# HUNGRY PEOPLE AND EMPTY HANDS : 

NEED FOR VIGOROUS IMPLEMENTATION
OF N.P.P.-2000 IN BIHAR : AN EMPIRICAL STUDY

SPONSORED BY<br>THE PLANNING COMMISSION GOVT. OF INDIA NEW DELHI

## CONDUCTED BY

> PROF. CHAKRADHAR SINHA UNIVERSITY PROFESSOR \& HEAD (RETD.) UNIVERSITY DEPARTMENT OF ECONOMICS BRA BIHAR UNIVERSITY MUZAFFARPUR (BIHAR)

# No. O-15012/82/200 1-SER 

Government of India
Planing Commission
(SER Division)
Yojana Bhavan Sansad Manga
New Delhi, Dated 28.2.2003
Yojana Bhavan Sansad Marg n
New Delhi, Dated 28.2.2003.
The Registrar,
B.R.A. Bihar University, Miuzalmarpur (Bihar).

Subject: Research proposal on "Hungry People and Empty VIands:
Need for Vigorous Implementation of NPP-2000 in Bihar -
An Empirical Study" - Regarding.

Sir,
I am directed to convey the approval of the President of India for Grant-inaid of Ks. 4.33 lakh (Rupees four Lakh Thirty Three Thousand oily) for carrying out the study on the above subject.
2. ' Registrar of the BRA Bihar University will be responsible for supervising and directing the study to its completion. The duration of this study is Twelve Months.
3. Grant-in-aid for this research study is being provided under the Scluenc of Socio-Economic Research (SER), which is administered by SER Division in Nanning Commission Hence, all the correspondence should be addressed io Deputy Adviser (SER).
4. Joint Secretary (NCP), Planing Commission has determined the son pe of this research study and he will be the "Nodal Officer" for Monitoring the finatial and physical progress of this research study. Hence, a copy of all the correspondence for this study should be endorsed to Joint Secretary ( NCO ).

5 Two copies of the Draft report of the study rill be submitted to D: Adviser (SER) by February, 2004. Comments on the draft report, if any, will have to be incorporated while finalizing the report.
10. The Institution will maintain a subsidiary account of Grant-in-aik received fou Planning Commission.
? The amon will be released as under subject to availability ot funds dame. the current financial year:
(i) First installment of $40^{\circ} \%$ of Grantin-aid will be released after mectiving acceptance of temp and conditions, a hond on a won rupees mon judicial papa duly executed by lead of the Institution, authenticated on each pare e

Dated.. !. \&..\%. …........ 2006 ,
$\mathrm{T}_{0}$
The 4. Sccretary to the Govt. of India. planning Commission, ( SER Division) Yojana thawan Sanadad Marg, New Delhi- 110001.

Subs- Submiseion of draft Report of the Research Project on " Hangry People and Empty Hands: Need for vigorous Implementation on MPP 2000 in Rinar:- Regarding.
sir.
I am directed to refer to your letter no. $0-15012 / 32 / 2001$-seir on the subject cited above and to enclose hereith the two cupies of draft Report duly signed by Prof. Chakradhar sinha( Principal Investigator retired Pfof, and Heac of the Dept. of Bconomics, BoR.A.Bihar University, Muzaffarpur.

It is requested that the draft Repont may
kindly be accepted and the balance $20 \%$ of the projent grant may be settled.
with best regards.
Yours faithfully
Asinadara $\frac{16.2 .06}{162}$
Fncl:- As above.
(A.K.Srivastava) Develoment officer.

Professor Chakradhar Sinha Visiting Professor, Queen's University, Kingston (CANADA)
Former Chairman,
Banking Service Recruitment Board Ministry of Finance, Govt. of India, University Professor \& Head (Retd.), University Department of Economics, BRA Bihar University, Muzaffarpur (Bihar)

Residential Address:
House No. 6B/12, Tilak Marg, North Shri Krishna Puri, PATNA- 800013
Tel. : 0612-2576939 (R) 0612-2540831 (O) 0612-2541027 (O)
Fax : 0612-2540831
Mobile - 9431015093
e-Mail : cdsinha@rediffmail.com

Ref. No $\qquad$ Date

December 21, 2006
Dr. V. K. Bhatia Saheb, Adviser (SER), Government of India, Planning Commission, Yojana Bhawan, Parliament Street, New Delhi - 110001.

Sir,
This has reference to Planning Commission letter No. O$15012 / 82 / 01-S E R$ dated $2^{\text {nd }}$ May, 2006 on the subject noted above, addressed to the Registrar, BRA Bihar University, Muzaffarpur, with a copy to me as P.I.

The Draft Report has already been forwarded to Planning Commission by the host Institution, i.e. BRA Bihar University, Muzaffarpur (Bihar).

In the light of the Observations made, the Draft Report has been revised. The suggestions have been carefully incorporated.

Professor Chakradhar Sinha
Visiting Professor, Queen's University, Kingston (CANADA)
Former Chairman,
Banking Service Recruitment Board Ministry of Finance, Govt. of India, University Professor $8 \%$ Head (Retd.), University Department of Economics, BRA Bihar University, Muzaffarpur (Bihar)

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Mobile - 9431015093
e-Mail : cdsinha@rediffmail.com

Ref. No $\qquad$ Date $\qquad$

Reply to comments :
(1) The problem of population explosion has been analysed in Chapter-3.
(2) The problem of poverty, under development and poor health status has been covered in Chapter- 5 .
(3) The strategy/model for population stabilization is presented in Chapter- 6 .
(4) The involvement of PRIs, NGOs and Self Help Groups is discussed in detail in Chapter-7.
(5) The strategy for socio-economic development of Bihar is outlined in Chapter-8.

I hope, the Planning Commission will be satisfied with the Revised Version.

As desired, two copies of the Report, after incorporating the Observations, are submitted for kind perusal and the needful.

With regards,
Yours faithfully,
(Prof. Chakradhar Sinha)
P.I.

Babasaheb Bhimrao Ambedkar Bihar University

MUZAFFARPUR

Ref. No...0.0. 2606
To
The Deputy Advisor (SER) Planning Ccmmiarion, Yojana Ehawan, Sansad Marg. New Delh.1-110001。

Suk: -

Dated.......!.!../....!!..... 2003

Planning Commission Research project on "Hungry People and Emputy Hands Need for Vigorous Implementation of N.P.P.-2000 in Bihar-An Empiral study"Regarding release of $40 \%$ next instalment of grant under kesearch Project sanctioned to Dr.chakradhar Ednha (P.I.)Retd.Prof.\&HOI) of EConomics Deptt.BoR. Ambedkar Bihar University, Muzz,gfarpur, Bihar. sir,

With reference to your letter No.0-15012/82/01/SER dated $13.05 .200 \Xi$ on the subject noted asove. I am directed to forward herewith the progress report of research work done so far. The amount of grant of Rs. $1,72,200 \%=0 n l y$ has been receiv--ed from planning commission, Govt.of Inlia, New Delhi and out of the recelpt of grant a sum of Rs. $1,73,530 /-50$ p, has already been spetet on payment of salary to Research staff, stationary and printing of Houserold and village level schedules and Travel expense. There is no fund available for payment of salary to Research staff working under the project and printing of more questionnaire.

It is, es such, requested that the next instalment of $40 \%$ of project grant may kindly be releised so that the work of the project may not suffer. This may kindly be treated as MOST URGENT.

Encl:-As above.


# No. O-15012/82/200 1-SER 

Government of India
Planing Commission
(SER Division)
Yojana Bhavan Sansad Manga
New Delhi, Dated 28.2.2003
Yojana Bhavan Sansad Marg n
New Delhi, Dated 28.2.2003.
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B.R.A. Bihar University, Miuzalmarpur (Bihar).

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10. The Institution will maintain a subsidiary account of Grant-in-aik received fou Planning Commission.
? The amon will be released as under subject to availability ot funds dame. the current financial year:
(i) First installment of $40^{\circ} \%$ of Grantin-aid will be released after mectiving acceptance of temp and conditions, a hond on a won rupees mon judicial papa duly executed by lead of the Institution, authenticated on each pare e
(ii) The second installment of $40 \%$ will be released after reviewing the progress of the study by the concerned Adviser and the receipt of Utilization Certificate lien the focal of the destitution in the prescribed format for the released amount ot lis est instillment.
(iii) The third and furl instalment of $20 \%$ will be released after receiving the 11 copies of the final report, content of the report on a CD ROM or floppy (3.5"), Utilization Certificate for the full amman approved (6) the institution and Statement of Expenditure duly signed by the Head of the Institute.
8. The persons employed in the project will be treated as the employees of the Institution and not of the Government and the conditions of their services will bee governed in accordance with the rules and regulations of the Institution.
9. No honorarium will be permissible to the Directur-in-Charge who supervises the project.
10. No capital expenditure will be incurred without the prior approval of the Planning Commission.
11. Equipment if any, purchased out of the Grant-in-aid (excluding, overhear) with the prior approval of the Planning Commission will, on the completion of the: research project, remain the property of the Planning Commission, which will decide its disposal.
12. Institution shall provide all infrastructure facilities, secretarial, material and s managerial assistance required for the project for which a budget provision has been made under overheads/contingency.
13. No part of the findings will be released for publication without the knowledge and permission of the Planning Commission.
1.4. You are kindly requested to communicate your acceptance of the firms and conditions mentioned above with bond duly' executed within Ten Days so as 10 process the release of funds.
15. The apponval of grant-in-aid issues with the concurrence of Finance Wing (I'lamuing Commission) vide Diary No. 3010 dated 3.1.2003.

(SA. RUHHM)
Under Secretary to the Govt of India

## Cい口: 10:-

1. Pay and Accounts Slicer, Manning Commission.
2. Discolor of Audit; Central Revenue, $\triangle G C R$ Building, New I)elhi.
3. I.E. Cell, Planning Commission.
4. Joint Secretary (NCP), Planning Commission.
$\therefore \quad$ Finder
 Palnat-8()() 01.3.
(S.A. R, 1111:1)


Yojana Bhavain,
Sansad Mar: ${ }^{\prime}$, New Delhi-11000i.

Dated $22^{\text {nd }}$ April, 03

## ORDER

Sub:- Grant-in-nld from Plamuing Commission for conducting a Research Study on "Hungry People \& Empty Hand" - Release of Grant.

In continuation of our detter of even number dated $28^{\mathrm{dr}_{3}} \mathrm{Feb}$; 03 on the above subject, the sanction of the President is hereby accorded to the payment of Grant-in-aid amounting to Rs. $1,73,200 /=$ (Rs. Oue Lakh Seventy Three Thousand \& Two Hundred only) as $1^{\text {st }}$ installment to the Registrar, BRA Bihar University, Muzaffarpur. The total amount approved for the above scheme is Rs. $4,33,000$. Out of which a sum of Rs. $1,73,200 /=$ stands release including this installment.
2. The expenditure involved is non-recurring nature and will be debited under Demand /Grant No.63, Major Head 3475 - Other General Economic Services, Minor Head - 00.800- Other Expenditure, 05.01.31 -Grant-in-aid to Universities, Research Institutions etc. and will be met from the grant sanctioned for the purpose for the current financial year
3. The Accounting \& Auditing arrangements in respect of the above amount will be the same as prevailing in University / Institution and it will to necossnry for the University / Institntion to furninh and Audited Statement of Accounts within six munths from the completion of the Study / Workshop on the above cited subject to show that the amount has been spent as approved by the Planning Commission.
4. The amount will be drawn by the undersigned who is the Drawing and Disbursing Oficer, Grant-in-aid, Planning Commission and will be paid to the Registrar, BRA Bihar University, Muzaffarpur by cheque / demand draft in his favor in accordance with the revised procedure of payment of grant-in-aid as amended up to date vide Ministry of Finance, Department of Economic Affairs O.M.No.1(200/E-Coord./95 dated $25^{\text {th }}$
Aprit,1995.
5. The Sanction has been issued under Rule 20 of the Delegation of Financial Power Rules 1978. The Grant is in accordance with the Principles prescribed with the previous consent of the Ministry of Finance.
6. This issues with the concurrence of Integrated Finance vide their Dy. No. 3010 dated 03.01.03.
7. The Budget Provision for the year 2003-2004 is Rs. 1.50 Crore. Out of which a sum of Rs. 9.28 lakh stands released including this installed.

Pay \& Accounts Office,
Planning Commission,
New Delli-110001.
Copy to:-

1. The Registrar, BRA Bihar University, Muzaffarpur Bihar).
2. Director of Audit, Central Revenue, AGCR Building Now Delhi .
3. I.F. Cell, Planning Commission.
4. Folder
5. Joint-Secretary (NCP), Planning Commission.

Prof. Chakridhar Sinh, Project Director,H.No. 6 B/12 Tilak Marg, North Shrikrishnapuri, Patna - 800013.
7. R.
(Y.R.Nandwani)

Deputy Secretary to the Government of India

# Planning Commission Project 

"HUNGRY PEOPLE AND EMPTY HANDS : NEED FOR VIGOROUS IMPLEMENTATION OF N.P.P.-2000 IN BIHAR : AN EMPIRICAL STUDY" under Prof. Chakradhar Sinha as P.I.

A Research Project entitled "HUNGRY PEOPLE AND EMPTY HANDS : NEED FOR VIGOROUS IMPLEMENTATION OF N.P.P.2000 IN BIHAR : AN EMPIRICAL STUDY" submitted by Dr. Chakradhar Sinha, Retd. Professor of Economics, BRA Bihar University, was approved by Planning Commission, Govt. of India vide letter No. O-15012/82/2001-SER dated 28.02.2003. The Under Secretary to Govt. of India, conveyed the approval of the President of India for Grant-inaid of Rs. 4.33 Lacs (Rupees four lacs thirty three thousand only) to the Registrar, BRA Bihar University, Muzaffarpur (Bihar) for conducting this Research Project.

Out of the above amount of Rs. 4.33 Lacs, the Planning Commission provided to BRA Bihar University, Muzaffarpur, a sum of Rs. 1,73,200/(Rupees One lac seventy three thousand two hundred only) on 22/4/2003. Subsequently, another instalment of Rs. 1,73,200/- was provided to the host university on 30/4/2004. Thus a sum of Rs. $3,46,400 /$ - (Rupees Three lacs forty six thousand four hundred only) has been paid to the host university, i.e. BRA Bihar University, Muzaffarpur. This is 80 percent of the sanctioned grant of Rs. 4.33 lacs.

The Draft Report of the above Project was accepted by the Planning Commission and the acceptance was conveyed to the host university vide letter No. O-15012/82/2001-SER dated 22 May, 2007. The acceptance has also been conveyed to the P.I. (copy of the letter enclosed).

The Planning Commission has requested the Registrar of the host university to submit 10 (Ten) copies of the Final Report and CD-ROM containing complete report of the Study along with :

Utilisation Certificate of Consolidated Amount (approved)

## Project Grant under different heads :

| Cost Break-up | Amount (in Rs.) |
| :--- | ---: |
| Salaries | $2,34,000.00$ |
| Travel | $50,000.00$ |
| Data Processing, Tabulation | $33,000.00$ |
| Stationery, Printing, etc. | $70,000.00$ |
| Overheads | $46,000.00$ |
| Grand Total | $\mathbf{4 , 3 3 , 0 0 0 . 0 0}$ |

## Utilisation:

As against the approved amount of Rs. 4.33 lacs, the utilization is shown below :

## A. Advance to P.I. under Travel, Printing and Stationery heads :

(i) Vide Cheque No. 422361 dated 18/6/2003

Rs. 65,000.00
(ii) Vide Cheque No. 430182 dated 10/6/2004 Rs. 55,000.00

## B. Payment to Field Staff :

| SI. <br> No | Name | Amount (in Rs,) |
| :--- | :--- | ---: |
| 1. | Sri Sunil Kumar Singh (Team Leader) <br> (May, 2003 to March, 2004) @ Rs. 7000/- <br> Per Month | $75,193.50$ |
| 2. | Sri Sanjay Kumar (Field Investigator) <br> (May, 2003 to March, 2004) @ Rs. 5000/- <br> Per Month | $53,387.00$ |
| 3. | Sri Kumar Amitesh Ranjan (Field Investigator) <br> (July, 2003 to March, 2004) @ Rs. 5000/- <br> Per Month | $45,000.00$ |
| 4. | Sri Anilesh Kumar (Field Investigator) <br> (July, 2003 to March, 2004) @ Rs. 5000/- <br> Per Month | $45,000.00$ |
| Total |  |  |

After the remaining amount of $20 \%$ of the total Project Grant of Rs. 4.33 lacs i.e. Rs. $86,600 /-$ (Rupees Eighty six thousand six hundred only) is received by the university from the Planning Commission, the same amount shall be utilized under the following heads, as approved by the Planning Commission :

Utilisation of $20 \%$ of Project Grant to be received from the Planning Commission :
(a) Salary to Field Staff, as per the following details:
(i) Sri Sunil Kumar Singh: Rs. $4,906.20$
(ii) Sri Sanjay Kumar : Rs. 3,504.43
(iii) Sri Kumar Amitesh Ranjan : Rs. $3,504.43$
(iv) Sri Anilesh Kumar

Rs. 3,504.43

Total
Rs. 15,419.49
(b) Data Processing and Tabulation:

Rs. 33,000.00
(Paid to Computer Agency, i.e. Kumar
Computers, Patna, by the P.I.)
(c) Overhead charges to the host University: Rs. $46,000.00$

The Utilisation Certificate of Rs. 1,20.000/- advanced to P.I. has already been submitted to the host university.

The utilization of Project grant under different heads is shown below:

| Head | Amount (in Rs.) |  | Total (Rs.) |
| :--- | ---: | :--- | :--- |
| Travel | 25000.00 <br> $1^{\text {st }}$ instalment <br> (Vouchers enclosed) | 25000.00 <br> 2nd instalment <br> (Vouchers enclosed) $)$ | $50,000.00$ |
| Stationery, <br> Printing etc. | $40,000.00$ <br> $1 s t$ instalment <br> (Vouchers enclosed) | $30,000.00$ <br> 2nd instalment <br> (Vouchers enclosed) | $70,000.00$ |
| Data Processing, <br> Tabulation | $33,000.00$ <br> (Vouchers enclosed) | 33.000 .00 |  |
| Salaries | $2,18,580.50$ | $15,419.50$ | $2,34,000.00$ |

It is certified that the Project Grant of Rs. 4.33 lacs has been utilized for the purpose for which it was sanctioned.

Audited Statement of the Accounts by the leading Chartered Accountant, namely, M/s Thakur, Vaidyanath Aiyar \& Co., enclosed for kind perusal.

Statement of Expenditure incurred on the Study entitled "HUNGRY PEOPLE AND EMPTY HANDS : NEED FOR VIGOROUS IMPLEMENTATION OF N.P.P.-2000 IN BIHAR : AN EMPIRICAL STUDY" under Prof. Chakradhar Sinha as P.I., duly signed by the Registrar of the University.
A. Payment to Field Staff :

Rs. $2,18,580.50+$ Rs, $15,419.50=$
Rs. 2,34,000.00
B. Travel

Rs. 25,000.00 + Rs. $25,000.00=$
Rs. 50,000.00
C. Data Processing and Tabulation :

Rs. 33,000.00
D. Stationery, Printing, etc. :

Rs. $40,000.00+30,000.00=$
Rs. 70,000.00
E. Overheads :

Rs. 46,000.00
(to host University)
Grand Total
:
Rs. 4,33,000.00

Principal Investigator
Registrar

## PREFACE

The National Population Policy (NPP)-2000 has laid down short term, medium term and long term targets for stabilization of population in India by 2045. One of the important medium term goals of NPP-2000 is bringing down the TFR (the average number of children a woman bears in her life time) at replacement level of 2.1 by 2010. The immediate objective is to address unmet need.

It has been emphasized in NPP-2000 that the achievements in the backward States of Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan and Orissa, will determine the time and the year in which the country is likely to achieve population stabilization.

In the present piece of research, an analysis of data available through various sources has been undertaken to highlight the magnitude of population problem in Bihar State vis-à-vis the rest of the country. The Study aims at achieving the goal of population stabilization and poverty alleviation, and thereby improving the quality of life of people in the State of Bihar which lags behind in all spheres of development.
(Prof. Chakradhar Sinha)
P. I.

## ACKNOWLEDGEMENT

The Investigation under reference having crucial significance for Bihar lagging behind population stabilisation and health services, was successfully completed due to sincere efforts and involvement of numerous organisations and individuals at various stages of the Study. We would like to thank every one who was instrumental in making the present piece of empirical research a success.

First of all, we are grateful to world famous Planning Commission, Govt. of India, for financial support and able guidance at various stages of the Project. We are thankful to the Adviser, Deputy Adviser and other officials of SER Division of Planning Commission for their valuable co-operation and able guidance.

I take the opportunity to express my deep sense of gratitude and thankfulness to Dr. Padam Singh Ji, former Additional Director General, ICMR, Ministry of Health and Family Welfare, Govt. of India, and currently, Member, National Statistical Commission, Govt. of India, New Delhi. I have the honour to put on record his able guidance and brilliant suggestions based on his
rich knowledge and vast experience, in spite of his tight and busy schedule. As an academician, I owe him a debt which can never be repaid.

I am obliged to Dr. R. J. Yadav Ji, Deputy Director, Institute of Research in Medical Statistics, ICMR, for his in-depth discussions and brilliant suggestions.

I have the honour to express my deep sense of gratitude to Hon'ble Vice-Chancellor, BRA Bihar University, Muzaffarpur, Hon'ble Dr. Asheshwar Yadav Ji, former Vice-Chancellor, for their valuable support, able guidance and administrative approval at various stages of the Project. I am grateful to the Registrar, BRA Bihar University, Muzaffarpur, Dr. A. K. Shrivastava Saheb, Development Officer, Shri Purushottam Prasad Singh Ji, Secretary to Vice-Chancellor, and Shri D. P. Verma Ji, the concerned official, for administrative support and guidance on several occasions.

I am grateful to my former Guru, Dr. Ashish Bose Saheb, Emeritus Professor and former Head of the Demographic Research Centre, Institute of Economic Growth, University of Delhi, for his innovative ideas and original approach as a Demographer of international repute.

I put on record the valuable contribution of Dr. (Mrs.) Shobha Rani, Vice Principal, Sidharth Mahila Mahavidyalaya, Patna, in completion of the present piece of research.

I shall always remember the kindness and generosity of Dr. K. N. Singh Ji, brilliant Faculty of Population Research Centre, Patna University, in completing this Research Project.

I take the opportunity to express my gratitude to Dr. Rahul Dev Bhawsar, Manager, Research and Evaluation, EPOS Health Consultants, New Dilhi, for novel ideas and brilliant suggestions. I am thankful to Shri Arvind Kumar Ji, P.I.C., IGNOU Programme Study Centre, Dr. Ajay Kumar Ji, O.S.D., Shri Harendra Kumar and Shri Anil Kumar Jha, Computer Experts, IIMIT, Patna for their brilliant suggestions and valuable support.

Last but not the least, credit goes to all Village and Household Respondents who spent their time and responded to the rather lenthy Questionnaires with tremendous patience and enthusiasm.
(Professor Chakradhar Sinha)
P. I.

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## CHAPTER - 1

## Introduction

### 1.1 Background of the State

The origin of Bihar State can be traced back to the Vedic period. Bihar is mentioned in Vedas, Puranas and Epics. Bihar formed a part of Bengal Presidency until a new Province of Bihar and Orissa (combined) was created on 12 December 1911. Between 1931 and 1941 there was yet another partition and Bihar and Orissa became two separate Provinces. In November 2000 Bihar was again divided into two States, namely Bihar and Jharkhand. Bihar is a land locked State and bounded on the north by Nepal, on the east by West Bengal, on the west by Uttar Pradesh and on the south Jharkhand. Bihar is the land of Gautam Budha, Mahavir and Guru Govind Singh. The first Republic of the world was started from Vaishali district of Bihar. In ancient time, Bihar was very famous for its various seats of learning. The university of Nalanda, Vikram Shila (now Bhagalpur) and Udat Puri (now Biharshariff) were internationally reputed institutions for higher learning. Mithila was an important centre for Sanskrit learning. The greatest mathematician of the world AryaBhat was born in Patliputra (present Patna, capital of Bihar). Bihar is also land of many freedom fighters such as Veer Kunwar Singh, Batkeshwar Dutt, Birsamunda, Tilka Manjhi, Maulana Mazharul Haque, Jaiprakash Narain and Abdul Bari. Dr. Rajendra Prasad, the first President of India, was also from Bihar. Unfortunately, despite its glorious past history, Bihar is now one of the most backward States of India.

### 1.2 Demographic Profile of Bihar

According to Census 2001, Bihar is the third most populous State (after U.P \& Maharashtra) of India with a population of 8.28 crores. The decadal population growth rate in the State during 1991-2001 is 28.43 percent which


Figure - 1.1
is 7 point higher than national decadal growth rate 21.34 percent. The population density (per square km) in 2001 was 880 for the State compared to 324 for India. The sex ratio of the population (number of female per 1000 males) is 921 in Bihar and 933 for all India. The literacy rate among the population age 7years and above, according to the 2001 census, was 47.53 and 65.38 percent for the State and the country respectively. From above
chart based on estimate of Sample Registration System for 2000, it is quite clear that IMR of Bihar is lower than national average, death rate is almost match with the country, but birth rate of this State is higher than the country level resulting higher natural growth rate. To reduce this natural growth rate, we have to enhance contraceptive prevalence rate (CPR).

### 1.3 Geography

The lifeline of this State is the Ganga river, which enters the State from the west and flows towards the east. A large number of rivers join the Ganga from the north and south. Ghaghara, Gandak and Kosi are the main tributaries of the Ganga. Kosi, called "the sorrow of Bihar", is the widest river and frequently changes its course causing devastation. The Sone, Punpun, Mohane and Gumani rivers are the right-bank tributaries of the Ganga. Forests in the composite State are mainly confined in the Chotanagpur, which is now a part of the Jharkhand State.

The year in Bihar may be divided in to three distinct seasons- winter from October to February, summer from March to mid -June and the monsoon from mid-June to September. Hot westerly winds begin in March and last until May. The temperature begins to rise in March, and the months of April and May are characterized by great heat and dryness.

The monsoon sets in by around the middle of June, bringing in its wake a quick fall in the temperature and widespread rains ending in September. The cold season starts in November when both day and night temperatures drop
rapidly. January is usually the coldest month.. The temperature varies from region to region. The lowest temperature varies from $8^{\circ} \mathrm{C}$ to $11^{\circ} \mathrm{C}$ in different parts of the State. The mean maximum temperature in May varies from $35-44^{\circ} \mathrm{C}$. Gaya is the hottest district in the State. The State receives most of its rainfall from south West monsoon from June to September. The average rainfall is 1200 mm and ranges from 1000 mm to 2000 mm .

### 1.4 Economy

Bihar is predominately an agricultural State with about 90 percent of the population living in rural areas according to the 2001 census. Bihar grows Kharif and Rabi crops and the major agricultural products include rice, bajra, maize, jowar, sugarcane, tur, potato and pulses. The main cash crops are sugarcane, potato, tobacco, oil seeds, onion, jute and mesta. Kharif and rabi food grains constitute 64 and 36 percent of the total production of food grains in the State, respectively. According to table 2.1 nearly 43 percent people of Bihar live below poverty line, while in India it is 26 percent. It shows that the economic condition of Bihar is very poor.

### 1.5 Health Status

Health conditions in Bihar are poor. The rapidly growing population is adversely affecting health and quality of life. Delivery of health services is mainly governed by the National Health Policy (NHP) which was approved by Parliament in 1983. First formal National Health Policy was formulated in 1983, and since then there have been marked changes in the determinant relating to the health sector. Some of the policy initiatives outlined in the NHP-1983 have yielded results (Table 1.1), while, in several other areas, the outcome has not been expected.

| Table 1.1 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sector | BPL (\%) | $\begin{array}{\|l\|} \hline \text { IMR } \\ \text { 1999(SRS) } \\ \hline \end{array}$ | $\begin{aligned} & \hline<5 \mathrm{MR} \\ & \text { NFHS-II } \end{aligned}$ | \%of children underweight | MMR perlakh |
| India | 26.1 | 70 | 94.9 | 47 | 408 |
| Rural | 27.09 | 75 | 103.7 | 49.6 | -- |
| Urban | 23.02 | 44 | 63.1 | 38.4 | -- |
| Better Performing States |  |  |  |  |  |
| Kerala | 12.72 | 14 | 18.8 | 27 | 87 |
| Maharashtra | 25.02 | 48 | 58.1 | 50 | 135 |
| Tamilnadu | 21.02 | 52 | 63.3 | 37 | 79 |
| Low Performing States |  |  |  |  |  |
| Orissa | 47.15 | 97 | 104.4 | 54 | 498 |
| Bihar | 42.6 | 63 | 105.1 | 54 | 707 |
| Rajas than | 15.28 | 81 | 114.9 | 51 | 607 |
| Uttar Pradesh | 31.15 | 84 | 122.9 | 52 | 707 |
| Madhya Pradesh | 37.43 | 90 | 137.6 | 55 | 498 |

Policy and strategy of the Government regarding health delivery is mainly favouring vertical approach, which is very expensive and difficult to be sustained. There was shortage of professional manpower and other resources at all levels of services. Powers are not given to local self-government at the districts and village levels for effective operation of health services. NHP 2002 has set out a new policy framework for the accelerated achievement of public health goal in socio-economic transformation currently prevailing in the country.

### 1.6 The Study

As global population has increased threefold during this century, from 2 billion to 6 billion, the population of India has increased nearly five fold from 238 million ( 23 crore) to 1 billion ( 100 crore) during the same period. Every sixth person on the globe today is an Indian. India adds about 10 lakh persons to its population every fortnight. India is adding one Australia in ever eight months. By 2045 or earlier, India would overtake China as the world's most populous nation. Bihar ranks three among the Indian States in terms of population. Among the major causes of the population explosion, poverty is regarded as the main cause. In Bihar, nearly 43 percent people are living below the poverty line.

In the new millennium, nations are judged by the well being of their people; by level of health, nutrition and education; by the civil and political liberties enjoyed by their citizens; by the protection guaranteed to children and by safety provisions made for the vulnerable and the disadvantaged people. With this vision, the National Population Policy (NPP) was framed. The immediate objectives of the NPP are to meet the unmet need of contraception, strengthening health infrastructure, strengthening of health personnel and promote integrated services delivery for basic RCH care. The mid term objective of the NPP is to bring the total fertility rate (TFR) to replacement level i.e. 2 by 2010 and long term objective is to stabilize population by 2045.

After considering the above facts, a research proposal entitled "Hungry People and Empty Hands: Need for Vigorous Implementation of N.P.P in Bihar: An Empirical Study" was submitted to Planning Commission, Govt. of India, New Delhi.

### 1.7 Objective

The study aims at achieving the goal of population stabilization and poverty alleviation and thereby improving the quality of life of people in the state of Bihar.

### 1.8 Methodology

The methodology included primary data collection as well as review and analysis of secondary data.

