encouragements given to women education in KBK district through provision of stipends and setting up of hostels for SCs / STs girls who comprise a very large chunk in the total population of KBK district.

Similarly the benefit of these and other programmes have been reflected in enrolment in primary and upper primary schools. Enrolment rate in primary schools in KBK region went up from 75.89 in 1996-97 to 86.44 per cent in 2001-02 and to 107.05 per cent in 2007 respectively against 86.49 per cent to 89.11 per cent to 103 per cent on average for the state as a whole. In Upper primary schools the enrolment for KBK went down from 56.39 in 1996-97 to 43.83 per cent in 2001-02, but shot up to 84.99 per cent in 2007-08 as against state average of 59.33, 64.45 and 106.09 per cent for the same years respectively.

There was remarkable achievement in drop out rate which at primary school level decreased from 57.13 to 46.20 per cent and to 8.57 for the years 1996-97, 2001-02 and 2007-08 respectively as against the State average decrease being 47.60, 41.00 and 7.76 per cent. At the upper primary level the drop out rate which was 79.10 per cent in 1996-97, came down to 66.56 per cent in 2001-02 and to 14.82 per cent in 2007-08 as against State average fall being 59.60, 56.00 and 13.58 per cent respectively.

Thus, the achievement for KBK districts in matters of primary and upper primary level both in terms of enrolment and drop out rates is very encouraging and the achievement could be ascribed to the substantial assistance provided to the ST/SC boys and girls, particularly to girls in terms of hostel for them.

As regards general socio-economic well being, Regional income disparities within Orissa have narrowed during 2000-05. Comparison of household expenditure levels in 1999-2000 (NSS 55th round) and 2004-05 (NSS 61st round) shows that per-capita expenditure increased faster in rural areas (by 12 per cent over five years or 2.3 per cent annually), as compared with urban areas (by 4 per cent, over the period or 0.8 per cent annually). In rural areas, the most rapid growth was recorded in the poorest Southern region where per-capita expenditure increased by 25 per cent (4.6 per cent annually), followed by the Coastal region (12 per cent, or 2.3 per cent annually), and then the Northern region (6 per cent, or 1.2 per cent annually). In urban areas, per-capita expenditure grew overall by only 4 percent over the five-year period. Regional distribution of urban expenditure moved in favour of the Northern region, where per-capita expenditure grew by 14 percent (2.7 per cent annually), spurred by mineral-based industrial growth and its multiplier effects. KBK districts from a major chunk of southern and northern districts of Orissa and RLTA could have been a major contributor to this encouraging development.

The findings of this quick evaluation have been more or less corroborated by few of studies conducted by independent agencies like NIRD and few reputed agencies engaged by the State Government as also by NHRC. While NIRD, Hyderabad study has found out that RLTAAP has been instrumental in increasing both area under cultivation as also increase in water table through its watershed programmes. Both area and yield have gone up remarkably in micro watershed areas and forest coverage has gone up.

Independent organisations have shown increase in fish production and substantial increase in annual income. Because of provision of drinking water, distance covered (mostly by women) to fetch drinking water has been reduced to about 0.5 kms. while male folk now fetch water (which was not so) for domestic purpose from the supply point (hand pump / stand etc.)

In spite of few shortcomings and lacunae, the RLTAAP has been instrumental in changing the face of KBK region substantially and therefore, require continuance with quarter vigor on a long-term basis.

The key findings of the quick evaluation study in respect of 8 components examined and presented below for greater appreciation.

1. Summary Conclusions:

Conclusions drawn in respect of individual components surveyed are presented below separately component-wise.

1.1 40 SEATED HOSTELS FOR ST / SC GIRLS IN KBK DISTRICTS

- 1.1.1 Enrolment ratio of girls as compared to 1000 boys in the sample primary schools rose to 1126 which was due to hostel facilities and provision of stipend for SCs and STs girls residing in hostels to bridge all gender and social disparities at the primary stage.
- 1.1.2 On an average 2-3 (2.7) teachers were available per school with 5 classes and the teacher pupil ratio in 2006-07 was 1:58 as against the norm of 1:40.
- 1.1.3 Seventy per cent of the teachers and 94 per cent of the hostel superintendents were staying in the vicinity of school premises.
- 1.1.4 Construction of hostel buildings were faster when executed through contractors and once completed, their operation was faster if executed departmentally.
- 1.1.5 In cases of 93 per cent hostel buildings, one or more deficiencies were observed. Roof leaking and wall soaking was seen in case of 46 per cent of buildings, toilets damaged in 12 per cent cases, cracks in the building in

17 per cent cases, floors damaged in 24 per cent cases, and doors and windows damaged in 7 per cent buildings.

- 1.1.6 In 17 per cent of hostels, there was either no electricity or some electrical problems even if electricity connection was there. In 15 per cent of hostels, there was either no boundary wall or damaged beyond repairs.
- 1.1.7 Annual maintenance of hostel buildings was not being undertaken in 76 per cent of hostel buildings and those in perishable condition required urgent attention.
- 1.1.8 Amenities were provided to all most all the hostels, but in a partial manner and full stock of the amenities provided were not there as some items were damaged or thoroughly worn out.
- 1.1.9 Due to non-repairs and non- replacement of amenities, 29 per cent of the hostels have reported to have been facing problems.
- 1.1.10 Almost all the hostels had night watchmen arrangements and in 7 per cent of the hostels, there were some written code of conduct for the boarders for enforcement of discipline further encouraged.
- 1.1.11 The minimum distance of home from school of a student in school is 0 km and the maximum of 60 kms. Admissions of girls from headquarter villages as boarders have been allowed.
- 1.1.12 Boarders are usually allowed home visits accompanied by their relatives. In 46 percentage cases, boarders return to hostel in time after their home visits.
- 1.1.13 Seventy eight per cent of hostels had organised Health Camps for their boarders and 32 per cent had organised Immunisation Camps. First Aid facility was available in 90 per cent of the hostels.
- 1.1.14 Payment of stipend is made to the boarders without any time lag in case of 90 per cent of hostels. In 10 per cent cases, payment is made within a time lag of one to two months.
- 1.1.15 About 88 per cent sample hostels, reported that food component of stipend is not adequate. Hostel authorities manage the food by way of availing subsidised ration as well by raising kitchen gardens.
- 1.1.16 One of the hostels in Nuapada district reported to have been receiving one pair of uniform in place of two. As many as 34 per cent of sample hostels received dress up to 2006-07; 64 per cent up to 2005-06 and only one pair in Balangir district up to 2004-05.
- 1.1.17 On an average, 4 non-vegetable meals are served per week in the sample hostels.
- 1.1.18 Ten per cent of boarders are maintaining cleanliness and 88 per cent attending schools regularly. About 34 per cent boarders are maintaining hostel routine and 10 per cent have acquired sense of health and hygiene.
- 1.1.19 Pass outs at Class-V stage gradually and steadily increased. The proportionate share of pass percentage is higher as compared to school pass outs among the boarders which indicates, establishment of RLTA hostels has positive impact on the enrolment of SCs and STs girls and their retention.
- 1.1.20 Parents and their relatives are the major sources of information and inspiration based on which the boarders have stayed in hostels. They perceive that getting food and dress followed by education with good

environment as their benefit of staying in hostels. They do not consider disciplined life and overcoming the problem of travel to school as their benefits.

- 1.1.21 Only 4 per cent of boarders have no knowledge on payment of stipend and they did not appear to be concerned with adequacy of the same.
- 1.1.22 Majority of boarders were sharing hostel amenities jointly as a result of non repair and non replacement of amenities.
- 1.1.23 Higher percentage of boarders are satisfied with educational atmosphere, food, clothing and security aspects and lesser percentage are satisfied on cleanliness, environmental, sanitation, gardening, sports and games.
- 1.1.24 About 82 per cent boarders expressed the view that they would not have attended school had there been no hostel and 95 per cent would not have remained in hostel had there been no provision of stipend which indicates that RLTP hostels are extremely useful.
- 1.1.25 Key Informants perceived that the hostel programme aims at increasing enrolment and imparting education to SCs and STs girls. However, majority of them are yet to realise that this programme will in the long run help reducing the gender disparity in education front.
- 1.1.26 Key Informants expressed the view that the boarders could attend school but not remained in hostel without stipend that indicates that establishment of hostels and grant of stipend has tremendous effect on the enrolment of SC and ST girls as an incentive.
- 1.1.27 Although intake per RLTP hostels is 40 only, the same in respect of other hostels is of around 60. Although the total number of seats under the RLTP hostels was originally envisaged as 16000 at the rate of 40 per hostel, the State Government decided to enhance the seats from 16000 to 18460 from the educational session 2005-06.
- 1.1.28 The DWOs reported that total number of seats under 400 RLTP hostels is 17960 although revised to 18460 from 2006-07 which indicates that Government's decision to enhance seats has not been given effect to.
- 1.1.29 The DWOs have expressed that the food component of the stipend is not adequate.
- 1.1.30 Out of 8, as many as 6 DWOs have expressed to have admitted girl students from headquarter villages as boarders.
- 1.1.31 Occupancy of seats in the hostels is more than 95 per cent all along that implies there is higher demand for hostel accommodations among SC and ST girls.

1.2 MOBILE HEALTH UNITS IN KBK DISTRICTS

- 1.2.1 On an average, one sample MHU serves a population of 55,800 in about 102 villages.
- 1.2.2 About 76 per cent of sample MHUs were visiting all the villages' assigned to them in each month and the remaining 24 per cent were not doing so for many constraints.

- 1.2.3 As much as 53 per cent sample MHUs were visiting their villages twice a month and the remaining 47 per cent once a month. All sample MHUs reported to have been working on holidays to cope with workload.
- 1.2.4 As many as 94 per cent sample MHUs had three crucial staff positions i.e. a Medical Officers, a Pharmacist and a Health Worker (Female) filled in. As regard the medical officers in 47 per cent MHUs were Allopathic Doctors, 41 per cent Ayurvedic Doctors and 12 per cent Homeopathic Doctors.
- 1.2.5 All the sample MHUs had a vehicle each, whether Government or hired. All sample MHUs had B P instruments, Slides and requisite medicines. However, there was no stethoscope in one and no Microscope in 3 sample MHUs.
- 1.2.6 About 29 per cent MHUs expressed that village visits had not been adequate, 24 per cent faced constraints of transport and fuel and 4 per cent had problem of medicines and funds.
- 1.2.7 The average number of tour days came to 20 per month in case of 5 districts and less than 20 in case of 3 districts. None the district complied with the minimum of two night halts per month.
- 1.2.8 School visits per MHU varied from 1 to 8 per month and distribution of ORS ranged 200 to 2174. The MHUs had also been associated with other activities like organisation of Health Camps, Immunisation Camps, Family Welfare Camps, and rendering services during calamities.
- 1.2.9 Timeliness has been observed in provision of staff and mobile vans in case of all sample MHUs. Supply of medicines was delayed in case of one MHU, equipments in case of 8 and provision of funds in case of 13.
- 1.2.10 Medical Officers in charge felt that modern equipments, quality medicines as per local needs, furniture for camps, ambulance and telephone facility for emergency cases are badly required. Microscope training to the Pharmacists, display board in villages on MHU programme, accommodation and storage facility are the essential requirements.
- 1.2.11 As many as 84 per cent sample households interviewed were aware of the functioning of a MHU in their locality and providing treatment to individual patients and 16 per cent were aware that MHU is organising

community health programmes. 72 per cent sample house-holds are availing treatment from MHU.

- 1.2.12 As many as 43 per cent sample beneficiary house-holds said that MHUs are capable of attending emergency cases, 2 per cent said the MHUs to be charging fees from patients, 25 per cent said the MHUs to be undertaking follow up of patients.
- 1.2.13 All children below the age of 5 in sample households were immunised. Out of 4 pregnant women in these households, only 3 reported to have been vaccinated and given iron supplements.
- 1.2.14 About 76 per cent beneficiary households expressed that they are getting service at their door step. 94 per cent of them said that supply of medicine was adequate, 67 per cent expressed MHUs to be cooperative, 55 per cent said to have received timely treatment, 37 per cent opined follow ups to be good, and 33 per cent said MHUs put importance to rich and influential families. However, 71 per cent expressed their overall satisfaction on ongoing MHUs.
- 1.2.15 All Key Informants, all were aware of the functioning of a MHU in their locality and they said that MHUs are conducting village visits but not making night halts.
- 1.2.16 As much as 94 per cent of the Key Informants have their knowledge on MHUs conducting school visits, 71 per cent on immunisation camps, 62 per cent on antenatal check ups, 50 per cent on health camps and 18 per cent on family welfare camps. However, their observation is not encouraging on the prevention and control measures taken and the health hygiene education imparted by the MHUs.
- 1.2.17 MHUs in 5 districts were fully equipped Medical Officers in position in 87 MHUs, Pharmacists in 70 MHUs and Health Worker (Female) in 81 MHUs. Although CDMOs visited 90 MHUs on 96 occasions during 2005-06, some MHUs were not visited during the year at all.
- 1.2.18 The blood slides collected has been gradually increasing over the years. The malaria positive cases found were 21 per cent of the slides collected in past 8 years. Disease specific number of patients treated has not been well maintained except Malaria.

- 1.2.19 Number of patients treated per MHU per annum was around 2784 in 1998-99, which has gradually increased to 8385 in 2005-06 which is more than three times in span of 6 years.
- 1.2.20 The CDMOs also expressed that the delivery of health care facilities at hospitals, Primary Health Centers etc. would not have gained momentum in these districts. But establishment of MHUs in the KBK region has positive impact on the health care delivery system at door steps in these districts.

1.3 EMERGENCY FEEDING PROGRAMME IN KBK DISTRICTS

- 1.3.1 Out of 32 sample Anganwadi Centers, 26 were functioning in Government accommodations and 6 in private or rented accommodations. 24 Centers were running in pucca, 5 in semi-pucca and 3 in kutcha buildings. 30 out of 32 sample Centers were suitable for running Anganwadis.
- 1.3.2 Only 2 Anganwadi Workers out of 32 were Matriculates, 7 were under Matriculates and the rest 23 were below Matriculation and none was illiterate.
- 1.3.3 On an average, 31 beneficiaries per annum per AWC were extended the benefit of emergency feeding and the number of applicants was same as the number of beneficiaries in most of the cases. Around 38 per cent of beneficiaries were men and 62 per cent women.
- 1.3.4 Around 20 per cent of beneficiaries belong to SCs, 53 per cent to STs and the remaining 27 per cent to other category. 96 per cent were from the BPL and 4 per cent from APL category. Selection of beneficiaries was made at the level of Palli Sabha and recommended for inclusion in one and all cases.
- 1.3.5 Certain AWCs, opined that quality of food stuff supplied was not good and timeliness of its supply was not ensured. Fuel is neither available free nor funds provided for the purpose.
- 1.3.6 While cooked food is served at Anganwadi Centers, meals are also sent to homes of beneficiaries when they are not physically able to move out. Cooked meals are also sent to homes of beneficiaries even when he/she is absent from the village in certain cases.

- 1.3.7 Complaints were also received from beneficiaries in regard to quality of food, its adequacy and timeliness. 19 per cent of sample beneficiaries expressed their overall dissatisfaction over the programme.
- 1.3.8 About 5 per cent of beneficiaries expressed that AWCs are not cooperative with the beneficiaries. At the same time, 12 per cent of beneficiary expressed that conflict has been culminated among their family members as a result of the emergency feeding programme as it leads to idleness.
- 1.3.9 As many as 96 per cent of sample beneficiaries expressed that the programme of emergency feeding as a tool to break the vicious circle of food insecurity among the old and infirm people of the poor families have benefited immensely.
- 1.3.10 About 27 per cent of sample beneficiaries preferred taking rations to their homes saying that the ration will be shared among other family members.
- 1.3.11 Key informants opined that the old, poor, infirm and helpless are usually selected as beneficiaries. However, in rare occasions, views of rich and influential persons prevail to select beneficiaries. Some of the key informants opined that AWCs were not cooperative with the problems of the beneficiaries.
- 1.3.12 The number of beneficiaries to be covered through AWCs is usually allotted in advance for finalising the selection list. While the allotted number of beneficiaries is adequate in certain cases, the same is not sufficient in others as the reality varies from area to area.
- 1.3.13 Authority approving the select list differs from district to district.
- 1.3.14 Quality of rice in case of most districts has been reported to be fair by the Programme Managers.
- 1.3.15 Programme Managers expressed overall satisfaction on the procedure adopted for selection of beneficiaries, maintenance of records in the process, the quality of food served, the cooperation extended by the AWCs and the mutual cooperation extended by the local people. However, there was lack of cooperation on the part of the beneficiaries in certain cases. There was also the problem of inadequate storage space in two districts.

1.4 AFFORESTATION PROGRAMME IN KBK DISTRICTS

- 1.4.1 The average area of a sample plantation site was 41.75 hectares. Out of total 16 sample sites, 10 were in reserved forest (RF) and 6 on revenue land (RL). 11 plantations were done over degraded forest (DF) and 5 on bald hills (BH). Block plantation was undertaken in case of 13 sites and gap filling in case of remaining three sites.
- 1.4.2 Out of 668 ha in 16 sample sites, economic plantation was done over 160 ha, NTFP over 130 ha, Bamboo over 40 ha, Fuel wood and mixed plantation over 108 ha, and RDF on 230 ha. In total 16 Van Samrakhyan Samitis (VSS), one in respect of each sample site existed.
- 1.4.3 The VSSs were closely associated in all stages of operation like site selection, stock mapping, selection of species, decision making, contribution of labour, organization of IEC and training and visit programmes as also in providing watch and ward facilities.
- 1.4.4 Departmental nurseries were raised for plantation in 12 sites and seedlings were purchased from private nurseries for the remaining 4 sites. While highest priority was given to plantation of timber in case of Balangir and Kalahandi districts, highest priority was given to mixed plantation in Koraput district and to fire wood plantation in case of Rayagada district. Plantation of fruit bearing trees is given a low priority by all most all districts should be relooked.
- 1.4.5 Except soil work, all other activities were not undertaken in requisite number. While manuring was undertaken in 92 per cent occasions as compared to the standard practices that in case of weeding was 70 per cent. Fire tracing was done in 94 per cent cases and pruning in 19 per cent cases. Standard practices were not undertaken in requisite number in respect of key activities.
- 1.4.6 Organisation of training, workshop and field visits were more or less adequate for departmental functionary. For VSS members, their participation in workshops and execution of field visits were quite dismal.
- 1.4.7 Around 74,183 man-days in all was generated of which 77 per cent were contributed by the forest fringe villagers and 23 per cent by people from outside. Against man-days generated by villagers, 23 per cent was contributed by women seemed to be on the lower side.

- 1.4.8 The average number of supervision by higher authorities during 2005-06 came to 4 per site. However, in case of certain sites, there had been no supervision at all.
- 1.4.9 The condition of the afforestation sites was reported to be quite good at the time of their transfer to the hands of VSS.
- 1.4.10 56 per cent of sample households reported that they are primarily depending on forest resources for their livelihood which indicates that establishment of afforestation sites in the fringe of their villages are certainly useful and virtually, 98 per cent of the sample households expressed that the programme of afforestation is useful as a major source of livelihood.
- 1.4.11 21 per cent sample households expressed to have sacrificed some land on account of afforestation programme. However, all the sample households had participated in implementation of various activities involving physical labour like nursery raising, site preparation, pitting, burning, plantation, soil work, manuring and protection of sites etc. but their participation was moderate in site selection, stock mapping, base line survey and selection of species.
- 1.4.12 About 63 per cent sample households were enjoying usufructs from the afforestation sites like collecting fuel and fodder, NTFP etc and they will use the sites intensively as they will grow older.
- 1.4.13 Average number of members per VSS was 13 comprising around 72 per cent of males and 28 per cent females. The social composition of VSS was 22 per cent SCs, 45 per cent STs and 33 per cent from other category.
- 1.4.14 Involvement of the VSS in plantation activities like nursery raising, site preparation, pitting, burning, plantation, soil work and manuring and protection is cent per cent, whereas their participation at the planning stage was moderate.
- 1.4.15 All the 32 key informants were aware of the anticipated benefits of afforestation like (i) green coverage, (ii) environmental improvements, (iii) soil and moisture conservation, (iv) increase in water table, (v) availability of fuel and fodder, (vi) availability of NTFP, and (vii) felling of trees on maturity etc.

- 1.4.16 It was reported that during transfer of afforestation sites to the VSS a document was executed between the Forest Department and the VSS along with transfer of a copy of the plantation journal. It was also reported that the VSSs were also discharging their responsibilities like protecting the sites from biotic interference, against illicit felling, from fire, conducting periodic cleaning, and maintaining plantation journal.
- 1.4.17 Condition of the sample sites in terms of survival of trees and the quality of growth was better as compared to the time of transfer to VSS which implies that the impact of the programme is quite appreciable.
- 1.4.18 In 4 Forest Divisions, 1692 VSSs were formed of which 1072 (63.36%) were involved with RLTA P plantation. It is, therefore, quite evident that the intervention under RLTA P is quite appreciable.
- 1.4.19 Although the VSSs were protecting the sites from biotic interference, they were unable protect sites from illicit felling.
- 1.4.20 Three out of four DFOs expressed that the VSS were associated at all stages of operation and their cooperation was satisfactory. They are also maintaining sites in good condition. In case of Rayagada, it was reported that although VSSs were associated at all stages, their cooperation was not encouraging and they are also not maintaining the sites satisfactorily.

1.5 BIJU KRUSHAK VIKAS YOJANA IN KBK DISTRICTS

- 1.5.1 Incompletion of the LI points has been mostly due to delay in the preparation of estimate, execution of electrical works and non-contribution of beneficiary share.
- 1.5.2 In Kalahandi, the actual irrigated area under the command of sample LIPs was 78.5 per cent, in Koraput it was 88 per cent and in Nawarangpur and Subarnapur districts it was cent per cent. In most of the cases, installation of LI points was completed within one year and the average cost of one sample LIP was around Rs.6.16 lakh.
- 1.5.3 All beneficiaries contributed their share in terms of physical labour. All members of the Pani Panchayats in the selected sample LIPs were paying water rent regularly.
- 1.5.4 All the LIPs are being operated/supervised by members of Pani Panchayats. The average annual operation and maintenance cost ranges

between Rs.30,000/- in Nawarangpur district to Rs.50,000/- in Koraput district. For 55 per cent LIPs, OLIC undertakes repair works and for remaining 45 per cent private mechanics do the job.

- 1.5.5 Kalahandi and Koraput districts are meeting repair expenses from PP funds and in Nawarangpur and Subarnapur districts jointly by PP and the OLIC.
- 1.5.6 20 per cent of the PPs complain about frequent electricity failure and 50 per cent complain about high electricity fees. In 50 per cent PPs there has been observed internal conflict among the PP members.
- 1.5.7 The electricity distribution company charges fee as per minimum load factor even if the LIP is not in use which is a cause of resentment among PP members.
- 1.5.8 In Kalahandi, Nawarangpur and Subarnapur districts, all members of the sample PPs expressed that their economic condition has been improved to a great extent due to LIPs. However, in Koraput district the PP members expressed that their economic condition has marginally changed.
- 1.5.9 Sample beneficiaries of Kalahandi district revealed that their cropping intensity had gone up from 103.6 per cent to 161.2 per cent, in Koraput from 84.77 to 140.3, in Nawarangpur from 92.1 to 171.5, and in Subarnapur from 81.9 to 180.3 as a result of installation of LIPs. The overall increase for all the districts was from 89.7 per cent to 164.8 per cent showing a very positive impact of the programme.
- 1.5.10 Area under paddy has gone up and paddy is also being cultivated in Rabi season now. There have been significant changes in terms of cropping pattern. Inferior cereals have been replaced by superior HYV cereals and commercial crops like cabbage, brinjal, tomato, cash crop like sugarcane etc. have been adopted.
- 1.5.11 As a result of the installation of LIPs under RLTA, the Farm Business Income went up significantly from Rs.944/- to Rs.3297/- per acre of net sown area in Kalahandi district, from Rs.927/- to Rs.2458/- in Koraput, from Rs.2007/- to Rs.2868/- in Nawarangpur and from Rs.1024/- to Rs.2745/- in Subarnapur districts respectively.

- 1.5.12 One distinguishing feature marked in the district of Subarnapur is that although Cropping Intensity in the “post-project” period is one of the highest, the FBl per acre is comparatively lower. The reason for this could be that there has not been much crop diversion and the farmers are growing mostly the traditional paddy in Rabi season.
- 1.5.13 Per acre labour employment intensity has gone up from 62 to 168 (171%) in Kalahandi, from 59 to 142 (141%) in Koraput, from 68 to 182 (168%) in Nawarangpur and from 82 to 178 (117%) in Subarnapur districts. Thus, in terms of employment generation, the contribution of BKVY is enormous.
- 1.5.14 On the whole, 10 per cent of the sample beneficiaries considered water supplied for irrigation to be inadequate and 2 per cent considered breakdown as a problem. None complained about drying up of wells, whereas only in one case there was complain like electrically failure, quarrel among members etc.
- 1.5.15 In case of sample districts, 52 per cent beneficiaries considered their income rising significantly, 46 per cent considered it to be a marginal rise while 2 per cent considered the income to have remained stagnat.
- 1.5.16 About 15 per cent of the beneficiaries wanted the field channels to be repaired and realigned so that all the fields get adequate water.
- 1.5.17 All the key informants expressed that there was good cooperation among the PP members as well as between the PPs and the OLIC, and the PPs were conducting regular meetings. They expressed that crop diversification and cultivation of cash crops was feasible as a result of the system of Pani Panchayats. They opined that the impact of the system of Pani Panchayat had been significant.
- 1.5.18 The key informants suggested that Government should take steps for installation of additional points, provide regular technological assistance, meet the cost of repair and maintenance, see to regular supply of electricity, reduce water rate, increase labour wage etc. Government should think of installing additional points, providing technological assistance, ensuring regular supply of electricity etc.
- 1.5.19 From the suggestions of the key informants transpires one important thing that they have not very well understood the very objectives of the system of Pani Panchayats.

1.6 WATERSHED DEVELOPMENT IN KBK DISTRICTS

- 1.6.1 The estimated cost of a sample watershed was Rs.182.97 lakh on an average against which the financial achievement was Rs.122.66 lakh, which accounts for 67.04 per cent and this appears to be under utilisation even after 4 years of execution. 10 sample watersheds had been completed and the remaining 6 were still continuing. The 6 ongoing watersheds include 5, started in 2002-03 and one in 2001-02.
- 1.6.2 The area treated under sample watersheds include land under forest, revenue land, land under cultivation, community land and barren land.
- 1.6.3 The nature of activities undertaken in the sample watersheds were insitu plantation, soil and moisture conservation, plantation and sowing of seeds of multipurpose trees, shrub, grass, legumes, pasture and land development, agro-forestry, horticulture and floriculture, drainage line treatment, small water harvesting structures, development of orchards and pisciculture etc.
- 1.6.4 Awareness raising programmes like training, extension and people's participation been undertaken in respect of all watersheds.
- 1.6.5 On an average 11 assets were created per sample watershed with a minimum of 7 and maximum of 14 relating to eco-restoration. The assets created under watersheds are likely to provide them gainful employment to the local people.
- 1.6.6 Flow of funds towards employment generation had been of the order of 55.25 per cent of the total expenditure. On an average 1048 mandays was generated per Rs.1.00 lakh equal wage rate was adopted both for male and female workers. No contractor was engaged for construction of watersheds. The employment generated was totally enjoyed by the local people and 40.30 per cent of the same was women component.
- 1.6.7 Around 1352 ha of irrigation potential was created under the 16 sample watershed, which was fully utilized in Kharif crops 2005-06. The Rabi crops utilisation was of the order of 540 ha that accounted for 40 per cent.
- 1.6.8 While no training and visits were organized in case of two watersheds, it was not useful in respect of two watersheds where organized.