For primary data collection nine districts of Begusarai, Bettiah (West Champaran), Darbhanga, Motihari (East Champaran), Muzaffarpur, Samastipur, Sitamarhi, Purnia and Vaishali were selected. In each district, two blocks were selected randomly. From each block four villages were selected randomly. Finally, seventy-five households were selected from each selected village for survey work.

For secondary data review following sources have been extensively utilised:

- National Family Health Survey 1998-99
- DLHS-RCH 1998 and 2004
- National Population Policy 2000
- Reports of working groups, Planning Commission
- National Sample Survey Organisation
- Other relevant documents


### 1.9 Districts Profile

Districts profile of the nine selected districts Begusarai, Bettiah (West Champaran), Darbhanga, Motihari (East Champaran), Muzaffarpur, Samastipur, Sitamarhi, Purnia and Vaishali along with Bihar State is presented in Table 2.2. Table shows that highest annual growth rate 3.5 is found in Purnia district and lowest growth rate 2.5 observed in Samastipur district.

Urbanization is considered as an important development index. According to Table 2.2, only 10 percent of Bihar total population is living in urban area. Among selected nine districts, West champaran having highest urban population (10 percent) and it is lowest (4 percent) in Samastipur district. Very low sex ratio is found in Sitamarhi (892 female per thousand male) and East champaran (897 female per thousand male).

Table - Schematic Diagram of Sampling

| Step of Selection |  |  |
| :--- | :--- | :--- |
| 1. | District | Begusarai |
|  | Blocks | Matihani and Kankalgram |
|  | Villages | Eight Villages |
|  |  |  |
| 2. | District | Bettiah (West Champaran) |
|  | Blocks | Chanpatiya and Majhauliya |
|  | Villages | Eight Villages |
|  |  |  |
| 3. | District | Sitamrhi |
|  | Blocks | Rannusaidpur and Dumra |
|  | Villages | Eight Villages |
|  |  |  |
| 4. | District | Samastipur |
|  | Blocks | Tajpur and Pusa |
|  | Villages | Eight Villages |
|  |  |  |
| 5. | District | Motihari (East Champaran) |
|  | Blocks | Dhaka and Motihari Sadar |
|  | Villages | Eight Villages |
|  |  |  |
| 6. | District | Purnia |
|  | Blocks | Amour and Baisa |
|  | Villages | Eight Villages |
|  |  |  |
| 7. | District | Darbhanga |
|  | Blocks | Hayaghat and Bahadurpur |
|  | Villages | Eight Villages |
|  |  |  |
| 8. | District | Muzaffarpur |
|  | Blocks | Musahri and Kanti |
|  | Villages | Eight Villages |
|  |  |  |
| 9. | District | Vaishali |
|  | Blocks | Patepur and Bidupur |
|  | Villages | Eight Villages |
|  | lat |  |

Households covered : 25,000 (Twenty Five Thousand Households).

| Districts \& State | Basic Demography Indicators |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Population | Annual Growth rate | Population density (per sq.Km) | Percent <br> Urban <br> Population | Sex ratio | Percent Population |  | Literacy <br> Rate | Work <br> Participation <br> Rate |
|  |  |  |  |  |  | Sc | St |  |  |
| Begusarai | 2,349,366 | 2.91 | 1222 | 4.58 | 912 | 14.5 | 0.1 | 48.55 | 31.8 |
| Bettiah (west champaran) | 3,043,466 | 3.04 | 582 | 10.17 | 901 | 14.3 | 1.5 | 39.63 | 37.9 |
| Darbhanga | 3,295,789 | 3.08 | 1442 | 8.11 | 914 | 15.5 | 0.0 | 44.32 | 31.2 |
| Motihari (east champaran | 3,939,773 | 2.92 | 991 | 6.37 | 897 | 13.0 | 0.1 | 38.14 | 32.7 |
| Muzaffarpur | 3,746,714 | 2.67 | 1180 | 9.29 | 920 | 15.9 | 0.1 | 48.15 | 30.4 |
| Purnia | 2,543,942 | 3.52 | 787 | 8.74 | 915 | 12.3 | 4.4 | 35.51 | 37.8 |
| Samastipur | 3,394,793 | 2.56 | 1175 | 3.63 | 928 | 18.5 | 0.1 | 45.76 | 31.6 |
| Sitamarhi | 2,682,720 | 3.25 | 1214 | 5.71 | 892 | 11.8 | 0.1 | 39.38 | 31.9 |
| Vaishali | 2,718,421 | 2.63 | 1332 | 6.86 | 920 | 20.7 | 0.1 | 51.63 | 28.8 |
| Bihar | 82,998,509 | 2.84 | 880 | 10.46 | 919 |  |  | 47.53 | 33.7 |

## Source: Census of India 2001

### 1.10 Questionnaires

The basic tool for data collection in this survey was questionnaire developed for personal interviews with ever-married women (age 18-49 years) and men at the household level. There were two types of questionnaires: Village questionnaire and Household questionnaire.

The main components of questionnaire are as follows:

- General household characteristics of sampled households including demographic features like birth and marriages which have occurred in the family.
- Characteristics of married and eligible women (18-49 years)
- Knowledge, Awareness and Practice and side effect of Family Planning among eligible women.

A training programme for one week was organized for the field staff during $3^{\text {rd }}$ week of March 2003 at Muzaffarpur. The training was conducted by noted experts in Demography.

- Collection of data on births, age at marriages,
- Assuring correct age reporting,
- Actual field practice,
- Mock interviewers and group discussions.

A strict supervision on data collection was maintained throughout the survey by well experienced senior field staff along with Principal Investigator of this project.

### 1.11 Data Processing and Tabulation

All the completed questionnaires were brought to department for data processing. The data were processed on computers. The process consisted of office editing of questionnaires, data entry, cleaning and tabulation. Data cleaning included validation, range and consistency checks. The frequency distribution table was developed by using SPSSWIN by the computer programmer hired for this project.

### 1.12 The Report

The Report consists of nine Chapters. Chapter-1 is devoted to broad Introduction. This Chapter presents a vivid picture of demographic profile of Bihar, health status, survey design and sample size, district profile of the State, questionnaire, data management and other related issues. Chapter-2 presents a profile of the demographic and socio-economic characteristics of the household population in nine districts of Bihar chosen for this Study. Chapter-3 is concerned with Population explosion in Bihar. This Chapter gives an account of population growth, fertility, poverty and demographic profile of the State. Chapter-4 analyses data collected on budgetary allocation of funds and their utilization for general health and RCH services in Bihar. This Chapter highlights utilization of funds for diseases specific to Bihar, especially, especially Kalazar and Malaria.

Chapter-5 discusses health scenario in Bihar such as, health infrastructure and development index of Bihar in comparison to other States in India. Chapter-6 presents a strategy/model for population stabilization in Bihar. This Chapter highlights the districts identified for Targeted Intervention in the State of Bihar. It gives a critical examination of health scenario in Bihar State. The latest data from

Rural Health Statistics, Govt. of India, and District Level Household Survey (DLHS) under RCH-III for all districts of Bihar were especially procured for use in the analysis. Chapter-7 discusses the crucial role of PRIs, NGOs and Self Help Groups in Population Stabilisation in the State. Chapter-8 presents an anatomy of challenges and strategy for development of Bihar. The last Chapter contains the salient findings of the Study.

### 1.13 Reply to the Comments :

(1) The problem of population explosion has been analysed in Chapter-3.
(2) The problem of poverty, under development and poor health status has been covered in Chapter-5.
(3) The strategy/model for population stabilisation is presented in Chapter-6.
(4) The involvement of PRIs, NGOs and Self Help Groups is discussed in detail in Chapter-7.
(5) The strategy for socio-economic development of Bihar is outlined in Chapter-8.

## CHAPTER -2

## Household Characteristics

This chapter presents a profile of the demographic and socioeconomic characteristics of Household population in nine districts of Bihar namely Begusarai, Bettiah (West Champaran), Darbhanga, Motihari (East Champaran), Muzaffarpur, Samastipur, Sitamarhi, Purnia, and Vaishali.

### 2.1 Age Distribution of the Household Population

Table 2.1 presents the percent distribution of the household population by age residing in Kacha house in nine districts of Bihar. The age distribution is typical of high fertility population, with a higher proportion of the population is in the younger age groups. The child population (below age 15 years) in almost all districts more than forty two percent of the population is below 15 years. Highest proportion (47 percent) of child population is found in Darbhanga and lowest (42.3 percent) in Muzaffarpur district. The comparative view of the child population within each selected district is presented in Figure2.1.

Figure - 2.1


| Table - HOUSEHOLD POPULATION BY AGEPercent distribution of the household population by |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Begusarai | Bettiah | Darbhanga | Motihari | Muzaffarpur | Purnia | Samastipur | Sitamarhi | Vaishali |
| Age group ( in years) |  |  |  |  |  |  |  |  |  |
| 0-4 | 17.1 | 17.1 | 15.8 | 15.5 | 14.6 | 16.0 | 17.4 | 16.5 | 14.9 |
| 5-9 | 15.4 | 14.7 | 17.0 | 14.7 | 14.5 | 18.0 | 14.8 | 16.5 | 13.9 |
| 10-14 | 13.1 | 11.4 | 14.3 | 13.1 | 13.2 | 40.6 | 12.1 | 14.1 | 14.3 |
| 15-19 | 9.9 | 10.0 | 8.9 | 9.1 | 9.1 | 9.8 | 9.3 | 7.8 | 10.4 |
| 20-24 | 6.4 | 9.4 | 6.7 | 7.7 | 6.3 | 6.4 | 8.3 | 6.4 | 7.1 |
| 25-29 | 6.8 | 8.3 | 5.4 | 6.6 | 6.2 | 6.1 | 6.8 | 5.3 | 6.4 |
| 30-34 | 5.8 | 6.3 | 5.4 | 6.1 | 6.3 | 5.2 | 6.1 | 5.3 | 5.3 |
| 35-39 | 5.0 | 5.4 | 5.0 | 5.3 | 5.4 | 5.1 | 5.1 | 5.4 | 5.5 |
| 40-44 | 3.3 | 4.2 | 4.3 | 4.2 | 5.0 | 3.7 | 3.3 | 5.3 | 4.5 |
| 45-49 | 4.0 | 3.7 | 3.2 | 4.3 | 4.6 | 4.3 | 4.1 | 3.4 | 3.5 |
| 50-59 | 5.9 | 4.9 | 5.7 | 6.2 | 7.5 | 5.2 | 5.6 | 5.3 | 4.9 |
| $60+$ | 7.2 | 4.7 | 8.2 | 7.2 | 7.3 | 5.5 | 7.1 | 8.5 | 9.2 |
| Number of persons |  |  |  |  |  |  |  |  |  |

Source : Field Survey

### 2.2 Age and Sex distribution of the Household Population

Table 2.2 presents the percentage distribution of the household population residing in Kacha house according to age and sex of nine districts of Bihar. Overall, sex preference is observed among the child population (below 15 years) in each sample district of Bihar. In other words, the percentage of male child population is found to be higher than the percentage of female child population in all study districts of Bihar. The highest percentage about 50 percent male child populations is found in Purnia district along with 46 percent female child. The lowest percentage (39 percent) of female child population is evaluated in Begusarai district with 49 percent male child population. A very irregular behaviour of sex ratio of the different districts compared to the State is presented in Figure-2.2. The number of female is greater than the number of male in Darbhanga, Purnia and Sitamarhi districts.


Figure 2.2

| $\begin{aligned} & \text { Age } \\ & \text { group (in } \\ & \text { years) } \end{aligned}$ | Begusarai |  | Bettiah |  | Darbhanga |  | Motihari |  | Muzaffarpur |  | Purnia |  | Samastipur |  | Sitamarhi |  | Vaishali |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 0-4 | 18.9 | 13.2 | 16.2 | 17.9 | 16.8 | 15.0 | 15.7 | 15.3 | 14.7 | 14.5 | 15.6 | 15.9 | 18.1 | 16.6 | 18.1 | 15.0 | 14.7 | 15.2 |
| 5-9 | 15.0 | 13.9 | 15.6 | 12.5 | 18.5 | 15.8 | 15.5 | 13.8 | 15.3 | 13.7 | 19.2 | 16.6 | 13.0 | 17.0 | 18.3 | 14.8 | 14.4 | 13.4 |
| 10-14 | 14.6 | 11.6 | 11.3 | 11.7 | 14.2 | 14.5 | 13.8 | 12.4 | 12.5 | 13.9 | 15.3 | 13.5 | 13.4 | 10.8 | 15.3 | 13.0 | 14.9 | 13.5 |
| 15-19 | 9.9 | 10.0 | 9.2 | 11.5 | 8.8 | 9.1 | 9.8 | 8.3 | 8.6 | 9.6 | 7.7 | 12.0 | 8.3 | 10.2 | 7.7 | 7.8 | 10.1 | 10.7 |
| 20-24 | 5.6 | 7.2 | 8.0 | 10.6 | 4.4 | 8.7 | 6.4 | 9.2 | 6.2 | 6.4 | 6.0 | 7.0 | 7.9 | 8.6 | 4.6 | 8.2 | 6.8 | 7.5 |
| 25-29 | 5.9 | 7.9 | 8.6 | 7.6 | 3.7 | 6.9 | 5.4 | 7.8 | 5.7 | 6.7 | 5.0 | 7.5 | 5.6 | 8.0 | 3.8 | 6.7 | 6.1 | 6.7 |
| 30-34 | 5.5 | 6.1 | 6.8 | 5.7 | 5.1 | 5.6 | 6.1 | 6.0 | 5.8 | 6.9 | 4.5 | 6.2 | 6.2 | 6.1 | 4.3 | 6.3 | 5.2 | 5.4 |
| 35-39 | 4.6 | 5.5 | 5.2 | 5.9 | 4.8 | 5.2 | 5.1 | 5.6 | 6.0 | 4.7 | 6.2 | 4.6 | 5.8 | 4.5 | 4.8 | 6.1 | 5.1 | 6.0 |
| 40-44 | 4.2 | 2.5 | 4.8 | 3.5 | 4.6 | 4.0 | 4.0 | 4.4 | 4.9 | 5.1 | 3.9 | 3.8 | 3.3 | 3.4 | 4.7 | 5.9 | 5.3 | 3.6 |
| 45-49 | 2.7 | 5.3 | 3.4 | 3.9 | 3.2 | 3.2 | 4.0 | 4.6 | 4.6 | 4.6 | 4.0 | 4.4 | 4.1 | 3.9 | 4.1 | 2.7 | 3.4 | 3.5 |
| 50-59 | 6.0 | 5.8 | 5.5 | 4.3 | 6.7 | 4.9 | 6.4 | 6.1 | 7.5 | 2.6 | 5.8 | 4.4 | 5.6 | 5.5 | 5.7 | 5.3 | 4.7 | 5.2 |
| $60+$ | 7.3 | 7.1 | 5.3 | 2.8 | 9.3 | 7.2 | 7.9 | 6.6 | 8.4 | 6.3 | 6.9 | 4.1 | 8.8 | 5.3 | 8.6 | 8.3 | 9.3 | 9.0 |
| Number of person |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sex Ratio | 924 |  | 864 |  | 1168 |  | 901 |  | 980 |  | 1064 |  | 984 |  | 1032 |  | 980 |  |
| F/M * 1000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Source : Field Survey

### 2.3 Household Head's Background

Table 2.3 shows the percentage distribution of household by various characteristics of the household head (sex, age, religion and caste).

Majority of households are headed by males in almost all districts. The domination of male as head of the household in different districts varies from 73 percent to 98 percent.

Household heads are concentrating in the middle age group of 30-44 and 45-59 in all selected districts. The median age of head of the households are 45 years in East Champaran, Muzaffarpur, Sitamarhi and Vaishali districts followed by Darbhanga (43 Year), Purnia (43year), Samastipur (42 year), Begusarai (42 year) and West Champaran (40 years).

Overall, a large proportion of household heads are found to be Hindu in all study districts. In Vaishali district, a very high proportion 95 percent head of the households are found to be Hindu. 92 percent heads of the households are Hindu in Begusarai, Muzaffarpur, and Samastipur. 91 percent Hindu head of the household is found in Sitamarhi and after that East Champaran (88 percent), Darbhanga (81 percent) and West Champaran (77 percent).

Very low percentage (58 percent) of heads of the households is observed in Purnia district. As this study is covering Kacha household population, may be due to this fact majority heads of the households are Backward and Scheduled Caste.

The mean household size varies from 6 to 7persons per household within nine districts of Bihar. It is the highest (7 persons per household) for Vaishali, West Champaran, \& Samastipur and lowest (6 persons per household) for rest of the districts like Begusarai, Darbhanga, East Champaran, Muzaffarpur, Purnia \& Sitamarhi.

|  | Begusarai | Bettiah | Darbhanga | Motihari | Muzaffarpur | Purnia | Samastipur | Sitamarhi | Vaishali |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristics |  |  |  |  |  |  |  |  |  |
| Sex of household head |  |  |  |  |  |  |  |  |  |
| Male | 97.5 | 98.1 | 72.6 | 95.2 | 96.9 | 81.2 | 95.2 | 88.7 | 93.3 |
| Female | 2.5 | 1.9 | 27.4 | 4.8 | 3.1 | 18.8 | 4.8 | 11.3 | 6.7 |
| Age of household head |  |  |  |  |  |  |  |  |  |
| <30 | 16.8 | 19.1 | 15.9 | 9.5 | 11.8 | 19.1 | 17.6 | 10.0 | 12.0 |
| 30-44 | 41.8 | 45.1 | 37.8 | 40.4 | 39.0 | 37.1 | 39.4 | 41.5 | 37.9 |
| 45-59 | 24.6 | 25.8 | 26.4 | 30.9 | 32.3 | 26.9 | 24.1 | 28.5 | 26.6 |
| 60+ | 17.6 | 10.0 | 19.9 | 19.3 | 16.9 | 17.0 | 19.0 | 20.0 | 26.5 |
| Median Age of the Household Head | 42.1 | 40.3 | 43.5 | 45.1 | 44.7 | 42.5 | 42.4 | 44.5 | 45.0 |
| Religion of Head of HH |  |  |  |  |  |  |  |  |  |
| Hindu | 92.3 | 76.5 | 80.5 | 87.9 | 91.9 | 57.6 | 91.5 | 90.8 | 94.1 |
| Muslim | 7.7 | 23.3 | 19.5 | 12.1 | 8.1 | 42.4 | 8.5 | 9.2 | 5.9 |
| Caste |  |  |  |  |  |  |  |  |  |
| Scheduled Caste | 31.8 | 23.8 | 19.3 | 23.8 | 31.3 | 22.7 | 29.9 | 19.7 | 29.2 |
| Scheduled Tribe | 1.4 | 6.9 | 1.1 | 0.9 | 0.9 | 1.1 | 0.2 | 0.0 | 1.6 |
| OBC | 54.3 | 60.1 | 58.3 | 64.4 | 47.3 | 59.6 | 58.1 | 63.9 | 62.8 |
| Others | 12.5 | 9.1 | 21.2 | 10.9 | 20.3 | 16.5 | 11.7 | 16.4 | 6.1 |
| Mean Household Size | 6.3 | 6.8 | 6.0 | 6.4 | 6.0 | 5.5 | 6.6 | 6.1 | 7.1 |
| No. of Households | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |

[^0]
### 2.4 Marital Status of Household Population

Table 2.4 shows the percent distribution of household population by marital status classified by age and sex.

This table is presenting two main findings common for all covered districts of Bihar. Firstly, among female age 10 or more years, the proportion of currently married women is higher than the never married women in all districts of Bihar. The proportion of currently married women is highest (74 percent) in Samastipur district followed by East Champaran (73 percent), West Champaran (70 percent), Begusarai (70 percent), Vaishali (68 percent), Sitamarhi (67 percent), Muzaffarpur (66 percent), Darbhanga (65 percent) and Purnia (61percent). According to NFHS II (98 -99) the percentage of currently married women is 54 percent. It is indicating high percentage of currently married women in surveyed nine districts population residents of Kachcha household.

Secondly, the proportion of never married is higher for male as compared to females. The proportion of never married male is highest in Begusrai ( 43 percent), followed by Purnia ( 43 percent), Sitamarhi ( 40 percent), Darbhanga ( 39 percent), East Champaran (38 percent), Vaishali (38 percent), Muzaffarpur (35 percent), West Champaran ( 31 percent) and Samastipur (31 percent).

The proportion of Widower/divorced/separated females is greater than male in all districts. About more than half of the women age 45 or older are Widower/divorced/separated in all districts.

Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION
Percent distribution of households population age 10 and above by marital status, age group according to sex in nine districts of Bihar.

|  | Begusarai |  | Bettiah |  | Darbhanga |  | Motihari |  | Muzaffarpur |  | Purnia |  | Samastipur |  | Sitamarhi |  | Vaishali |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Characteristics | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| Never Married $10-14$ | 100 | 96 | 96 | 93 | 99 | 98 | 97 | 96 | 100 | 97 | 100 | 99 | 88 | 96 | 100 | 96 | 95 | 90 |
| 15-19 | 95 | 43 | 78 | 29 | 93 | 41 | 92 | 40 | 91 | 40 | 96 | 53 | 85 | 25 | 95 | 38 | 84 | 39 |
| 20-24 | 57 | 1.4 | 28 | 2.7 | 49 | 5.9 | 49 | 6.9 | 49 | 7.9 | 64 | 16 | 31 | 1.5 | 46 | 6.2 | 48 | 3.8 |
| 25-29 | 15 | 0.3 | 5.1 | 0.0 | 15 | 0.0 | 7.0 | 0.0 | 13 | 0.0 | 19 | 0.5 | 5.3 | 0.0 | 11 | 0.8 | 7.7 | 1.5 |
| 30-44 | 5 | 0.0 | 0.8 | 0.0 | 0.6 | 0.5 | 2.0 | 0.2 | 3.2 | 0.0 | 1.5 | 0.7 | 0.0 | 0.4 | 2.7 | 0.0 | 1.5 | 0.0 |
| 45-59 | 0.5 | 0.0 | 0.9 | 1.3 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| 60+ | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 1.9 | 0.0 |
| Total | 43 | 23 | 31 | 21 | 39 | 27 | 38 | 23 | 35 | 25 | 43 | 31 | 31 | 20 | 40 | 23 | 38 | 24 |
| Currently Married |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10-14 | 0.0 | 3.7 | 3.7 | 7.1 | 0.7 | 1.6 | 2.5 | 3.6 | 0.4 | 2.2 | 0.3 | 1.5 | 12 | 4.3 | 0.3 | 3.2 | 4.2 | 10 |
| 15-19 | 4.7 | 57 | 23 | 71 | 7.3 | 60 | 7.8 | 60 | 9.0 | 60 | 3.8 | 46 | 15 | 74 | 4.2 | 60 | 16 | 61 |
| 20-24 | 43 | 95 | 71 | 96 | 51 | 93 | 51 | 91 | 52 | 91 | 35 | 82 | 67 | 98 | 51 | 93 | 51 | 96 |
| 25-29 | 85 | 98 | 95 | 100 | 85 | 98 | 92 | 100 | 87 | 96 | 81 | 95 | 94 | 97 | 89 | 98 | 89 | 98 |
| 30-44 | 95 | 94 | 98 | 98 | 97 | 94 | 97 | 94 | 97 | 98 | 95 | 92 | 100 | 97 | 97 | 98 | 98 | 95 |
| 45-59 | 95 | 88 | 88 | 79 | 94 | 85 | 91 | 87 | 95 | 79 | 98 | 81 | 99 | 87 | 94 | 79 | 95 | 87 |
| 60+ | 83 | 56 | 70 | 54 | 77 | 48 | 85 | 55 | 85 | 51 | 86 | 48 | 78 | 62 | 79 | 43 | 88 | 54 |
| Total | 54 | 70 | 65 | 73 | 57 | 65 | 58 | 70 | 62 | 66 | 55 | 61 | 65 | 74 | 56 | 67 | 60 | 68 |
| Widower/Divorced/ Separated |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10-14 | 0.0 | 0.0 | 0.5 | 0.3 | 0.7 | 0.0 | 0.2 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 |
| 15-19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 1.0 | 0.0 | 2.0 | 0.0 | 0.8 |
| 20-24 | 0.0 | 3.3 | 0.7 | 1.1 | 0.0 | 1.0 | 0.0 | 2.5 | 0.0 | 0.9 | 1.5 | 2.3 | 1.9 | 0.4 | 2.9 | 1.1 | 1.2 | 0.0 |
| 25-29 | 0.0 | 1.3 | 0.0 | 0.3 | 0.0 | 2.1 | 1.1 | 0.0 | 0.0 | 4.0 | 0.0 | 4.3 | 0.8 | 2.6 | 0.0 | 1.5 | 3.5 | 0.4 |
| 30-44 | 0.8 | 6.1 | 1.1 | 1.9 | 2.2 | 6.0 | 1.5 | 6.1 | 0.3 | 2.0 | 3.1 | 7.3 | 0.3 | 2.8 | 0.7 | 2.3 | 0.3 | 4.9 |
| 45-59 | 4.8 | 12 | 11 | 20 | 6.2 | 15 | 7.8 | 13 | 4.9 | 21 | 1.2 | 19 | 0.5 | 14 | 6.5 | 21 | 4.3 | 14 |
| 60+ | 17 | 44 | 31 | 46 | 23 | 52 | 15 | 45 | 15 | 49 | 14 | 53 | 22 | 38 | 19 | 57 | 10 | 46 |
| Total | 2.7 | 8.1 | 4.2 | 5.7 | 4.9 | 8.7 | 3.4 | 7.9 | 2.7 | 8.9 | 2.5 | 8.3 | 3.3 | 6.1 | 3.9 | 10 | 2.4 | 8.6 |

Source : Field Survey

### 2.5 Housing Characteristics

Table 2.5 presents the percentage distribution of households by selected background characteristics.

Majority kachcha household's source of lighting is other than electricity. Very limited Kachcha household's source of lighting is electricity ranging from $1-8$ percent. Nearly 8 percent household's source of lighting is electricity followed by Sitamarhi ( 5 percent), Muzaffarpur ( 4 percent), Motihari (4 percent), West Champaran (3 percent), Vaishali (3 percent), Begusarai (2 percent), and Purina (1 percent). In almost all districts the facility of electricity is very low compared to NFHS -1(17 percent) and NFHS -2 (18 percent).

Water sources and sanitary facilities have an important influence on the health of household members especially children. This survey contained questions on source of drinking water and type of sanitary facilities. According to Survey, majority of kachcha household residents are getting drinking water from hand pump/bore well ranging from 68 percent to 97 percent. It is highest in Purnia district ( 97 percent) afterward Stamarhi (95 percent), West Champaran (86 percent), Darbhanga (84 percent), Begusarai (81 percent), Samastipur (78 percent), East Champaran (76 percent), Muzaffarpur ( 74 percent), and Vaishali ( 68 percent). The second and third major sources of water are Tap and well respectively among Kachcha household residents in all selected districts.

Regarding sanitation facilities, large percentage of kachcha household residents are using open field. The percentages variation in this regard is 92 percent to 99percent.

Several types of fuel are used for cooking in Bihar, with wood as the most common type. In the State as a whole, 49 percent of households rely mainly


Source : Field Survey
on wood according to NFHS - II. This story is true in all seven districts West Champaran ( 94 percent), Begusarai ( 90 percent), Muzaffarpur (77 percent), East Champaran ( 75 percent), Vaishali ( 66 percent), Samastipur ( 59 percent), and Sitamarhi (54 percent). However, in Darbhanga \& Purnia, other sources of fuel are used as a main source rather than wood among kachcha household residents.

### 2.6 Household Assets.

The possession of durable goods is another indicator of a household's socioeconomic level, although these goods may also have other benefits. For example, having access to a radio or television may expose households members to innovative ideas or important information about health and family welfare; a refrigerator prolongs the wholesomeness of food; a means of transportation allows greater access to many services outside the local area.

Table 2.6 presents the percent distribution of Kachcha household's assets in nine selected districts of Bihar. Table 2.6 shows that major means of transportation is bicycle among kachcha households residents in all selected nine districts of north Bihar. The percentage of household who are possessing bicycle varies from 27 percent to 61 percent. 61pecent household in Vaishali district owning bicycle after ward Samastipur (56 percent), Purnia (51 percent), Begusarai (47 percent), East Champaran ( 45 percent), Muzaffarpur ( 41 percent) and 39 percent in Darbhanga and Sitamarhi. A very least percentage, 27 percent household owning bicycle in West Champaran. In NFHS II bicycle owning households was 45 percent in composite Bihar.

After bicycle, second common asset among the Kachcha household resident is radio/transistor. Perhaps it is only media, which used by kachcha household resident for entertainment and for news about the world.

| Table 2.6 HOUSEHOLD ASSETS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Begusarai | Bettiah | Darbhanga | Motihari | Muzaffarpur | Purnia | Samastipur | Sitamarhi | Vaishali | Bihar |
| Characteristics |  |  |  |  |  |  |  |  |  |  |
| House holds assets |  |  |  |  |  |  |  |  |  |  |
| Fan | 2.0 | 3.1 | 2.2 | 2.0 | 3.6 | 2.5 | 5.2 | 1.9 | 4.9 |  |
| Radio/Transistor | 17.7 | 16.4 | 23.9 | 19.5 | 17.1 | 31.2 | 20.9 | 17.1 | 27.7 |  |
| Sewing machine | 3.6 | 3.8 | 4.1 | 2.3 | 3.7 | 3.9 | 5.2 | 2.4 | 6.0 |  |
| Television | 1.8 | 3.8 | 3.2 | 1.8 | 5.6 | 5.9 | 6.6 | 2.5 | 6.5 |  |
| Telephone | 0.7 | 6.8 | 0.8 | 1.9 | 0.4 | 0.8 | 1.0 | 0.9 | 2.7 |  |
| Bicycle | 47.0 | 27.3 | 38.7 | 45.1 | 40.9 | 51.1 | 55.9 | 38.6 | 60.7 |  |
| Motor cycle/Scooter | 1.8 | 10.6 | 1.2 | 2.0 | 1.8 | 1.0 | 2.0 | 1.9 | 2.9 |  |
| Car/Jeep | 0.1 | 3.2 | 0.0 | 0.3 | 0.2 | 0.0 | 0.1 | 0.0 | 0.3 |  |
| Tractor | 0.1 | 0.7 | 0.3 | 0.0 | 0.6 | 0.0 | 0.3 | 0.0 | 0.7 |  |

Source : Field Survey

38 percent household owning radio in Purnia district followed by Vaishali (28 percent), Darbhanga (24 percent), Samastipur (21 percent), East Champaran (20 percent), Begusarai (18 percent), 17 percent in Muzaffarpur and Sitamarhi. A very low percentage (16 percent) of households are owning radio in West Champaran.

## CHAPTER 3

## Population Explosion in Bihar

### 3.1 Population Growth

Table 3.1 provides details about population growth in Bihar in comparison to all India.