- 1.6.9 The visible changes that have taken place as a result of the watersheds are of the following nature;
- (i) Employment opportunities have been created through activities like plantation, agro-forestry, horticulture, floriculture, land development, creation of orchards, taking up pisciculture etc.
 - (ii) There has been a change in the cropping pattern including cultivation of summer crops.
 - (iii) The local people have been able to earn additional income through the end product of different economic activities that has reduced migration of local labours.
 - (iv) Health and hygiene condition has improved due to construction of drainage system and installation of safe drinking water sources.
 - (v) Interpersonal relationship and public and private partnership has been improved as a result of local people becoming members in different user groups.
- 1.6.10 The Farm Business Income per acre, cropping intensity, crop diversification and the employment generation has gone up as a result of watershed projects.
- 1.6.11 There were as many as 42 SHGs of different types within the area coming under the sample watersheds which have gone up to 163 (288%) as a result of watershed programme. They have learnt the concept of self management in process of development.
- 1.6.12 Households in watershed areas had taken part in some kind of activity or the other like product development, organization of health camps, distribution of goats, cattle and agricultural implements, plantation, fishery activities, watch and ward etc.
- 1.6.13 Sample households expressed that the scope of getting some additional employment has increased. All of them are collecting fire wood and fodder from watersheds. They opined that the water table has increased, environmental improvements have been noticed and there had been diversification of economic activities.
- 1.6.14 The Key Informants opined that watersheds have been able to create livelihood opportunities, increase the water table, grow fodder and fire wood, enhance the economic growth of the local people through various income generating activities like agricultural activities, pisciculture, plantation etc.

- 1.6.15 The programme of micro-watersheds in KBK districts are being implemented since 2002-03 and a considerable number of them are still incomplete. Their completion may be expedited.
- 1.6.16 The Programme Managers expressed that there had been considerable positive impact of the programme of watershed on the local people and the following are few examples;
- i. Better management of natural resources and SHG movement in a big way.
 - ii. Vigorous implementation of beneficiary oriented programme through PPP.
 - iii. Soil and water conservation, renovation of existing ponds and tanks and taking up of pisciculture.
 - iv. Taking up plantation activities and thereby rearing of domestic animals,
 - v. Collection of fodder and fuel wood, cultivation of vegetables, cash crops etc
 - vi. Increased scope for livelihood opportunities and employment generation thereby increasing the economic condition of the people.
 - vii. Improvement in interpersonal relationship among the local people.
 - viii. The overall observation is that the objectives of Watershed Programme have considerably been fulfilled as there has been increase in irrigation, cropping intensity, crop diversification, additional employment generation, increase in farm business income, increase in soil and moisture conservation, increase in green cover, adoption of new activities like horticulture, fishery, and plantation etc as also reduction in out-migration.
 - ix. Apart from land lords within the watershed areas, the landless have also been benefited by way of availing additional employment and livelihood opportunities and enjoying usufructs as a result of the watersheds.
 - x. In regard to sustainability of watershed projects, the prospect is bright since additional employment opportunities have been created and additional income generation have occurred on account of watershed projects and there has been considerable participation of the local people in the operation and maintenance of various activities under the watersheds through SHGs and User Groups. However, what is needed is to keep up the spirit through enhanced farm activities generating higher and higher incomes over the years.

1.7 RURAL CONNECTIVITY PROGRAMME IN KBK DISTRICTS

- 1.7.1 In case of 6 sample bridges, there was no link at all ensuring all weather connectivity. In respect of the other two, the existing links were unsafe masonry bridges. Construction of 6 sample bridges was entrusted to

contractors and 2 executed departmentally. As many as 7 out of 8 sample bridges were completed and put to operation as on the date of field study.

- 1.7.2 In case of one (i.e. the SB over Jamuna Bahal) bridge in Kalahandi district, the construction was delayed due to water logging as no specific drainage channel (nallah) passing through the site was existing creating perennial problem because of technical reasons.
- 1.7.3 The physical and financial progress under the programme had been satisfactory. Of the total employment generated, 37 per cent related to skilled labour and 63 per cent to unskilled.
- 1.7.4 About 87 per cent of the unskilled labour was contributed by men and 13 per cent by women. SCs contributed 45 per cent, STs 36 per cent and others 19 per cent of the unskilled labour.
- 1.7.5 It was observed in course of field study that incomplete information was furnished in certain cases, which implies that either records are not maintained properly or there was lack of transparency.
- 1.7.6 As observed, cube testing was done in case of all the sample bridges whereas stump testing was done in case of 6 (75 %) sample bridges.
- 1.7.7 There was adequate number of inspections on construction of bridge projects by the local Engineers. Inspection by supervising officers i.e. the EE, SE and the CE per site came to 13 on an average with a minimum of 3 and maximum of 32 per site.
- 1.7.8 The nature of problems faced by the local people prior to the construction of the bridge projects were really enormous as expressed by the GPs for which construction of these bridge projects were absolutely necessary.
- 1.7.9 In case of the Bridge over Palliguda in Koraput district, the 4 Gram Panchayats contacted expressed that there was no problem prior to construction of this bridge. If this fund was spent on other bridge more benefits would have been derived.
- 1.7.10 One and all the GPs contacted opined that construction of these bridge projects have improved connectivity with other villages and the block headquarters. There has been appreciable improvement in accessibility to GPs, Blocks, District headquarters and Health Centres, Educational Institutions and other Growth Centres including the market places etc. that

makes clear that construction of bridge projects as a matter of providing the missing links had positive impact on local rural economy.

- 1.7.11 It was the unanimous opinion in all the focus group discussions that local people have been enjoying all weather connectivity. Children could go to schools across the bridges, local people could go to hospitals and market places, business men could expand business as direct link with producers and buyers developed, procurement of raw materials and essential commodities were much easier by reducing transport cost and save time as a result of construction of these bridges.
- 1.7.12 Focus group discussions also revealed that as a result of availing connectivity through the bridge projects, some people have opened small business within their villages as also across the bridges. Besides, people are able to save time and distance to go to far places as a result of these bridges and conduct safe night journey across the bridges.
- 1.7.13 The business men of the local rural market could avail easy access to higher business centres as a result of bridges in question. Procurement of materials from outside, contact with big buyers, opening of new ventures has also been possible. Earlier, the producers were carrying their produces to the buyers or to market places. The situation has been changed and the buyers are coming to the door step with a good competitive price.

1.8 RURAL WATER SUPPLY PROGRAMME IN KBK DISTRICTS.

- 1.8.1 Majority of the water supply projects have been installed within the middle of habitations and few at the end of habitations because of location advantages and availability of space.
- 1.8.2 The average number of potential beneficiaries per tube well was 167 and 151 for sanitary wells which is within the prescribed norm for KBK districts. But in case of Kalahandi district, one tube well has been installed for an average of 258 populations. This was certainly in the higher side.
- 1.8.3 Of the 50 sample tube wells, so far 9 were transferred to Water Users Associations. As against a target of 167 beneficiaries per tube well on an average, as many as 153 (92%) are receiving benefit at present.

- 1.8.4 Of the 12 sample sanitary wells, none was transferred to Water Users Associations. As against a target of 151 beneficiaries per sample sanitary well, 129 (85%) on an average are receiving benefit at present.
- 1.8.5 All the 8 sample piped water supply projects were completed. The source was mostly Ground Water lift in case of 6 and River Lift in remaining two. As against a target of 2009 beneficiaries per sample piped water supply project, 1927 (96%) on an average are receiving benefit at present.
- 1.8.6 There were in all 117 break downs in case of 70 projects during the previous year that comes to two per project on an average. As against a total of 117 break downs, 49 break downs were repaired within a reasonable time period. Even if repaired within reasonable time, the average number of days of interruption was 4 days.
- 1.8.7 In all, 20 Water User Associations have been formed out of which 9 projects have been transferred so far. However, 12 Associations are taking part in operation and maintenance of projects.
- 1.8.8 Only in case of two projects, user fees are being collected by WUAs. In total 50 persons were trained in respect of 70 projects on operation and maintenance and on development of skill of local people to take care of break downs. This number appears to be inadequate.
- 1.8.9 Out of 208 beneficiaries contacted, 178 (86%) expressed that supply of water through the projects was adequate. In case of inadequate supply, the attributable reasons were frequent break downs, drying up of the source, and delay in repairs etc. 10 per cent of the break downs were related to electrical problems.
- 1.8.10 About 27 per cent of the break downs were related to mishandling water supply projects, especially the tube wells which is mostly due to lack of knowledge or good civic sense among users.
- 1.8.11 In case of 50 per cent of sample water supply projects, it was the feeling that the RWSS organization is not extending cooperation with the people for timely repair of the break downs. Operation and maintenance of 87 per cent of the projects is vested on the Panchayats.
- 1.8.12 About 20 per cent of the sample beneficiaries reported to have been making payments towards operation and maintenance. However, 32 per

cent sample beneficiaries are of the opinion that funds either of the panchayats or of the water user associations are inadequate to meet the maintenance cost.

- 1.8.13 Maintenance of hygienic practices like using clean pots to carry water, storing water with a cover and using clean mugs etc. among the beneficiaries is satisfactory. In case of epidemics, however, only in 18 per cent cases disinfectants were used for purification of the water sources.
- 1.8.14 As much as 80 per cent of the sample beneficiaries reported that there has been constructed good platforms or stand points at water sources. 43 per cent sample beneficiaries reported that waste water is used for gardens, 15 per cent reported channeling to soak pits, 5 per cent to drains and 59% per cent to open spaces.
- 1.8.15 As many as 99 per cent of the beneficiaries are satisfied that there has been a drastic reduction in prevalence of diarrhea and dysentery cases and 98 per cent are satisfied on the reduction in prevalence of cholera and jaundice cases.
- 1.8.16 The opinion of the key informants on the reduction of water borne diseases is almost the same as that of sample beneficiaries.
- 1.8.17 All Project Managers were of the opinion that there has been reduction in the prevalence of various kinds of water borne diseases and the people are enjoying improved quality of life.
- 1.8.18 Majority of the Programme Managers expressed that the burden on women to fetch water from distant places has been reduced and time has been saved for other household works.

2. Recommendations:

Based on the conclusions arrived at through field study, a set of recommendations have been made in respect of each component. The summary of the recommendations made are presented below separately for each component.

2.1 40 SEATED HOSTELS FOR ST / SC GIRLS IN KBK DISTRICTS

- 2.1.1 For ensuring quality education, there is an urgent need for appointing at least five teachers in each school over and above the Head Master. If

there be any financial constraints, appointment of Shikshya Sahayaks in requisite number could be a viable solution.

- 2.1.2 For administrative reasons, Government should ensure stay of Head Masters/Mistress and Hostel Superintendents at school headquarters. Due to lack of residential accommodations, Government may adopt viable solutions like posting of local teachers in these schools.
- 2.1.3 Government should ensure effective cooperation between the administrative department, executing agency and school authorities for reducing time lag in execution and operation of building projects in future. Executing agencies delivering poor quality constructions should not be given any work in future and have a provision to retain 5% of project cost as security deposit for five years in time of tender.
- 2.1.4 Even if annual maintenance is not permissible in the initial years of construction, there is no bar for the administration to inspect hostel buildings and take appropriate corrective measures as a special case.
- 2.1.5 Since majority of the amenities provided are consumable and recurring in nature require repairs and replacements in time. Cares should be taken to undertake necessary repairs and replacements annually.
- 2.1.6 Government may consider providing only the non-consumable items and the consumable items be left to the boarders or else purchased and given to them as in case of uniform so that they shall care for their own items.
- 2.1.7 All hostels should ensure night watching arrangements and there should be a prescribed common code of conduct for the boarders.
- 2.1.8 Hostel admission to girls from headquarters villages may be discontinued and awareness and motivation camps in outskirt villages be organised to persuade more of outside girls to join schools and take admission in hostels.
- 2.1.9 Non-return of boarders in time after enjoying home visits should be discussed in meetings of Parents Teachers Association and the parents should be impressed to send back their children to hostel in time.
- 2.1.10 Hostel authorities should take care to organise Immunisation Camps for boarders and provide First Aid facilities in hostels.
- 2.1.11 Timely payment of stipend and distribution of two pairs of uniform to all boarders should be ensured.
- 2.1.12 With a view to avoiding misuse and misappropriation of stipend, the amount of stipend should be received by authorized persons of the boarders on their behalf and more preferably by their parents.
- 2.1.13 Sharing amenities jointly will give rise to clash of interest and controversy apart from spread of communicable diseases among boarders. It is recommended that there should be adequate provision of amenities and timely repairs and replacements of utensils, study materials, furniture etc. annually.
- 2.1.14 The question of reducing gender inequality in education among SCs and STs by way of providing boarding facilities to girls should be highlighted before the local public in different flora.
- 2.1.15 Hostel authorities should give emphasis on environmental sanitation, gardening, games and sports that keeps the children mentally free and physically sound.