Table 3.1: Trend of Population in Bihar and India 1901-2001

| Year | India |  | Bihar* |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Population | Growth Rate | Population | Growth Rate |
| 1901 | 236281000 | 0.00 | 27314000 | 0.00 |
| 1911 | 252122000 | 5.73 | 28317000 | 3.67 |
| 1921 | 251352000 | -0.31 | 28129000 | -0.66 |
| 1931 | 279015000 | 11.01 | 31350000 | 11.45 |
| 1941 | 318701000 | 14.22 | 35174000 | 12.20 |
| 1951 | 361139000 | 13.31 | 38786000 | 10.27 |
| 1961 | 439235000 | 21.50 | 46456000 | 19.77 |
| 1971 | 547950000 | 24.80 | 56353000 | 21.33 |
| 1981 | 685185000 | 25.00 | 69915000 | 24.06 |
| 1991 | 846302000 | 23.51 | 80374000 | 23.54 |
| 2001 | 1027015247 | 21.34 | 82878796 | 28.43 |

* Upto 1991 the data relates to pre-divided Bihar

According to the Census, since 1971 Bihar has witnessed a decadal growth rate of over 20 percentage points. In fact the growth was around 10 percentage points during 1931 to 1951 and reached almost 20percentage points during 1961. As per the latest Census (2001) the decadal growth rate is over 28 percentage points.

The total population of pre-divided Bihar was 56 million in 1971, 70 million in 1981, and 86 million in 1991, accounting for 10 percent of the total population of India. The decadal growth rate increased from 21 percent for the period 1961-71 to 24 percent for 1971-81 and remained at 24 percent during 1981-91. The 1981-91 intercensal increase in population in Bihar ( 23.5 percent) was about the same as that for the country as a whole (23.9 percent). After the carving out of Jharkhand, Bihar now accounts for about 8 percent of total population of India. The decadal growth rate of Bihar is much higher as compared to all India during 1991-2001.

### 3.2 Fertility

Results on fertility indicators for Bihar and all India are presented in table 3.2.

Table 3.2: Fertility Indicators

| Indicators | Age <br> group | Total | Rural | Urban | Total | Rural | Urban |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |
|  |  | India |  |  | Bihar |  |  |  |
| Age specific fertility rates | $15-19$ | 46.1 | 52.5 | 25.4 | 50.5 | 53.2 | 27.9 |  |
|  | $20-24$ | 214.4 | 235.1 | 157.6 | 256.5 | 267.8 | 180.9 |  |
|  | $25-29$ | 171.3 | 180.4 | 147.2 | 228.4 | 230.5 | 211.7 |  |
|  | $30-34$ | 90.6 | 98.8 | 66.9 | 160.1 | 166.2 | 111.0 |  |
|  | $35-39$ | 44.1 | 50.5 | 25.8 | 86.3 | 90.1 | 56.4 |  |
|  | $40-44$ | 18.5 | 22.2 | 8.6 | 45.2 | 46.8 | 33.2 |  |
|  | $45-49$ | 6.8 | 7.8 | 3.9 | 16.2 | 17.2 | 8.7 |  |
|  |  |  |  |  |  |  |  |  |
| Age specific marital fertility rates | $15-19$ | 246.5 | 248.5 | 234.4 | 205.1 | 207.6 | 172.8 |  |
|  | $20-24$ | 326.2 | 331.5 | 306.3 | 333.3 | 336.6 | 303.8 |  |
|  | $25-29$ | 195.7 | 201.1 | 180.1 | 242.0 | 241.3 | 247.7 |  |
|  | $30-34$ | 97.1 | 105.0 | 73.3 | 164.4 | 170.2 | 116.8 |  |
|  | $35-39$ | 47.5 | 54.2 | 27.9 | 89.4 | 93.3 | 58.4 |  |
|  | $40-44$ | 20.6 | 24.6 | 9.5 | 48.3 | 50.2 | 35.0 |  |
|  | $45-49$ | 7.9 | 9.1 | 4.5 | 17.8 | 18.9 | 9.6 |  |
|  |  |  |  |  |  |  |  |  |
|  |  | 24.8 | 26.4 | 19.8 | 30.7 | 31.6 | 23.4 |  |
| Crude birth rate |  | 95.3 | 103.5 | 71.9 | 126.4 | 130.4 | 95.9 |  |
| General fertility rate | 3.0 | 3.2 | 2.2 | 4.2 | 4.4 | 3.1 |  |  |
| Total fertility rate | 1.4 | 1.5 | 1.0 | 1.9 | 2.0 | 1.5 |  |  |
| Gross reproduction rate |  |  | 132.6 | 141.0 | 106.4 | 166.7 | 170.2 | 137.3 |
| General marital fertility rate |  | 4.7 | 4.9 | 4.2 | 5.5 | 5.6 | 4.7 |  |
| Total marital fertility rate |  |  |  |  |  |  |  |  |

According to the Sample Registration System (SRS), fertility in Bihar continues to be high as compared to all India level. The crude birth rate for Bihar is 30.7 per 1,000 population as compared to 24.8 at all India level. The total fertility rate for Bihar is 4.2 children per woman as compared to 3 for all India. Other fertility indicators like Gross Reproduction Rate, General Marital Fertility Rate and Total Marital Fertility Rate are also higher for Bihar as compared to all India. The Age Specific Fertility Rates, in general are higher for Bihar as compared to all India, however, it is important to mention that in Bihar even at higher age groups (35 years and more) the Age Specific Fertility Rates are much higher, almost doubled, than that for all India.

The birth rate for Bihar continues to be higher as compared to all India levels. The decline in the birth rate has been slower in the State as compared to other States. Bihar has one of the highest birth rate next to U.P. in the country.

Table 3.2(a): Crude Birth Rate

| State | Rural | Urban | Combined |
| :--- | :---: | :---: | :---: |
| Bihar |  |  |  |
| 1995 | 33.1 | 23.8 | 32.1 |
| 2003 | 31.6 | 23.4 | 30.7 |
| All India |  |  |  |
| 1995 | 30.0 | 22.7 | 28.3 |
| 2003 | 26.4 | 19.8 | 24.8 |



The fairly rapid fall in TFR which has taken place between 1981 and 1991 could not be sustained by Bihar. In fact, after 1991 practically there has been no decline in fertility in the State. Regarding social indicators prevailing in Bihar, the literacy rate is only 49\%, IMR 66 and unmet needs for contraception 42.03. However, the most serious problem in Bihar seems to be the poor state of affairs of the primary health delivery system.

The number of sterilizations per 10,000 couples was 106 in 1999-2000. This has further declined to 37 during the next year. This is the lowest for any major State. As of now no clear strategy seems to be in place in Bihar to tackle the population problem. The State Population Commission and the State Population Policy under formulation should be able to give the required directions in this regard. The PRIs in Bihar appear to have become active after the elections to them sometime back. The elected PRIs should be able to play an important role in all developmental activities including the promotion of the small family norm. The first priority should be to make the primary health system functional by filling up gaps both of facilities and personnel and bringing about accountability. Then only the large unmet need for contraception existing in the State can be met.

According to the 2001 Census, the proportions of the total population designated as scheduled castes and scheduled tribes are lower in Bihar than in all of India. Bihar is one of the educationally backward States in India. According to the 2001 Census, the literacy rate among the population age seven and above was 47 percent, compared with 65 percent for India as a whole. The literacy rates were 60 percent for males and 33 percent for females in Bihar, compared with 76 percent and 54 percent for males and females, respectively, for India. The gap in literacy rates between males and females in Bihar is higher than the gap in India as a whole (Table 3.3).

### 3.3 Demography Profile of Bihar

Table 3.3 : Demographic Characteristics of Bihar and India, 2001.

| Characteristics | India | Bihar |
| :--- | :--- | :--- |
| Population (2001) |  |  |
| Total | $1,027,015,247$ | $82,878,796$ |
| Rural | $741,660,293$ | $74,199,596$ |
| Urban | $285,354,954$ | $8,679,200$ |
| Percentage Decadal Growth Rate | 21.34 | 28.43 |
| Literacy Rate |  |  |
| Persons | 65.3 | 47.5 |
| Male | 75.8 | 60.3 |
| Female | 54.1 | 33.5 |
| Crude birth rate |  |  |
| Total | 24.8 | 30.7 |
| Rural | 26.4 | 31.6 |
| Urban | 19.8 | 23.4 |
| Total fertility rate |  |  |
| Total | 3.0 | 4.2 |
| Rural | 3.2 | 4.4 |
| Urban | 2.2 | 3.1 |
| Infant Mortality Rate |  |  |
| Total | 60 | 60 |
| Rural | 66 | 62 |
| Urban | 38 | 49 |

The population density is much higher in Bihar than in India as a whole (497 compared with 273 persons per km2).

Bihar has been undergoing a slow process of urbanization. The level of urbanization in Bihar (13 percent) is much lower than for India as a whole ( 26 percent). The sex ratio in Bihar is lower than in India as a whole .

Mortality decline in Bihar also exhibits a similar pattern, i.e., a decline during the 1980s and stagnation during the 1990s. The crude death rate declined from 13.9 per 1,000 population in 1981 to 9.8 in 1991. The infant mortality rate declined from 118 per 1,000 live births in 1981 to 69 in 1991 a decline of 49 percent. The crude death rate and infant mortality rate in 1997 were 10.0 and 71, respectively, indicating no improvement since 1991.

The infant mortality rate estimated by the Sample Registration System for Bihar in 1997 was the same as that for India as a whole (i.e., 71 per 1,000 live births). This has declined to 61 for Bihar and 58 for all India as per SRS 2005. For 1996-2001, life expectancy is projected to be 65.6 years for males and 62.1 years for females, a substantial increase from the estimates of 55.2 years for males and 53.0 years for females in 1981.86. The couple protection rate (defined as the percentage of eligible couples effectively protected against pregnancy by various methods of contraception) in Bihar was 21 percent in 1997, compared with 6 percent in 1971. The couple protection rate in Bihar in 1997 was much lower than the 45 percent estimate for all India.

Table 3.3(a): Percentage decadal variation in population since 1901 for Bihar and Districts

| SL | State/District | Percentage decadal variation |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 1901- \\ 11 \end{gathered}$ | $\begin{gathered} 1911- \\ 21 \end{gathered}$ | $\begin{gathered} 1921- \\ 31 \end{gathered}$ | $\begin{gathered} 1931- \\ 41 \end{gathered}$ | $\begin{gathered} 1941- \\ 51 \\ \hline \end{gathered}$ | $\begin{gathered} 1951- \\ 61 \end{gathered}$ | $\begin{array}{\|c} \hline 1961- \\ 71 \\ \hline \end{array}$ | $\begin{gathered} 1971- \\ 81 \end{gathered}$ | $\begin{gathered} 1981- \\ 91 \end{gathered}$ | $\begin{gathered} 1991- \\ 01 \end{gathered}$ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  | Bihar State | 1.52 | -0.97 | 9.74 | 12.22 | 10.58 | 19.79 | 20.91 | 24.16 | 23.38 | 28.43 |
| 1. | West Champaran | 6.59 | 1.70 | 10.55 | 11.74 | 4.91 | 23.68 | 19.76 | 24.30 | 18.30 | 30.40 |
| 2. | East Champaran | 6.59 | 1.70 | 10.55 | 11.74 | 4.91 | 16.42 | 16.36 | 24.00 | 25.46 | 29.27 |
| 3. | Sheohar | 3.24 | -3.18 | 6.75 | 10.32 | 8.51 | 13.26 | 13.27 | 17.29 | 27.34 | 36.16 |
| 4. | Sitamarhi | 3.24 | -3.18 | 6.75 | 10.32 | 8.51 | 15.91 | 14.27 | 22.99 | 23.13 | 32.58 |
| 5. | Madhubani | 0.59 | -0.55 | 8.67 | 9.19 | 9.04 | 17.58 | 18.18 | 22.93 | 21.76 | 26.08 |
| 6. | Supaul | 3.09 | -3.44 | 5.81 | 0.78 | 15.94 | 50.53 | 28.83 | 27.28 | 23.45 | 29.95 |
| 6. <br> 8. | Araria | 7.46 | 6.78 | 8.16 | 8.86 | 6.13 | 45.01 | 27.58 | 27.91 | 26.69 | 31.84 |
| 8. | Kishanganj | 7.46 | 6.78 | 8.16 | 8.86 | 6.13 | 36.72 | 34.60 | 30.15 | 22.20 | 31.50 |
| 9. | Purnia | 7.46 | 6.78 | 8.16 | 8.86 | 6.13 | 36.90 | 26.92 | 27.42 | 23.76 | 35.23 |
| 10. | Katihar | 7.46 | 6.78 | 8.16 | 8.86 | 6.13 | 31.09 | 24.80 | 25.65 | 27.77 | 30.91 |
| 11. | Madhepura | 3.09 | -3.44 | 5.81 | 0.78 | 15.94 | 21.46 | 20.57 | 24.28 | 22.16 | 29.45 |
| 12. | Saharsa | 3.09 | -3.44 | 5.81 | 0.78 | 15.94 | 21.24 | 23.88 | 25.07 | 25.54 | 33.03 |
| 13. | Darbhanga | 0.59 | -0.55 | 8.67 | 9.19 | 9.04 | 16.27 | 21.30 | 23.75 | 25.04 | 30.85 |
| 14. | Muzaffarpur | 3.24 | -3.18 | 6.75 | 10.32 | 8.51 | 16.06 | 19.44 | 23.48 | 25.30 | 26.74 |
| 15. | Gopalganj | -4.97 | 2.20 | 6.26 | 15.03 | 10.30 | 12.62 | 19.50 | 22.99 | 25.12 | 26.11 |
| 16. | Siwan | -4.97 | 2.20 | 6.26 | 15.03 | 10.30 | 12.61 | 20.51 | 21.67 | 22.04 | 24.78 |
| 17. | Saran | -4.97 | 2.20 | 6.26 | 15.03 | 10.30 | 15.20 | 18.13 | 21.91 | 23.44 | 26.37 |
| 18. | Vaishali | 3.24 | -3.18 | 6.75 | 10.32 | 8.51 | 20.22 | 19.05 | 23.24 | 29.08 | 26.39 |
| 19. | Samastipur | 0.59 | -0.55 | 8.67 | 9.19 | 9.04 | 17.25 | 16.61 | 23.14 | 28.35 | 25.63 |
| 20. | Begusarai | 3.13 | -4.91 | 12.60 | 13.05 | 10.52 | 20.20 | 20.23 | 26.92 | 24.61 | 29.11 |
| 21. | Khagaria | 3.13 | -4.91 | 12.60 | 13.05 | 10.52 | 21.96 | 18.57 | 19.88 | 28.44 | 29.32 |
| 22. | Bhagalpur | 1.70 | -6.70 | 15.24 | 14.28 | 12.25 | 21.52 | 22.31 | 26.58 | 20.67 | 27.24 |
| 23. | Banka | 1.70 | -6.70 | 15.24 | 14.28 | 12.25 | 17.19 | 22.06 | 23.54 | 24.44 | 24.47 |
| 24. | Munger | 3.13 | -4.91 | 12.60 | 13.05 | 10.52 | 18.60 | 18.27 | 21.86 | 17.79 | 20.34 |
| 25. | Lakhisarai | 3.13 | -4.91 | 12.60 | 13.05 | 10.52 | 11.41 | 24.63 | 21.53 | 21.08 | 23.94 |
| 26. | Sheikhpura | 3.10 | -4.89 | 12.64 | 13.08 | 10.58 | 16.89 | 19.59 | 18.94 | 19.84 | 24.96 |
| 27. | Nalanda | -0.96 | -1.98 | 17.10 | 16.14 | 17.89 | 17.36 | 20.04 | 25.68 | 21.73 | 18.64 |
| 28. | Patna | -0.96 | -1.98 | 17.10 | 16.14 | 17.89 | 16.34 | 20.90 | 34.13 | 19.84 | 30.17 |
| 29. | Bhojpur | -4.96 | -2.62 | 9.88 | 16.81 | 15.45 | 16.05 | 20.46 | 21.19 | 20.26 | 24.58 |
| 30. | Buxar | -4.96 | -2.62 | 9.88 | 16.81 | 15.45 | 18.49 | 20.30 | 19.84 | 18.63 | 29.03 |
| 31. | Kaimur | -4.96 | -2.62 | 9.88 | 16.81 | 15.45 | 20.81 | 24.87 | 19.23 | 24.20 | 30.64 |


| 32. | Rohtas | -4.96 | -2.62 | 9.88 | 16.81 | 15.45 | 23.28 | 25.65 | 23.03 | 21.77 | 27.71 |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 33. | Jehanabad | 4.81 | -0.37 | 10.94 | 16.20 | 10.63 | 17.21 | 20.37 | 19.70 | 19.43 | 28.64 |
| 34. | Aurangabad | 4.81 | -0.37 | 10.94 | 16.20 | 10.63 | 19.38 | 22.28 | 21.75 | 24.49 | 30.19 |
| 35. | Gaya | 4.81 | -0.37 | 10.94 | 16.20 | 10.63 | 18.20 | 23.92 | 24.62 | 23.92 | 30.03 |
| 36. | Nawada | 4.81 | -0.37 | 10.94 | 16.20 | 10.63 | 20.84 | 20.54 | 22.96 | 23.70 | 33.08 |
| 37. | Jamui | 3.13 | -4.91 | 12.60 | 13.05 | 10.52 | 20.51 | 24.38 | 20.86 | 21.90 | 32.90 |

Table 3.3(a) shows the district-wise decadal variation in population since 1901. It is observed from table that the growth rate has shown very wide fluctuations in the districts over the decades. During 1901-11, while the State and most of its districts have shown an increase in growth rate of their population, the districts of Patna, Nalanda, Bhojpur, Buxar, Kaimur, Rohtas, Saran, Siwan and Gopalganj have shown a decrease in their population size although the decrease has been very nominal in case of Patna and Nalanda. During 1911-21, when the population of the State and most of the districts decreased, there was an increase in population in Saran, Siwan, Gopalganj, West Champaran, East Champaran, Purnia, Katihar, Araria and Kishanganj districts of north Bihar. From the decade 1921-31 onwards, no district in the State registered a negative growth rate, i.e. decline in population, although fluctuations were noticed in the population growth rate among the districts in all the succeeding decades. From the decade 1951-61, almost all the districts had started showing substantial increase in the growth rate of population. In the decade 1991-2001, as many as 22 districts have recorded population growth rate higher than the state average (28.43\%) among which the newly created district of Sheohar ranks first (36.16\%).

### 3.4 Poverty

The percentage of persons below poverty line for Bihar as compared to all India are as under:

Table 3.4: Percentage of persons below poverty line, 1999-2000

| State | Rural | Urban | Combined |
| :--- | :---: | :---: | :---: |
| Bihar | 44.3 | 32.9 | 42.6 |
| All India | 27.1 | 23.6 | 26.1 |

Source: Planning Commission, India

It would appear that Poverty ratio in Bihar is one and half times as compared to all India level. Further, Bihar is next to Orissa in terms of maximum poverty in the country.

Table 3.4(a): Per Capita Income

| State | Per capita income (Rs.) |
| :--- | :---: |
| Bihar | 1010 |
| All India | 1749 |

The per capita income of Bihar is Rs 1010 per month, which is around $60 \%$ of all India level.

## Per Capita Expenditure

Table 3.4(b): Per Capita Monthly Consumption Expenditure (Rs.), 2006

| State | Rural |  |  | Urban |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Food | Non-Food | Total | Food | Non-Food | Total |
| Bihar | 270.26 | 146.85 | 417.11 | 356.01 | 340.26 | 696.27 |
| All India | 307.60 | 251.19 | 558.78 | 447.41 | 604.95 | 1052.36 |

The per capita income and expenditure in Bihar have remained much lower around 70\% of all India level and continuous to be so even at present.

## CHAPTER - 4

## BUDGETARY ALLOCATION OF FUNDS AND THEIR UTILISATION FOR HEALTH SERVICES

In this Chapter, we present a detailed analysis of data collected on Budgetary Allocation of funds and their utilisation for General Health and RCH services in the States of Bihar and Jharkhand, Concerted efforts were made to collect information on these aspects from the Health Department of the concerned State Government and other available sources.

### 4.1 Health Budget Utilisation

We had planned to collect secondary data on health services since the beginning of the First Five Year Plan (1951). In spite of our very sincere and pains taking efforts, we did not succeed in collecting all relevant data for all the years. We visited various Regional Offices and District Headquarters to collect secondary data as far as possible. The details of allocation of funds and their utilisation for general health have been presented in Table-4.1.

Table - 4.1
Allocation of Budget and its utilisation for General Health in Bihar

| Year | Allocation (Rs. in lakhs) | Utilisation (Rs. in lakhs) | Percentage Utilization |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 2003-2004 | 8238.79 | $\begin{gathered} 5251.45 \\ \text { (upto Jan.’04) } \end{gathered}$ | 63.74 |
| 2002-2003 | 8794.65 | 8189.76 | 93.12 |
| 2001-2002 | 7429.39 | 7114.23 | 95.75 |
| 2000-2001 | 6511.75 | 6073.69 | 93.27 |
| 1999-2000 | 6919.34 | 8257.16 | 119.33 |
| 1998-1999 | 8466.00 | 5087.14 | 60.08 |
| 1997-1998 | 4715.00 | 3953.20 | 83.83 |
| 1996-1997 | 673.21 | NA |  |
| 1995-1996 | 4022.48 | NA |  |
| 1994-1995 | 2708.93 | 865.23 | 31.93 |
| 1993-1994 | 634.00 | 319.90 | 50.47 |
| 1992-1993 | 610.44 | 150.00 | 24.59 |
| 1991-1992 | 600.00 | 16.84 | 2.83 |
| 1990-1991 | 500.00 | 9.36 | 1.8 |
| 1989-1990 | 1992.00 | 1734.41 | 87.04 |
| 1988-1989 | 2776.36 | 902.56 | 32.49 |
| 1987-1988 | 1790.00 | 1770.73 | 98.93 |
| 1986-1987 | 1303.53 | NA |  |
| 1985-1986 | 7650.00 | NA |  |
| 1984-1985 | 4145.96 | 2583.34 | 62.30 |
| 1983-1984 | 1987.00 | NA |  |


| Year | Allocation (Rs. in lakhs) | Utilisation (Rs. in lakhs) | Percentage Utilization |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 1982-1983 | 1981.00 | NA |  |
| 1981-1982 | 2698.14 | 2731.66 | 101.26 |
| 1980-1981 | 1430.00 | 1430.00 | 100.00 |
| 1979-1980 | 218.23 | NA |  |
| 1978-1979 | 142.00 | NA |  |
| 1977-1978 | 229.00 | NA |  |
| 1976-1977 | 167.79 | NA |  |
| 1975-1976 | 245.75 | NA |  |
| 1974-1975 | 1430.97 | NA |  |
| 1973-1974 | 116.72 | NA |  |
| 1972-1973 | 583.79 | NA |  |
| 1971-1972 | 405.90 | 273.68 | 67.48 |
| 1970-1971 | 2928.90 | 1710.00 | 58.38 |
| 1969-1970 | 227.87 | 156.39 | 68.42 |
| 1968-1969 | 157.81 | 113.89 | 72.15 |
| 1967-1968 | 109.82 | 95.31 | 86.36 |
| 1966-1967 | 254.90 | 254.90 | 100.00 |
| 1965-1966 | 720.81 | 525.00 | 72.81 |
| 1964-1965 | 144.57 | NA |  |
| 1963-1964 | 566.62 | NA |  |
| 1962-1963 | 550.60 | NA |  |
| 1961-1962 | 450.52 | NA |  |
| 1960-1961 | 368.15 | NA |  |
| 1959-1960 | 360.86 | 340.72 | 94.45 |
| 1958-1959 | 318.52 | 290.42 | 90.90 |
| 1957-1958 | 359.91 | NA |  |


| Year | Allocation <br> (Rs. in lakhs) | Utilisation <br> (Rs. in lakhs) | Percentage <br> Utilization |
| :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| $1956-1957$ | 533.87 | NA |  |
| $1955-1956$ | 206.20 | NA |  |
| $1954-1955$ | 165.18 | NA |  |
| $1953-1954$ | 053.55 | 020.01 | 37.03 |
| $1952-1953$ | 053.51 | NA |  |
| $1951-1952$ | 131.00 | NA |  |

Sources:

1) Govt. of Bihar, Health Department, Annual Reports.
2) Govt. of Bihar - Budget Figures.
3) Govt. of Bihar : Affiliated Offices/ Centres of Health Services.

After careful perusal of figures presented above, it is evident that fund allocated for the general health was not fully utilised in many years. The only exception is in year 1999-2000 which recorded fund utilisation of 119.33\%.

It is evident from the above table utilisation of fund for general health in undivided Bihar was far from satisfactory and this trend compares very unfavourably with the all-India trend during the corresponding period.

### 4.2 Budget Allocation by Different States for Family Welfare

For Family Welfare Programmes, the allocation for Bihar is much less in relation to its size. This is evident from Table 4.2.

Table - 4.2: State-wise Expenditure on Family Welfare Programme from 1992-93 to 1996-97 and Allocation for 1997-98
(Rs. In lakhs)

| Sl <br> No | States | $1992-93$ | $1993-94$ | $1994-95$ | $1995-96$ | $1996-97$ | Allocation <br> $1997-98$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | A. P. | 7316.54 | 9139.67 | 1210.95 | 10653.03 | 17712.42 | 5473.17 |
| 2 | Assam | 1754.64 | 2299.50 | 2583.89 | 2888.43 | 4255.16 | 2929.77 |
| 3 | Bihar | 6914.11 | 7435.86 | 7656.86 | 7644.86 | 8633.45 | 9112.84 |
| 4 | Gujarat | 4942.94 | 6057.38 | 6945.01 | 6588.77 | 12193.54 | 5240.23 |
| 5 | Haryana | 2322.01 | 2800.81 | 2507.91 | 2478.46 | 2521.79 | 2628.48 |
| 6 | Karnataka | 4158.06 | 4515.54 | 5009.10 | 6153.92 | 6792.05 | 4541.77 |
| 7 | Kerala | 3100.44 | 3815.43 | 4576.72 | 6073.93 | 2525.55 | 2968.45 |
| 8 | M. P. | 6325.25 | 8155.46 | 7962.00 | 6801.06 | 8276.55 | 6516.78 |
| 9 | Maharashtra | 8367.25 | 9510.43 | 10754.11 | 11969.08 | 11298.97 | 7260.96 |
| 10 | Orissa | 3486.35 | 2465.07 | 6478.01 | 4666.21 | 3803.54 | 3523.44 |
| 11 | Punjab | 3247.65 | 3553.01 | 3591.32 | 2057.08 | 1931.09 | 1862.29 |
| 12 | Rajasthan | 5002.37 | 5439.35 | 5253.07 | 8022.74 | 10232.67 | 5110.99 |
| 13 | Tamil Nadu | 6523.94 | 4790.10 | 2525.19 | 7441.58 | 4186.45 | 8255.82 |
| 14 | U.P. | 14526.10 | 19945.65 | 19788.69 | 23299.55 | 22597.63 | 15715.18 |
| 15 | West Bengal | 5841.06 | 6317.42 | 5586.72 | 6099.92 | 7898.90 | 4922.31 |
| 16 | Arunachal | 58.09 | 67.90 | 95.21 | 115.32 | 131.81 | 147.51 |
|  | Pradesh | Goa | 94.77 | 100.06 | 109.38 | 132.34 | 164.25 |
| 17. | 1364.48 | 2188.34 | 1575.70 | 1548.64 | 2143.07 | 111.27 |  |
| 18 | Himachal |  |  |  |  |  |  |
|  | Pradesh |  |  |  |  |  |  |


| 19 | J \& K | 1222.58 | 1295.31 | 1052.90 | 1101.90 | 1385.99 | 1836.12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 20 | Manipur | 478.49 | 347.96 | 383.07 | 475.76 | 388.44 | 448.50 |
| 21 | Meghalaya | 234.41 | 275.38 | 276.47 | 362.56 | 404.18 | 296.36 |
| 22 | Mizoram | 159.91 | 167.35 | 190.30 | 177.57 | 208.08 | 219.71 |
| 23 | Nagaland | 229.21 | 256.58 | 259.92 | 280.58 | 330.99 | 207.82 |
| 24 | Sikkim | 190.37 | 266.25 | 250.61 | 349.80 | 314.04 | 217.90 |
| 25 | Tripura | 556.94 | 340.21 | 386.74 | 768.31 | 915.07 | 405.34 |
|  | Total : <br> States: <br> Amount <br> unallocated | 88417.96 | 101546.02 | 109309.85 | 118151.40 | 134246.50 | 91120.55 |
|  | UTs: | 566.82 | 695.53 | 1262.22 | 823.60 | 985.76 | 2544.70 |
|  | Central Sector: | 6491.84 | 7143.53 | 7498.83 | 8515.92 | 22385.45 | 42012.40 |
|  | Cost of Supplies | 13563.38 | 21877.20 | 35416.73 | 34349.49 | 37038.70 | 36480.00 |
|  | Grand Total | 109040.00 | 131262.28 | 153487.63 | 161840.41 | 194656.41 | 182935.00 |

Source : Ministry of Health \& Family Welfare, Deptt. of Family Welfare, Govt. of
India.

### 4.3 Budgetary Allocation under Health Sector during $10^{\text {th }}$ Plan (2002-2007)

Following table presents allocation for health sector under $10^{\text {th }}$ plan for Bihar in comparison to all India.

Table 4.3: Budgetary Allocation under Health Sector

| State | Rs. (in Lacs) |
| :---: | :---: |
| Bihar | 107920 |
| All India | 2176734 |

It would appear that the allocation for Bihar is less than 5 percent of the total allocation under health sector, where as the State accounts for about 10 percent of population in the country. In fact, the actual expenditures and R.E.s has been still lower 2.5\%-3\% of all India.

### 4.4 Utilization of Funds for Diseases Specific to Bihar

## Kalazar

The budget allocation and utilisation concerning Kalazar which has been a peculiar disease in the state and has been presented in Table 4.4.

Table 4.4 Budget allocation and its utilisation for KALAZAR in Bihar

| Year | Allocation <br> (Rs. in lakhs) | Utilisation <br> (Rs. in lakhs) | Percent <br> Utilisation |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| $2003-2004$ | 167.82 | NA |  |
| $2002-2003$ | 545.90 | NA |  |
| $2001-2002$ | 509.52 | 13.83 | 2.74 |
| $2000-2001$ | 650.00 | NA |  |
| $1999-2000$ | 617.10 | 329.19 | 53.32 |
| $1998-1999$ | 657.10 | 260.53 | 39.72 |
| $1997-1998$ | 526.10 | 476.31 | 90.49 |
| $1996-1997$ | NA | NA |  |
| $1995-1996$ | 700.00 | NA |  |
| $1994-1995$ | 289.51 | 286.23 | 98.78 |
| $1993-1994$ | 195.10 | 14.58 | 7.69 |


| $1992-1993$ | 260.53 | 13.85 | 5.36 |
| :---: | :---: | :---: | :---: |
| $1991-1992$ | 329.19 | 185.63 | 56.53 |
| $1990-1991$ | 195.10 | 14.58 | 7.69 |
| $1989-1990$ | 250.00 | NA |  |
| $1988-1989$ | 246.00 | NA |  |
| $1980-1981$ | 47.28 | NA |  |
| $1978-1979$ | 0.60 | NA |  |
| $1957-1958$ | 0.16 | NA |  |
| $1956-1957$ | -0.42 | NA |  |
| $1954-1955$ | 0.96 | NA |  |

## Sources:

1) Govt. of Bihar: Office of the Deputy Director, Malaria.
2) Govt. of Bihar: Annual Reports
3) Govt. of Bihar: Budget Figures

It is evident from the figures presented in Table 4.4 that fund allocated for Kalazar was meager in view of the dangerous consequences of this disease. It is pity that even the meager amount was not fully utilised for all the years. During 1994-95 utilisation was satisfactory with $98.78 \%$ level. However, only half of the allocated fund was utilized during 1991-92, 1998-99, and 1999-2000.

The number of Kalazar patients and the resulting death during the year 1974 to 2003 has been presented in Table 4.5. This also gives a realistic picture of Morbidity so far as Kalazar is concerned.

Tale - 4.5 Details of Kalazar Patients and the resulting Death: Bihar

| Year | Number of <br> Patients | Number of Death | Col.3 as \% of <br> Col. 2 |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 2003 | 13094 | 187 | 1.42 |
| 2002 | 9684 | 160 | 1.65 |
| 2001 | 10387 | 204 | 1.96 |
| 2000 | 13076 | 131 | 1.00 |
| 1999 | 11627 | 277 | 2.38 |
| 1998 | 12411 | 215 | 1.73 |
| 1997 | 15948 | 251 | 1.57 |
| 1996 | 25055 | 674 | 2.69 |
| 1995 | 21045 | 259 | 1.23 |
| 1994 | 24371 | 379 | 1.55 |
| 1993 | 75523 | 1417 | 1.59 |
| 1992 | 59640 | 83 | 1.87 |
| 1991 | 30879 | 475 | 0.14 |
| 1990 | 19267 | 121 | 1.00 |
| 1989 |  |  | 1.53 |
| 1988 | 24650 | 0.62 |  |
|  |  |  |  |

Table 4.5 contd.

| Year | Number of <br> Patients | Number of Death | Col.3 as \% of <br> Col. 2 |
| :---: | :---: | :---: | :---: |
| 1987 | 19178 | 77 | 0.40 |
| 1986 | 14079 | 48 | 0.34 |
| 1985 | 13030 | 35 | 0.26 |
| 1984 | 12983 | 67 | 0.51 |
| 1983 | 11831 | 128 | 1.08 |
| 1982 | 11120 | 35 | 0.31 |
| 1981 | 14115 | 35 | 0.24 |
| 1980 | 13620 | 23 | 0.16 |
| 1979 | 25172 | 28 | 0.11 |
| 1978 | 41953 | 62 | 0.14 |
| 1977 | 18589 | 229 | 1.23 |
| 1976 | 63923 | 20 | 0.03 |
| 1975 | 56737 | 22 | 0.03 |
| 1974 | 40321 | 18 | 0.04 |

Source: Govt. of Bihar : Health Department

It is observed that the number of Kalazar deaths increased significantly during the year 2000-2001 from 131 cases in 2000 to 204 cases in 2001. It is interesting to note in this connection that during the period, particularly during the year 2001-2002, utilization of fund was only $2 \%$ of allocated budget on Kalazar whereas the number of Kalazar patients increased significantly. The World Health Organisation report corroborates this alarming trend of Kalazar patients in North Bihar.

The situation is worse in remote and interior areas of North Bihar districts.

Table 4.6 gives a Block-wise and District-wise position of Kalazar patients and the resulting death in the State of Bihar (bifurcated Bihar) during 2003.

Table 4.6: Kalazar Control Programme: Monthly Kalazar Patients Report April -2003

| $\begin{gathered} \text { Sl. } \\ \text { No. } \end{gathered}$ | Name of District | Name of Blocks |  | No. of <br> Patients | Death | Treated | Under <br> Treatment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Affected |  |  |  |  |
| 1 | Muzaffarpur | 14 | 14 | 254 | 2 | 159 | 134 |
| 2 | Madhepura | 7 | 9 | 171 | 0 | 89 | 73 |
| 3 | Purnea | 11 | 7 | 220 | 0 | 132 | 87 |
| 4 | Vaishali | 11 | 11 | 79 | 1 | 43 | 104 |
| 5 | East <br> Champaran | 20 | 15 | 131 | 3 | 101 | 90 |
| 6 | Araria | 9 | 5 | 470 | 0 | 326 | 106 |
| 7 | Saharsa | 7 | 7 | 77 | 0 | 0 | 108 |
| 8 | Madhepura | 18 | 14 | 53 | 1 | 53 | 67 |
| 9 | Saran | 15 | 12 | 39 | 0 | 19 | 17 |
| 10 | Darbhanga | 12 | 11 | 83 | 0 | 24 | 98 |
| 11 | Katihar | 11 | 9 | 277 | 19 | 155 | 83 |
| 12 | Supaul | 9 | 4 | 39 | 0 | 13 | 43 |
| 13 | Samastipur | 14 | 9 | 6 | 0 | 6 | 29 |

Table 4.6 contd......

| $\begin{aligned} & \text { Sl. } \\ & \text { No } \end{aligned}$ | Name of District | Name of Blocks |  | No. of <br> Patients | Death | Treated | Under <br> Treatment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Affacted |  |  |  |  |
| 14 | Sitamarhi | 13 | 7 | 47 | 3 | 28 | 22 |
| 15 | Patna | 16 | 12 | 20 | 1 | 25 | 19 |
| 16 | Kishanganj | 7 | 4 | 9 | 0 | 5 | 5 |
| 17 | Siwan | 15 | 1 | 1 | 0 | 0 | 1 |
| 18 | West <br> Champaran | 18 | 7 | 33 | 0 | 19 | 14 |
| 19 | Begusarai | 11 | 4 | 16 | 0 | 3 | 16 |
| 20 | Khagaria | 6 | 2 | 160 | 0 | 29 | 46 |
| 21 | Nalanda | 12 | 5 | 11 | 1 | 9 | 10 |
| 22 | Bhagalpur | 11 | 3 | 3 | 0 | 4 | 3 |
| 23 | Bhojpur | 12 | 3 | 4 | 0 | 2 | 4 |
| 24 | Gopalganj | 10 | 2 | 10 | 0 | 16 | 10 |
| 25 | Sheohar | 3 | 2 | 15 | 0 | 0 | 4 |
| 26 | Jehanabad | 7 | 2 | 15 | 0 | 15 | 0 |
| 27 | Buxar | 7 | 1 | 3 | 0 | 0 | 3 |
| 28 | Munger | 6 | 0 | 0 | 0 | 0 | 0 |
| 29 | Sheikhpura | 3 | 0 | 0 | 0 | 0 | 0 |

Source: Govt. of Bihar: Health Department

The situation continues to be alarming and it calls for proper coordination and concerted action at various levels.

Thus, there is a issue of Governance in the State. The utilization of allocated funds in the State for general health, family welfare and Kalazar requires to be improved in near future for a dent and reversing the trend in the desired direction.

## Graphical presentation of Budget Allocation and Utilisation for "General Health" in Bihar from 1999-2000 to 2003-2004

(Rs. in Lakh)


## Graphical presentation of Budget Allocation and Utilisation for "Kala-Zar" in Bihar from 1997-1998 to 2003-2004

(Rs. in Lakh)


Note : 1) Year - 2000-2001 and 2002-2003, no separate allocation
2) 0 - Not available

## Report of "Kala-Zar" Patients in Bihar from 1999 to 2003

Number of Patients and Death


Graphical presentation of Budget Allocation and Utilization for "Tuberculosis" in Bihar from 1998-1999 to 2002-2003
(Rs. in Lakh)


Note: 0-Not available

## Report of "Tuberculosis" Patients in Bihar from 1999 to 2003

Number of Patients


## Graphical presentation of Budget Allocation and Utilization

 for "Malaria" in Bihar from 1998-1999 to 2002-2003(Rs. in Lakh)


## Report of "Malaria" Patients in Bihar from 1999 to 2003

## Number of Patient and Death



## Report of "Leprosy" Patient in Bihar from 1998 to 2002

Number of Patients


## Graphical presentation of Budget Allocation and Utilisation for "Filaria" in Bihar from 1998-1999 to 2003-2004

(Rs. in Lakh)


Note : Year - 1999-2000 data not available.

## Report "Filaria" Patient in Bihar from 1999 to 2003

Number of Patients


## CHAPTER - 5

## HEALTH SCENARIO IN BIHAR

This chapter presents an analysis of health infrastructure in the State along with trends in RCH indicators for Bihar. The latest data from Rural Health Statistics, GoI, and District Level Household Survey (DLHS) under RCH-2 for all districts of Bihar were especially procured for use in the analysis.

### 5.1 Health Infrastructure

The details on the primary health care infrastructure in the State as well as the number of SCs, PHCs and CHCs required and the shortfall as per 2001 rural population at Bihar and all India level is indicated below :

Table 5.1: Existing Health Infrastructure and Shortfall in Bihar

| Name | Total population in rural areas | Tribal population in rural areas | Sub Centre |  |  | PHCs |  |  | CHCs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | R | P | S | R | P | S | R | P | S |
| Bihar | 74316709 | 717702 | 14959 | 10337 | 4622 | 2489 | 1648 | 841 | 622 | 101 | 521 |
| India | 742490639 | 77338597 | 158792 | 146026 | 19269 | 26022 | 23236 | 4337 | 6491 | 3346 | 3206 |

R: Required; P: in Position; S: Shortfall

On the basis of 2001 population, the shortage of SCs is 4622 , PHCs 841 and CHCs 521.

The existing infrastructure is not adequate if we take into account the Census 2001 population.

Whereas Bihar accounts for about 8 percent of India's rural population, the shortfall in sub health centres in Bihar is nearly one-fourth of total shortfall in the country. In terms of shortfalls in PHCs and CHCs, Bihar accounts for 20 percent and 16 percent of total shortfall in the country.

There is also non-availability of doctors and ANMs apart from the problem of such functionaries not attending to their duties. There has been a serious deterioration in the family planning performance in the State especially during the last two years.

Apart from large gaps in infrastructure and human resources, the available SCs, PHCs etc. are also not functioning satisfactorily due to various administrative reasons.

The average population covered by different health facilities in Bihar vis.-a-vis all India is presented below in table 5.2

Table 5.2 Average Population Covered by Health Facility

| Facility | Bihar | India |
| :--- | :--- | :--- |
| Sub-Centres | 7189 | 5085 |
| PHCs | 45095 | 31954 |
| CHCs | 735809 | 221904 |

Bihar is the only State in the country covering more than 7000 population per sub centre. There are two States in the country wherein a Primary Health Centre covers a population of more than 45000 and Bihar is one of these two States in this category. Also, there are two States in the country where a Community Health Centre covers more than 7 lacs population and Bihar is one of these two States. Thus, Bihar has one of the poorest health infrastructure in the country.

Presence of health facilities and services in villages of Bihar as compared to India is presented in Table 5.3.

Table-5.3 : Facilities/Services in Villages (\%)

|  |  |  |
| :--- | :---: | :---: |
| Facility/Services | Bihar | India |
| Anganwadi | 39.8 | 63.8 |
| Primary Health Centre | 13.1 | 12.9 |
| Sub-Centre | 28.0 | 32.3 |
| Hospital | 5.9 | 9.6 |
| Dispensary/clinics | 9.4 | 28.3 |
| Private Doctor | 32.5 | 41.9 |

About $28 \%$ of villages in Bihar had a sub-centre as compared to $32 \%$ in all India. Availability of private doctor was $32 \%$ in Bihar as against $42 \%$ all over India. Dependence of patients on government health services is much more in the State and therefore the responsibility of the State increases to that extent as well as the load factor is also likely to be much higher. It is possible that in the absence of private doctors, people are compelled to seek medical care from quacks and traditional healers. This aspect needs to be addressed in the programme interventions.

Distance from the health facility is an area of concern in Bihar, the results on the same is presented in Table 5.4

Table 5.4 Distance from the nearest health facility, 1998-99

| BIHAR |  |  |  |
| :--- | :---: | :---: | :---: |
| Distance | Primary Facility <br> Health Centre | Sub- <br> Centre | Any Health <br> Facility |
| Within Village | 13.1 | 28.5 | 34.2 |
| $<5 \mathrm{~km}$ | 31.1 | 41.8 | 44.3 |
| $5-9 \mathrm{~km}$ | 28.5 | 17.8 | 13.4 |
| $10+\mathrm{km}$ | 27.3 | 11.9 | 8.0 |
| Total Percent | 100 | 100 | 100 |
| Median Distance <br> (in km) | 5.6 | 2.6 | 1.9 |

## INDIA

| Within Village | 13.1 | 33 | 47.4 |
| :--- | :---: | :---: | :---: |
| $<5 \mathrm{~km}$ | 28.4 | 39.7 | 38.9 |
| $5-9 \mathrm{~km}$ | 29.2 | 16.3 | 9.7 |
| $10+\mathrm{km}$ | 28.8 | 9.6 | 3.9 |
| Total Percent | 100 | 100 | 100 |
| Median Distance (in km) | 4.9 | 1.3 | 0 |

The median distance of a sub-centre in Bihar is double than that of the corresponding distances at all India level. Similarly, the median distance of a Primary Health Centre in Bihar is also more than that of the distances at all India level.

This implies that patients reaching government health facilities have to make additional effort in terms of time and money spent to reach government health facilities and in case services are not available due to any reason, the hardship case is much more and the likelihood of loosing these patients to quacks or resulting in complications and serious repercussions for them.

### 5.2 Development Index of Bihar in comparison to other States

Ranking of Bihar on the basis of a Composite index based on 13 socioeconomic and RCH indicators is presented in Table 5.5.

Table-5.5 Ranking of State/UTs on the basis of composite index

| State | Composite Index | Rank |
| :--- | :---: | :---: |
| Goa | 83.71 | 1 |
| Pondicherry | 82.7 | 2 |
| Kerala | 81.88 | 3 |
| Chandigarh | 79.68 | 4 |
| Tamil Nadu | 78.06 | 5 |
| Delhi | 78.01 | 6 |
| Punjab | 73.88 | 7 |


| Karnataka | 70.31 | 8 |
| :--- | :---: | :---: |
| Himachal Pradesh | 70.02 | 9 |
| Lakshadweep | 69.81 | 10 |
| Mizoram | 69.24 | 11 |
| Daman \& Diu | 68.95 | 12 |
| Harayana | 66.8 | 13 |
| Maharastha | 65.58 | 14 |
| Gujrarat | 65.22 | 15 |
| Andhra Pradesh | 65.13 | 16 |
| Tripura | 64.17 | 17 |
| Andaman \& Nicobar | 63.89 | 18 |
| Uttaranchal | 60.52 | 19 |
| West Bengal | 59.58 | 20 |
| Sikkim | 58.64 | 21 |
| Assam | 55.35 | 22 |
| Chhatisgarh | 55.44 | 23 |
| Orrisa | 54.01 | 24 |
| Manipur | 51.97 | 25 |
| Dadra \& Nagar Haveli | 50.51 | 26 |
| Megalaya | 49.33 | 27 |
| Madhya Pradesh | 48.31 | 28 |
| Nagaland | 44.09 | 29 |
| Uttar Pradesh | 43.58 | 30 |
| Arunachal Pradesh | 43.39 | 21 |
| Rajasthan | 39.01 | 32 |
| Bihar | 38.27 | 33 |
| Jharkhand | 34 |  |
| Sare |  |  |

Source : Population Commission, 2002
The table clearly shows that Bihar ranks very low at 33 out of 34 States. The only State below Bihar is Jharkhand.

### 5.3 Health Status in Bihar in Comparison to all India Level

The analysis of data has been undertaken on the following aspects :
Status of Bihar in comparison to all India on important indicators
Trends in the utilization of health services in Bihar
District level information on key indicators

Table 5.6: Presents comparison of Bihar with all India on key indicators.

| Table-5.6: KEY INDICATORS: BIHAR \& INDIA - 1998-99 |  |  |
| :---: | :---: | :---: |
|  | INDIA | BIHAR |
| Characteristics of Household |  |  |
| Percent with electricity | 60.1 | 18.2 |
| Percent within 15 minutes of safe water supply | 62.3 | 65.7 |
| Percent with flush toilet | 24.0 | 13.3 |
| Percent with no toilet facility | 64.0 | 83.2 |
| Percent using Govt. Health facilities for sickness | 28.7 | 9.1 |
| Current Contraceptive Use |  |  |
| Any Method | 48.2 | 24.5 |
| Unmet Need for Family Planning |  |  |
| Percent with unmet need for family planning | 15.8 | 24.5 |
| Child Mortality |  |  |
| Infant mortality rate | 67.6 | 72.9 |
| Under-Five mortality rate | 94.9 | 105.1 |
| Safe Motherhood and women's Reproductive Health |  |  |
| Percent of births whose mothers received : |  |  |
| Antenatal check-up from a health professional | 65.1 | 36.0 |
| Antenatal check-up in first trisemester | 33.0 | 15.1 |
| Two or more tetanus toxoid injections | 66.8 | 57.8 |
| Iron and folic acid tablets or syrup | 57.6 | 24.1 |
| Percent of birth whose mother were assisted at delivery by a : |  |  |
| Doctor | 30.3 | 14.5 |
| ANM/Nurse/Mid wife/LHV | 11.4 | 5.7 |
| Traditional birth attendants | 35.0 | 65.8 |
| Child Health |  |  |
| Percent of children age 0-3 months exclusively Breastfed | 55.2 | 55.2 |
| Median duration of breastfeeding (months) | 25.4 | 36.0 |
| Percent of Children who received vaccination : |  |  |
| BCG | 71.6 | 37.7 |
| DPT (3 doses) | 55.1 | 24.2 |
| Polio (3 doses) | 62.8 | 41.0 |
| Measles | 50.7 | 16.6 |
| All vaccinations | 42.0 | 11.0 |
| Percent of children in the past 2 week who received oral dehydration salts (ORS) | 26.8 | 15.4 |
| Percent of children with acute respiratory infection in the past 2 weeks taken to a hospital facility or provider | 64.0 | 58.2 |


| Nutrition |  |  |
| :--- | :---: | :---: |
| Percent of women with anaemia | 51.8 | 63.4 |
| Percent of women with moderate/severe anaemia | 16.7 | 20.5 |
| Percent of children age 6-35 months with <br> anaemia | 74.3 | 81.3 |
| Percent of children age 6-35 months with <br> moderate/severe anaemia | 51.3 | 54.4 |
| Percent of children chronically undernourished <br> (stunted) | 45.5 | 53.7 |
| Percent of children acutely undernourished <br> (wasted) | 15.5 | 21.0 |
| Morbidity per 100,000 Persons | 2,468 | 2026 |
| Asthma | 544 | 969 |
| Tuberculosis | 432 | 833 |
| Medically treated tuberculosis | 1,361 | 1551 |
| Jaundice during the past 12 months | 3,697 | 3788 |
| Malaria during the past 3 months |  |  |

Comparison of Bihar with All India in terms of important indicators, revealed the following :

Prevalence of tuberculosis including medically treated tuberculosis, Jaundice as well as Malaria is much higher in Bihar as compared to All India.

Infant mortality and child mortality rate continue to be higher in Bihar as compared to All India level.

The ANC coverage levels as well as immunization coverage levels are much lower for Bihar as compared to All India.

Institutional deliveries are also much lower in Bihar as compared to All India.

The information on immunization coverage of children has been analysed in detail.

| Table 5.7 : Immunization Coverage |  |  |
| :--- | :--- | :--- |
|  | Bihar | All India |
| BCG | 37.7 | 74 |
| DPT 1 | 39.7 | 70.6 |
| DPT 2 | 33.4 | 67.1 |
| DPT 3 | 24.2 | 63.8 |
| OPV 1 | 81.3 | 75.1 |
| OPV 2 | 71.7 | 75.1 |
| OPV 3 | 41.0 | 68.3 |
| Measles | 16.6 | 61.4 |
| Vit A | 10.2 | 43.2 |
| Fully Immunised | 11.0 | 56.6 |

The proportion of children fully immunized were only one fifth of the all India level. The reasons for non-compliance are presented in Table 5.8.

Table-5.8 : Reasons for Non Compliance

|  |  |  |
| :--- | :--- | :--- |
| Reasons | Bihar | All India |
| Not aware of the need for all <br> vaccinations | 65.3 | 57.6 |
| Not aware of the place | 30 | 27.5 |
| No one informed | 10.1 | 0.6 |
| Lack of motivation | 40.1 | 11.5 |
| Obstacles | 9.1 | 9 |

The reason for non-compliance reported by over $65 \%$ was lack of awareness of the need for all vaccinations (full dosage). $30 \%$ respondents cited lack of knowledge of where vaccination services are available as the reason. Lack of motivation was another reason reported by about $40 \%$ as against the corresponding percentage of $11 \%$ at all India level. These figures clearly bring out the need to focus the IEC strategy to cover the knowledge gaps amongst the community about the necessity for their children to get all doses of all vaccines in time as well as the danger they expose their children otherwise.

The information on sources of information has been presented in Table 5.9.
Table 5.9: Source of Information

|  |  |  |
| :--- | :---: | :---: |
| Source | Bihar | All India |
| Inter-personal | 88.4 | 78.3 |
| Health Worker | 32 | 41.9 |
| Anganwadi Worker | 15.4 | 27.5 |
| Govt./Private pediatrician | 1.6 | 4.7 |
| Relative/Friend | 33 | 18.7 |
| Teacher | 56.9 | 14.5 |
| Religious/Community <br> Leader | 0.7 | 1.2 |

The source of information was mainly interpersonal. Teachers have emerged as important sources of information and can be used as influencers in addition to ICDS workers, PRIs \& others.

Information on exposure to mass media is presented in Table 5.10
Table 5.10 : Exposure to Mass Media

|  |  |  |
| :--- | :---: | :---: |
|  | Bihar | India |
| Reads a newspaper or magazine at least once <br> a week | 9.3 | 20.8 |
| Watches television at least once a week | 16.8 | 45.7 |
| Listen to the radio at least once a week | 20.3 | 36.5 |
| Visit the cinema theatre at least once a week | 4.4 | 10.6 |
| Not regularly exposed to any media. | 72.3 | 40.3 |

As high as $72 \%$ women in Bihar were not exposed to any media, only $9 \%$ read news paper, $17 \%$ watch T.V. and $20 \%$ listen to India. This has important bearing on the selection of media for any IEC interventions in the rural areas of the State.

Table-5.11 : Home Visits by a Health Worker in last 12 months

|  |  |  |
| :--- | :---: | :---: |
| Characteristic | India | Bihar |
| Percentage with at least one visit | 13 | 2.4 |
| Median number of Visits | 2.7 | 1.3 |
| Median months since the most recent visit | 1.8 | 2.5 |

Home visits by health workers are one of the important indicators of the quality of outreach services provided by the government health delivery system. The results on the number of visits along with the perceived quality of such visits are presented in Table 5.12.

Table-5.12: Quality of Home Visits

| Type of services received |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Bihar |  | India |  |
| Quality indicator | Family <br> Planning | Health | Family <br> Planning | Health |
| Percentage who said <br> workers spent enough time <br> with them | 84.1 | 87.6 | 89.4 | 90.5 |
| Percentage who said worker talked to them |  |  |  |  |
| Nicely | 78.6 | 67.9 | 77 | 78.6 |
| Somewhat nicely | 17.9 | 26.3 | 21.7 | 19.7 |
| Not nicely | 3.5 | 5.8 | 1.3 | 1.6 |
| Total percent | 100 | 100 | 100 | 100 |

It can be seen that only $2 \%$ reported home visit by a health worker in Bihar as compared to the national average of $13 \%$, the satisfaction level with these visits was higher in Bihar as compared to all India level.

It is important to know, the extent to which people depend on the Government for health care. Table 5.13 summarizes the situation in Bihar.

Table- 5.13 : Source of Health Care

|  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Source | Bihar |  | India |  |
|  | Residence |  | Residence |  |
|  | Urban | Rural | Urban | Rural |
|  | 16.6 | 8.8 | 23.50 | 30.60 |
|  | 82.3 | 89.7 | 74.80 | 66.20 |
|  | 1.1 | 1.5 | 1.00 | 2.50 |
| Total percent | 100.00 | 100.00 | 100.00 | 100.00 |

Sources of health care present a contrasting picture in Bihar as compared to all India. One-third at all India level depend on Govt. for health care, the corresponding figure is very low at around 10 percent for Bihar. This indicates, the higher demand and reliance on Private health services in Bihar.

### 5.4 Current Levels of Utilization : District Level Information

The district level health information for 2002-03 from RCH-2 has been analysed on important indicators.

In Bihar, early marriages are very common. The information on age at marriage is given in table 5.14.

About 50 percent of both boys and girls still marry below the legal age. Here, the magnitude varies from 29 percent girls marrying below legal age in Saran to more than four-fifths ( 85 percent) of girls marrying below the legal age in the district of Sheikhpura.

Table 5.14: Age at marriage (\%)

| District | Mean Age <br> Marri Boy | Mean Age <br> Marri Girl | Boy married <br> below legal age | Girl married <br> below legal age |
| :--- | :---: | :---: | :---: | :---: |
| Araria | 22.2 | 17.6 | 36.2 | 50.5 |
| Aurangabad | 20.5 | 17.8 | 62.2 | 45.6 |
| Banka | 22.7 | 16.9 | 32.2 | 56.0 |
| Begusarai | 22.8 | 17.5 | 32.6 | 42.6 |
| Bhagalpur | 24.3 | 18.3 | 24.4 | 42.6 |
| Bhojpur | 21.5 | 17.3 | 48.4 | 55.3 |
| Buxar | 20.8 | 16.7 | 52.8 | 59.2 |
| Darbhanga | 22.7 | 17.7 | 34.9 | 49.8 |
| Gaya | 20.2 | 17.0 | 59.9 | 54.7 |
| Gopalganj | 21.8 | 18.3 | 43.0 | 34.6 |
| Jamui | 21.6 | 17.0 | 44.4 | 64.7 |
| Jehanabad | 20.2 | 17.0 | 56.8 | 60.4 |
| Kaimur (Bhabua) | 20.5 | 17.9 | 56.2 | 48.6 |
| Katihar | 22.0 | 17.5 | 43.9 | 46.2 |
| Khagaria | 22.1 | 17.3 | 38.2 | 58.2 |
| Kishanganj | 23.4 | 18.3 | 27.8 | 42.6 |
| Lakhisarai | 21.5 | 17.1 | 44.6 | 57.4 |
| Madhepura | 21.8 | 17.2 | 51.2 | 54.3 |
| Madhubani | 20.0 | 16.7 | 51.5 | 60.8 |
| Munger | 23.6 | 17.8 | 25.4 | 48.3 |
| Muzaffarpur | 22.4 | 17.8 | 39.8 | 44.5 |
| Nalanda | 21.4 | 16.9 | 47.1 | 59.6 |
| Nawada | 20.5 | 16.4 | 52.7 | 58.6 |
| Pashchim | 20.9 | 16.3 | 51.5 | 63.9 |
| Champaran |  |  |  |  |
| Patna | 23.3 | 17.8 | 30.3 | 44.7 |
| Purba Champaran | 21.8 | 17.1 | 43.7 | 59.0 |
| Purnia | 22.8 | 18.1 | 27.4 | 42.2 |
| Rohtas | 21.1 | 17.8 | 50.8 | 46.8 |
| Saharsa | 21.8 | 17.4 | 47.7 | 47.9 |
| Samastipur | 21.2 | 16.6 | 48.2 | 67.7 |
| Saran | 22.1 | 18.6 | 36.3 | 28.9 |
| Sheikhapura | 20.4 | 15.1 | 56.9 | 85.0 |
| Sheohar | 21.5 | 16.8 | 53.4 | 59.2 |
| Sitamarhi | 21.7 | 17.4 | 42.7 | 56.0 |
| Siwan | 22.6 | 18.2 | 32.8 | 39.5 |
| Supaul | 22.0 | 16.9 | 43.1 | 61.1 |
| Vaishali | 21.9 | 16.8 | 40.8 | 61.6 |
| Average | 21.8 | $\mathbf{1 7 . 3}$ | 43.6 | 53.1 |
|  |  |  |  |  |

On family planning specific information was collected on awareness of any method and all methods, modern and traditional and the same is presented in table 5.15.

Table 5.15: Knowledge of family planning methods (\%)

| District | Any Modern <br> Family <br> Planning | Modern spacing <br> Family Planning | Modern all <br> Family <br> Planning | Any <br> Traditional <br> method |
| :--- | :---: | :---: | :---: | :---: |
| Araria | 100.0 | 87.8 | 35.2 | 56.8 |
| Aurangabad | 100.0 | 96.0 | 60.8 | 13.2 |
| Banka | 100.0 | 90.6 | 56.8 | 77.9 |
| Begusarai | 100.0 | 89.9 | 63.4 | 48.1 |
| Bhagalpur | 100.0 | 95.5 | 62.9 | 84.0 |
| Bhojpur | 99.7 | 95.6 | 52.7 | 71.0 |
| Buxar | 99.9 | 93.5 | 61.9 | 72.7 |
| Darbhanga | 99.9 | 94.6 | 64.0 | 54.5 |
| Gaya | 100.0 | 79.9 | 46.8 | 32.9 |
| Gopalganj | 99.8 | 95.5 | 43.0 | 78.2 |
| Jamui | 99.8 | 90.1 | 46.5 | 73.1 |
| Jehanabad | 99.9 | 91.0 | 58.6 | 51.2 |
| Kaimur (Bhabua) | 100.0 | 83.8 | 35.9 | 50.4 |
| Katihar | 99.9 | 93.0 | 48.0 | 73.7 |
| Khagaria | 100.0 | 93.2 | 58.6 | 29.5 |
| Kishanganj | 99.8 | 83.9 | 34.8 | 42.8 |
| Lakhisarai | 100.0 | 94.9 | 55.3 | 73.8 |
| Madhepura | 100.0 | 95.3 | 48.1 | 66.7 |
| Madhubani | 99.7 | 87.5 | 44.9 | 49.6 |
| Munger | 99.8 | 95.3 | 53.4 | 77.3 |
| Muzaffarpur | 99.7 | 87.5 | 49.0 | 26.3 |
| Nalanda | 99.9 | 96.1 | 36.3 | 41.4 |
| Nawada | 100.0 | 94.0 | 64.5 | 62.7 |
| Pashchim | 99.8 | 76.4 | 20.1 | 32.3 |
| Champaran |  |  |  |  |
| Patna | 100.0 | 96.1 | 68.5 | 53.3 |
| Purba Champaran | 99.6 | 90.2 | 43.9 | 20.7 |
| Purnia | 100.0 | 93.5 | 50.3 | 76.8 |
| Rohtas | 100.0 | 94.6 | 63.0 | 76.7 |
| Saharsa | 100.0 | 98.3 | 54.7 | 80.5 |
| Samastipur | 99.8 | 81.4 | 43.4 | 32.5 |
| Saran | 100.0 | 95.9 | 64.2 | 88.1 |
| Sheikhapura | 99.7 | 92.6 | 66.1 | 65.7 |
| Sheohar | 99.6 | 95.9 | 45.9 | 68.2 |
|  |  |  |  |  |
|  |  |  |  |  |


| Sitamarhi | 100.0 | 96.6 | 59.4 | 43.5 |
| :--- | :---: | :---: | :---: | :---: |
| Siwan | 99.9 | 87.4 | 53.9 | 54.4 |
| Supaul | 100.0 | 93.5 | 28.0 | 75.9 |
| Vaishali | 100.0 | 92.4 | 66.3 | 60.9 |
| Average | 99.9 | 91.6 | 51.6 | 57.8 |

The knowledge of any method of family planning was almost universal. Women were mainly aware of sterilizations and spacing methods but the knowledge of all modern methods was only 52 percent and of traditional methods as 58 percent. Here large variations have been observed in the knowledge of all modern methods from 68 percent in Patna to 20 percent in Pashchim Champaran; and in traditional methods from 88 percent in Saran to 13 percent in Aurangabad.