- 2.1.16 Additional provisions of infrastructure, amenities and stipend should be made in advance to give effect to the enhancement of hostel seats from 16000 to 18460.
- 2.1.17 The DWOs opined that had there been no provision of stipend, girls would not have preferred to stay in hostels and the boarders would not have attended schools without hostel facilities. According to their opinion, establishment of hostels for SCs and STs girls in the KBK region under the RLTA is a useful step to raise literacy among females.
- 2.1.18 There is a need for the hostel authorities to give emphasis on the quality of food, maintenance of hostel routine and reading habit of boarders, awareness of cleanliness, environmental sanitation, gardening, games and sports and above all providing security and enforcement of discipline among the boarders.
- 2.1.19 All hostels should develop kitchen garden in collaboration with the horticulture department. Gardening will not only provide vegetables to the inmates, but also the inmates can develop a sense of pro-nature and eco-friendly activities.
- 2.1.20 The following are few points that emerged in course of field investigation may be considered by Government as a follow up action;
- i. All hostels should be provided with drinking water facility and electricity. The possibility of providing fans need be explored. The existing system of charging electricity dues at commercial rates may be waived.
 - ii. There is need for provision for television and news paper for enhancing exposure of boarders and also provision of play, games and sports materials for their entertainment and physical exercise.
 - iii. Female teachers should preferably be kept as Hostel Superintendents and there need be a female attendant who will continue to stay with the boarders as an Aya-cum-watcher.

2.2 MOBILE HEALTH UNITS IN KBK DISTRICTS

- 2.2.1 Zilla Swasthya Samitis should ensure a minimum of two visits by MHUs to each village during a month. Impeding problems, if any, should be resolved.
- 2.2.2 MHUs should arrange clinics for villages within a radius of 5 kms. All crucial manpower of MHUs like the Medical Officer, the Pharmacist and the Health Worker (Female) should be maintained.
- 2.2.3 Although Allopathic, Ayurvedic as well as Homeopathic Doctors are equally qualified and authorized, preferably allopathic doctors should be kept in charge of the MHUs. Of course, doctors from other streams can attend to their job in exigency.

- 2.2.4 The District Authorities should regularly review and ensure full provision of equipments including Stethoscope and Microscope in the MHUs. If necessary, repairs and replacements should be done at once.
- 2.2.5 District Authorities should review the adequacy of village visits by MHUs and the impeding problems like transport, fuel, equipment and medicine should be sorted out. More so, adequate fuel need be purchased in advance and kept as reserve to avoid short supply in rural areas in time of emergency.
- 2.2.6 The CDMOs should review the position at the end of each month and enforce fulfillment of a minimum of 20 days tour and 2 days of night halts in case of each MHU.
- 2.2.7 Like tour days and night halts norms, Departmental authorities should prescribe a minimum number of school visits, health camps, immunization camps, and family welfare camps to be organized by MHUs per month for better coverage.
- 2.2.8 It is expedient for the supervisory authority to review the position and ensure provision of support services like supply of medicines, equipments, provision of funds etc to the MHUs strictly in time for their effective functioning.
- 2.2.9 Keeping in view the existing arrangements, Government should examine the possibility of making provisions for modern equipments, quality medicines as per local needs, furniture for camps, ambulance and telephone for emergency cases, Microscope training to the Pharmacists, a display board at the village level, accommodation and storage facility for MHUs.
- 2.2.10 IEC programme should be further more vigorously taken up to create adequate awareness among the people on the nature and extent of services a MHU provides for the local people.
- 2.2.11 To bring in improvements in the quality of services delivery, CDMOs should undertake more of field visits and interaction with villagers which will help increasing attendance to emergency, enhancing follow ups, eliminating the scope of charging fees, and ensuring complete enumeration of expectant mothers and their antenatal check ups.

- 2.2.12 Visit of CDMOs on clinic days will have adequate impact on providing doorstep services, ensuring good cooperation, providing timely treatment, ensuring cent per cent follow ups, and in removing bias of MHUs towards the rich and influential people, if any.
- 2.2.13 Even though, the prevalence of T B, Leprosy and ARI in the region is less as compared to Malaria, Diarrhoea and Scabies, it is essential that the various treatment facilities and the community programmes available should be widely publicized through vigorous IEC programme.
- 2.2.14 The MHUs should undertake adequate prevention and control measures on TB, Malaria, Leprosy, Diarrhea, ARI, and Scabies as well as organize various health and hygiene education programmes. More specifically, doctors should invariably lead the mobile team in conducting mobile clinics.
- 2.2.15 Since treatment of Panchabyadhi is an important and popular component of the MHU programme, the MHUs should maintain records of the patients treated under various diseases particularly those coming under Panchabyadhi which will help in undertaking policy reviews in future.
- 2.2.16 Government may take appropriate action on some of the valuable suggestions given by the CDMOs as listed below for bringing improvements in the health care delivery System through MHUs.
- i. Provision of accommodation for office, staff and store.
 - ii. Establishment of one additional MHU in large-sized blocks.
 - iii. The tour days having been increased from 20 to 24 per month, with adequate funds provision.
 - iv. Periodical training for both Medical and Para-medical staff of the MHUs should be organised.
 - v. Posting of adequate number of MBBS Doctors for MHUs.
 - vi. A mechanism need to be evolved to associate PRIs in the programme of MHUs.

2.3 EMERGENCY FEEDING PROGRAMME IN KBK DISTRICTS

- 2.3.1 Accommodations found unsuitable for Anganwadi Centres may be addressed for efficient management of various programmes aimed at providing service to the old, infirm, children and pregnant women.

- 2.3.2 The select list along with all relevant details of beneficiaries should be made available to the AWCs for record and future reference.
- 2.3.3 Requisite provision of funds not only for purchase of fuel but also for all other local purchases including vegetables.
- 2.3.4 The practice of providing meals for the absentee beneficiaries should be discontinued.
- 2.3.5 District administration should take care to see that the quality of food served is good, adequate and there is timeliness in food service. More of supervision by higher authorities and their interaction with the beneficiaries as well as their presence during food service will reduce the number of complains.
- 2.3.6 The Gram Sabha or the local NGOs have leading role to counsel and pacify situations if they come across any kind of conflicts among the family members on account of emergency feeding programme.
- 2.3.7 In fitness of things, district-wise selection of beneficiaries should be based on a potential survey conducted in advance. Such a survey could be carried out along with the BPL Census for better consistency.
- 2.3.8 There shall be prescribed specific authority to approve the selected list along with uniform norm in all districts. In case it is already prescribed, the same should be enforced.
- 2.3.9 Since some programme managers have reported the food stuff supplied to be of fair quality, there is need for the State level authorities to take appropriate steps to ensure the quality of food stuff.
- 2.3.10 The administration should look into the accommodation problem of the AWCs and its storage space.
- 2.3.11 The following suggestions which came forth in course of the field survey need be examined and appropriate action taken by the administration;
- i. Anganwadi Workers should stay in the AWC headquarters.
 - ii. Anganwadi Centres should have adequate space for storage, cooking and dining.
 - iii. Providing of two meals in a day and providing requisite utensils to AWCs.
 - iv. Provision of extra staff in AWC to deal with emergency feeding.
 - v. Provision of contingency and remuneration for the Cook.
 - vi. Provision of safe drinking water facility at the AWCs.

- vii. Allow ration to beneficiaries from inaccessible areas.
- viii. Increasing the number of beneficiaries where needed, i.e., especially at times of natural calamities.

2.4 AFFORESTATION PROGRAMME IN KBK DISTRICTS

- 2.4.1 Forest Department should take due care to increase the level of association of VSSs in conducting IEC activities under afforestation programme.
- 2.4.2 Higher implementing authorities should make a check list of various standard practices to be undertaken in course of plantation and the same should be recorded in the plantation journal under joint signature of the executing functionary of the Forest Department and the VSS.
- 2.4.3 Since audio-visual exposure is more effective for villagers, the departmental authorities should organize more of workshops and demonstration visits for VSS members in course of plantation and necessarily before transfer of sites to the hands of VSS.
- 2.4.4 Forest Department should involve more of local people and increase participation of women in implementing various activities under afforestation programme for its success.
- 2.4.5 Forest Department should prescribe and enforce minimum supervisions in course of plantation to ensure standard practices of plantation.
- 2.4.6 To remove hostility in the minds of persons sacrificing their land for the purpose of afforestation, the IEC programme should strategically address the issue in a participatory mode with the help of VSS as their long term asset.
- 2.4.7 VSSs should be involved in a big way from the stage of site selection so that a sense of their ownership of the site among the VSS members and the villagers will be created.
- 2.4.8 To prevent Illicit felling of trees, a coordination committee of the neighboring VSSs should be organized. The very presence of this committee will facilitate mutual cooperation and broad base interest of the member VSS over a larger green area.
- 2.4.9 Participation in training, workshops and execution of field visits to know the success stories are key instruments in enhancing the knowledge and

sense of ownership among VSS members which should be given due priority.

2.4.10 Few suggestions across the field study are listed below that may be examined and reconsidered by Government;

- i. Permission to take up afforestation on revenue land should be accorded in time.
- ii. Fencing by way of plantation of quick growing non-grazing species will help reducing biotic interference as also reduce cost.
- iii. Among fruit bearing species, plantation of mango, jack fruits trees could be considered if suitable soil and moisture conditions are available in the proposed site.
- iv. Soil and water conservation measures including construction of check dams if feasible could be a part of the afforestation programme that helped in survival rate of the plantations undertaken and re-charge of ground water.
- v. There should be organised meetings of different VSS for sharing their experience and learning better practices.
- vi. For reducing illicit felling and biotic pressure on the afforestation sites, back-yard plantation should be encouraged and there should be provision for award of prizes.
- vii. Even after transfer of afforestation sites to VSS, Forest Department should continue its association for ensuring sound growth and protection of afforestation sites by way of extending their technical guidance and advice.

2.5 BIJU KRUSHAK VIKASH YOJANA IN KBK DISTRICTS

2.5.1 Government should create adequate general awareness on the roles and responsibilities of the Pani Panchayats on the efficient operation and maintenance of LI points for higher agricultural productivity.

2.5.2 Few aspects on operation and maintenance of Pani Panchayats as listed below came to notice that needs immediate attention of Government;

- i. Pani Panchayats should have a repair kit of spare parts to meet immediate nature of repairs as spare parts are not available locally.
- ii. Government may issue instructions to Electrical Distribution Companies for timely preparation of cost estimate and supply of electrical connections to LI points without charging commercial electrical tariff from Pani Panchayats.
- iii. Government should organize more number of trainings/workshops and motivation programmes for the PP members with a view to encouraging their enhanced participation in the operation and maintenance of the system of Pani Panchayats even during disaster and natural calamity as also make payment of their water user charges spontaneously.

- iv. The Agriculture Department has a vital role to play in organizing agriculture extension programme since crop diversification and cultivation of cash crops have yet to receive priority in case of certain Pani Panchayats despite creation of assured irrigation facilities through installation of LI points.

2.6 WATERSHED PROGRAMME IN KBK DISTRICTS

- 2.6.1 The district authorities should organize training and visit programmes to the user groups in case of all watersheds for good exposure.
- 2.6.2 Impeding problems involved in all incomplete micro-watershed projects should be sorted out and resolved for their early completion. A specific date line for completion of incomplete projects should be drawn up so as to avoid escalation of project cost.
- 2.6.3 In course of conducting the field study and interaction with various stakeholders few suggestions listed below which may be examined and reconsidered by Government.
 - i. There is need for imparting training on maintenance of records by the User Groups under the watershed programme,
 - ii. In each watershed, a small nursery may be raised or else there may a central nursery for replacement of trees or plants in time when required.
 - iii. Low cost agricultural implements should be made available within easy reach for micro-watersheds.
 - iv. The positions of the members of the Watershed Development Team should not be kept vacant at any point of time
 - v. There should be a system of reward to the best performing watershed project in a district each year should be introduced with a view to make watershed development a peoples' movement.
 - vi. There should be a forum for all the Watershed Development Committees in a district to meet, interact and learn best practices/ success stories from each other.

2.7 RURAL CONNECTIVITY PROGRAMME IN KBK DISTRICTS

- 2.7.1 Project authorities should involve the local people in the selection of site for the bridge project to derive maximum cooperation and thus confer maximum benefits from the scheme.
- 2.7.2 Executing authorities have to ensure enhanced participation of women in the employment generation and it should not fall below 30 per cent. Participation of SCs and STs in employment generation should be ensured at par with their representation in the district population.

- 2.7.3 Executing agencies should maintain records strictly as prescribed and maintain transparency in providing information.
- 2.7.4 Supervising authorities should ensure uniform number of inspections to project sites with some amount of stress on projects having some problems of critical nature. In any case, the number of higher-level inspections to project sites should not fall below a specific number as would be prescribed.

2.8 RURAL WATER SUPPLY PROGRAMME IN KBK DISTRICTS.

- 2.8.1 Government should take care to provide one tube well for 150 persons in case of KBK districts.
- 2.8.2 At least two to three persons from each user group should be given training on the operation and maintenance of projects.
- 2.8.3 Departmental authorities and the electrical companies have a greater role to play in regard to timely restoration of power in case of electrical break downs.
- 2.8.4 To avoid break downs due to mishandling, early formation of User Groups and transfer of the projects to them is the best alternative for general awareness and motivation of the programmes.
- 2.8.5 Advance programme on awareness raising, training and motivation programmes are the best ways to generate demand. Although the system is a basic need of life for the rural mass, it should be made more effective and the best course of action through the Community Based Organisations (CBOs), be practised in order to generate confidence among the stakeholders and make the programme a mass movement.
- 2.8.6 Formation of water user associations, supply of repair kits, providing training to few members and transferring the points to these associations will solve the problem of spare parts and non availability of mechanics as well as removing the feeling of non-cooperation of the RWSS organisation with the local people.
- 2.8.7 It is essential for the Government to create adequate public awareness on the hazards of waste water disposal in open space and non-use of disinfectants for treatment of water sources. For management of waste water, effective mechanism with adoption of advance technology be

followed and training on this aspect be given to the management managing the safe drinking water source.

2.8.8 The remedies for tackling the problem of insufficient discharge can be tackled to certain extent by directing the waste water to a nearby soak pit for the purpose of recharging the source. Care should be taken to disinfect the discharge water as it may contaminate sources of safe drinking water.