The information on the levels of current use of family planning methods in different districts of Bihar can be seen in the Table 5.16.

Table 5.16: Current use of Modern Family Planning Methods (\%)

| Dist_name | Use <br> Modern <br> Family <br> Planning | Use <br> spacing <br> Family <br> Planning | Use <br> traditional <br> Family <br> Planning | Female <br> Sterilizati <br> on | Male <br> Sterilizat <br> ion | Current <br> Use <br> IUD | Current <br> Use <br> Pills | Current <br> Use <br> Condoms |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Araria | 31.2 | 25.5 | 5.7 | 22.2 | 0.2 | 0.1 | 2.0 | 0.9 |
| Aurangabad | 25.7 | 24.8 | 0.9 | 21.2 | 0.5 | 0.4 | 1.2 | 1.2 |
| Banka | 36.9 | 26.9 | 10.0 | 21.4 | 0.1 | 0.9 | 1.4 | 2.6 |
| Begusarai | 27.6 | 25.0 | 2.5 | 20.0 | 0.8 | 0.7 | 1.7 | 1.7 |
| Bhagalpur | 39.6 | 29.9 | 9.7 | 23.4 | 0.3 | 1.1 | 2.0 | 2.8 |
| Bhojpur | 36.9 | 30.1 | 6.8 | 23.2 | 0.5 | 0.7 | 2.3 | 2.4 |
| Buxar | 31.0 | 25.4 | 5.6 | 18.6 | 0.5 | 0.7 | 2.6 | 2.8 |
| Darbhanga | 31.9 | 29.2 | 2.7 | 23.2 | 0.6 | 0.7 | 2.9 | 1.6 |
| Gaya | 28.4 | 27.4 | 1.0 | 22.5 | 0.2 | 1.4 | 1.7 | 1.3 |
| Gopalganj | 30.1 | 20.2 | 9.8 | 14.7 | 0.2 | 0.8 | 2.1 | 2.0 |
| Jamui | 28.9 | 24.3 | 4.5 | 19.6 | 0.2 | 1.4 | 1.1 | 1.5 |
| Jehanabad | 28.2 | 26.4 | 1.7 | 23.2 | 0.5 | 0.2 | 0.9 | 1.5 |
| Kaimur | 29.2 | 26.9 | 2.3 | 20.9 | 0.1 | 1.7 | 1.2 | 2.5 |
| (Bhabua) |  |  |  |  |  |  |  |  |
| Katihar | 33.6 | 28.1 | 5.4 | 21.6 | 0.1 | 0.7 | 3.3 | 1.4 |
| Khagaria | 30.8 | 28.0 | 2.8 | 25.0 | 0.3 | 0.8 | 1.0 | 0.9 |


| Kishanganj | 23.1 | 20.3 | 2.7 | 13.0 | 0.3 | 0.7 | 5.1 | 1.2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lakhisarai | 32.6 | 27.4 | 5.2 | 21.6 | 0.9 | 1.8 | 1.7 | 0.9 |
| Madhepura | 31.5 | 27.2 | 4.3 | 25.1 | 0.1 | 0.2 | 1.0 | 0.3 |
| Madhubani | 30.4 | 29.9 | 0.5 | 24.9 | 0.4 | 0.8 | 2.9 | 0.8 |
| Munger | 38.6 | 30.8 | 7.9 | 26.4 | 0.1 | 0.7 | 0.8 | 2.6 |
| Muzaffarpur | 32.5 | 31.6 | 0.9 | 26.7 | 0.7 | 1.4 | 1.3 | 1.5 |
| Nalanda | 26.4 | 23.4 | 3.1 | 20.1 | 0.1 | 0.5 | 1.3 | 1.1 |
| Nawada | 28.8 | 27.9 | 0.9 | 22.1 | 0.6 | 1.2 | 1.6 | 2.4 |
| Pashchim | 24.6 | 18.9 | 5.6 | 16.0 | 0.9 | 0.1 | 1.5 | 0.4 |
| Champaran |  |  |  |  |  |  |  |  |
| Patna | 36.8 | 33.9 | 2.8 | 24.6 | 0.9 | 1.5 | 2.7 | 4.1 |
| Purba | 27.8 | 26.4 | 1.4 | 22.4 | 0.2 | 0.4 | 1.8 | 1.2 |
| Champaran |  |  |  |  |  |  |  |  |
| Purnia | 30.0 | 24.0 | 6.0 | 18.9 | 0.0 | 0.1 | 2.7 | 1.2 |
| Rohtas | 35.0 | 28.2 | 6.7 | 22.6 | 0.7 | 0.9 | 2.5 | 1.4 |
| Saharsa | 37.7 | 32.1 | 5.6 | 27.8 | 0.2 | 0.1 | 1.6 | 1.8 |
| Samastipur | 22.7 | 21.8 | 0.8 | 19.5 | 0.2 | 0.1 | 0.8 | 1.2 |
| Saran | 30.5 | 24.5 | 6.0 | 17.2 | 0.2 | 0.9 | 1.5 | 4.3 |
| Sheikhapura | 23.9 | 22.4 | 1.5 | 18.6 | 0.6 | 1.2 | 1.3 | 0.6 |
| Sheohar | 19.7 | 17.1 | 2.6 | 15.3 | 0.0 | 0.3 | 0.7 | 0.5 |
| Sitamarhi | 27.9 | 26.0 | 1.5 | 21.9 | 0.2 | 0.6 | 1.8 | 1.2 |
| Siwan | 23.7 | 21.2 | 2.4 | 14.6 | 0.5 | 0.5 | 2.2 | 3.2 |
| Supaul | 36.4 | 33.3 | 3.0 | 30.8 | 0.0 | 0.1 | 1.0 | 1.0 |
| Vaishali | 33.0 | 30.9 | 1.8 | 25.3 | 0.7 | 0.7 | 1.8 | 2.4 |
| Average | 30.4 | 26.4 | 3.9 | 21.5 | 0.4 | 0.7 | 1.8 | 1.7 |

The current use of modern family planning was 30 percent and use of modern spacing methods was 26 percent. The female sterilizations (tubectomy) were 22 percent and male sterilizations (vasectomy) less than 1 percent. The variations in the tubectomy acceptors were from 13 percent in Kishanganj to 31 percent in Supaul.

The unmet need of family planning separately for spacing and limiting methods are summarized as under:

Table 5.17: Unmet need (\%)

| District | Unmet need limiting | Unmet need Spacing | Unmet need-total |
| :---: | :---: | :---: | :---: |
| Araria | 19.7 | 18.3 | 38.0 |
| Aurangabad | 22.2 | 12.0 | 34.3 |
| Banka | 16.8 | 14.2 | 31.0 |
| Begusarai | 25.7 | 15.6 | 41.3 |
| Bhagalpur | 18.4 | 14.8 | 33.1 |
| Bhojpur | 18.3 | 12.5 | 30.8 |
| Buxar | 20.4 | 16.4 | 36.8 |
| Darbhanga | 24.3 | 15.8 | 40.0 |
| Gaya | 23.2 | 17.8 | 41.1 |
| Gopalganj | 22.8 | 12.0 | 34.8 |
| Jamui | 21.0 | 12.2 | 33.2 |
| Jehanabad | 26.5 | 18.4 | 44.9 |
| Kaimur (Bhabua) | 24.3 | 10.0 | 34.4 |
| Katihar | 21.4 | 17.8 | 39.1 |
| Khagaria | 20.4 | 14.8 | 35.2 |
| Kishanganj | 28.6 | 18.6 | 47.3 |
| Lakhisarai | 18.4 | 13.2 | 31.6 |
| Madhepura | 18.2 | 19.6 | 37.9 |
| Madhubani | 18.2 | 13.5 | 31.8 |
| Munger | 19.2 | 16.3 | 35.4 |
| Muzaffarpur | 23.4 | 14.4 | 37.8 |
| Nalanda | 25.2 | 12.7 | 37.9 |
| Nawada | 26.7 | 19.2 | 45.9 |
| Pashchim Champaran | 18.9 | 18.3 | 37.2 |
| Patna | 19.9 | 14.2 | 34.0 |
| Purba Champaran | 20.6 | 17.8 | 38.4 |
| Purnia | 24.9 | 6.3 | 31.2 |
| Rohtas | 18.9 | 11.7 | 30.5 |
| Saharsa | 20.0 | 14.1 | 34.1 |
| Samastipur | 22.1 | 20.5 | 42.6 |
| Saran | 24.6 | 11.9 | 36.6 |
| Sheikhapura | 27.9 | 15.2 | 43.1 |
| Sheohar | 23.7 | 22.0 | 45.8 |
| Sitamarhi | 21.8 | 16.5 | 38.3 |
| Siwan | 32.7 | 12.9 | 45.7 |
| Supaul | 16.9 | 8.0 | 25.0 |
| Vaishali | 20.2 | 16.8 | 37.0 |
| Average | 22.1 | 15.0 | 37.1 |

The information on Antenatal Care is presented in Table 5.18.

Table 5.18: Antenatal Checkup

| Dist. | Any Antenatal Checkup | 3 or more Antenatal Checkups | One TT Injection Pregnancy | $\begin{aligned} & \hline 2 \text { or more } \\ & \text { TT } \\ & \text { Injection } \end{aligned}$ | One IFA tablet regularly | 2 or more IFA Tab regularly pregnancy | $\begin{array}{lr}100 & \text { or } \\ \text { more } & \text { IFA }\end{array}$ tab <br> pregnancy | Received adequate IFA tab/syrup | $\begin{aligned} & \text { Full } \\ & \text { ANC } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Araria | 34.2 | 12.0 | 7.6 | 67.0 | 15.3 | 7.2 | 4.7 | 4.8 | 2.1* |
| Aurangabad | 37.8 | 19.9 | 2.4* | 81.5 | 11.5 | 8.0 | 4.3 | 4.3 | 1.4* |
| Banka | 38.5 | 24.1 | 2.3* | 72.3 | 25.1 | 2.5 | 8.5 | 8.5 | 6.4 |
| Begusarai | 33.5 | 18.3 | 5.4 | 66.9 | 11.4 | 7.1 | 4.6* | 4.8* | 2.5* |
| Bhagalpur | 48.5 | 27.9 | 3.6* | 80.4 | 24.4 | 9.1 | 7.1 | 7.7 | 6.0 |
| Bhojpur | 51.3 | 23.5 | 4.9* | 68.0 | 22.3 | 12.8 | 13.1 | 14.5 | 5.8 |
| Buxar | 38.2 | 16.6 | 1.9* | 60.2 | 12.1 | 10.6 | 3.6* | 4.6* | 2.2* |
| Darbhanga | 33.3 | 16.6 | 5.1* | 65.1 | 11.6 | 7.7 | 5.3* | 6.3 | 3.5* |
| Gaya | 33.0 | 21.3 | 6.8 | 76.6 | 11.2 | 6.2 | 7.6 | 7.6 | 4.7* |
| Gopalganj | 53.3 | 28.4 | 5.1 | 71.3 | 25.2 | 13.3 | 11.6 | 12.5 | 6.6 |
| Jamui | 43.7 | 22.7 | 1.4* | 74.2 | 11.5 | 20.1 | 9.5 | 12.0 | 7.8 |
| Jehanabad | 33.6 | 20.0 | 6.1 | 68.3 | 8.5 | 15.1 | 6.6 | 6.9 | 3.9* |
| Kaimur | 40.1 | 17.8 | 4.2* | 53.4 | 18.2 | 6.0 | 3.4* | 3.4* | 2.1* |
| Katihar | 36.1 | 21.6 | 3.0* | 74.7 | 18.5 | 9.3 | 6.2 | 7.4 | 3.6* |
| Khagaria | 23.3 | 9.6 | 1.0* | 67.8 | 10.0 | 4.5 | 2.9* | 3.1* | 2.0* |
| Kishanganj | 28.3 | 12.4 | 7.1 | 56.8 | 9.5 | 8.2 | 1.8* | 2.8* | 1.1* |
| Lakhisarai | 40.4 | 21.9 | 1.6* | 70.3 | 20.5 | 5.8 | 12.7 | 13.4 | 8.9 |
| Madhepura | 27.5 | 11.7 | 6.8 | 60.6 | 16.1 | 8.3 | 8.8 | 8.9 | 6.1 |
| Madhubani | 36.0 | 15.5 | 5.4 | 69.6 | 13.3 | 11.4 | 5.2 | 5.6 | 3.3* |
| Munger | 48.1 | 22.5 | 2.0* | 74.7 | 16.9 | 12.9 | 2.7* | 5.5* | 1.8* |
| Muzaffarpur | 40.4 | 20.8 | 1.8* | 88.3 | 22.1 | 5.0 | 7.4 | 7.8 | 5.3* |
| Nalanda | 33.2 | 15.0 | 1.1* | 76.3 | 16.1 | 6.0 | 4.9* | 5.5 | 1.8* |
| Nawada | 35.1 | 15.4 | 2.6* | 80.9 | 16.0 | 9.6 | 3.8* | 5.8 | 2.8* |
| Pashchim | 35.1 | 17.5 | 3.6* | 56.5 | 9.6 | 10.9 | 4.1 | 4.5 | 0.7* |
| Champaran |  |  |  |  |  |  |  |  |  |
| Patna | 52.4 | 31.0 | 3.5* | 68.8 | 24.4 | 9.3 | 15.1 | 15.4 | 12.8 |
| Purba | 42.6 | 23.5 | 8.2 | 73.8 | 19.8 | 14.1 | 9.6 | 11.0 | 8.6 |
| Champaran |  |  |  |  |  |  |  |  |  |
| Purnia | 26.3 | 12.5 | 10.1 | 64.7 | 18.4 | 1.7 | 2.9* | 3.1* | 2.9* |
| Rohtas | 52.4 | 25.8 | 8.3 | 78.2 | 21.9 | 14.4 | 7.8 | 8.7 | 5.0* |
| Saharsa | 28.9 | 14.7 | 4.3* | 49.7 | 11.8 | 7.9 | 2.2* | 3.5* | 1.9* |
| Samastipur | 23.4 | 8.8 | 2.3* | 65.3 | 7.2 | 14.1 | 8.0 | 8.5 | 4.0* |
| Saran | 32.7 | 18.2 | 1.6* | 82.0 | 12.5 | 12.7 | 8.3 | 10.0 | 6.6 |
| Sheikhapura | 37.0 | 23.0 | 1.9* | 69.8 | 13.3 | 5.1 | 4.8* | 5.7 | 4.0* |
| Sheohar | 23.7 | 10.3 | 5.6 | 75.7 | 12.8 | 4.9 | 5.1 | 5.5 | 3.2* |
| Sitamarhi | 27.9 | 13.6 | 3.4* | 65.5 | 9.3 | 6.0 | 6.2 | 6.5 | 3.3* |
| Siwan | 43.3 | 22.9 | 2.0* | 78.6 | 16.3 | 6.1 | 6.3 | 6.8 | 4.3* |
| Supaul | 24.9 | 9.7 | 5.7 | 68.0 | 14.9 | 3.2 | 3.3* | 3.3* | 2.2* |
| Vaishali | 46.4 | 25.3 | 4.7 | 82.1 | 16.6 | 6.7 | 6.7 | 6.7 | 4.9 |
| Average | 36.9 | 18.7 | 4.2 | 70.4 | 15.6 | 8.8 | 6.4 | 7.1 | 4.2 |

Whereas over one-third women reported having undergone antenatal check-up in the State, those receiving 3 ANC check-ups were only 19 percent, TT2 doses 70 percent and 2 or more IFA consumed per day was 9 percent thereby reducing the full ANC coverage to less than 5 percent of pregnant women. Here also variations have been observed amongst districts.

Delivery care has a strong bearing on reproductive complications. The status of delivery care and breastfeeding practices in Bihar can be viewed from Table 5.19.

Table 5.19: Home, Institutional and safe delivery (\%)

| District | Institutional Delivery | Institutional Delivery | Institutional Delivery | Home Delivery | Safe with <br> TBA <br> Delivery | Safe without TBA Delivery |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Araria | 9.1 | 1.8 | 7.3 | 90.9 | 20.6 | 17.3 |
| Aurangabad | 21.3 | 6.8 | 14.5 | 78.5 | 28.7 | 26.9 |
| Banka | 25.4 | 6.9 | 18.4 | 74.4 | 36.4 | 36.2 |
| Begusarai | 15.7 | 4.5 | 11.2 | 83.9 | 28.7 | 20.6 |
| Bhagalpur | 29.2 | 4.2 | 25.1 | 70.7 | 41.6 | 39.4 |
| Bhojpur | 37.4 | 8.1 | 29.3 | 61.9 | 49.0 | 47.4 |
| Buxar | 30.4 | 4.1 | 26.3 | 68.9 | 40.9 | 39.8 |
| Darbhanga | 16.9 | 2.9 | 13.9 | 83.1 | 25.5 | 24.0 |
| Gaya | 23.6 | 3.2 | 20.4 | 76.2 | 37.9 | 28.9 |
| Gopalganj | 24.0 | 4.9 | 19.1 | 75.0 | 35.2 | 34.3 |
| Jamui | 23.5 | 2.6 | 20.9 | 76.5 | 27.4 | 26.4 |
| Jehanabad | 35.1 | 10.4 | 24.7 | 64.9 | 42.6 | 42.6 |
| Kaimur (Bhabua) | 33.6 | 5.5 | 28.2 | 66.4 | 44.1 | 40.3 |
| Katihar | 13.1 | 5.4 | 7.7 | 86.9 | 28.8 | 27.3 |
| Khagaria | 15.1 | 6.8 | 8.2 | 84.8 | 20.2 | 19.4 |
| Kishanganj | 14.1 | 7.6 | 6.5 | 85.7 | 20.5 | 20.1 |
| Lakhisarai | 25.4 | 3.9 | 21.5 | 74.5 | 30.9 | 28.8 |
| Madhepura | 11.8 | 1.4 | 10.4 | 88.2 | 21.7 | 18.3 |
| Madhubani | 7.7 | 2.8 | 4.9 | 92.2 | 15.4 | 14.6 |
| Munger | 38.8 | 5.1 | 33.7 | 60.8 | 47.3 | 46.8 |
| Muzaffarpur | 19.4 | 3.2 | 16.1 | 80.6 | 31.0 | 24.2 |
| Nalanda | 30.8 | 3.9 | 26.9 | 69.0 | 38.0 | 35.8 |
| Nawada | 26.1 | 6.4 | 19.8 | 73.2 | 34.1 | 32.3 |
| Pashchim Champaran | 28.6 | 18.2 | 10.4 | 70.6 | 37.1 | 35.8 |
| Patna | 45.3 | 10.7 | 34.5 | 54.4 | 49.2 | 47.8 |
| Purba Champaran | 18.6 | 5.5 | 13.1 | 81.1 | 27.2 | 24.9 |
| Purnia | 13.0 | 2.4 | 10.7 | 86.8 | 19.0 | 18.6 |
| Rohtas | 39.7 | 1.9 | 37.8 | 60.3 | 50.5 | 48.2 |
| Saharsa | 16.4 | 6.5 | 10.0 | 83.4 | 21.5 | 20.6 |
| Samastipur | 11.1 | 4.5 | 6.7 | 88.8 | 19.1 | 15.1 |
| Saran | 15.9 | 3.6 | 12.3 | 83.9 | 22.3 | 21.5 |
| Sheikhapura | 23.1 | 1.3 | 21.8 | 76.9 | 44.9 | 30.7 |
| Sheohar | 8.4 | 1.9 | 6.5 | 91.5 | 16.1 | 14.6 |


| Sitamarhi | 11.6 | 2.8 | 8.8 | 88.4 | 16.1 | 15.2 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Siwan | 24.1 | 8.0 | 16.1 | 75.9 | 33.6 | 32.4 |
| Supaul | 12.5 | 3.7 | 8.8 | 87.0 | 27.8 | 26.0 |
| Vaishali | 23.1 | 3.0 | 20.0 | 76.6 | 37.8 | 29.6 |
| Average | 22.1 | 5.0 | 17.1 | 77.6 | 31.6 | 29.0 |

From the above given data, about 32 percent of deliveries could be classified as safe, of which 22 percent were institutional deliveries. Breastfeeding within 2 hours was reported by 5 percent and exclusive breastfeeding for 4 months was also by only 5 percent. District variations were considerable in the case of safe delivery from 15 percent in Madhubani to 51 percent in Rohtas; in institutional delivery from 8 percent in Sheohar to 45 percent in Patna; breastfeeding within 2 hours from less than 1 percent in Aurangabad, Saharsa and Sheikhpura to 25 percent in Kaimur; and exclusive breastfeeding for 4 months from nil in Bhojpur, Gopalganj, Jamui, Katihar, Kishanganj, Lakhisarai, Munger, and Saran to 48 percent in Paschim Champaran. Adverse delivery care practices as indicated by the above data has immediate implications of programme interventions as most of these practices are due to ignorance, lack of information or a credible and readily available source of information and counselling.

Table 5.20: Breastfeeding (\%)

| District | Breastfeeding within 2 hours | Mother squeezed out first breast milk | Breastfeeding 4 months |
| :---: | :---: | :---: | :---: |
| Araria | 0.9 | 65.1 | 12.6 |
| Aurangabad | 0.6 | 60.8 | 4.2 |
| Banka | 8.7 | 73.2 | 0.1 |
| Begusarai | 2.8 | 61.3 | 5.4 |
| Bhagalpur | 3.8 | 64.8 | 2.7 |
| Bhojpur | 2.5 | 56.3 | 0.0 |
| Buxar | 4.2 | 42.6 | 5.3 |
| Darbhanga | 5.4 | 67.3 | 2.7 |
| Gaya | 6.4 | 72.3 | 6.0 |
| Gopalganj | 8.5 | 38.9 | 0.0 |
| Jamui | 4.2 | 66.3 | 0.0 |
| Jehanabad | 8.6 | 56.6 | 2.1 |
| Kaimur (Bhabua) | 24.7 | 31.0 | 0.8 |
| Katihar | 2.7 | 72.6 | 0.0 |
| Khagaria | 1.3 | 65.1 | 12.1 |
| Kishanganj | 4.4 | 71.7 | 0.0 |
| Lakhisarai | 2.3 | 44.4 | 0.0 |
| Madhepura | 2.5 | 66.7 | 4.9 |
| Madhubani | 3.5 | 75.3 | 19.0 |
| Munger | 7.3 | 67.4 | 0.0 |
| Muzaffarpur | 9.3 | 60.2 | 15.8 |
| Nalanda | 5.0 | 63.8 | 0.8 |
| Nawada | 5.3 | 54.8 | 1.0 |
| Pashchim Champaran | 5.7 | 39.0 | 47.7 |
| Patna | 8.1 | 44.4 | 9.6 |
| Purba Champaran | 10.5 | 55.1 | 1.4 |
| Purnia | 5.9 | 37.9 | 1.6 |
| Rohtas | 9.0 | 25.8 | 4.5 |
| Saharsa | 0.7 | 75.6 | 2.6 |
| Samastipur | 2.6 | 49.7 | 4.1 |
| Saran | 6.4 | 45.1 | 0.0 |
| Sheikhapura | 0.6 | 79.7 | 5.5 |
| Sheohar | 2.0 | 35.0 | 2.5 |
| Sitamarhi | 4.5 | 61.3 | 4.1 |
| Siwan | 11.9 | 62.4 | 4.8 |
| Supaul | 8.2 | 58.3 | 1.3 |
| Vaishali | 3.4 | 41.1 | 4.8 |
| Average | 5.5 | 57.0 | 5.1 |

The information on immunization coverage levels can be seen in Table 5.21.

Table: 5.21: Immunization (\%)

| District | Children 1235 months received polio 0 | Children 1235 months received BCG | Children 1235 months received DPT 3 | Children 12- <br> 35 months received polio 3 | Children 1235 months received measles | Children 12-35 months received Full Immunization | Children 1235 months not received vaccination |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Araria | 4.4 | 46.1 | 32.3 | 30.9 | 21.4 | 19.6 | 52.7 |
| Aurangabad | 3.2 | 51.9 | 41.2 | 41.4 | 34.6 | 32.6 | 45.6 |
| Banka | 3.9 | 43.9 | 35.6 | 35.6 | 26.5 | 25.6 | 54.5 |
| Begusarai | 3.3 | 36.1 | 28.2 | 27.4 | 22.6 | 21.4 | 60.1 |
| Bhagalpur | 7.3 | 63.3 | 51.8 | 51.4 | 44.7 | 42.8 | 34.5 |
| Bhojpur | 14.3 | 53.5 | 39.7 | 39.6 | 40.7 | 32.3 | 44.4 |
| Buxar | 4.6 | 38.2 | 30.2 | 30.3 | 22.8 | 22.0 | 59.1 |
| Darbhanga | 4.7 | 42.3 | 31.0 | 31.0 | 24.1 | 22.0 | 54.2 |
| Gaya | 13.1 | 43.9 | 24.5 | 21.7 | 23.8 | 14.4 | 53.4 |
| Gopalganj | 14.0 | 65.0 | 52.4 | 51.1 | 45.6 | 39.0 | 31.0 |
| Jamui | 6.7 | 24.2 | 16.7 | 15.1 | 15.3 | 13.1 | 75.0 |
| Jehanabad | 9.4 | 38.2 | 28.9 | 24.8 | 22.1 | 16.8 | 60.7 |
| Kaimur (Bhabua) | 9.7 | 36.1 | 20.6 | 19.3 | 19.7 | 12.5 | 60.0 |
| Katihar | 8.2 | 41.7 | 27.9 | 27.4 | 19.8 | 17.5 | 54.4 |
| Khagaria | 2.1 | 42.7 | 29.6 | 29.1 | 22.1 | 21.1 | 55.2 |
| Kishanganj | 2.7 | 18.8 | 10.8 | 10.2 | 8.5 | 7.9 | 79.1 |
| Lakhisarai | 11.6 | 37.8 | 29.6 | 30.7 | 26.4 | 23.2 | 59.5 |
| Madhepura | 8.1 | 43.2 | 30.1 | 29.2 | 23.0 | 21.7 | 54.9 |
| Madhubani | 10.0 | 45.1 | 28.7 | 25.1 | 21.9 | 15.5 | 47.6 |
| Munger | 4.9 | 48.0 | 36.0 | 36.5 | 33.6 | 26.4 | 46.9 |
| Muzaffarpur | 15.9 | 59.8 | 48.0 | 46.9 | 40.7 | 35.9 | 35.1 |
| Nalanda | 4.9 | 47.9 | 32.7 | 32.4 | 29.6 | 21.8 | 49.6 |
| Nawada | 5.5 | 48.2 | 36.8 | 33.4 | 32.7 | 25.4 | 48.1 |
| Pashchim Champaran | 6.8 | 25.7 | 14.6 | 14.1 | 12.7 | 7.6 | 67.6 |
| Patna | 8.4 | 59.0 | 52.5 | 53.0 | 42.1 | 39.9 | 36.9 |
| Purba Champaran | 9.5 | 34.6 | 22.4 | 22.2 | 19.3 | 14.6 | 59.8 |
| Purnia | 14.1 | 51.0 | 41.2 | 40.8 | 32.8 | 28.5 | 48.3 |
| Rohtas | 20.2 | 41.4 | 30.3 | 30.3 | 28.5 | 24.6 | 57.8 |
| Saharsa | 6.5 | 39.6 | 30.4 | 30.3 | 25.0 | 22.9 | 60.2 |
| Samastipur | 5.7 | 43.9 | 28.6 | 28.2 | 19.7 | 16.0 | 52.5 |
| Saran | 5.9 | 65.9 | 54.2 | 52.1 | 38.5 | 35.3 | 30.8 |
| Sheikhapura | 21.4 | 44.3 | 27.2 | 24.6 | 28.1 | 18.5 | 50.7 |
| Sheohar | 3.3 | 42.9 | 30.3 | 30.2 | 19.5 | 18.3 | 56.3 |
| Sitamarhi | 8.1 | 49.4 | 36.3 | 34.6 | 28.8 | 25.5 | 47.9 |
| Siwan | 4.6 | 59.5 | 51.5 | 51.3 | 41.6 | 38.9 | 37.4 |
| Supaul | 8.7 | 43.7 | 25.1 | 24.8 | 19.8 | 15.7 | 52.8 |
| Vaishali | 9.8 | 57.1 | 45.1 | 43.7 | 31.2 | 26.1 | 40.1 |
| Average | 8.3 | 45.2 | 33.3 | 32.5 | 27.3 | 23.3 | 51.7 |

Regarding immunization, whereas over 45 percent received BCG and those received all antigens were only 23 percent in Bihar. This was because of high dropouts from DPT1 to DPT3, Polio 1 to Polio 3 and low coverage of Measles. The variation in full immunization coverage was from a low of 8 percent in Kishanganj and Paschim Champaran to a high of 43 percent in Bhagalpur.

In Bihar Pneumonia and Diarrhoea continue to be the two major killers among children. Information on awareness of danger signs of Pneumonia, percentage of people suffered from Pneumonia and who had sought treatment has been given in table 5.22.

Table 5.22: Diarrhoea \& Pneumonia (\%)

| District | Aware of <br> diarrhoea | Knowledge <br> of ORS | Who had <br> diarrhoea | Given ORS <br> during <br> diarrhea | Treatment <br> Diarrhoea | Aware <br> danger sign <br> Pneumonia | Who had <br> Pneumonia | Treatment <br> Pneumonia |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Araria | 74.2 | 12.8 | 7.4 | 0.0 | 84.9 | 67.0 | 17.9 | 64.0 |
| Aurangabad | 50.3 | 15.4 | 2.3 | 0.0 | 77.1 | 75.9 | 6.6 | 82.9 |
| Banka | 40.0 | 15.2 | 3.8 | 14.2 | 58.9 | 70.1 | 5.3 | 71.7 |
| Begusarai | 68.6 | 17.5 | 1.1 | 0.0 | 100.0 | 85.2 | 12.7 | 59.1 |
| Bhagalpur | 73.3 | 20.7 | 3.5 | 32.5 | 88.3 | 78.6 | 19.4 | 83.3 |
| Bhojpur | 78.5 | 21.3 | 3.0 | 4.7 | 61.5 | 84.3 | 5.7 | 71.1 |
| Buxar | 92.9 | 12.0 | 4.0 | 2.7 | 93.8 | 86.0 | 11.1 | 91.5 |
| Darbhanga | 55.8 | 10.7 | 4.2 | 13.6 | 94.6 | 80.5 | 12.0 | 84.9 |
| Gaya | 62.2 | 17.3 | 3.6 | 57.0 | 87.8 | 84.0 | 13.9 | 84.4 |
| Gopalganj | 64.7 | 11.2 | 18.2 | 17.6 | 84.0 | 73.5 | 17.4 | 65.1 |
| Jamui | 31.4 | 9.4 | 2.5 | 44.7 | 58.1 | 86.4 | 7.4 | 85.5 |
| Jehanabad | 84.6 | 38.3 | 7.6 | 0.0 | 100.0 | 94.3 | 28.5 | 90.4 |
| Kaimur (Bhabua) | 34.7 | 15.4 | 4.5 | 30.4 | 69.2 | 74.3 | 15.7 | 73.6 |
| Katihar | 88.9 | 14.5 | 4.6 | 3.1 | 89.1 | 92.6 | 11.8 | 73.0 |
| Khagariaa | 67.3 | 19.1 | 5.0 | 25.7 | 80.4 | 81.8 | 17.4 | 78.3 |
| Kishanganj | 70.3 | 14.2 | 3.0 | 0.0 | 95.8 | 84.5 | 10.2 | 81.7 |
| Lakhisarai | 61.0 | 11.5 | 1.8 | 46.3 | 89.0 | 82.9 | 4.2 | 95.9 |
| Madhepura | 88.5 | 13.2 | 13.2 | 19.5 | 69.1 | 70.8 | 29.3 | 70.4 |
| Madhubani | 69.4 | 17.3 | 8.9 | 8.7 | 67.4 | 68.6 | 32.7 | 80.7 |
| Munger | 54.5 | 22.9 | 1.2 | 48.3 | 100.0 | 81.7 | 17.8 | 72.0 |
| Muzaffarpur | 77.2 | 32.1 | 10.0 | 4.5 | 91.3 | 77.7 | 16.3 | 91.8 |
| Nalanda | 45.0 | 24.2 | 1.0 | 0.0 | 62.6 | 82.2 | 6.2 | 72.5 |
| Nawada | 95.7 | 50.5 | 4.3 | 2.5 | 93.9 | 98.9 | 21.4 | 87.9 |
| Pashchim Champaran | 63.2 | 10.8 | 7.7 | 23.8 | 63.0 | 74.1 | 6.1 | 78.0 |
| Patna | 77.2 | 33.3 | 8.1 | 4.6 | 100.0 | 88.4 | 22.3 | 82.9 |
| Purba Champaran | 75.8 | 24.4 | 12.0 | 16.0 | 84.1 | 80.6 | 22.0 | 88.9 |
| Purnia | 70.2 | 22.0 | 0.0 | NA | NA | 76.1 | 1.6 | 100.0 |
|  |  |  |  |  |  |  |  |  |


| Rohtas | 68.5 | 31.9 | 2.7 | 0.0 | 89.1 | 85.6 | 21.3 | 96.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Saharsa | 59.4 | 16.8 | 9.0 | 33.0 | 75.4 | 97.8 | 5.8 | 97.2 |
| Samastipur | 73.9 | 46.3 | 16.3 | 3.6 | 89.2 | 86.2 | 23.6 | 79.9 |
| Saran | 59.5 | 14.4 | 2.3 | 36.5 | 69.5 | 78.7 | 15.3 | 85.7 |
| Sheikhapura | 35.1 | 19.7 | 3.0 | 65.7 | 78.0 | 83.1 | 7.4 | 68.2 |
| Sheohar | 61.0 | 13.1 | 5.8 | 2.7 | 90.5 | 93.5 | 5.6 | 91.7 |
| Sitamarhi | 59.6 | 22.9 | 11.3 | 39.4 | 92.0 | 65.3 | 17.4 | 88.5 |
| Siwan | 66.9 | 22.4 | 2.2 | 33.8 | 87.8 | 70.7 | 9.4 | 61.3 |
| Supaul | 19.0 | 8.8 | 10.6 | 26.0 | 79.4 | 43.1 | 10.2 | 59.0 |
| Vaishali | 78.8 | 31.6 | 13.9 | 2.6 | 88.2 | 83.0 | 12.1 | 90.5 |
| Average | 64.8 | 20.4 | 6.0 | 18.4 | 82.9 | 80.2 | 14.1 | 73.3 |

It is heartening to note that as high as over 80 percent reported awareness of danger signs of pneumonia. About 14 percent reported to have had pneumonia, of which 73 percent reported to have sought the treatment.

There were however, variations across the districts; in awareness of pneumonia from low of 43 percent in Supaul to high of 99 percent in Nawada; in prevalence of pneumonia from 2 percent in Purnia to 33 percent in Madhubani; and in seeking treatment for pneumonia from 59 percent in Begusarai and Supaul to 100 percent in Purnia.

Profiling of different districts of Bihar based on the awareness of diarrhoea and its treatment can be seen from Table 5.22.

Regarding diarrhea, though the awareness of diarrhea was as high as 65 percent, the knowledge of ORS was only 20 percent. The prevalence of diarrhea reported was 6 percent and among these 18 percent were given ORS whereas over 83 percent sought treatment of diarrhea.

The inter-district variations were: in awareness of diarrhea from 19 percent (Supaul) to 96 percent (Nawada); in knowledge of ORS from 9 percent (Supaul) to 50 percent (Nawada); prevalence of diarrhoea from nil (Purnia) to 18 percent (Gopalganj); given ORS from nil (Araria, Aurangabad, Begusarai, Jehanabad, Kishnganj, Nalanda and

Rohtas) to 66 percent (Sheikhpura) and; in seeking treatment for diarrhoea from 58 percent (Jamui) to 100 percent (Begusarai, Jehanabad,Munger and Patna).

The level of utilization of Government health facilities for various services in different districts of Bihar is presented in Table 5.23.

Table 5.23: Help received from health worker and facility utilized by women (\%)

| District | Women <br> visit <br> ANM/ <br> Health <br> worker |  | HW spent <br> time | Satisfied <br> service <br> advice HW | Utilize <br> Govt. <br> Health <br> Facility <br> ANC | Utilize Govt. <br> Health <br> facility <br> treat.preg. <br> Com. | Utilize <br> Health facility <br> treat.post <br> delivery.Comp |
| :--- | :---: | :---: | :---: | :--- | :--- | :--- | :--- |
|  |  |  |  | Utilize <br> Govt. <br> Health <br> facility <br> treatment <br> RTI/STI |  |  |  |
| Araria | 6.7 | 74.4 | 75.5 | 6.3 | 14.3 | 9.3 | 4.0 |
| Aurangabad | 0.6 | 78.5 | 85.8 | 3.7 | 13.1 | 7.1 | 3.7 |
| Banka | 0.6 | 89.5 | 89.5 | 5.0 | 9.8 | 2.9 | 3.6 |
| Begusarai | 0.3 | 100.0 | 100.0 | 2.6 | 5.5 | 7.3 | 7.0 |
| Bhagalpur | 1.8 | 61.7 | 45.7 | 4.5 | 7.6 | 6.7 | 6.0 |
| Bhojpur | 1.1 | 11.5 | 4.9 | 8.2 | 13.4 | 16.2 | 2.6 |
| Buxar | 1.4 | 91.8 | 91.8 | 5.0 | 11.8 | 5.4 | 5.9 |
| Darbhanga | 1.2 | 100.0 | 84.3 | 2.5 | 5.9 | 3.5 | 3.8 |
| Gaya | 1.6 | 65.4 | 42.4 | 5.1 | 15.9 | 15.8 | 7.3 |
| Gopalganj | 0.6 | 45.6 | 63.4 | 7.7 | 9.6 | 12.4 | 8.2 |
| Jamui | 0.1 | 0.0 | 0.0 | 3.6 | 7.6 | 2.9 | 2.0 |
| Jehanabad | 2.0 | 61.8 | 52.9 | 3.5 | 3.1 | 13.4 | 7.6 |
| Kaimur (Bhabua) | 0.1 | 100.0 | 100.0 | 8.5 | 12.5 | 20.9 | 20.9 |
| Katihar | 1.6 | 73.7 | 73.7 | 8.8 | 10.4 | 12.2 | 9.4 |
| Khagaria | 1.3 | 88.5 | 70.7 | 3.3 | 9.0 | 6.4 | 5.4 |
| Kishanganj | 0.7 | 100.0 | 100.0 | 7.6 | 18.9 | 13.8 | 9.4 |
| Lakhisarai | 0.2 | 100.0 | 100.0 | 5.2 | 9.2 | 3.2 | 2.7 |
| Madhepura | 0.5 | 100.0 | 77.3 | 1.3 | 7.1 | 5.4 | 0.0 |
| Madhubani | 19.0 | 67.7 | 62.5 | 7.7 | 15.1 | 19.4 | 5.9 |
| Munger | 0.0 | 0.0 | 0.0 | 7.1 | 9.7 | 4.4 | 6.8 |
| Muzaffarpur | 2.5 | 33.0 | 56.5 | 8.0 | 8.4 | 5.2 | 8.2 |
| Nalanaa | 1.3 | 93.3 | 61.4 | 3.5 | 6.8 | 6.3 | 8.3 |
| Nawada | 1.5 | 41.3 | 56.9 | 5.6 | 2.5 | 9.2 | 12.5 |
| Pashchim | 11.1 | 64.5 | 70.0 | 17.3 | 25.5 | 75.6 | 51.1 |
| Champaran |  |  |  |  |  |  |  |
| Patna | 2.3 | 70.6 | 41.2 | 6.9 | 8.8 | 14.5 | 5.7 |
| Purba Champaran | 4.6 | 64.1 | 47.6 | 8.9 | 15.1 | 11.2 | 9.3 |
| Purnia | 0.0 | 0.0 | 0.0 | 3.6 | 4.5 | 4.3 | 4.3 |
| Rohtas | 0.5 | 88.9 | 86.6 | 4.5 | 6.1 | 1.3 | 3.3 |
| Saharsa | 0.3 | 100.0 | 78.2 | 4.1 | 6.7 | 7.7 | 1.8 |
| Samastipur | 2.2 | 77.9 | 74.1 | 4.0 | 10.8 | 15.0 | 5.9 |
| Saran | 0.0 | 0.0 | 0.0 | 3.9 | 11.2 | 1.7 | 0.8 |
| Sheikhapura | 8.2 | 6.4 | 52.1 | 5.7 | 28.8 | 12.4 | 30.4 |
| Sheohar | 0.0 | 0.0 | 0.0 | 3.6 | 6.7 | 5.6 | 7.7 |
| Sitamarhi | 0.8 | 93.1 | 93.1 | 3.4 | 9.4 | 7.6 | 3.9 |
| Siwan | 0.7 | 81.9 | 100.0 | 7.9 | 21.6 | 11.9 | 3.3 |
| Supaul | 0.7 | 0.0 | 0.0 | 5.6 | 15.0 | 10.8 | 9.0 |
| Vaishali | 1.4 | 74.2 | 77.6 | 4.3 | 6.7 | 10.4 | 13.8 |
| Average | 2.1 | 62.1 | 59.9 | 5.6 | 10.9 | 10.8 | 8.1 |
|  |  |  |  |  |  |  |  |

The utilization of Government health facilities for pregnancy related complications and for post delivery complications was 11 percent each in the state as a whole. Further, in Bihar about 1 out of 10 women availed Government health services for ANC and RTI/STI. Further, a large variation has been observed among the districts in the utilization of Government health facilities. Sheikhpura district ranks first with 29 percent women utilizing Government health facilities for pregnancy related complications while Nawada, Jehanabad and Purnia districts stood lowest where less than 5 percent of women reported such utilization. On the other hand, utilization of Government health facilities for post delivery complications is lowest in Rohtas, Saran, Banka and Jamui districts ( $<5$ percent) and highest in Paschim Champaran (76 percent). For ANC services utilization is lowest in Madhepura (only 1 percent) and highest in Paschim Champaran (17 percent). The district wise information shows that this proportion utilizing services for RTI/STI is lowest in the Madhepura and Saran districts where utilization of Government health services is almost negligible while it is highest in Paschim Champaran (51 percent).

Information related to the magnitude of complications during pregnancy, delivery and post-delivery in different districts of Bihar has been presented in Table 5.24.

Table 5.24: Complications during or after pregnancy and side effects due to family planning

| District | Complications in Pregnancy | Complications in Delivery | Complications in post-delivery | Side effects due to female sterilization | Side effects due to use of IUD | Side effects due to use of Pills |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Araria | 54.5 | 89.0 | 72.5 | 29.4 | 52.8 | 22.5 |
| Aurangabad | 44.5 | 83.7 | 52.6 | 22.6 | 15.3 | 0.0 |
| Banka | 57.5 | 87.8 | 45.9 | 27.2 | 6.2 | 31.9 |
| Begusarai | 27.7 | 70.9 | 33.8 | 6.7 | 14.1 | 0.0 |
| Bhagalpur | 49.0 | 79.1 | 51.8 | 24.9 | 33.1 | 9.1 |
| Bhojpur | 49.0 | 91.0 | 30.4 | 13.9 | 9.2 | 17.1 |
| Buxar | 45.3 | 83.6 | 44.2 | 15.3 | 24.6 | 7.0 |
| Darbhanga | 40.4 | 71.5 | 49.8 | 18.7 | 0.0 | 16.5 |
| Gaya | 50.1 | 73.5 | 48.9 | 21.7 | 11.5 | 40.7 |
| Gopalganj | 53.7 | 65.3 | 55.9 | 16.6 | 32.2 | 15.7 |
| Jamui | 47.0 | 99.2 | 33.8 | 13.5 | 13.3 | 0.0 |
| Jehanabad | 37.7 | 60.5 | 36.3 | 22.8 | 0.0 | 0.0 |
| Kaimur (Bhabua) | 45.5 | 99.0 | 51.6 | 17.4 | 0.0 | 12.8 |
| Katihar | 30.1 | 80.8 | 50.1 | 23.8 | 0.0 | 11.6 |
| Khagaria | 34.1 | 79.1 | 46.5 | 27.0 | 19.8 | 41.8 |
| Kishanganj | 27.8 | 70.8 | 45.6 | 18.4 | 23.0 | 34.4 |
| Lakhisarai | 40.2 | 86.4 | 42.5 | 20.5 | 4.8 | 8.8 |
| Madhepura | 51.2 | 96.4 | 65.6 | 26.7 | 0.0 | 28.9 |
| Madhubani | 31.3 | 68.3 | 55.2 | 23.5 | 28.1 | 23.5 |
| Munger | 31.8 | 82.6 | 53.4 | 17.1 | 8.0 | 0.0 |
| Muzaffarpur | 42.2 | 68.9 | 40.9 | 20.6 | 22.7 | 41.1 |
| Nalanda | 43.4 | 99.1 | 43.3 | 17.5 | 0.0 | 11.6 |
| Nawada | 29.0 | 63.6 | 36.5 | 20.9 | 5.6 | 16.1 |
| Pashchim | 26.7 | 61.0 | 49.8 | 9.0 | 0.0 | 0.0 |
| Champaran |  |  |  |  |  |  |
| Patna | 38.6 | 64.7 | 40.6 | 19.5 | 24.8 | 9.5 |
| Purba | 49.3 | 61.3 | 46.1 | 23.3 | 26.2 | 17.7 |
| Champaran |  |  |  |  |  |  |
| Purnia | 36.0 | 99.8 | 30.0 | 7.9 | 0.0 | 13.9 |
| Rohtas | 44.9 | 98.3 | 46.6 | 18.9 | 21.6 | 6.0 |
| Saharsa | 38.9 | 99.4 | 33.8 | 18.9 | 0.0 | 4.9 |
| Samastipur | 39.7 | 70.9 | 53.6 | 21.3 | 0.0 | 38.6 |
| Saran | 41.1 | 96.9 | 36.9 | 11.1 | 4.4 | 7.1 |
| Sheikhapura | 21.4 | 85.0 | 56.9 | 29.9 | 0.0 | 30.0 |
| Sheohar | 56.2 | 90.8 | 56.0 | 23.8 | 0.0 | 6.0 |
| Sitamarhi | 47.7 | 78.4 | 45.9 | 24.4 | 43.3 | 30.8 |
| Siwan | 37.1 | 84.4 | 32.2 | 11.3 | 0.0 | 18.0 |
| Supaul | 38.9 | 98.8 | 60.1 | 19.7 | 0.0 | 0.0 |
| Vaishali | 39.2 | 85.2 | 53.8 | 16.6 | 0.0 | 0.0 |
| Average | 41.0 | 81.7 | 46.7 | 19.5 | 12.0 | 15.5 |

An analysis of data above shows that in the State, around 4 out of 10 women (41 percent) had pregnancy complications, 8 out of 10 women ( 82 percent) had complications during delivery while nearly 5 out of 10 women ( 47 percent) reported post-delivery complications, respectively.

On examining the district level data, large differentials emerge. For example, pregnancy complications were lowest in Sheikhpura (21 percent) while Banka reported highest pregnancy related complications (57 percent). Similarly, delivery complications were lowest in Jehanabad (60 percent) and highest in Jamui, Kaimur, Nalanda, Purnia, Saharsa and Supaul districts (99 percent), respectively. In case of post-delivery complications Bhojpur and Purnia districts had the lowest proportion (30 percent each) while Araria district had the highest proportion (72 percent).

## CHAPTER - 6

## STRATEGY FOR POPULATION STABILIZATION IN BIHAR

### 6.1 National Population Policy

The National Population Policy (NPP) 2000 [1] has laid down short-term, medium-term and long-term targets for stabilization of population by 2045. One of the important medium term goals in NPP-2000 is bringing down the TFR (the average number of children a woman bears in her lifetime) at replacement level of 2.1 by 2010. The immediate objective is to address unmet need.

It has been emphasised in the NPP-2000 that the achievements in the backward states of UP, MP, Bihar, Rajasthan and Orissa will determine the time and the year in which the country is likely to achieve population stabilization. An analysis of data available through various sources has been undertaken to highlight magnitude of population problem in backward states vis-à-vis the rest.

There are districts with very high TFR requiring special focus to achieve faster gains. It is therefore important to identify such districts with high TFR for proper targeting. The chapter attempts to identify such districts.

Important community based data sources on population related parameters are Census, SRS, NFHS, RCH/RHS. The availability of data through these sources is as under :
(i) Census: Census 2001 [2] has provided information on total population at state level along with Sex ratio, Literacy.
(ii) Sample Registration System (SRS) : The SRS [3] is the main source of data on Crude Birth Rate (CBR), Total Fertility Rate (TFR), Infant Mortality Rate (IMR), etc. at state level. These data are used for assessing the levels and studying the trends.
(iii) National Family Health Survey (NFHS) : Two rounds of National Family Health Survey (NFHS-1 and NFHS-2) [4] provide data on levels and change of various parameters at state level combined as well as by background characteristics such as literacy level, Socio-economic groups etc.
(iv) RCH Rapid Household Surveys (1998-99) : At the district level, data on population related parameters are available through RCH/Rapid Household Surveys [5]. These data are of immense use for identifying districts requiring special attention.

The data on TFR are not available at district level. Of various indictors for which information is available at district level, the third and higher order birth is known to be highly correlated with TFR. Therefore, using the theory of Small Area Statistics' the relationship of TFR and third and higher order birth has been used in identifying the districts with varying levels of TFR. For this, NFHS data have been used in studying the relationship of $3^{\text {rd }}$ and higher order birth with TFR as this is the source which has acceptable data on both the indicators.

The results are presented separately under the following heads viz, Demographically Weak States and Demographically weak districts.

### 6.2 Demographically Weak States

Table 6.1 provides the information on TFR for the states of U.P., M.P., Bihar, Rajasthan and Orissa using SRS.

Table 6.1 : Total Fertility Rate

| States | TFR |
| :--- | :--- |
| All India | 3.3 |
| Bihar | 4.5 |
| M.P. | 4.1 |
| Rajasthan | 4.23 |
| U.P. | 4.83 |
| Orissa | 3.14 |

The group of these states (EAG states) excepting Orissa has very high TFR. The state of Orissa which has TFR lower than the rest of the states in the group, has the highest infant mortality rate and undernutrition because of which the state has been grouped with other states as the goal is not only to achieve TFR of 2.1 but also to take care of reduction in IMR, MMR, malnutrition etc.

The TFR for the group of these states (average for the 5 states) is 4.2, i.e. double the level than the desired TFR of 2.1 highlighting the magnitude of the task. The TFR for Bihar is the highest at 4.5 .

### 6.3 Demographically Weak Districts

In order to identify districts with high TFR following table provides correspondence of TFR and B3 (third order births)

Table 6.2: Correspondence of TFR and third and higher order births.

| TFR | B3 |
| :--- | :--- |
| 2.1 | 31.0 |
| 2.5 | 38.0 |
| 3.0 | 46.5 |
| 3.5 | 55.0 |
| 4.0 | 64.0 |

Based on the relationships and the information at district level on third and higher order births, the districts have been classified according to different levels of TFR, viz. <2.1, 2.1 to $2.5,2.5$ to $3.0,3.0$ to 3.5 , and $>3.5$. Table 6.3 provides the number of districts falling in different groups.

Table 6.3: Distribution of Districts by TFR Category

| STATES | $<\mathbf{2 . 1}$ | $\mathbf{2 . 1 - 2 . 5}$ | $\mathbf{2 . 5 - 3}$ | $\mathbf{3 - 3 . 5}$ | $\mathbf{3 . 5 - 4}$ | $>\mathbf{4}$ | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ANDHRA PRADESH | 17 | 4 | 2 | 0 | 0 | 0 | 23 |
| BIHAR | 0 | 0 | 1 | 9 | 31 | 2 | 43 |
| GOA | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| GUJRAT | 4 | 7 | 4 | 4 | 0 | 0 | 19 |
| HARYANA | 1 | 8 | 7 | 1 | 1 | 0 | 17 |
| HIMACHAL PRADESH | 6 | 3 | 2 | 1 | 0 | 0 | 12 |
| J \& K | 2 | 2 | 2 | 1 | 4 | 2 | 13 |
| KARNATAKA | 11 | 4 | 1 | 4 | 0 | 0 | 20 |
| KERALA | 13 | 1 | 0 | 0 | 0 | 0 | 14 |
| M. P. | 0 | 1 | 13 | 28 | 3 | 0 | 45 |
| MAHARASHTRA | 9 | 11 | 9 | 1 | 0 | 0 | 30 |
| ORISSA | 0 | 2 | 15 | 13 | 0 | 0 | 30 |
| PUNJAB | 4 | 9 | 4 | 0 | 0 | 0 | 17 |
| RAJASTHAN | 0 | 0 | 4 | 17 | 9 | 0 | 30 |
| TAMILNADU | 21 | 2 | 0 | 0 | 0 | 0 | 23 |
| UTTAR PRADESH | 0 | 0 | 3 | 12 | 44 | 9 | 68 |
| WEST BENGAL | 4 | 6 | 2 | 6 | 0 | 0 | 19 |
| NORTH EAST | 5 | 6 | 11 | 17 | 18 | 10 | 67 |
| DELHI \& US | 8 | 1 | 2 | 1 | 0 | 0 | 12 |
| TOTAL | $\mathbf{1 0 7}$ | $\mathbf{6 7}$ | $\mathbf{8 2}$ | $\mathbf{1 1 5}$ | $\mathbf{1 1 0}$ | $\mathbf{2 3}$ | $\mathbf{5 0 4}$ |

Following are the salient observations emerging from this analysis.
(a) The districts with TFR more than 3.5 numbering 133 could be termed as demographically weak districts which are required to be specially targeted for faster gains.
(b) These districts are mainly from the States of pre-divided Uttar Pradesh (52), pre-divided Bihar (33), North Eastern states (28), Rajasthan (9), J\&K (6), Madhya Pradesh (3) and Haryana (1). Of 33 districts from pre-divided Bihar 9 belong to Jharkhand and rest 24 are from Bihar.
In the state of Bihar more than $3 / 4^{\text {th }}$ of the districts fall in the category of demographically weak districts. The other state from where very high proportion falls in this category is U.P.
(c) On the other hand, in the States of Kerala and Tamil Nadu 93 and $91 \%$ of districts respectively have already achieved TFR of less then 2.1. In the state of Andhra Pradesh the percentage of districts with TFR less then 2.1 is 74\% followed by Karnataka (55\%).
(d) An analysis of data on other indicators indicated that in better performing districts, the availability of health infrastructure is better as reflected by over 75 percent institutional deliveries and full ANC as against corresponding figure of $15 \%$ in poor performing districts.

Table 6.4: Selected Indicators (Average) for Districts Falling in Different TFR Category

| Estimated TFR Category |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Indicator | $<2.1$ | 2.1-2.5 | 2.5-3 | 3-3.5 | >3.5 |
| Full ANC | 73.7 | 51.4 | 32.0 | 24.2 | 18.9 |
| Institutional |  |  |  |  |  |
| Dliveries | 74.5 | 50.3 | 36.6 | 25.8 | 17.2 |
| Complete |  |  |  |  |  |
|  | 83.2 | 72.0 | 60.8 | 46.1 | 33.9 |
| Immunisation |  |  |  |  |  |
| Sterilisation | 48.0 | 40.9 | 36.5 | 29.6 | 15.9 |
| Girls Marrying |  |  |  |  |  |
| Above 18 Years | 81.0 | 75.6 | 66.5 | 55.6 | 45.9 |
| Female |  |  |  |  |  |
| Literacy | 46.9 | 39.2 | 31.0 | 23.6 | 20.5 |

Table 6.4 shows the Average of different Indicators for the districts falling under different TFR categories.

These are the districts where the availability of health infrastructure is poor and therefore required to be strengthened. In better performing districts the female literacy is also very high as to also low proportion marrying below 18 yrs. Efforts will have to be made to identify the factors responsible for poor achievements and area specific remedial measures have to be planned and implemented. Improvement in literacy as well as in availability and access to family welfare services are needed in the demographically weak districts in order to achieve a faster decline in fertility rates.

### 6.4 Districts Identified for Targeted Interventions in Bihar

It is important to mention that the number of districts having TFR 3.5 or more have reduced from 24 for 1998 as per DLHS-RCH 1 to 17 for 2004 as per DLHS-RCH 2 information.

The list of 17 districts of Bihar with high TFR requiring targeted interventions for achieving population stabilization are as under:

- Araria
- Buxar
- Darbhanga
- Jehanabad
- Katihar
- Khagaria
- Kishanganj
- Nalanda
- Nawada
- Pashchim Champaran
- Purnia
- Saharsa
- Samastipur
- Saran
- Sheikhpura
- Sheohar
- Sitamarhi

The population stabilization efforts should be intensified and targeted in these districts for achieving faster gains.

### 6.5 Population Stabilization : Strategic Immediate Steps

Some of the aspects which require immediate attention have been presented in the subsequent sections. Though the role of PRIs, NGOs and SHGs have been commented in this section, the same has been elaborated in Chapter 7.

## Unmet Need

The present growth of the population of the country is basically due to three factors. About 58 percent of the growth can be attributed to the large size of the population in the 'reproductive age group'. This is referred to as the "momentum factor" and is bound to take place because of what has happened in the past. Another 20 percent of the growth in population is said to be due to un-met needs of contraception and the balance 22 percent due to other socioeconomic factors like high infant mortality, low status of women, preference for son, illiteracy, poverty etc. Higher fertility due to un-met needs for contraception accounts for 168 million eligible couples of which only 44 per cent are currently effectively protected. Thus, urgent steps to make contraception more widely available, accessible and affordable would considerably reduce fertility levels. A large proportion of the population (more than 80 percent) in Bihar lives in rural areas in villages, many with poor communication and transport facilities. Reproduction health and basic health infrastructure and services often do not reach the villages and accordingly vast numbers of people cannot avail of these facilities. Infrastructure development, therefore, would facilitate eligible couples to avail of these services and thus increase the number of those who are able to reduce their family size.

High wanted fertility due to high infant mortality rate (IMR) is on account of the perception of some segments of population, particularly the poor, who see repeated child birth as an insurance against multiple infant (and child) deaths which stymies efforts at reducing total fertility rate. Additionally, there are more child deaths in the age group of $0-14$ in this segment than elsewhere.

Further, over 50 percent of girls marry below the age of 18, the minimum legal age of marriage resulting in too early, too frequent and too many births. Around 33 percent births occur at intervals of less than 24 months. This also contributes to high IMR.

The elements of population growth amenable to policy intervention relate to the later two categories, namely meeting the un-met needs of contraception and dealing with the socio-economic and demographic factors affecting population growth. It has been admitted that if the un-met needs for contraception alone can be met in the high population growth states it could go a long way in reducing the overall population significantly.

The unmet needs of family welfare may be on account of several reasons, prominent among them include ignorance, lack of access to information, services, health facilities or fear of higher risk from side effects of fertility control devices. In this view of the matter, unmet needs emerge from the following factors:
(a) Availability, access and quality of existing health infrastructure and family welfare services. This would include motivation and mobility of health providers and transportation of patients to health centers.
(b) Counselling
(c) Supply of products
(d) Information/education

Therefore, intervention to meet the unmet needs cannot be construed as a component of RCH programme but has to be positioned integrally in the country's public health and associated nutrition and child development infrastructure. Taking the above into account, the National Population Policy 2000 has conceptualized three dimensions of possible interventions:

The Strategy should focus on: (i) intervention to meet un-met needs should not be an isolated vertical component but be an integral part of the delivery of basic RCH services and embedded in public health and associated sectors’ infrastructure; (ii) extending the basket of choices and improve their easy availability; (iii) linking family planning services to new opportunities arising from decentralization and economic reforms with panchayats being used for ensuring their accountability and reach;(iv) involvement of ISM \& H practitioners to increase coverage; (v) improving quality in all methods of contraception and creating safe back-up abortion facilities; (vi) With the help of NGOs and self-help groups ensuring widest availability of public information on methods of contraception including precautions to ensure that choices in contraception are in fact available in letter and spirit; (vii) special training programmes particularly in contraceptive safety skills for ANMs, supportive counseling services, efforts to encourage men to use contraceptive methods and sex education to adolescents within a positive value framework; (viii) affordable health insurance package for low income people for a selected number of common illnesses which should cover OPD and also maternity and; (ix) crucial role of Panchayats in providing information to the people and ensuring local accountability.