2.8.9 Few suggestions which came forth in course of the field study as listed below may be examined and considered by Government;

- i. Toilets are usually constructed nearby water sources in rural areas that are likely to pollute source. Awareness campaign should emphasize on the hazards of these practices.
- ii. When a water source is defunct or water quality is affected, local people use water from nearby pond or river. There should be annual verification of water sources in accordance with the books to identify defunct sources as well as to rectify the problems to minimize the water born diseases in rural areas.
- iii. Open defecation pollutes water sources for which installation of toilets under the Total Sanitation Campaign (TSC) should be encouraged and the NGOs may also be involved in the campaign.
- iv. People prefer sanitary wells to tube wells for the simple reasons of easy maintenance and apparently for no break downs. In view of this, Government may consider installing more of sanitary wells where water quality is good and more specifically in interior villages.
- v. In case of piped water supply projects, there are some irregular connections to private households which should be checked.
- vi. Rural water supply projects are usually demand driven and local people should own the same for their operation and maintenance. But the people's perception at various levels still prevails that Government have to continue with operation and maintenance of the same. The programme to be sustainable, there is need to break through this wrong notion by active involvement of GPs/PRIs.

Annexure – 2.1**Socio-economic Profile of Balangir District**

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 82 ⁰ 41' to 83 ⁰ 42' E
	(b) Latitude (in Degree)	- 20 ⁰ 9' to 21 ⁰ 05' N
2	Geographical area (sq. km.)	- 6575.0
3	No. of Sub-Divisions	- 3
4	No of Tahsils	- 3
5	No of CD Blocks	- 14
6	Municipalities	- 1
7	NACs	- 8
8	Police Stations	- 13
9	Gram Panchayats	- 285
10	Total Villages	- 1792
	(a) Inhabited Villages	- 1761
	(b) Un-inhabited Villages	- 31
11	Normal annual rainfall (in mm.)	- 1443.5
12	Total Households (2001)	- 303,385
13	No of Rural Households (2001)	- 272,975
14	Total population (2001)	- 1,337,194
	(a) Males	- 673,985
	(b) Females	- 663,209
15	Children, 0 – 6 yrs (2001)	- 188,674
	(a) Males	- 97,431
	(b) Females	- 94,243
16	% of SCs to total population (2001)	- 16.92
17	% of STs to total population (2001)	- 20.63
18	Overall literacy rate (%)	- 54.93
	(a) Males	- 70.36
	(b) Females	- 39.27
19	Total workers	- 559,750
	(a) Males	- 371,425
	(b) Females	- 188,325

20	Total main workers	-	351,689
	(a) Males	-	299,209
	(b) Females	-	52,480
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	43,761
	(ii) Miscellaneous tree crops and groves	-	796
	(iii) Permanent pasture	-	37,544
	(iv) Culturable waste	-	18,868
	(v) Land put to non-agricultural use	-	46,479
	(vi) Barren and uncultivable waste	-	13,349
	(vii) Current fallow	-	78,255
	(viii) Other fallow	-	17,868
	(ix) Net area sown	-	280,527
22	Operational Holdings	-	30,590
	(a) Small Holdings	-	7,325
	(b) Marginal Holdings	-	19,620
23	Area under Paddy (in ha): 2000-01	-	130,527
	(a) Total productions of paddy (qtls)	-	808,779
	(b) Yield rate of Paddy (qtls / ha)	-	6.20
	(i) Highest (Titlagarh Block)	-	10.31
	(ii) Lowest (Belpada Block)	-	2.19
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	2
	(c) Other Hospitals	-	8
	(d) Community Health Centre	-	5
	(e) Primary Health Centre (Old)	-	10
	(f) Primary Health Centre (New)	-	38
	(g) Mobile Health Unit (MHU)	-	15
	(h) Homeopathic Dispensaries	-	16
	(i) Ayurvedic Dispensaries	-	29
25	Percentage of families below poverty line – BPL Census: 2002	-	61.06
26	No of Anganwadi Centres	-	1261

Annexure – 2.2

Socio-economic Profile of Kalahandi District

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 82 ⁰ 32' to 83 ⁰ 47' E
	(b) Latitude (in Degree)	- 19 ⁰ 8' to 20 ⁰ 25' N
2	Geographical area (sq. km.)	- 7920.0
3	No. of Sub-Divisions	- 2
4	No of Tahsils	- 7
5	No of CD Blocks	- 13
6	Municipalities	- 1
7	NACs	- 2
8	Police Stations	- 12
9	Gram Panchayats	- 273
10	Total Villages	- 2205
	(a) Inhabited Villages	- 2068
	(b) Un-inhabited Villages	- 137
11	Normal annual rainfall (in mm.)	- 1378.2
12	Total Households (2001)	- 320,624
13	No of Rural Households (2001)	- 299,942
14	Total population (2001)	- 1,335,494
	(a) Males	- 667,526
	(b) Females	- 667,968
15	Children, 0 – 6 yrs (2001)	- 217,889
	(a) Males	- 109,807
	(b) Females	- 108,082
16	% of SCs to total population (2001)	- 17.67
17	% of STs to total population (2001)	- 28.65
18	Overall literacy rate (%)	- 46.20
	(a) Males	- 62.88
	(b) Females	- 29.56
19	Total workers	- 620,590
	(a) Males	- 381,444
	(b) Females	- 239,506

20	Total main workers	-	382,050
	(a) Males	-	313,670
	(b) Females	-	68,380
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	64,271
	(ii) Miscellaneous tree crops and groves	-	2,667
	(iii) Permanent pasture	-	20,418
	(iv) Culturable waste	-	21,434
	(v) Land put to non-agricultural use	-	43,351
	(vi) Barren and uncultivable waste	-	33,151
	(vii) Current fallow	-	60,575
	(viii) Other fallow	-	16,593
	(ix) Net area sown	-	290,901
22	Operational Holdings	-	27,214
	(a) Small Holdings	-	7,697
	(b) Marginal Holdings	-	15,394
23	Area under Paddy (in ha): 2000-01	-	265,642
	(a) Total productions of paddy (qtls)	-	5,181,757
	(b) Yield rate of Paddy (qtls / ha)	-	19.50
	(i) Highest (Jaipatna Block)	-	32.17
	(ii) Lowest (Golamunda Block)	-	5.97
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	1
	(c) Other Hospitals	-	5
	(d) Community Health Centre	-	6
	(e) Primary Health Centre (Old)	-	8
	(f) Primary Health Centre (New)	-	39
	(g) Mobile Health Unit (MHU)	-	14
	(h) Homeopathic Dispensaries	-	14
	(i) Ayurvedic Dispensaries	-	18
25	Percentage of families below poverty line – BPL Census: 2002	-	62.71
26	No of Anganwadi Centres	-	1214

Socio-economic Profile of Koraput District

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 82 ⁰ 5' to 83 ⁰ 23' E
	(b) Latitude (in Degree)	- 18 ⁰ 13' to 19 ⁰ 10' N
2	Geographical area (sq. km.)	- 8807.0
3	No. of Sub-Divisions	- 2
4	No of Tahsils	- 7
5	No of CD Blocks	- 14
6	Municipalities	- 1
7	NACs	- 3
8	Police Stations	- 21
9	Gram Panchayats	- 226
10	Total Villages	- 1997
	(a) Inhabited Villages	- 1915
	(b) Un-inhabited Villages	- 82
11	Normal annual rainfall (in mm.)	- 1521.8
12	Total Households (2001)	- 284,876
13	No of Rural Households (2001)	- 240,294
14	Total population (2001)	- 1,180,637
	(a) Males	- 590,743
	(b) Females	- 589,894
15	Children, 0 – 6 yrs (2001)	- 200,689
	(a) Males	- 101,181
	(b) Females	- 99,508
16	% of SCs to total population (2001)	- 13.04
17	% of STs to total population (2001)	- 49.61
18	Overall literacy rate (%)	- 36.20
	(a) Males	- 47.58
	(b) Females	- 24.81
19	Total workers	- 570,435
	(a) Males	- 332,014
	(b) Females	- 238,421

20	Total main workers	-	353,367
	(a) Males	-	263,223
	(b) Females	-	90,144
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	52,279
	(ii) Miscellaneous tree crops and groves	-	20,900
	(iii) Permanent pasture	-	16,149
	(iv) Culturable waste	-	12,078
	(v) Land put to non-agricultural use	-	32,211
	(vi) Barren and uncultivable waste	-	114,932
	(vii) Current fallow	-	74,114
	(viii) Other fallow	-	18,382
	(ix) Net area sown	-	240,897
22	Operational Holdings	-	138,315
	(a) Small Holdings	-	40,795
	(b) Marginal Holdings	-	63,730
23	Area under Paddy (in ha): 2000-01	-	152,442
	(a) Total productions of paddy (qtls)	-	3,450,385
	(b) Yield rate of Paddy (qtls / ha)	-	22.63
	(i) Highest (Kotpad Block)	-	29.91
	(ii) Lowest (Bandhugaon Block)	-	7.78
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	1
	(c) Other Hospitals	-	6
	(d) Community Health Centre	-	4
	(e) Primary Health Centre (Old)	-	10
	(f) Primary Health Centre (New)	-	48
	(g) Mobile Health Unit (MHU)	-	14
	(h) Homeopathic Dispensaries	-	15
	(i) Ayurvedic Dispensaries	-	11
25	Percentage of families below poverty line – BPL Census: 2002	-	83.81
26	No of Anganwadi Centres	-	1342

Annexure – 2.4**Socio-economic Profile of Malkangiri District**

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 81 ⁰ 22' to 82 ⁰ 25' E
	(b) Latitude (in Degree)	- 17 ⁰ 40' to 18 ⁰ 43' N
2	Geographical area (sq. km.)	- 5791.0
3	No. of Sub-Divisions	- 1
4	No of Tahsils	- 3
5	No of CD Blocks	- 7
6	Municipalities	- 0
7	NACs	- 2
8	Police Stations	- 10
9	Gram Panchayats	- 108
10	Total Villages	- 928
	(a) Inhabited Villages	- 878
	(b) Un-inhabited Villages	- 50
11	Normal annual rainfall (in mm.)	- 1521.8
12	Total Households (2001)	- 109,483
13	No of Rural Households (2001)	- 102,076
14	Total population (2001)	- 504,198
	(a) Males	- 252,507
	(b) Females	- 251,691
15	Children, 0 – 6 yrs (2001)	- 89,813
	(a) Males	- 45,315
	(b) Females	- 44,498
16	% of SCs to total population (2001)	- 21.35
17	% of STs to total population (2001)	- 57.42
18	Overall literacy rate (%)	- 31.26
	(a) Males	- 41.21
	(b) Females	- 21.28
19	Total workers	- 247,624
	(a) Males	- 141,190
	(b) Females	- 106,434

20	Total main workers	-	154,179
	(a) Males	-	114,742
	(b) Females	-	39,437
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	143,002
	(ii) Miscellaneous tree crops and groves	-	486
	(iii) Permanent pasture	-	20,679
	(iv) Culturable waste	-	15,293
	(v) Land put to non-agricultural use	-	25,314
	(vi) Barren and uncultivable waste	-	44,439
	(vii) Current fallow	-	3,998
	(viii) Other fallow	-	18,283
	(ix) Net area sown	-	115,886
22	Operational Holdings	-	66,124
	(a) Small Holdings	-	24,129
	(b) Marginal Holdings	-	20,730
23	Area under Paddy (in ha): 2000-01	-	91,871
	(a) Total productions of paddy (qtls)	-	953,932
	(b) Yield rate of Paddy (qtls / ha)	-	10.38
	(i) Highest (Khairiput Block)	-	15.01
	(ii) Lowest (Podia Block)	-	7.96
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	0
	(c) Other Hospitals	-	5
	(d) Community Health Centre	-	3
	(e) Primary Health Centre (Old)	-	4
	(f) Primary Health Centre (New)	-	16
	(g) Mobile Health Unit (MHU)	-	10
	(h) Homeopathic Dispensaries	-	2
	(i) Ayurvedic Dispensaries	-	2
25	Percentage of families below poverty line – BPL Census: 2002	-	81.88
26	No of Anganwadi Centres	-	580

Annexure – 2.5**Socio-economic Profile of Nawarangpur District**

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 81 ⁰ 52' to 82 ⁰ 53' E
	(b) Latitude (in Degree)	- 19 ⁰ 9' to 20 ⁰ 5' N
2	Geographical area (sq. km.)	- 5291.0
3	No. of Sub-Divisions	- 1
4	No of Tahsils	- 4
5	No of CD Blocks	- 10
6	Municipalities	- 1
7	NACs	- 1
8	Police Stations	- 10
9	Gram Panchayats	- 169
10	Total Villages	- 897
	(a) Inhabited Villages	- 880
	(b) Un-inhabited Villages	- 17
11	Normal annual rainfall (in mm.)	- 1521.8
12	Total Households (2001)	- 227,026
13	No of Rural Households (2001)	- 214,538
14	Total population (2001)	- 1,025,766
	(a) Males	- 515,162
	(b) Females	- 510,604
15	Children, 0 – 6 yrs (2001)	- 187,048
	(a) Males	- 93,588
	(b) Females	- 93,460
16	% of SCs to total population (2001)	- 14.10
17	% of STs to total population (2001)	- 55.03
18	Overall literacy rate (%)	- 34.26
	(a) Males	- 47.36
	(b) Females	- 21.02
19	Total workers	- 507,395
	(a) Males	- 290,723
	(b) Females	- 216,672

20	Total main workers	-	264,800
	(a) Males	-	215,836
	(b) Females	-	48,964
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	93,468
	(ii) Miscellaneous tree crops and groves	-	16,820
	(iii) Permanent pasture	-	6,297
	(iv) Culturable waste	-	10,454
	(v) Land put to non-agricultural use	-	17,385
	(vi) Barren and uncultivable waste	-	6,704
	(vii) Current fallow	-	32,023
	(viii) Other fallow	-	6,509
	(ix) Net area sown	-	207,806
22	Operational Holdings	-	128,074
	(a) Small Holdings	-	35,449
	(b) Marginal Holdings	-	68,602
23	Area under Paddy (in ha): 2000-01	-	153,577
	(a) Total productions of paddy (qtls)	-	2,631,368
	(b) Yield rate of Paddy (qtls / ha)	-	17.13
	(i) Highest (Umerkote Block)	-	24.90
	(ii) Lowest (Papadahandi Block)	-	13.17
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	0
	(c) Other Hospitals	-	3
	(d) Community Health Centre	-	5
	(e) Primary Health Centre (Old)	-	5
	(f) Primary Health Centre (New)	-	37
	(g) Mobile Health Unit (MHU)	-	11
	(h) Homeopathic Dispensaries	-	13
	(i) Ayurvedic Dispensaries	-	16
25	Percentage of families below poverty line – BPL Census: 2002	-	73.66
26	No of Anganwadi Centres	-	994

Socio-economic Profile of Nuapada District

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 82 ⁰ 20' to 82 ⁰ 53' E
	(b) Latitude (in Degree)	- 20 ⁰ 0' to 21 ⁰ 5' N
2	Geographical area (sq. km.)	- 3852.0
3	No. of Sub-Divisions	- 1
4	No of Tahsils	- 2
5	No of CD Blocks	- 5
6	Municipalities	- 0
7	NACs	- 2
8	Police Stations	- 6
9	Gram Panchayats	- 109
10	Total Villages	- 659
	(a) Inhabited Villages	- 643
	(b) Un-inhabited Villages	- 16
11	Normal annual rainfall (in mm.)	- 1378.2
12	Total Households (2001)	- 122,601
13	No of Rural Households (2001)	- 116,329
14	Total population (2001)	- 530,690
	(a) Males	- 264,396
	(b) Females	- 266,294
15	Children, 0 – 6 yrs (2001)	- 84,521
	(a) Males	- 42,927
	(b) Females	- 41,594
16	% of SCs to total population (2001)	- 13.62
17	% of STs to total population (2001)	- 34.71
18	Overall literacy rate (%)	- 42.29
	(a) Males	- 58.78
	(b) Females	- 26.01
19	Total workers	- 244,360
	(a) Males	- 146,378
	(b) Females	- 97,982

20	Total main workers	-	131,561
	(a) Males	-	108,561
	(b) Females	-	22,654
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	29,521
	(ii) Miscellaneous tree crops and groves	-	1,607
	(iii) Permanent pasture	-	12,587
	(iv) Culturable waste	-	9,156
	(v) Land put to non-agricultural use	-	18,713
	(vi) Barren and uncultivable waste	-	8,653
	(vii) Current fallow	-	26,264
	(viii) Other fallow	-	7,156
	(ix) Net area sown	-	130,653
22	Operational Holdings	-	27,675
	(a) Small Holdings	-	10,520
	(b) Marginal Holdings	-	8,450
23	Area under Paddy (in ha): 2000-01	-	105,743
	(a) Total productions of paddy (qtls)	-	482,495
	(b) Yield rate of Paddy (qtls / ha)	-	4.56
	(i) Highest (Nuapada Block)	-	5.53
	(ii) Lowest (Khariar Block)	-	2.94
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	0
	(c) Other Hospitals	-	3
	(d) Community Health Centre	-	4
	(e) Primary Health Centre (Old)	-	2
	(f) Primary Health Centre (New)	-	12
	(g) Mobile Health Unit (MHU)	-	6
	(h) Homeopathic Dispensaries	-	5
	(i) Ayurvedic Dispensaries	-	9
25	Percentage of families below poverty line – BPL Census: 2002	-	72.03
26	No of Anganwadi Centres	-	585

Socio-economic Profile of Rayagada District

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 82 ⁰ 54' to 84 ⁰ 2' E
	(b) Latitude (in Degree)	- 19 ⁰ 0' to 19 ⁰ 58' N
2	Geographical area (sq. km.)	- 7073.0
3	No. of Sub-Divisions	- 2
4	No of Tahsils	- 4
5	No of CD Blocks	- 11
6	Municipalities	- 1
7	NACs	- 2
8	Police Stations	- 12
9	Gram Panchayats	- 171
10	Total Villages	- 2667
	(a) Inhabited Villages	- 2445
	(b) Un-inhabited Villages	- 222
11	Normal annual rainfall (in mm.)	- 1521
12	Total Households (2001)	- 190,381
13	No of Rural Households (2001)	- 165,257
14	Total population (2001)	- 831,109
	(a) Males	- 409,792
	(b) Females	- 421,371
15	Children, 0 – 6 yrs (2001)	- 145,493
	(a) Males	- 73,451
	(b) Females	- 72,042
16	% of SCs to total population (2001)	- 13.91
17	% of STs to total population (2001)	- 55.75
18	Overall literacy rate (%)	- 35.16
	(a) Males	- 47.35
	(b) Females	- 24.31
19	Total workers	- 399,184
	(a) Males	- 225,367
	(b) Females	- 173,817

20	Total main workers	-	249,909
	(a) Males	-	179,932
	(b) Females	-	69,977
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	100,767
	(ii) Miscellaneous tree crops and groves	-	5,457
	(iii) Permanent pasture	-	8,309
	(iv) Culturable waste	-	8,466
	(v) Land put to non-agricultural use	-	24,192
	(vi) Barren and uncultivable waste	-	160,232
	(vii) Current fallow	-	40,320
	(viii) Other fallow	-	16,704
	(ix) Net area sown	-	138,951
22	Operational Holdings	-	100,396
	(a) Small Holdings	-	27,413
	(b) Marginal Holdings	-	52,155
23	Area under Paddy (in ha): 2000-01	-	69,443
	(a) Total productions of paddy (qtls)	-	1,106,918
	(b) Yield rate of Paddy (qtls / ha)	-	15.94
	(i) Highest (Padampur Block)	-	26.05
	(ii) Lowest (Muniguda Block)	-	11.42
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	1
	(c) Other Hospitals	-	3
	(d) Community Health Centre	-	11
	(e) Primary Health Centre (Old)	-	11
	(f) Primary Health Centre (New)	-	58
	(g) Mobile Health Unit (MHU)	-	12
	(h) Homeopathic Dispensaries	-	9
	(i) Ayurvedic Dispensaries	-	16
25	Percentage of families below poverty line – BPL Census: 2002	-	73.02
26	No of Anganwadi Centres	-	1001

Socio-economic Profile of Sonapur District

Sl (1)	Item of Information (2)	Information (3)
1	Location	
	(a) Longitude (in Degree)	- 83 ⁰ 27' to 84 ⁰ 15' E
	(b) Latitude (in Degree)	- 20 ⁰ 30' to 20 ⁰ 10' N
2	Geographical area (sq. km.)	- 2337.0
3	No. of Sub-Divisions	- 2
4	No of Tahsils	- 4
5	No of CD Blocks	- 6
6	Municipalities	- 1
7	NACs	- 2
8	Police Stations	- 7
9	Gram Panchayats	- 96
10	Total Villages	- 959
	(a) Inhabited Villages	- 808
	(b) Un-inhabited Villages	- 151
11	Normal annual rainfall (in mm.)	- 1443.5
12	Total Households (2001)	- 115,533
13	No of Rural Households (2001)	- 107,292
14	Total population (2001)	- 541,835
	(a) Males	- 275,601
	(b) Females	- 266,234
15	Children, 0 – 6 yrs (2001)	- 77,259
	(a) Males	- 39,275
	(b) Females	- 37,984
16	% of SCs to total population (2001)	- 23.62
17	% of STs to total population (2001)	- 9.78
18	Overall literacy rate (%)	- 64.07
	(a) Males	- 80.30
	(b) Females	- 47.28
19	Total workers	- 236,980
	(a) Males	- 149,776
	(b) Females	- 87,204

20	Total main workers	-	148,695
	(a) Males	-	121,737
	(b) Females	-	26,958
21	Land Use Pattern (2000- 01: in ha)		
	(i) Forest area	-	18,153
	(ii) Miscellaneous tree crops and groves	-	5,242
	(iii) Permanent pasture	-	9,769
	(iv) Culturable waste	-	10,654
	(v) Land put to non-agricultural use	-	19,046
	(vi) Barren and uncultivable waste	-	3,130
	(vii) Current fallow	-	15,639
	(viii) Other fallow	-	12,358
	(ix) Net area sown	-	90,616
22	Operational Holdings	-	72,566
	(a) Small Holdings	-	18,653
	(b) Marginal Holdings	-	39,794
23	Area under Paddy (in ha): 2000-01	-	103,409
	(a) Total productions of paddy (qtls)	-	2,038,197
	(b) Yield rate of Paddy (qtls / ha)	-	19.71
	(i) Highest (Binika Block)	-	35.04
	(ii) Lowest (Birmaharajpur Block)	-	6.72
24	Health Infrastructure:		
	(a) District Headquarter Hospital	-	1
	(b) Sub-Divisional Hospital	-	0
	(c) Other Hospitals	-	3
	(d) Community Health Centre	-	4
	(e) Primary Health Centre (Old)	-	2
	(f) Primary Health Centre (New)	-	17
	(g) Mobile Health Unit (MHU)	-	7
	(h) Homeopathic Dispensaries	-	4
	(i) Ayurvedic Dispensaries	-	12
25	Percentage of families below poverty line – BPL Census: 2002	-	73.02
26	No of Anganwadi Centres	-	416

Annexure - 4.1.1

List of Amenities to be Provided in 40 Seated Hostels for SC and ST Girls
(Under Revised Long Term Action Plan)

1. Cot
2. Bed Sheet
3. Mosquito Net
4. Satranli
5. Towel
6. Woolen Blanket
7. Steel Tray and Glass
8. Bucket
9. Larntern
10. Lota
11. Others
 - a. Steel Almirah
 - b. Chair
 - c. Aluminium Handa

Annexure-4.1.2**Perception of Key Informants on the Hostel Life.**

Sl.	District	Sample Hostels	No of K Is	Perception of K Is on the Hostel Life									
				Security	Discipline	Cooperation	Edn	Food	Dress	Cleanliness	Environment	Gardening	Games/Sports
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Balangir	3	6	3	5	5	6	6	6	5	5	1	4
2	Kalahandi	3	6	6	6	6	5	6	5	5	4	3	2
3	Koraput	9	18	18	18	17	17	18	17	12	5	10	11
4	Malkangiri	5	10	8	10	10	10	10	10	6	3	7	7
5	Nawarangpur	5	10	10	10	10	10	10	10	3	3	5	0
6	Nuapada	4	8	0	8	6	6	7	8	8	6	2	2
7	Rayagada	9	18	13	17	17	18	16	18	16	16	15	9
8	Sonepur	3	6	2	6	6	6	6	6	6	6	2	3
	Total	41	82	60	80	77	78	79	80	61	48	45	38
	% to Total	-	-	73	98	94	95	96	98	74	59	55	46

Annexure-4.2.1**Table No: 4.2.7****Other Activities Performed by Sample MHUs during 1998-99 to 2005- 06**

SI	District	Samp MHUs	MHU Years	Tour Days		N H Done		School Visits		Distbn of ORS		Health Camps		Immu Camps		F W Camps		Calamity Relief	
				Total	Monthly	Total	Monthly	Total	Monthly	Total	Annual	Total	Annual	Total	Annual	Total	Annual	Total	Annual
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1	Balangir	3	18	4174	19	131	0.60	493	2.28	12114	673	1863	103	754	42	194	11	129	7
2	Kalahandi	3	22	5307	20	0	0.00	1064	4.03	47834	2174	672	31	781	36	5	0.2	0	0
3	Koraput	3	24	5649	20	87	0.30	1636	5.68	13291	554	325	14	325	14	325	14	201	8
4	Malkangir	2	16	3580	19	230	1.19	622	3.23	23063	1441	321	20	423	26	549	34	35	2
5	Nabarangpur	2	15	3751	21	186	1.03	716	3.97	2995	200	75	5	49	3	0	0	91	6
6	Nuapada	1	8	1704	18	36	0.37	201	2.09	10040	1255	294	37	20	2	0	0	0	0
7	Rayagada	2	15	3571	20	284	1.57	1542	8.56	21445	1430	477	32	743	50	282	35	17	1
8	Sonepur	1	8	1920	20	35	0.36	96	1.00	4800	600	0	0	0	0	0	0	40	5
	Total	17	126	29656	20	989	0.65	6370	4.21	135588	833	4027	242	3095	173	1355	11	513	4

Annexure - 4.2.2**Detection and Treatment of Malaria Cases through MHUs**

SI	District	Total MHUs	During 1998-99			During 1999-00			During 2000-01		
			Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases
1	2	3	4	5	6	7	8	9	10	11	12
1	Balangir	15	19175	3252	17%	6347	573	9%	8289	801	10%
2	Kalahandi	14	11054	819	7%	14462	1254	9%	15051	1422	9%
3	Koraput	15	11498	3073	27%	10929	1700	16%	1957	262	13%
4	Malkangir	10	4562	2737	60%	7201	5184	72%	12407	6203	50%
5	Nawarangpur	11	411	212	52%	876	252	29%	952	311	33%
6	Nuapada	6	NA	NA	-	NA	NA	-	4326	1758	41%
7	Rayagada	12	5514	929	17%	9848	1997	20%	14263	1709	12%
8	Sonepur	7	1995	244	12%	4799	357	7%	12782	779	6%
	Total	90	54209	11266	21%	54462	11316	21%	70027	13245	19%

Annexure - 4.2.2 (contd)