Among the 14 national socio-demographic goals of national population policy first 7 relate directly to the women and children and the remaining 7 relate to them indirectly, although vitally. The sub-group on empowerment of women, development of children and issues of adolescents made the following major recommendations:

- The larger issues of alleviations of poverty, empowerment of women, changing mind-set of men and creation of opportunities and enabling environment for women, children and adolescents have to be addressed. Strategic framework for stablisation of population is not merely a question of birth control or use of contraceptives.
- Various national policies such as those of health, youth education, and children should all be integrated with national population policy for preparing national and state level action plans.
- Adequate resource allocation for social sectors.
- Universalisation of ICDS and IWEP programmes, opening up of large number of crèches/day-care centres.
- Restructuring of Kishori Shakti Yojana so as to have a gender centered adolescent nutrition and development programme.
- A strong focus on adolescents in various programmes and schemes.
- Nutritional scheme for children and mothers in the below poverty-line segment through available food stock.
- Women members of Panchayats to coordinate various programmes of women and children and capacity building for this purpose; Empowerment of the self-help groups of women; collaboration of Panchayats, NGOs and self-help groups in social sector programmes.
- Positive discrimination in favour of districts and blocks which have lagged behind so as to accelerate their development to reach the minimum desired levels. Developing a system of gender segregated data on indices of development at district and sub-district level.
- Medium-term perspective of 10 years for empowerment of women and development of children and adolescents.
- Involvement of men in promotion of reproductive rights and greater focus on male contraceptives as safe and easier device to use.
- Training and equipping the village midwives to ensure 100 percent safe deliveries.
- Promoting Rural orientation for medical students of both government and private colleges.
- Training and capacity building of field functionaries, NGOs, self-help groups in addition to members of PRIs.
- Comprehensive package at block level on improving home based care through trained personnel for checking neo-natal and pre-natal mortality.
- Compulsory social auditing of infant and maternal deaths.
- Clinical and medical interventions which can result in immediate and significant improvement in the maternal mortality to be effected through campaign mode.
- Review of pre-natal diagnostic Act to ensure its effective implementation.
- Sustained information campaign for achieving national goals contained in NPP-2000.
- Suitable packages and courses on health and nutrition education.

Sharpening the focus on existing infrastructure to deliver the quality of services is the first point of intervention. This should be accomplished by following steps:

[^1]Further elucidation of these recommendations imply better planning, resource mobilization and co-ordination under on going contraception programmes with emphasis on synergy in related programmes to achieve optimal results. Also, added in this context is wider and easy availability of contraceptives, expanding basket of choices consistent with safety and concern for human rights and accompanied by comprehensive information cutting across geographical areas and classes through the community based outreach and coverage. There is also a suggestion that family welfare services should also include health insurance. Monitoring of quality of services and enforcing accountability of service providers have been stressed and the role of Panchayats has been specifically thought of in this context.

The second dimension of intervention outlined in the operational strategy has been linked to the inadequacy of the existing health infrastructure to meet the unmet needs of contraception, their being wide gaps in coverage and outreach. This implies that health care/family welfare centers are over burdened or under-provided in terms of personnel and equipment, besides being constrained by absence of supervision, lack of training and motivation.

The third dimension of the unmet needs is the inability to provide integrated services delivery for basic reproductive and child health care. This is reflected in segmented nature of service delivery related to RCH and family welfare which do not seem to get coordinated to provide delivery at one convenient place. This is on account of inadequate number of trained birth attendants, non-availability of facilities for safe delivery and expert medical advice in case of complications. A key feature of integrated service delivery has been identified as the registration at village level of births, deaths, marriages and pregnancies and maintaining a list of community midwives and trained birth attendants, village health guides, anganwadi workers and other public functionaries who may be entrusted with specific responsibilities in attempting to implement the integrated service delivery. The one stop integrated
delivery would involve package for basic health, family planning and maternal and child health related services. The strategic interventions in this regard include training and motivating village self-help acceptor groups for establishing primary contact at house hold levels who would provide following six different services at one place:

- Registration of births, deaths, marriages and pregnancies
- Weighting of children under 5 years and recording the weight on standard growth chart
- Counselling and advocacy for contraception besides free supply of contraceptives
- Preventive care, with availability of basic medicines for common ailments, anti-pyretic for fevers, anti-biotic ointment for infections, ORT/ORS for childhood diarrhea together with standardized indigenous medication and Homeopathic cures.
- Nutrition supplements Advocacy and encouragement for continued enrolment of children in schools up to the age of 14.
- While some of the functions such as those listed as $2 \& 5$ above are already performed by the Anganwadi workers at the village level and ANM at the group of villages level, it has been suggested that the village Anganwadi Centre may become the pivot of basic healthcare activities, supply of contraceptives, counseling, nutrition, supplementation and education including pre-school activities. The Anganwadi centers can also function as depots for ORS/basic medicines and contraceptives. Trained birth attendants and dais should be made familiar with emergency and referral procedures to assists ANMs to respond to maternal morbidity emergencies at the village level. The nearest institutional healthcare facility should be equipped for integrated service delivery to be accessed. A maternity hut should be established in each village as the village delivery room, adequately equipped with kits for mid-wifely, ante natal care and delivery, basic medication for obstetric emergency aid, contraceptives, drugs and medicines for common ailments and indigenous medicines/ supplies for maternal and new born care.

Further, the interventions can focus on activating the existing health infrastructure and family welfare services for better performance, enforcing quality, making service providers accountable for their performance and rationalizing deployment of local resources, manpower as well material for extracting optimal benefits. The interventions also include extension of reach of services through co-operation with NGOs and, where feasible, with facilities in the private sector. Barring those aspects which involve adequate allocation of resources such as supply of medicines, equipment etc., Panchayat Raj Institutions are best equipped to make those interventions in varying degrees depending upon the devolution of powers, authority and resources.

Also, on the Socio-Economic front for population stabilization, it was that around $20 \%$ of the growth of population is due to factors like high infant mortality, low status of women, preference for son, illiteracy and poverty. In case of infant mortality it has been estimated that about $7 \%$ of new born infants die within a year. This is attributed to (a) poor health of mothers and infants resulting in low birth weight and pre-mature babies, (b) infant and childhood diarrhoeal diseases, acute respiratory infections and malnutrition, (c) in India, there are more female deaths in the age group of 0-14 than in any other country.

With $8 \%$ of India's population, the Maternal mortality ratio in Bihar continues to be very high at 371 per 1-lakh live births and this is far higher than 301 for all India (2001-2003).

The infant mortality rate and maternal mortality rate, to a large extent, are related to the reach and quality of basic health services and status of healthcare infrastructure for reproductive and child health. The suggested interventions for improvement in the health care infrastructure as discussed in the unmet needs section would naturally have their impact on lowering infant mortality as well
as maternal mortality in the Bihar. This would lead to better infant survival rate which in turn would motivate the women (in fact the family) to practice small family norm as it would obviate the need for more children as an insurance against risk of death of their infant/ children. But fertility behaviour of women and the attitude to acceptance of its regulation is also influenced by complex socio cultural determinants of women's health and nutrition which have as cumulative effect on her status and psyche. These include discriminatory childcare leading to mal-nutrition and impaired physical development of the girl child, under nutrition / micronutrient deficiency in early adolescence which has an adverse impact on the level of productivity in women and therefore, responsible for their poverty as well. Early child bearing and consequent serious pregnancy related complications also increase risk of pre-mature deaths and disability. Mal-nutrition, frequent pregnancy, unsafe abortions, RTI and STI, all combine to keep the maternal mortality ratio so high in the state. The added problem in this context is the low social and economic status of girls and women which limits their access to education, nutrition and healthcare and skewed distribution of these benefits within the family. This is evident from the data provided in earlier sections. The programme intervention to combat maternal mortality and infant mortality include safe motherhood, universal immunization, child survival and oral rehydration which together constitute the integrated reproductive and child health programme (RCH). It also includes management of RTIs and STIs.

The state should adopt operational strategies recommended by the National Population Policy which include:

- effective implementation of RCH programme
- opening more child care centers to encourage female employment
- reducing school drop out and promoting school enrollment for the girl child
- provision of potable water and sanitation facilities
- improving health management by strengthening referral network
- strengthening community health centres to provide emergency obstetric and neo-natal care
- establishing mechanism for identification of problem cases of maternal and child healthcare arranging transportation to improve access to community health centers.
- improving accessibility and quality of maternal and child health services
- monitoring performance of maternal and child health services
- monitoring performance of maternal and child health services
- improving technical skills of Medical / Para-medical personnel for maternal and child healthcare
- designing a health package for adolescents: expanding availability of safe abortion care;
- setting up maternity hospitals/ wards at sub-district level and at CHCs to function as FRUs, formulating standards for clinical services in public, private and NGOs sectors, focusing on extension of non-clinical methods of contraception, creating a national network of public, private and NGOs centres for delivery of RCH services free to any needy client.
For population stabilization, the State should stress on the following:

1. Identification of areas which would require additional inputs of child and maternal care services to reduce IMR and MMR and introduction of flexible approach with additional Anganwadi centres and supplementary nutrition, where required, for monitoring the performance and improving services in critical areas.
2. Convergence of existing food stock for providing nutritional security, at least to infants and mothers through ICDS centres.
3. Extension of ICDS to additional blocks, which have the highest incidence of infant and maternal mortality. Effective convergence at grass root level between ICDS programme and infrastructure of health and family welfare department.
4. Vigorous implementation of schemes for encouraging compulsory education among girls.
5. Vigorous action for preventing child marriages.
6. Effective implementation of NRHM, in particular, Janani Suraksha Yojana (JSY)

PRIs through devolution of authority and resources on the one hand and capacity building on the other can be able to do these. The specific sectors requiring attention are:

## Education

Increasing the level of education is useful to accelerate the transition to lower fertility rates. In India female education is closely linked to fertility decline. Generally women with more education have fewer children, are more likely to use contraception, and marry later. Several studies reveal that educated women will avail health and family planning services, no matter how difficult these may be to obtain. The average number of children born to educated women varies between 2 and 2.6 even in regions with high levels of fertility and infant mortality. In contrast, the average number of children born to women with no education is much more between 2.3 and 5.4.

It has been found that infant mortality among children born to educated women is one-quarter of the same among those of non-educated women in Kerala, while in Uttar Pradesh, an infant born to a non-educated mother is more than twice as likely to die as one born to a woman with a high school education. And infant mortality rates are far higher among women with little education in areas with few health services. Interestingly, infant mortality among educated women in Uttar Pradesh, with fewer health services, is about the same as it is among non-educated women in Kerala, with better health services. This implies that education and health services complement each other in reducing infant mortality.

Gender bias contributes to infant mortality, as is apparent in the survival ratios of boys to girls in several states. Gender bias is also evident in school enrolments, with rural girls attending least. Slow population growth and lower prevailing fertility have conferred no advantage on them. In another sign of continuing gender inequity, maternal morbidity and mortality are "unacceptably high in many states, even in Kerala, which has almost universal hospital delivery and antenatal care.

Female education lowers fertility, and it lowers infant mortality. Education complements health services, with both increasing health-seeking behaviour. To accelerate the transition from high birth rates to replacement birth rates in India, we can start by expanding female education, but simultaneously lowering infant mortality with better health services and expanded family planning services would be most effective.

The strength and experience of NGOs can be utilized adequately and appropriately in various activities, such as expanding educational opportunities to the deprived children, organization of educational activities focused exclusively on population concerns, counseling the young and old particularly in respect of reproductive health issues including HIV / AIDS and drug abuse and generation of awareness about critical population issues among the community. NGOs can be encouraged to actively participate in planning and management of adult literacy programmes to institutionalize population concerns.

## Women \& Children

The problems relating to women and children are the core issues for stabilizing the population of the country. The National Population Policy (NPP) envisages involving people and enabling women in particular to bring the issues of reproductive rights of women and of the larger conceptual issues of gender equality and of empowerment of women.

India accounts for nearly 25 \% of the World's maternal deaths. Every year about 1,25,000 Indian women die from pregnancy related causes many of which are preventable. Poor maternal health results in low birth weight and premature babies. More than $7 \%$ of the new-born babies perish every year. Nearly 2.3 \% of the babies who survive the first year perish before they complete five years. The number is more in case of female babies. The IMR has remained around 72 per 1,000 live births with no significant improvement in the nineties. This is much below the average of 6 in
developed countries, 64 in developing countries and the world average of 59. Also, there are significant disparities across States, within the States and among castes, communities and other ethnic groups.

The mean age of marriage at the national level is 19.5 years, but about $17.4 \%$ of girls are married below the legal age of marriage 18 years. 8.3 \% of fertility in India is contributed by mothers below 19 years age which is linked with premature death, neonatal deaths, low birth weight babies and maternal morbidity. Micro studies have indicated that women do not get adequate nutrition during pregnancy and lactation. According to an assessment of underweight and stunned growth of children (1997), in the age group of 1-5 years, almost half of girls were underweight and $20.3 \%$ were severely underweight. Stunting was observed in 56 \% of girls. The Body Mass Index (BMI) indicates that more women (36.1\%) than male (28.6\%) are affected by various stages of chronic energy deficiency. Of the social sectors, a large presence of NGO's is noticed in this area. However, the area wise distribution / location of NGO's is not uniform. Quality and care also needs re-emphasis.

## Empowerment of Women

Many of the socio-demographic goals outlined in the National Population Policy are concerned with women and children who constitute about $75 \%$ of our population. Underage marriage of girls, malnutrition, social and religious disabilities, gender discrimination in various forms, inadequate representation in the political and administrative set ups etc. make the condition of women generally poor. Repetitive child bearing, often against their will, is sometimes treated as an attack on the human rights of poor women. In the cultural ethos prevailing in the country, most poor and illiterate women do not exercise any free reproductive rights. Mostly the number of children they have to bear is decided by their husbands and families. Discrimination against the girl child and 'son preference' compels the women to go for uncalled for pregnancies and abortions. The serious consequences of these to the physical and mental health of the women concerned may not receive due consideration. All development effort including population stabilization cannot make much headway
unless there is radical improvement in the status of women. It may be interesting to note that there is already a huge woman force readily available in the country for mobilization. The women Panchayat members, members of Women Self Help Groups (SHGs), ANMs, Anganwadi Workers, lady primary teachers, etc. can be mobilized. A mass training programme using well designed training modules for these categories can help in creating awareness and a sense of participation in the implementation of various social sector programmes. This can also be useful to break down caste and communal barriers in the rural areas. Mobilisation of Mahila Shakti through SHGs can be especially important in places where NGOs are not present. As the SHGs are useful to improve the economic conditions of women, these Groups can be very effective forums to promote other social causes like gender equality, small family etc. The experience gained by women through working in PRIs, SHGs etc. may also be very important in bringing them up in leadership roles including setting up NGOs to address the felt needs of the community. The involvement of NGOs and the formation of Self Help Groups (SHGs) is necessary for the social and economic empowerment of disadvantaged women. This has been found successful mechanism for the organization, mobilization and self-development of women through the IMY and Swa Shakti projects of the Department of Women and Child Development. NGOs and SHGs can be instruments of social empowerment through awareness generation and convergence of delivery systems. The collaboration of NGOs, Panchayats and SHGs at the grassroots level could become very effective for implementation of programmes for issues relating to women, children and adolescents.

## Adolescents

Adolescents comprise about one fifth of India's population. A bulk of population in this age group, particularly in rural areas, are dropouts from schools and are vulnerable to exploitation of various sorts. A strong focus on the adolescents need to be built in various programmes and schemes to address their concerns related to health, sex education, nutrition, vulnerable to HIV/AIDS etc.

## Water \& Sanitation

Because of the close linkage between safe potable drinking water, morbidity and mortality, appropriate emphasis requires to be given to the drinking water sector. In India, still a very large population is deprived of safe water facility. About 70-80 \% diseases are water and sanitation related. As per an estimate, 15 lakhs children below age 5 die and 20 crore human days are lost every year due to water related diseases. Most deaths occur due to diarrohea and jaundice and unless these two diseases are reduced, the IMR and morbidity rate cannot be reduced. Therefore, we need to have a large conglomeration approach to address adequately the unmet needs of safe drinking water and sanitation. The strength of NGO's already working in this sector would have to be expanded / deepened.

## Tribal Communities

Welfare \& Development of tribals occupy a distinct place in developmental planning. Whereas on the one hand, we are encouraged to see the achievements and improvements in the living conditions of the tribals through concerted efforts, on the other hand, other unresolved problems persist like land alienation, displacement, indebtedness, abject levels of poverty, illiteracy, poor environmental conditions and traditional beliefs and customs resulting in non-utilization of health services. All these lead to poor health and nutritional status of the tribal communities. Malnutrition is rather common particularly in situations where they are involuntarily displaced or resettled. They remain underserved in the coverage of RCH and require special attention especially in view of high IMR, MMR.

Amongst tribals, there are some communities which are very backward in every respect as compared to the rest. They live under the most fragile conditions. Though the special strategy of tribal sub-plan (TSP) has been under implementation since

1975 both at the Central and State levels with the objective that the benefits from various developmental programmes flow to the ST's in population proportion, its full impact on improving the conditions of ST's is not being felt. Poverty levels have no doubt come down, much more requires to be done before hunger, malnutrition and the consequential deficiencies and diseases are eradicated.

Though a large number of schemes on education, health \& income generation, vocational training programmes are being implemented by NGO's at present, there is no co-relation between what the NGOs are doing with the various department schemes and the activities of the corresponding departments. For example while PHCs may be set up by Government, there could be an NGO implementing a scheme of hospital in the same area being funded by the Ministry of Tribal Affairs. Such situations could then the avoided and the limited resources of the various departments could be well optimally utilized for the benefit of the tribal community.

## CHAPTER - 7

## ROLE OF PRIs, NGOs, AND SELF HELP GROUPS IN POPULATION STABILIZATION

The National Population Policy 2000 and the National Health Policy, 2001, have rightly emphasized decentralization and convergence of service delivery at village levels and recognize the PRIs, NGOs and as well as Self-Help Groups as the agencies responsible to ensure the same. The Tenth Plan document also emphasizes the critical role and function of these in development.

The present chapter deals with interventions through the involvement of PRIs, NGOs, Self-Help Groups for achieving population stabilization in Bihar.

### 7.1 Role of PRIs

Population stabilization cannot be viewed in isolation. It is a dependent variable linked to the quality of environment, improved status of women, education, sustained and secure employment, equitable economic growth and income distribution and good living conditions. Therefore, programmes such as eradication of poverty, improving access to food, education and health care, providing adequate housing, sanitation and drinking water and improving the status of women through welfare and literacy programmes are necessary conditions for promoting population stabilization. The $73^{\text {rd }}$ constitutional amendment, which prescribes uniform structure of local governments throughout the country, provides the basis for conceptualizing the role of PRIs for local self-governance and development. The $74^{\text {th }}$ amendment to the constitution incorporates the provision for a district planning committee, which among others, is required to issue guidelines for local level planning by PRIs. These amendments have created a framework for enabling the state legislatures do determine the scope of devolution of funds and powers to the
local bodies. The Eleventh Schedule to the Constitution incorporates the list of 29 subjects allotted to the PRIs. Item No. 24 in that list is 'family welfare'. Thus the subject of Population Stabilization clearly falls in the domain of PRIs. Even the subjects pertaining to other dimensions of development such as those listed in the preceding paragraph which have a bearing on Population Stabilization are also included in this list as would be evident from below:

## Functions of Panchayati Raj Institutions

Drinking Water;<br>Poverty Alleviation Programmes;<br>Education;<br>Health \& Sanitation including Hospitals; Primary Heath Centres \& Dispensaries;<br>Family Welfare;<br>Women and Child Development;<br>Public Distribution System

Over the years, the share of public spending on health is declining largely due to financial crisis faced by the State Governments. As a consequence, the quality of service provided by the public health institutions has been deteriorating. The better off sections of society have started patronising private health care institutions. However, due to high cost, the poor cannot access these institutions and facilities, though the unsatisfactory functioning of public health institutions has forced even the poor to spend considerable part of their meagre and hard earned income on health care rendered by the private sector which would have ordinarily contributed towards better food and nutrition of the family. The challenge before PRIs is how to correct the existing inequities in health care services and to transform through community participation the public health institutions as centres for efficient delivery of services, which concern for the underprivileged, user friendly behaviour and greater sense of accountability. This, however, would require that the capacity to discharge this role but built up in the PRIs. The entire health and family welfare activities are not managed at the village / panchayat level. It would, therefore, imply specifying
functions and responsibilities to be discharged at each level along with allocation of resources consistent with them. The principle that needs to be kept in mind while specifying functions for the three tiers is that "what can be done at a given level shall be done at that level only and not at higher level". The gram panachayat level, broadly speaking, can efficiently handle family welfare centers, primary health care centers, sanitation, immunization and preventive / promotive public campaigns in the health domain and activities concerning literacy, poverty alleviation, nutrition and income generation in the non-health segment. This level would also be crucial in forging linkages with specialized / referral health services at higher levels. The block panchayat would be better suited to deal with community health centers / Taluk hospitals as referral units for in-patient treatment. The block panchayat can also organize capacity building programmes for health personnel at the gram panchayat level and get literature prepared of health education, proper storage and distribution of medicines, arranging for specialist services to PHCs, linkages for attending to emergency cases, etc.

### 7.1.1 Involvement of PRIs

So far Family Welfare Programmes have been administered entirely through bureaucratic formations. While this has had limited achievement, the goal of population stabilization requires these efforts to be accelerated. This would mean greater participation of target group couples in the programme with a view to understanding what constrains their behaviour in acceptance of small family norm and using various devices available for this purpose and how these constraints can be neutralized. As a necessary pre-condition, this would require more intensive and continuing contact with and counseling of the targeted couples and ensuring delivery of services and products of them. On both these counts, existing institutional arrangements have produced sub optimal results, despite burgeoning expenditure. In this background, the rationale for an alternative mode of delivery of services assumes significance. A number of persons who have been involved with the programme consider vigorous involvement of PRIs as the alternative organizational route. This would have the following advantages:

- The PRI bodies would be able to oversee the working of the bureaucratic delivery system for the programme and thus providing the much needed guidance and critical inputs in terms of feedback from people. This would make the bureaucracy at the grassroots more alert and accountable. The political control over the programme at the cutting edge level would thus get energized and strengthened.
- Involvement of PRIs would provide opportunities for more intimate interface with target group couples, particularly women in the family which would permit their genuine and context specific/group specific problems to be articulated. On this basis, corrective measures accommodating their concerns can be initiated without much delay at the local level itself.
- It is widely recognized that population stabilization is a complex goal which would respond to a multi sectoral development thrust. This presupposes different sectors of Government coming together and working in a coordinated manner so that convergence of services can create the necessary impact of motivating a change of behaviour. Though such an approach has been advocated by Govt. representatives and critics alike, its realization has remained elusive since bureaucratic formations are prone to work in a segmented manner through their departmental hierarchies. This limitation is expected to be overcome substantially once elected bodies like PRIs take charge of the programme and involve themselves in monitoring and supervision as all concerned public functionaries would eventually submit themselves to their political directions.
- People involvement through PRIs at various levels in the programme would create more humane ambience in the delivery of services where human rights and concerns of dignity are respected both in thought and action and developmental dimensions of fertility are taken into account while devising strategy for tackling the socially constrained behaviour of targeted couples/groups.

The vigorous involvement of PRIs would facilitate the concerns of health, family welfare, equitable development and population stabilization getting incorporated in the local political discourse in the same manner as various other development dimensions such as creating infrastructure, employment generation etc. are done at present. This will generate requisite awareness among the people, which would raise / sharpen their demand for various services. The raised consciousness in turn would create pressure on the elected bodies as well as local bureaucracy to perform which would make them more responsive. Involvement of PRIs would also lead to institutional capacity building in respect of this programme that would generate its own momentum.

With the involvement of PRIs, innovative and practical steps/solution may emerge for meeting local problems affecting family welfare and related programmes which are otherwise not likely, given the straightjacket rule bound world of official delivery system. Involvement of PRIs may also help identify variety of situational constraints and sensitivities, areas as well as people specific and would therefore pressure them to work out differential strategies to meet them, which are user friendly and easier to implement. Such experiences would also create demand for greater freedom of action in activities such as modes of social mobilization, IEC, strategic entry points in areas of intense hostility towards the programme without alienating the power structures of the community and may eventually change the overall contours or the programmes and strategies at the policy making level. PRIs’ involvement would thus help crystallize appropriate approaches to extension of programme activities focusing on specific target groups and communities.

### 7.1.2 Capacity Building of Panchayats

The need for Capacity Building of elected institutions is not sufficiently appreciated. This is evident from the insignificant efforts and resources devoted to this work so
far. It is therefore important to underline the reasons for taking up this work. The rationale for Capacity Building of PRI functional areas include the following:

The elected representatives of PRIs particularly at lower levels and more specifically women are new entrants who are probably participating in electoral politics for the first time. Most of them may not have had experience of participating in public life or party politics earlier. Obviously, such people are not likely to have occupied any position which involved taking decisions, designing programmes or monitoring and supervising delivery of services. Therefore, these functionaries would have no clear vision of their role and its evolving nature. It is necessary that they be trained to develop potential as well as appreciate limits of their position to enable them to discharge their functions properly.

It is important for PRI functionaries to realize that powers conferred on them through these elected positions are to be exercised within a set framework. This framework has been carved out through a variety of rules, regulations and processes which are both enabling as well as constraining. In their decision-making and interactions these limits have to be recognized so that unnecessary frictions are avoided. At the same time it has to be recognized that rules and regulations need to be simplified to facilitate smoother functioning of the PRIs.

Various field studies indicate that PRIs display a very narrow perspective of their role in development activities. This could be largely because of the conditionalities imposed by State agencies while releasing funds to PRIs. The approach of PRIs may become different if they are allowed freedom of action.

However, at present, it is usually their perception that they discharge their role and satisfy their constituents better if they are able to create/provide physical infrastructure to their area such as a road, a bridge, a building, a public facility, a bus stop etc., in other words, a perception of 'construction oriented development'. Most PRI functionaries also construe their powers in terms of the extent to which they spend public resources - higher the expenditure, the greater satisfaction they claim in terms of development of
their area. The other consideration, which guides their thought process and behaviour, is how far they can distribute patronage to individuals/groups in their constituencies. This helps them to build up a patron-client relationship. If the potential of PRIs as envisioned in this report has to be realized, this perception needs to undergo a radical change. The capacity Building Programme has to convey in forceful terms that PRIs can achieve greater satisfaction for their constituents by interventions in programmes of social sector, such as health, education, sanitation and environmental improvement most of which may not involve setting up any visible infrastructure, additional facility or entailing any expenditure but by simply enabling people to access services, bringing service providers in direct and easy contact with beneficiaries, or through information dissemination which helps people improve their quality of life. Focus on such programmes can earn considerable gratitude of their voters. Therefore, even politically such programmes are paying.

A plethora of programmes in different sectors of development are getting implemented throughout the country. Most of these programmes would now fall within the domain of PRIs. These programmes cover a large number of subjects. PRI functionaries are not conversant with the complexities of the subjects these programmes cover. Even officers and professionals take time to acquire knowledge of different programmes with which they are not familiar. The problem would obviously be greater with PRI functionaries. The Capacity Building Programme should focus on conveying essential knowledge about them so that they can take informed decisions, are not misled by officials and can make meaningful interventions in the interest of people. Besides, this knowledge would also be essential for PRI functionaries to convey messages contained in these programmes to people in simple language intelligible to them, which government functionaries are unable to do. The situation would improve as decentralized planning strikes firm roots in the coming years and eventually bottom up approach to participatory planning and development becomes a reality.

Development activity of any type has the potential of generating conflict as it may benefit some and possibly hurt others. Similarly, peoples’ mobilization for special goals may also bring PRI functionaries into conflict with vested interests or specific segments of society. Political processes
themselves give rise to a lot of conflicts, as competitive demands on resources and power do not lend themselves to easy resolution. The Capacity Building Programme should incorporate within its ambit mechanisms for conflict management within the overall perspective of equitable social and economic development.

While PRIs ostensively have to administer public sector programmes, activities, institutions and resources, non-government institutions may also be operating specific programmes in their jurisdiction, either funded by govt. or through resources mobilized from outside including international donor agencies. Besides, in service sectors such as health, education, welfare, private individuals and trusts also run institutions and provide services. Sometimes, the public and private sectors both may be catering to the services in the same sub sector or facility. As usually happens, these services have no direct linkage with govt. and govt. also has no leverage with and control over them. Nevertheless, these institutions represent additionality of monetary, material and manpower resources in the area and bridge some gaps in availability of services. PRIs need to be trained to seek cooperation from these agencies in order to enlarge the gamut of benefits to the people in their jurisdiction. This cooperation can help both and would considerably benefit the people. This public-private partnership/cooperation should constitute a promising area of Capacity Building where initiative and innovation would be immensely rewarding. This has so far been an unexplored area.

Capacity Building should not be considered as a general training course to introduce Govt. programmes. It is intended to be a serious effort at laying foundation of democratic governance. This underlines the need for a comprehensive design of the training curricula and attendant approaches for imparting it. The contours of such a design have been captured in the following broad themes :

Sensitisation about their role in social development. The members of PRIs would have to be given comprehensive exposure to what all they can achieve with their present status and with the enhanced powers and resources they are likely to get in the long run. They would have to be oriented a great deal towards social sector activities - education, health,
drinking water, social welfare, sanitation and poverty alleviation programmes, etc. A paradigm shift would be required in their thinking i.e., from attaching importance to expenditure oriented or subsidy distribution activities to stressing those programmes that deliver services and create facilities without incurring much expenditure. Some examples are: to ensure that ANM from the health sub-centre reaches the village and as per programme provides necessary ante-natal and post natal services to pregnant women, to administer child nutrition programmes, to persuade families to send their children particularly the girl child to school, to disseminate knowledge to village men \& women about personal hygiene, clean environment and sanitation. The sensitization programme should include those areas where by creating enabling conditions people are helped to access existing services which do not reach them despite their entitlement through awareness generation, counseling information sharing, promoting linkages between service providers/ institutions and individuals seeking them. There are many activities where no product is delivered or a patronage is conferred but necessary facilitation is promoted for people to derive benefits of the programme. For example, presently people affected by communicable diseases such as leprosy, TB, Malaria are unable to access medical advice and treatment even though they are entitled to it free of cost. If Panchayat in its jurisdiction facilitates contact between service provider and patient, enormous benefit would accrue to the patients suffering from these diseases. The beneficiaries of such effort would be ever grateful for facilitating their treatment. In short, the PRIs have to be oriented to a conceptualization of their role where such facilitation holds the key to entitlements rather than in delivery of the product or setting up a facility. This conceptualization is under emphasized if not neglected altogether, which is the reason why Panchayats even with admittedly inadequate empowerment do not tap their existing potential.
Panchayat Raj institutions need to be conveyed in very strong terms that considerable space is available for them to act in the area of empowerment of people through information sharing. Social mobilization can be attempted through information, education and communication. This would help people to protect themselves from
exploitation by forces within the government and outside, and exert pressure on officials and institutions which are mandated to deliver specified services to be responsive to their needs and change their orientation of work and behaviour. The area of IEC is indeed very large, ranging from information about preventive aspects of public health, specific information on a service that can be availed of and how (such as treatment of serious diseases), skill development opportunities, availability of Welfare Services, linkage between nutrition and health, how personal hygiene and environmental sanitation around the habitation can be organized, benefits accruing from education and equal affection and care of the girl child, risks of employing child labour, diseases associated with certain occupations, how drinking water can be purified and public drinking water source could be protected, precautions which a birth attendant must take when attending a delivery case, most locally available flora and herbs which can be used to alleviate suffering in the absence of a Doctor etc. The list can be expanded not only to cover development programmes but also social justice measures.
PRIs need to know what they can do in specific development Programmes falling in their jurisdictional domain. These Programmes are presently being implemented with a set of guidelines which lay down that public functionaries dealing with them would provide necessary benefits/services to the people. PRIs should be familiarized with programme guidelines to know exactly whom they should contact and who would intervene in respect of each scheme in the overall interest of the people. In the absence of the detailed knowledge of the schemes, PRI functionaries may either refrain from taking any interest or may make inappropriate interventions, which may create friction with the service providers or implementing officials. Exercising their authority and making interventions based on knowledge and understanding would strengthen their position and empower them to discharge their role effectively as the link between people and Programmes. To take an example, under ICDS Programme dry or cooked food is provided to infants and lactating mothers at the Anganwadi Centres. PRI should know the scale of such supplies and services to be provided by Anganwadi workers at the Centre. Further,
if there is a programme for providing food security, Panchayat should identify starvation prone areas, get schemes prepared and sanctioned for starting public works programme for the able bodied and providing gratuitous relief to the indigent persons. Panchayats can also quickly mobilize local measures to start a grain bank to prevent starvation. It should keep an eye on the PDS system and ensure that gram sabha approves names of genuinely BPL families for receipt of subsidized food grains. It should watch the conduct of PDS shop keeper and local moneylenders on such occasions. The areas of role articulation can get enlarged considerably, once PRI functionaries realize the potential benefit they can deliver.