SI	District	Total MHUs	During 2001-02			During 2002-03			During 2003-04		
			Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases
1	2	3	13	14	15	16	17	18	19	20	21
1	Balangir	15	9145	903	10%	9849	671	7%	7875	574	7%
2	Kalahandi	14	14475	1176	8%	14645	1249	9%	20412	1669	8%
3	Koraput	15	9441	887	9%	16473	1320	8%	14684	2629	18%
4	Malkangir	10	11559	6704	58%	15916	8435	53%	19231	12884	67%
5	Nawarangpur	11	6479	574	9%	7922	637	8%	7866	714	9%
6	Nuapada	6	5081	1487	29%	6488	4134	64%	9780	1282	13%
7	Rayagada	12	13531	1511	11%	12412	1271	10%	14142	1694	12%
8	Sonepur	7	8092	344	4%	8127	388	5%	6412	451	7%
	Total	90	77803	13586	17%	91832	18105	20%	100402	21897	22%

Annexure - 4.2.2 (contd)

Sl	District	Total MHUs	During 2004-05			During 2005-06			Total (8 years')		
			Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases	Slides Collected	+ve Cases	% of +ve Cases
1	2	3	22	23	24	25	26	27	28	29	30
1	Balangir	15	8856	598	7%	10986	620	6%	80582	7992	10%
2	Kalahandi	14	23528	2313	10%	18891	1453	8%	132518	11355	9%
3	Koraput	15	21774	4487	21%	22014	2547	12%	108770	16905	16%
4	Malkangir	10	16609	10795	65%	15373	10453	68%	102858	63395	62%
5	Nawarangpur	11	7956	590	7%	7622	614	8%	40084	3904	10%
6	Nuapada	6	8292	3000	36%	10913	5218	48%	44880	16879	38%
7	Rayagada	12	16908	2021	12%	21089	3265	15%	107707	14397	13%
8	Sonepur	7	4477	445	10%	3740	322	9%	50424	3329	7%
	Total	90	108400	24249	22%	110628	24492	22%	667823	138156	21%

Annexure - 4.2.3

Patients Treated through the MHUs during the Period 1998-99 to 2005-06

SI	District	Total MHUs	Patients Treated during 1998-99								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	4	5	6	7	8	9	10	11	12
1	Balangir	15		19175		NA	NA	NA	NA	19175	1278
2	Kalahandi	14		11054		NA	NA	NA	NA	11054	790
3	Koraput	15		3013		16285	8089	NA	NA	27387	1826
4	Malkangir	10		4562		3823	5778	3737	8300	26200	2620
5	Nawarangpur	11	81	596	37	8711	7252	9152	56501	82330	7485
6	Nuapada	6		NA		NA	NA	NA	NA	NA	NA
7	Rayagada	12		5514		6451	7163	NA	40765	59893	4991
8	Sonepur	7		898		1672	3654	2439	15877	24540	3506
	Total	90	81	44812	37	36942	31936	15328	121443	250579	2784

Annexure - 4.2 .3 (contd)

SI	District	Total MHUs	Patients Treated during 1999-00								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	13	14	15	16	17	18	19	20	21
1	Balangir	15		6347		NA	NA	NA	NA	6347	423
2	Kalahandi	14		14462		NA	NA	NA	NA	14462	1033
3	Koraput	15		1700		31374	7878	20327	NA	61279	4085
4	Malkangir	10		7201		4205	7201	3983	45206	67796	6780
5	Nawarangpur	11	129	7611	47	13952	16570	22103	102681	163093	14827
6	Nuapada	6		NA		NA	NA	NA	NA	NA	NA
7	Rayagada	12		9848		5872	11693	NA	49720	77133	6428
8	Sonepur	7		2286		2029	3933	4128	17605	29981	4283

	Total	90	129	49455	47	57432	47275	50541	215212	420091	4668
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Annexure - 4.2.3 (contd)

SI	District	Total MHUs	Patients Treated during 2000-01								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	22	23	24	25	26	27	28	29	30
1	Balangir	15		8289		NA	NA	NA	NA	8289	553
2	Kalahandi	14		15051		NA	NA	NA	NA	15051	1075
3	Koraput	15		262		19981	5945	11779	NA	37967	2531
4	Malkangir	10		12407		1389	10387	4960	52376	81519	8152
5	Nawarangpur	11	119	8754	25	17596	17211	24191	112977	180873	16443
6	Nuapada	6		1048		5	NA	NA	NA	1053	176
7	Rayagada	12		14263		8008	24635	NA	87509	134415	11201
8	Sonepur	7		4518		4271	12166	8253	57754	86962	12423
	Total	90	119	64592	25	51250	70344	49183	310616	546129	6068

Annexure - 4.2.3 (contd)

SI	District	Total MHUs	Patients Treated during 2001-02								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	31	32	33	34	35	36	37	38	39
1	Balangir	15		9145		NA	NA	NA	NA	9145	610
2	Kalahandi	14		14475		NA	NA	NA	NA	14475	1034
3	Koraput	15		887		7090	9538	13928	NA	31443	2096
4	Malkangir	10		11559		3663	15387	9836	48376	88821	8882
5	Nawarangpur	11	264	15911	119	11617	12670	24124	112944	177649	16150
6	Nuapada	6		949		18	NA	NA	NA	967	161
7	Rayagada	12		13531		8694	26424	7684	96740	153073	12756
8	Sonepur	7		4410		5432	10883	8356	61444	90525	12932
	Total	90	264	70867	119	36514	74902	63928	319504	566098	6290

Annexure - 4.2.3 (contd)

SI	District	Total MHUs	Patients Treated during 2002-03								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	40	41	42	43	44	45	46	47	48
1	Balangir	15		9849		NA	NA	NA	NA	9849	657
2	Kalahandi	14		14645		NA	NA	NA	NA	14645	1046
3	Koraput	15		1320		9555	29538	29045	NA	69458	4631
4	Malkangir	10		15916		7306	31822	14298	62376	131718	13172
5	Nawarangpur	11	214	9474	117	12417	22613	28514	130208	203557	18505
6	Nuapada	6		6488		75	NA	NA	NA	6563	1094
7	Rayagada	12		12412		7554	22588	8106	96848	147508	12292
8	Sonepur	7		4378		7398	15354	8782	63598	99510	14216
	Total	90	214	74482	117	44305	121915	88745	353030	682808	7587

Annexure - 4.2.3 (contd)

SI	District	Total MHUs	Patients Treated during 2003-04								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	49	50	51	52	53	54	55	56	57
1	Balangir	15		7875		NA	NA	NA	NA	7875	525
2	Kalahandi	14		20412		NA	NA	NA	NA	20412	1458
3	Koraput	15		2629		11049	33598	22584	NA	69860	4657
4	Malkangir	10		19231		5396	31298	13150	63272	132347	13235
5	Nawarangpur	11	311	10956	141	6988	23064	16464	135275	193199	17564
6	Nuapada	6		9780		108	NA	NA	NA	9888	1648
7	Rayagada	12		14142		9559	33590	10100	111381	178772	14898
8	Sonepur	7		3966		5791	11154	7811	54834	83556	11937

	Total	90	311	88991	141	38891	132704	70109	364762	695909	7732

Annexure - 4.2.3 (contd)

SI	District	Total MHUs	Patients Treated during 2004-05								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	58	59	60	61	62	63	64	65	66
1	Balangir	15		8856		NA	NA	NA	NA	8856	590
2	Kalahandi	14		23526		NA	NA	NA	NA	23526	1680
3	Koraput	15		4487		8349	25563	23463	NA	61862	4124
4	Malkangir	10		16609		9386	39973	23793	78339	168100	16810
5	Nawarangpur	11	69	7755	42	6921	22779	18259	126486	182311	16574
6	Nuapada	6		8292		140	NA	NA	NA	8432	1405
7	Rayagada	12		16908		9663	36920	18914	113599	196004	16334
8	Sonepur	7		4757		4378	11402	9515	53571	83623	11946
	Total	90	69	91190	42	38837	136637	93944	371995	732714	8141

Annexure - 4.2.3 (contd)

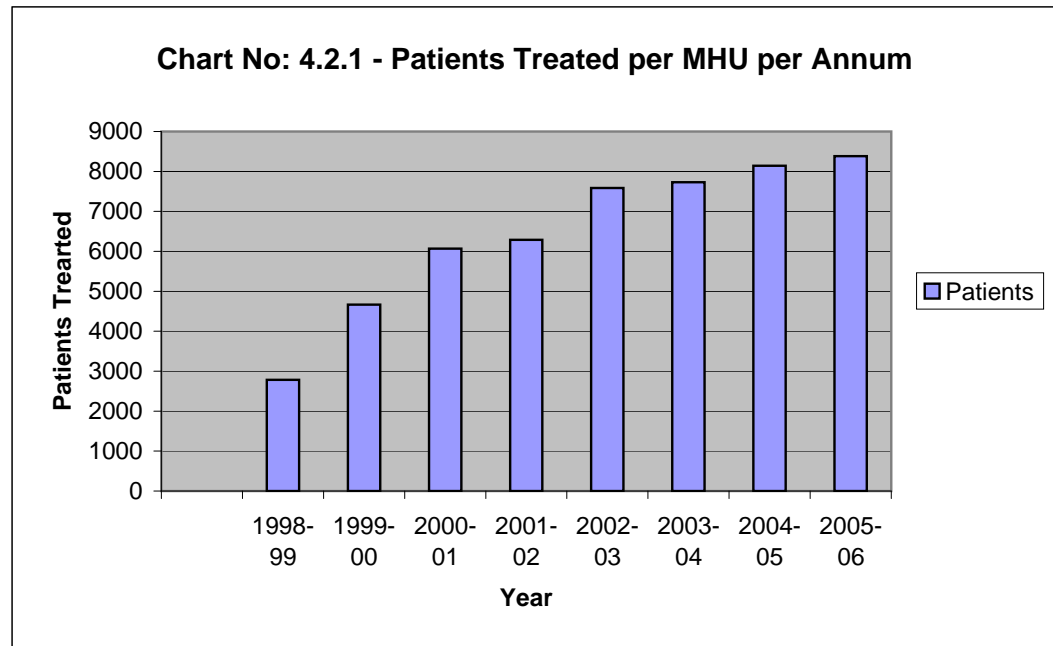
SI	District	Total MHUs	Patients Treated during 2005-06								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	67	68	69	70	71	72	73	74	75
1	Balangir	15		10986		NA	NA	NA	NA	10986	732
2	Kalahandi	14		18891		NA	NA	NA	NA	18891	1349
3	Koraput	15		2547		9855	24999	22639	NA	60040	4003
4	Malkangir	10		15373		6869	31309	6290	71308	131149	13115
5	Nawarangpur	11	55	9496	78	7022	23411	19514	179083	238659	21696
6	Nuapada	6		10913		14	NA	NA	NA	10927	1821

7	Rayagada	12		21089		12397	39701	30906	105696	209789	17482
8	Sonepur	7		3924		4066	8481	8387	49333	74191	10599
	Total	90	55	93219	78	40223	127901	87736	405420	754632	8385

Annexure - 4.2.3 (concluded)

SI	District	Total MHUs	Patients Treated during 1998-2006 (8 years)								Patients per MHU
			TB	Malaria	Leprosy	Diarrhoea	ARI	Scabies	Others	Total	
1	2	3	76	77	78	79	80	81	82	83	84
1	Balangir	15		80522		NA	NA	NA	NA	80522	5368
2	Kalahandi	14		132516		NA	NA	NA	NA	132516	9465
3	Koraput	15		16845		113541	145148	143765	NA	419299	27953
4	Malkangir	10		102858		42037	173155	80047	429553	827650	82765
5	Nawarangpur	11	1242	70553	606	85224	145570	162321	956155	1421671	129243
6	Nuapada	6		37470		360	NA	NA	NA	37830	6305
7	Rayagada	12		107707		68198	202714	75710	702258	1156587	96382
8	Sonepur	7		29137		35037	77027	57671	374016	572888	81841
	Total	90	1242	577608	606	344397	743614	519514	2461982	4648963	51655

Year	Patients
1998-99	2784
1999-00	4668
2000-01	6068
2001-02	6290
2002-03	7587
2003-04	7732
2004-05	8141
2005-06	8385



Annexure-4.3.1

Coverage of Beneficiaries through AWC during the Period 2001-02 to 2005-06

Sl	District	Sample AWCs	Total Applicants	Coverage During 2001-02			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	150	37	113	150	24	102	24	30	5	115
2	Kalahandi	5	163	65	98	163	27	73	63	87	36	40
3	Koraput	5	199	94	105	199	76	72	51	199	0	0
4	Malkangir	3	65	18	47	65	9	52	4	65	0	0
5	Nawarangpur	3	10	6	4	10	2	8	0	10	0	0
6	Nuapada	3	100	52	48	100	10	44	46	95	5	0
7	Rayagada	5	52	20	32	52	3	44	5	52	0	0
8	Sonepur	3	119	40	79	119	29	31	59	110	0	9
	Total	32	858	332	526	858	180	426	252	648	46	164
	Per AWC	-	27	10	17	27	6	13	8	20	2	5
	% to Total	-	-	39	61	-	21	50	29	93	7	31

Annexure-4.3.1 (....contd)

Sl	District	Sample AWCs	Total Applicants	Coverage During 2002-03			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	180	44	136	180	22	129	29	30	5	145
2	Kalahandi	5	136	49	87	136	30	57	49	82	14	40
3	Koraput	5	223	110	113	223	86	86	51	223	0	0
4	Malkangir	3	65	22	43	65	9	51	5	65	0	0
5	Nawarangpur	3	60	27	33	60	7	50	3	60	0	0
6	Nuapada	3	95	51	44	95	11	40	44	83	2	10
7	Rayagada	5	72	24	48	72	7	53	12	72	0	0
8	Sonepur	3	140	43	97	140	28	40	72	124	0	16
	Total	32	971	370	601	971	200	506	265	739	21	211
	Per AWC	-	30	11	19	30	6	16	8	23	1	6
	% to Total	-	-	38	62	-	20	52	28	97	3	22

Annexure-4.3.1 (....contd)

Sl	District	Sample AWCs	Total Applicants	Coverage During 2003-04			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	195	53	142	195	23	146	26	50	0	145
2	Kalahandi	5	147	54	93	147	32	57	58	92	15	40
3	Koraput	5	223	109	114	223	86	87	50	223	0	0
4	Malkangir	3	65	18	47	65	26	25	14	30	0	35
5	Nawarangpur	3	60	27	33	60	7	50	3	60	0	0
6	Nuapada	3	105	60	45	105	11	44	50	105	0	0
7	Rayagada	5	72	24	48	72	5	55	12	72	0	0
8	Sonepur	3	140	41	99	140	25	38	77	124	0	16
	Total	32	1007	386	621	1007	215	502	290	756	15	236
	Per AWC	-	31	12	19	31	7	15	9	23	1	7
	% to Total	-	-	38	62	-	21	50	29	98	2	23

Annexure-4.3.1 (....contd)

Sl	District	Sample AWCs	Total Applicants	Coverage During 2004-05			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	200	62	138	200	23	149	28	55	0	145
2	Kalahandi	5	147	51	96	147	33	61	53	93	14	40
3	Koraput	5	223	109	114	223	86	87	50	223	0	0
4	Malkangir	3	65	19	46	65	7	54	4	65	0	0
5	Nawarangpur	3	60	26	34	60	5	52	3	60	0	0
6	Nuapada	3	115	67	48	115	12	58	45	115	0	0
7	Rayagada	5	72	24	48	72	5	56	11	72	0	0
8	Sonepur	3	141	40	101	141	23	41	77	125	0	16
	Total	32	1023	398	625	1023	194	558	271	808	14	201
	Per AWC	-	32	12	20	32	6	17	9	25	1	6
	% to Total	-	-	39	61	-	19	55	26	98	2	20

Annexure-4.3.1 (....contd)

Sl	District	Sample AWCs	Total Applicants	Coverage During 2005-06			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	205	62	143	205	27	143	35	55	0	150
2	Kalahandi	5	157	60	97	157	34	67	56	93	14	50
3	Koraput	5	223	109	114	223	85	107	31	223	0	0
4	Malkangir	3	95	28	67	95	9	82	4	68	27	0
5	Nawarangpur	3	60	23	37	60	7	49	4	60	0	0
6	Nuapada	3	115	63	52	115	16	60	39	115	0	0
7	Rayagada	5	72	23	49	72	5	57	10	72	0	
8	Sonepur	3	141	41	100	141	25	41	75	125	0	16
	Total	32	1068	409	659	1068	208	606	254	811	41	216
	Per AWC	-	33	13	20	33	6	19	8	25	1	7
	% to Total	-	-	38	62	-	19	57	24	95	5	20

Annexure-4.3.1 (....contd)

Sl	District	Sample AWCs	Total Applicants	Coverage During 2001-06			Social Category			BPL / APL		
				Male	Female	Total	SC	ST	Others	BPL	APL	N A
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balangir	5	930	258	672	930	119	669	142	220	10	700
2	Kalahandi	5	750	279	471	750	156	315	279	447	93	210
3	Koraput	5	1091	531	560	1091	419	439	233	1091	0	0
4	Malkangir	3	355	105	250	355	60	264	31	293	27	35
5	Nawarangpur	3	250	109	141	250	28	209	13	250	0	0
6	Nuapada	3	530	293	237	530	60	246	224	513	7	10
7	Rayagada	5	340	115	225	340	25	265	50	340	0	0
8	Sonepur	3	681	205	476	681	130	191	360	608	0	73
	Total	32	4927	1895	3032	4927	997	2598	1332	3762	137	1028
	Per AWC per Annum		31	12	19	31	6	16	9	24	1	6
	% to Total	-	-	38	62	-	20	53	27	96	4	21

Annexure - 4.3.2

Views of Programme Managers on Different Aspects of Emergency Feeding Programme.

Sl	District	Positive Opinion on Different Aspects								Extent of food security provided		
		E1	E2	E3	E4	E5	E6	E7	E8	≥ 75%	50%to 75%	≤ 50%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Balangir	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-
2	Kalahandi	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-
3	Koraput	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-
4	Malkangiri	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-
5	Nawarangpur	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	-
6	Nuapada	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	-	-
7	Rayagada	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	-
8	Sonepur	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-
	Total	8 dist	8 dist	6 dist	8 dist	8 dist	6 dist	2 dist	8 dist	3 dist	5 dist	-

E₁: Selection of Beneficiaries, E₂: Record Maintenance, E₃: Storage Space, E₄: Cooperation of AWCs, E₅: Food quality, E₆: Cooperation of Beneficiaries, E₇: Beneficiaries prefer ration, E₈: Cooperation of local people.

Annexure-4.4.1**Different Varieties of Trees Planted over the Sample Sites.**

Sl	District	Samp Sites	Area (Ha)	Economic (No / Ha)		NTFP (No / Ha)		Bamboo (No / Ha)		Mixed Fuel Wood (No / Ha)		RDF (No / Ha)	
				Plants	Area	Plants	Area	Plants	Area	Plants	Area	Plants	Area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Balangir	4	133	32000	20	72000	45	-	-	108800	68	-	-
2	Kalahandi	4	140	9600	60	-	-	25000	40	64000	40	-	-
3	Koraput	5	245	80000	50	118500	85	-	-	-	-	31500	110
4	Rayagada	3	150	48000	30	-	-	-	-	-	-	74200	120
	Total	16	668	126000	160	190500	130	25000	40	172800	108	105700	230

Annexure-4.4.2**Participation of Sample Households in Different Activities under the Afforestation Programme.**

Sl	District	Samp Sites	Samp HH	Number of Households Participated in Different Activities under the Afforestation Programme										
				Site Seln	Stock Mapg	BLS	Specie Seln	Nursery	Site Prep	Pitting	Burning	Plantatn	Soil / Manurg	Protn
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Balangir	4	12	12	12	12	12	12	12	12	12	12	12	11
2	Kalahandi	4	12	2	1	7	1	9	9	10	9	11	8	10
3	Koraput	5	15	9	8	1	5	11	10	11	12	12	15	14
4	Rayagada	3	9	6	5	5	3	5	6	7	7	8	8	9
	Total	16	48	29	26	25	21	37	37	40	40	46	43	44
	% to Total	-	-	60	54	52	44	77	77	83	83	96	90	92

BLS: Base Line Survey

Annexure-4.4.3**Views and Opinion of Sample Households on the Usefulness of Afforestation Programme.**

Sl	District	Samp Site	Samp HH	Prov Emp	Green Cover	Env Imp	Soil Cons	Water Cons	Fuel & Fodder	NTFP	Maturity felling
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Balangir	4	12	12	12	12	12	10	12	10	10
2	Kalahandi	4	12	11	10	10	12	11	11	9	11
3	Koraput	5	15	15	15	15	14	9	13	8	7
4	Rayagada	3	9	9	7	9	9	8	8	9	6
	Total	16	48	47	44	46	47	38	44	36	34
	% to Total	-	-	98	92	96	98	79	92	79	71

Annexure-4.4.4**Participation of Sample VSS in Different Activities under the Afforestation Programme.**

Sl	District	Samp Sites	Samp K Is	Number of VSS Participated in Different Activities under the Afforestation Programme										
				Site Seln	Stock Mapg	BLS	Specie Seln	Nursery	Site Prep	Pitting	Burning	Plantatn	Soil / Manurg	Protn
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Balangir	4	8	4	4	4	4	4	4	4	4	4	4	4
2	Kalahandi	4	8	2	2	2	2	4	4	4	4	4	4	4
3	Koraput	5	10	4	4	4	5	5	5	5	5	5	5	5
4	Rayagada	3	6	2	2	2	3	3	3	3	3	3	3	3
	Total	16	32	12	12	12	14	16	16	16	16	16	16	16
	% to Total	-	-	75	75	75	88	100	100	100	100	100	100	100

Annexure-4.5.1**Opinion of Beneficiaries (number and per cent)**

SI	District	Sample L I Ps (No)	Sample Beneficiaries (No)	Required water not available	Reasons for inadequate water availability				Yield affected for water shortage	L I P helped increasing income		
					Supply not adequate	Frequent Breakdown	Drying up of water source	Others		Significantly	Marginally	Not at all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Kalahandi	4	12	1 (8 %)	0 (0 %)	0 (0 %)	0 (0 %)	1 (8 %)	0 (0 %)	9 (25 %)	3 (25 %)	0 (0 %)
2	Koraput	5	15	6 (40 %)	5 (33 %)	0 (0 %)	0 (0 %)	1 (7 %)	0 (0 %)	7 (47 %)	7 (47 %)	1 (6 %)
3	Nawarangpur	4	12	1 (8 %)	1 (8 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	6 (50 %)	6 (50 %)	0 (0 %)
4	Sonepur	7	21	5 (24 %)	0 (0 %)	1 (5 %)	0 (0 %)	5 (24 %)	0 (0 %)	9 (34 %)	12 (66 %)	0 (0 %)
	Total	20	60	13 (22 %)	6 (10 %)	1 (2 %)	0 (0 %)	7 (12 %)	0 (0 %)	31 (52 %)	28 (46 %)	1 (2 %)

Annexure-4.5.2**Suggestion given by Beneficiaries for Improving the Performance of LIPs.**

Sl	District	Samp LIPs	Samp Benefi	Suggestions given by Beneficiaries							
				S1	S2	S3	S4	S5	S6	S7	S8
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Kalahandi	4	12	2	2	12	2	1	2	1	1
2	Koraput	5	15	4	1	12	2	4	0	7	0
3	Nawarangpur	4	12	7	1	12	0	0	4	2	0
4	Sonepur	7	21	10	5	11	7	6	0	0	4
	Total (%)	20	60	23 (38)	9 (15)	47 (78)	11 (18)	11 (18)	6 (10)	10 (17)	5 (8)

S1: Solve Electrical Problem**S2: Construction of Channel****S3: Provide high power Motor****S4: Supply improved agricultural Implements****S5: Provision of additional LIP****S6: Provide for better drainage system****S7: Assure sufficient water****S8: Increasing labour wages**

Annexure-4.6.1

Salient Features of the 16 Sample Watersheds

Sl	Sample Watershed	District	Villages Covered	Popn Cov	Year of		Financial (Lakh Rs)		Type of Land under Treatment				
					Comm	Compl	Estimate	Expr	Forest	Rev	Commu	Cultivabl	Barren
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Marbouguda	Koraput	2	612	01-02	06-07	21.76	21.10	√	√	√	√	-
2	Maligaon	Koraput	2	679	01-02	06-07	21.76	21.10	√	√	√	√	-
3	Nandidebata	Koraput	4	921	02-03	06-07	9.37	9.37	√	√	√	√	√
4	Jagatjanani	Koraput	3	708	02-03	06-07	22.36	20.61	√	-	√	-	√
5	Mouli Maa	Koraput	3	595	02-03	06-07	22.36	21.37	√	√	√	√	-
6	Palkomla	Malkangiri	3	690	02-03	Ongoing	30.00	19.64	√	√	√	√	√
7	Pullimetta	Malkangiri	4	1770	02-03	Ongoing	30.00	20.70	√	√	√	√	√
8	Margo	Malkangiri	3	843	02-03	Ongoing	30.00	19.00	√	√	√	√	√
9	Tongguda	Malkangiri	4	1632	02-03	06-07	7.09	6.10	√	√	√	√	√
10	Sriram	Nawarangpur	1	1243	02-03	05-06	22.53	20.96	√	-	-	√	-
11	Maa Thakurani	Nawarangpur	1	1772	02-03	05-06	21.45	20.54	√	-	-	√	-
12	Khaira	Nawarangpur	1	1004	02-03	06-07	19.62	19.00	-	√	√	√	√
13	Jai Maa Thakurani	Nawarangpur	1	936	02-03	06-07	21.30	19.20	√	√	-	√	-
14	Gangeidevi	Rayagada	2	641	01-02	Ongoing	27.54	21.89	√	√	√	√	√
15	Tamingi	Rayagada	2	770	02-03	Ongoing	34.68	25.15	√	√	√	√	-
16	Nukalma	Rayagada	3	1100	02-03	Ongoing	30.75	16.28	-	√	√	√	-
	Total	16	39	15916			372.57	302.01	14	13	13	15	8

Annexure-4.8.1**Location of Sample Habitations and the Potential Beneficiaries**

Sl	District	Location of TWs and Potl Popn				Location of SWs and Potl Popn				Location of PWSshallow and Potl Popn			
		Within Habi	At the end	Total	Potl Popn	Within Habi	At the end	Total	Potl Popn	Within Habi	At the end	Total	Potl Popn
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(10)	(11)	(12)	(13)	(14)	(15)
1	Balangir	5	4	9	1190	-	-	-	-	-	1	1	3000
2	Kalahandi	6	4	10	2585	-	1	1	250	-	1	1	3976
3	Koraput	1	5	6	910	3	1	4	510	-	1	1	1500
4	Malkangiri	2	1	3	330	3	-	3	450	1	-	1	1322
5	Nawarangpur	6	2	8	1230	1	-	1	150	1	-	1	2000
6	Nuapada	4	-	4	600	1	-	1	75	-	1	1	1000
7	Rayagada	2	4	6	900	2	-	2	380	1	-	1	2525
8	Subarnapur	2	2	4	600	-	-	-	-	-	1	1	750
	Total	28	22	50	8345	10	2	12	1815	3	5	8	16073
	% to Total / Average	56%	44%	-	167 Avge	83%	17%	-	151 Avge	37%	63%	-	2009 Avge