PRI have two types of powers in the field of development; one relates to implementation of certain programmes already drawn up at higher levels; the other to plan new programmes based on the funds allocated or mobilized by them. The second role is more complex as it would require planning skills. The designing of new programmes would envisage capability to correctly assess the local needs, available resources and those which can be locally mobilized, identifying components and institutional arrangements to be incorporated in the structure of the programme and a clear vision of how the programme would proceed towards goals set for it. It would also require an understanding of what kind of linkages would be necessary with authorities, institutions and programmes outside the control of the PRIs and how these linkages can be fostered and promoted. These programmes would cover a wide gamut of activities ranging from creation of infrastructure to setting up facilities and arranging for services. This would call for communication skills on the part of trainers to sustain their interest and motivation and to enable them to appreciate how this knowledge can be profitably used to effectively discharge their functions and to raise their stock with people. For example, PRIs want to ensure that in remote and inaccessible areas, services should be available to reduce IMR/MMR and mortality due to epidemics but the nearest public health facility is far away with no road communication and the Doctors/ para medics do not visit the village on scheduled days as specified. PRIs in such a situation can take a number
of steps such as to sanction construction of at least a kuchcha road linking the village with the nearest road leading to a health facility under the Rural Development Programmes. If public funds are not readily available for this purpose, private local funds may be mobilized with cooperation form the villages which would benefit from this facility. The Panchayat can also have pressure brought upon the rural development functionaries and higher level PRIs to allocate resources for this purpose.

In the context of the tasks allotted and the departments transferred to the PRIs, a large number of public functionaries would be working under the direct supervision and management of Panchayati Raj institutions. While these functionaries have been in contact with PRI functionaries from before, with the $73^{\text {rd }}$ amendment of the constitution and the enactment of state law conforming to it, the control over their functionaries has to eventually get transferred to the appropriate level of PRIs. While most state governments have not yet taken this step, even in its absence, PRIs would still be in a position to exercise a lot of authority by virtue of their democratic status and statutory position to get their directions enforced and to make these functionaries responsive to the needs of the people. The PRIs would, in any case, have the status to seek answers from them in respect of the powers they exercise and funds they spend. Public functionaries cannot afford to ignore them because they can raise a lot of hue and cry against their conduct and mobilize people against them. The administrative control that PRIs will be required to exercise over the public functionaries is a major area of management skills which the PRIs should be trained to learn. Incidentally, this is also one of the most sensitive and tricky areas because it is likely to bring PRI functionaries into conflict with public functionaries. It is, therefore, all the more important that requisite understanding and sensitivity in the elected representatives of PRIs while dealing with public functionaries is emphasized. But, public functionaries also have a responsibility to discharge, e.g. to translate into programmes \& schemes the ideas and proposals conveyed by office bearers of PRIs. Thus a great deal of cooperation would be required between the two. How this cooperation can be promoted without sacrificing the supervisory role of PRI representatives should
be one of the thrust areas of capacity building. For example, while persons exercising authority in PRIs need not behave rudely with service providers in public, they should continue to take them to task for neglecting their work, not providing services as scheduled, keeping premises untidy, behaving arrogantly with people and similar other such derelictions of duty.

One of the major objectives of decentralized development lies in the expectation that these institutions would mobilize local resources for an existing or a new programme and for which requisite resources are not available or forthcoming either from the Government or nongovernmental sources. These resources may be in the form of monetary contribution, material or manpower without seeking any remuneration. It may include voluntary efforts for carrying out social audit of various programmes. Also, the PRIs have the advantage of deciding on a differential or voluntary system of mobilization of such resources depending upon the status and the income potential of constituents. The capacity building programme would train PRI functionaries in methods and processes by which such mobilization of local resources can be effected without any coercion, strain or caste bias.

One of the functions, which PRIs can discharge straightaway without any devolution of powers and resources from the State Govt., is to carry out an impact evaluation or social audit of programmes already in operation in their area. For this purpose, PRI bodies would be required to constitute groups of persons who enjoy impeccable reputation for their integrity and objectivity to investigate whether specified development programmes have achieved their objectives and whether the funds allocated for them have been properly spent, whether guidelines for the programme have been adhered to, whether the programme has benefited the people or the group whom it had intended to do and whether the implementation of the programme was constrained by delay, interference from unauthorized quarters and whether different levels of public bureaucracy had exercised their mandated role in its planning, implementation and supervision. This work would enhance the prestige and standing of Panchayat Raj
institutions and would bring them closer to the people. Such initiatives would also create adequate pressure on the public bureaucracy to desist from ignoring the programme objectives, guidelines and procedures and also to be responsive to the interventions made by PRI functionaries. The capacity building programme has to empower the PRIs with knowledge and information on the mechanism of getting such social audits carried out and how those entrusted with carrying out such social audit could obtain the correct information on the schemes from available records/ documents, gathering feedback from people through field visits and how they could be vigilant of attempts to mislead them by interested persons. This exposure would also enable Panchayat Raj representatives to understand the functioning of governmental organizations/complexity of decision-making processes and would help them in effecting improvements in the execution of future programmes.

One of the greatest advantages of decentralized development is that it can actualize the process of convergence of inter connected programmes but administered by different government organizations in a given area and achieve the desired objectives covered by such programmes. The 'convergence' of allied programmes for achieving requisite impact is now a well-accepted objective of development planning, though rarely realized at the ground level. One of the reasons is the tendency in public representatives to exert pressure that every programmes in areas not warranted by objective consideration of their optimal utility. On the other hand, a certain degree of trade off between different programmes in different constituencies can lead to more efficient utilization of resources and more effective benefits to people over a period of time. The advantages of convergence would need to be effectively conveyed to convince them of its overall usefulness. They could also be trained on how such convergence could be carried out and equitably spread to different areas with appropriate trade off through political negotiations. A striking example of achieving such convergence would be to improve drinking water facilities in
habitations perennially affected by water borne public health disorders. The convergence would also create visible impact where attending to pre natal and post natal checking of pregnant women and training of birth attendant for safe delivery practices is specifically focused on areas with higher IMR/MMR. Once benefits accruing from such convergence gets demonstrated, it would be easier to convince eligible couples about a small family norm. Similar convergence in respect of other development areas can also be promoted.

A neglected area of public administration is how resources in private sector for development can be harnessed. Panchayati Raj institutions need to learn how to tap this source for funds and material support. While PRIs would have powers and resources to deal with public sector programmes and manage public sector institutions, the network of non-governmental organizations and private sector providers of services remain outside their area of scrutiny and intervention. For example, it is well documented that private medical practitioners and institutions provide a substantial part of health care to people including very poor people. This may be on account of easy access, better alternative etc. PRIs could coordinate with service providers/ Institutions in Private/NGO sectors and seek their cooperation in implementing various programmes of health and family welfare including Disease Control Programmes. Public-private Cooperation would have the advantage of enlarging the resource base available to reach a larger mass of people including those who for various reasons do not have access to public sector institutions. Panchayati Raj institutions could also utilize the services of private medical practitioners, particularly specialists in private/ non-governmental sector hospitals to render services in public health facilities on serviceability of public health institutions themselves. This would be true of some other development sectors as well. The Capacity Building Programme should help PRIs identify areas of such cooperation and mechanisms of effecting them in the larger interest of people in their jurisdiction.

The position with regard to NGOs is similar. A large number of nongovernmental organizations operate in various fields of development such as health, education, poverty alleviation and income generation, social welfare, housing, sanitation, environmental improvement, social defence. All these subjects are also handled by govt. through a large number of schemes and programmes. NGOs are credited with more people friendly approaches in reaching their services, more sympathetic understanding of their social and economic conditions and providing necessary interventions in time of need promptly and without harassment. These advantages bring NGOs much closer to their target groups when compared to Government functionaries of any integrating their work harmoniously with the work of development programmes under the Government, the resource base-manpower, material and monetary-available to the PRIs gets enlarged and capability to effectively reach their services to the people increased. The capacity building programme of PRIs would have to focus attention on how this resource base can be harnessed without creating any conflicts and distortions. The task is not very easy as there is an under- current of tension between the PRIs and the NGOs with both having stereotype perceptions of each other. Similarly, Government agencies whether bureaucratic or non-official are hesitant to seek help of private service providers in Government programmes. But this traditional approach is changing and there are instances where creative initiatives of cooperation between the two have produced good results. The capacity building programme has to bring out this potential to convince PRIs about the gains from this cooperation in terms of coverage, effectiveness and quality of service. Health \& FW is a very promising sector for private-public cooperation. Poor people accessing private/NGOs service providers can be linked to govt. health facilities for drugs and other services, which are given free. In TB control programme in Hyderabad, this has been tried with good results\#. Similarly, private sector hospitals/ NGOs can help Govt. by providing services of their specialists, particularly Gynecologists for attending to serious cases of delivery or infant/ child health in PHCs / CHCs where no such medical personnel are available or willing to work. Even part-
time and periodical fixed days visits would improve RCH services and provide immense relief to patients.

Panchayati Raj Institutions in their constitutional incarnation have been in existence for close to a decade. In some states, they are in their second tenure of five-year period after the $73^{\text {rd }}$ amendment followed by the corresponding state law while in others they are still in their first tenure. Even during this limited period their experience of dealing with various institutions of the Government and public functionaries has been constrained by the lack of adequate powers and resources placed at their disposal. At the lower rung, entrants to these institutions are new comers with no previous experience either of politics or administration. Their exposure to the functioning of Government offices is virtually negligible. Being unfamiliar with the manner and processes of functioning of Government offices, they are equally non conversant with rules and regulations which guide the government functionaries in discharging their duties. They also lack understanding of the relationship between different levels of Government institutions. In this background, after assumption of power, when these representatives deal with public functionaries for the first time, they are impatient and there is an under current of tension which creates a lot of friction between elected representatives and their bureaucratic instruments. This affects the smooth functioning of PRIs as well as the delivery of service to the people. The capacity building programme for PRIs should therefore provide a great deal of exposure about the functioning of Government and its offices at various levels. This is necessary for the elected representatives to appreciate the constraints within which public bureaucracy functions and the work culture which binds them so that they do not place undue demands on them. Simultaneously, there is also need to combine it with the reorientation of public functionaries so that they appreciate the imperatives of decentralization and democratic governance at the local level. This is the most important aspect of capacity building training because harmonious functioning of the two institutions is absolutely necessary. In the area of Health \& FW, for example, one of the reasons why ANMs do not stay in the villages is that there is no official accommodation available and there are security considerations as well.

The local village Panchayat can persuade the concerned villages to provide a separate living room to the ANM and additional space that can also serve as her office. The residents of the villages should also ensure her security and render help to her in transporting drugs and other health material connected wither work from the office of the Issuing authority. In some inaccessible areas, doctors and para medical staffs do not visit villages because there is no road and therefore, no public transport is available for commuting the distance. The local PRI can mobilize funds for creating road connectivity. Until such time as a road is constructed, the PRI can locate a point which is connected to an existing serviceable road where people can gather on a specified day and time and ensure that the concerned health staff visits them. Bolck/District Panchayats may also be approached to arrange training for local youth (at least one male/ one female) as health workers who can carry out the directions of the health staff and to provide first aid in the absence of the health staff.

Local self-governance implies a certain degree of self-reliance. PRIs should be able to carve out a space for certain activities where they need not depend upon resources from Govt. but undertake to mobilize local resources - monetary, manpower and material from people. The larger the space they create for mobilizing private resources wider would be the reach of the PRIs and greater would be the satisfaction level of the people. While PRIs should definitely access maximum resources possible under various programmes for their area, they should take initiative to go in for voluntary funding from the public, where feasible, and even take up programmes which do not require monetary input but other means of cooperation such as labour/material contribution so that public needs can be met expeditiously. The capacity building programme should cover both aspects, i.e., advocacy for larger allocations from funding organizations of Govt. as well as innovative ways of harnessing private local resources, both monetary and non-monetary. Cleaning of drinking water sources, undertaking wastewater disposal, environmental improvement around habitat, renovation of common facilities are some of the programmes which can be entirely attended to be voluntary labour without waiting for Govt. funds to be allocated. Similarly, IEC programmes on Health,
social welfare, income generation, etc. can be launched through human resource mobilization without any monetary payment but with due social recognition to the efforts made by concerned persons.

Health is a very important sector of development where peoples' access to services is acutely constrained, among others, by the different hierarchies of programmes. The village Panchayat has in its jurisdiction health delivery institutions such as sub-centres, Primary Health Centres (PHCs), and workers of family welfare programmes. The block panchayat has under it community health centres (CHCs) while the sub-divisional and district hospitals fall in the domain of district panchayat. Various disease control/public health programmes/Family Welfare Programmes have their separate workers. For example, the Leprosy Control Programme, TB Control Programme, Blindness Control Programme, RCH Programme, Malaria Control Programme are implemented by their respective health workers whose jurisdictions are not co-terminous. Their vertical hierarchies are carved out as per needs of the concerned programme. Most of these programmes are operated through bureaucratic formations and do not involve Panchayati Raj Institutions even though health falls in the jurisdiction of PRIs. Worse still, these programmes also do not operate [barring RCH and in some respects HIV/AIDS] through local PHCs/CHCs/Distict hospitals. This is the greatest constraint in accessing services by the needy patients. The focus of capacity building programme for the PRIs in this sector should be on ways in which horizontal linkages with public health Institutions can be promoted so that the beneficiaries can easily access treatment facilities. This would go a long way in improving the reach of the programmes to the beneficiaries. The PRIs can provide the much needed public participation to these vertical programmes and rationalise their linkages so that the need for supervision and control by higher level medical professionals / para medical workers is considerably reduced and at the same time the quality and timely delivery of service is not adversely affected. A striking illustration in this context is the DOTS strategy for TB control programme in which the medicine has to be administrated to the patient under the direct supervision of a health worker. Surely, this linkage can be provided by
the local PRI through a specified member to obviate the need for a health worker to be present. This would improve the rate of dropouts in the programme due to hassles in obtaining medicine and increase coverage as well as optimize cure rate.

At present, a large number of government agencies and NGOs have been involved in sensitization, training and capacity building for members of PRIs. Their efforts need to be dovetailed into a comprehensive and coordinated approach to capacity building programme for PRIs. Many NGOs have also received support from donor agencies for such training. For PRIs to play a greater role in population stabilization throughout the country with equal seriousness, there is need to initiate a regular scheme.

The PRIs have been given critical role through a resolution by the Central Council of Ministers of Health and Family Welfare (2003), stating "that the States would involve PRI in the implementation of HFW programmes by progressive transfer of funds, functions and functionaries, by training, equipping and empowering them suitably to manage and supervise the functioning of health care infrastructure and manpower and further to coordinate the activities of the works of different departments such as: Health and Family Welfare, Social Welfare, and Education which are functioning at the Village and Block Levels".

The village Panchayats can specifically discharge the following responsibilities:

1. Re-organization of existing healthcare infrastructure and family welfare services through rational deployment of manpower and other resources to ensure their optimum spread and performance within their jurisdiction.
2. Monitoring the delivery of services to ensure their access, quality and responsiveness; development of appropriate norms of accountability and beneficiaries participation for this purpose.
3. Intensive training of existing birth attendants and additional birth attendants and integrating them with primary healthcare infrastructure and family welfare services.
4. Making Anganwadi Centre as a pivot of activities for maternal and child healthcare with adequate training, motivation and confidence building measures so that to a large extent such centers can provide optimum possible services at the village level.
5. Identifying public health centers (PHCs / CHCs) where specialized services experts are available for attending to critical cases and emergencies; in the absence of requisite facilities not being available from the district or the state level, to arrange on part-time basis visits of such specialists from private / NGO healthcare centers.
6. Integrating private healthcare centre / NGOs facilities in a manner that ensures widest reach and optimum utilization of resources.
7. Arranging extensive counseling to the targeted groups by mobilizing local women on a 'volunteer' basis but with appropriate training, motivation and recognition. Similar efforts for counseling men.
8. Arranging for registration of deaths, births, pregnancies, marriages at village level; social audit of cases of infant and maternal mortality.
9. Ensuring that basic medicines for essential obstetric aid and common ailments supplied by the Govt. are either stored / available with Anganwadi workers / ANMs or that such medicines are available at the local chemists shop.
10. Mobilise transportation facilities for patients to referral units by arranging public transport where feasible and by encouraging local youth to start such services by linking it up with poverty alleviation programmes under which transport as income generating activity is usually financed.
11. Mobilising women workers in public services and in the nongovernmental sector for discharging certain specified responsibilities in the overall programme.
12. Dissemination through user friendly methods and in local dialect of comprehensive information relating to preventive healthcare and nutrition, small family norm, contraceptive devices, treatment of girl child on the widest possible scale through their own elected women members, NGOs, Self Help Groups, DWCRA units, community organizations, religious organizations, marketing committees and at Haats, Bazaars and melas etc.
13. Ensuring universal coverage of immunization and prophylactic measures through key functionaries such as Anganwadi workers appropriately aided and supported by birth attendants, self-help groups and other community organizations.
14. Identifying areas of morbidity requiring specialized attention under various National Disease Control Programmes and establishing linkages / contact with service providers for their treatment; so that a schedule is prepared for attending to such cases in PHCs / CHCs as the case may be, and this schedule is widely publicized so that services can be provided with adherence to the schedule.
15. Utilising women Panchayat members, self-help groups, NGOs and other social workers for widening the reach and access to information and services for family welfare, in particular enlarging the area of unmet needs, appropriate and safe use of contraceptives and neutralizing constraints in taking recourse to regulatory measures for controlling fertility consistent with respect for human rights.

It would thus appear that even in the absence of adequate empowerment of Panchayati Raj Institutions with resources, powers and control over personnel there is a large space available for them to operate and to help in meeting the unmet needs of contraception and services. This role can be discharged even better with suitable capacity building and training measures the details of which have been spelt out in a separate chapter of this report.

Now coming to the second dimension i.e. regarding the inadequacy of existing health infrastructure and the wide gaps in coverage and out reach of family welfare programmes on this account, the deficiencies in health infrastructure and specialized and trained manpower has huge implications for public funding since the existing infrastructure is largely in the public domain. The gap in infrastructure is (a) due to non-filling up of existing / sanctioned positions and inability to adhere to existing level of maintenance (b) additional facilities needed to cover unreached areas and populations and to fully cover the existing area.

Planning Commission have expressed the view that the existing infrastructure is functioning sub-optimally and the factors responsible are:
a) Multiple tiers of institutions
b) In-appropriate location, poor access and poor maintenance
c) Gaps in critical manpower, mis-match between personnel and equipment
d) Lack of essential drugs / diagnostics
e) Poor referral linkages

There are also substantial differences between states and between districts in the same state in the availability and utilization of healthcare services, even though norms for creation of infrastructure and manpower are similar throughout the country. The strategy for the optimal utilization of this infrastructure lies in :-
a. Appropriately relocating sub-centres and PHCs to maximize their use
b. Utilisation of funds from various rural development programmes for improving the maintenance of existing facilities.
c. Making ad-hoc arrangement for deployment of doctors, specialists and para-medical staff.
d. Using existing doctors in ISM\&H to deliver basic services
e. Improving arrangements for counseling, supply and services with flexibility and responsiveness.
f. Undertaking extension of existing services into inaccessible areas and among the vulnerable groups where necessary with support of NGOs.
g. Development norms for accountability and supervision
h. Designing information / education and communication including face to face counseling suiting local needs and taking into account conceptual constraints.

From the above it may be seen that the strategy suggested can best be operationalised by Panchayati Raj bodies within their jurisdiction and does not entail additional funding. It is not our argument that the healthcare and family welfare sector does not need additional funds and manpower. It does, more so because the poor rely on public infrastructure largely and it is the poorer sections who face the constraint of unmet needs segment. The strengthening of public sector infrastructure is very crucial for this purpose and this is particularly so in respect of major states (also regarded as Backward States) where unmet needs are the highest.

Of these states, Bihar needs special mention where only $50 \%$ of the demand for family planning is satisfied. NFHS-II estimates the coverage even lower, i.e. roughly $25 \%$ in the State of Bihar. The state also has the largest concentration of population below poverty line. Therefore, strengthening the public health system besides improving the existing ones, is a vital need and also a priority which would require some financial inputs to accomplish. In fact, some of the gaps in critical manpower in these states, as also in a few others, are on account of non-recruitment to the posts already sanctioned. Therefore, even if no additionality of expenditure was committed in creating new positions, filling up the existing positions in the posts of ANMs, women health workers, lab technicians, specialists etc. would lead to considerable improvement.

The second area concerns grants to health care institutions for maintenance, diagnostic equipments, medicines etc where there has been a decline in allocations due to resource problems faced by the State. This is an all India problem but particularly critical with some states, particularly in Bihar. A number of states have taken recourse to external funding to meet this gap. Bihar is deficient in this respect as well. The point being made here is that Panchayati Raj Institutions are best equipped to intervene in respect of this dimension of unmet needs also. They can put up pressure for filling up existing posts and for equitable distribution of personnel through rationalization and re-deployment across the State in a manner that critically deficient areas are enabled to satisfy their needs at least partially. They can also strongly advocate for additionality of funds and manpower, particularly funds coming in from Govt. of India in Rural Development, Health, Welfare and Women and child development and make a case for specially funded / donor assisted projects. Being democratic bodies, their advocacy would bring this issue on the political agenda to which the policy makers at the sate level cannot remain immune. Further, Panchayati Raj Institutions can appropriately mobilize social groups within their jurisdiction and vigorously network with PRIs across the State to exert pressure on the State Government. Such networking can also be carried out cutting across state boundaries for exerting pressure on Central

Government to make special allocations for Bihar which is deficient in infrastructure and services.

Initiatives by MOHFW and donors in various states have focused on engaging PRIs in health programmes. MOHFW has supported the development of a training module for community and women's health, which deals with Panchayat engagement. MOHFW has also implemented the community needs assessment, the National maternity Benefit Scheme and the Referral Transport scheme through PRI in various states. The experiences so far have been positive, still there is a greater scope for strengthening and improving the enabling environment for panchayats to function more effectively. The experience of Kerala, Tamil Nadu, Goa and even Andhra Pradesh are not immediately and completely replicable, offers useful insights and lesions for states like Bihar to follow. The factors which could influence the progress of decentralized planning and implementation are political will, people’s readiness to engage with decentralization as well as capacity of PRIs to effectively function as per the provisions in Population and Health Policy documents.

The National Rural Health Mission (NRHM) launched by the Prime Minister in April 2005 provides an opportunity and challenge to PRIs and NGOs to act and perform. All state governments are engaged in preparing district plans which include preparation of plans for each panchayat even going up to village level plan. Thus, in this process, NRHM has been seen as a vehicle to ensure that preventive and promotive interventions reach the vulnerable and marginalized through expanding outreach and linking with local governance institutions. PRIs are seen as critical to the planning, implementation, and monitoring of the NRHM. Implementation of the NRHM in achieving its outcomes is significantly dependent on well functioning gram, block and district level panchayats. At the District level a District Health Mission will coordinate NRHM functions. Key to NRHM success are: intersectoral convergence, community ownership steered through village level health committees
at the level of the Gram Panchayat, and a well functioning public sector health system with support from the NGOs and the private sector.

A huge network of ASHA, (Accredited Social Health Activist) will be in place in the country in near future. One ASHA worker has been provided for a population of 500 . This network to strengthen village level service delivery will be a local resident and selected by the Gram Panchayat or the Village Health Committee. The work of ASHA worker will be closely monitored and will be reimbursed by the panchayat on a performance based remuneration plan. The village Health Committee (VHC) will from the link between the Gram Panchayat and the community, and will ensure that the health plan is in harmony with the overall local plan.

Although the Panchayat Raj institutions have existed for many years, owing to inherent weakness in the systems they were not very effective. Through constitutional amendments a third tier of local self-government has been set up and steps have been taken to remove the inherent shortcomings. In order to make PRIs more effective, consideration of key issues related to empowerment of panchayats through funds, human resources and capacity are critical. PRI engagement is perhaps the only existing mechanism to achieve large-scale community participation and reach the marginalized and vulnerable, particularly women, children, and the poor. Locating NRHM functions within the gram panchayat and implementing it through a village health committee/gram Sabha will facilitate the process and make population stabilization in state like Bihar and health for all an achievable reality.

### 7.2 Role of NGOs

### 7.2.1 NPP and NGOs

The National Commission on Population (NPP) which was set up on $11^{\text {th }}$ May, 2000, the day the country's population reached on billion has a mandate to review, monitor and oversee all the related social sector programmes that directly or indirectly impinge on the demographic profile. It is required to play its needed role for meeting the short-term, medium-term and long-term goals envisaged in NPP-2000. Through concerted efforts it is expected that the country's population would stabilize by 2045.

The National Population Policy -2000 is noteworthy that it transcends purely demographic concerns and emphasizes the relevance of multi-sectoral approach to solve the population problem. It lays down a number of socio-demographic goals like making school education up to the age of 14 years free and compulsory, reducing dropouts at primary and secondary levels, promoting delayed marriage for girls and most importantly, bringing about a convergence of various social sector programmes, so as to make population stabilization a truly people-centred programme.

The paradigm shift in the whole approach to family planning wherein not only family planning, but reproductive and child health care, as also an improvement of all those issues that would assist in the demographic transition from a stage of high fertility, high mortality to a stage of low fertility, low mortality leaves us with no option, but to enter into a partnership between Government, Non-Government Voluntary Organizations, the Private Sector a nd the community at large.

Education, Health, Family Welfare, Women \& Child Development, Rural Development, Water Supply \& Sanitation and the related areas of concern
would all have to addressed as per the new population policy. The task is stupendous especially in view of the large infrastructure gaps in most of the relevant areas.

In view of the enlarged zone and the impact that most of the social sector concerns are likely to have on the goals envisaged in NPP 2000, there is a wider canvass for cooperation between Government and the Voluntary Sector. A partnership between the government, non-government voluntary organizations, the private sector and the community at large is needed in areas such as education, health, family welfare, women and child development, rural development, water supply and sanitation for addressing the concerns outlined in the population policy. As the ultimate objective of voluntary action in the social sector is the welfare of the individual, the family and society at large, promotion of the small family norm by NGOs etc., can greatly facilitate the same.

### 7.2.2 NGOs in India

There are 12265 NGOs in the country of which $91 \%$ are involved in social sector activities-52.72\% in Rural Development (RD), 17\% in Human Resource Development (HRD), 10.15\% Social Justice \& Empowerment (SJ \& E), 6.2\% in Health \& Family Welfare (H \& FW), and 4.8\% in Youth Affairs \& Sports (YA \& S).

About $25 \%$ NGOs are working in the southern States of which $10.4 \%$ in Andhra Pradesh, $4.15 \%$ in Karnataka, $2.84 \%$ in Kerala and $7.85 \%$ in Tamil Nadu. About $36 \%$ NGOs are working in the demographically weak States including newly formed States $-15.84 \%$ in U.P., $4.5 \%$ in M.P., $9.33 \%$ in Bihar, $2.9 \%$ in Rajashthan, $1.7 \%$ in Jharkhand, 1.3\% in Uttaranchal and 0.35\% in Chhattisgarh. About 30\% NGOs are working in other major States - West

Bengal (9.73\%), Orissa (6.78\%), Maharashtra (4.95\%), Delhi (4.08\%), Gujarat (2.59\%), Haryana (1.5\%) and Punjab ( $0.36 \%$ ). $7.35 \%$ NGOs are working in North Eastern States - Assam (2.1\%), Manipur (2.9\%), Maghalaya (0.18\%), Mizoram (0.28\%), Nagaland (0.47\%), Arunachal Pradesh (0.2\%) and Tripura ( $0.37 \%$ ). The role of NGOs and their capacity in reaching across to large sections of the population and the quality of reach is undoubted. However, in view of the limited organizational, managerial and financial capacities of NGOs, they cannot, in any way supplant the normal government machinery in addressing the various developmental problems of the social sector. Very often the performance of NGOs depend on the presence of one or two committed individuals and the tempo of the programme is lost once these individuals stop taking interest in these programmes. On several occasions the NGO's have to take into account the concerns of the donor agencies (national or inter-national ) and these may sometimes result in giving a particular slant to a programmer. In such situations it would be better to take into account the views of the beneficiaries / target groups in order to ensure effectiveness and transparency in their working. In order that the NGO's can effectively complement the efforts of the governmental machinery specially among the underserved regions and groups, we may have to take a realistic view on their role and capacity and invest in their capacity building. This resource could then be used for capacity building and motivation of the target groups. Experience shows that very often and because of the constraints - organizational and financial, several NGO's, V.O.'s etc., tend to concentrate their activities in particular sectors or particular regions of the country. Since capacity building as also flow of resources takes place along with the NGO area of activity, an area-wise analysis may be required to be done so that investments can be tailored to meet these social commitments keeping in view the vast regional disparities. Through proper monitoring and allocation of funds as also recognition of the work being done by NGO's, a partnership can be established between government / NGO's and the community at large. Formulation and
implementation of policies and programmes is likely to show a marked improvement once this is done. There are outstanding examples of intersectoral collaboration and close linkages between NGOs, community groups and government in many countries. For instance, in Maldives, collaboration between youth groups, island development committees (IDCs) and health workers led to the declaration of two islands as "No Smoking Islands".

To reach the goal of population stabilization within a stipulated time frame, NGO's could be a great force to reply upon.

### 7.2.3 Role of NGOs in Population Stabilization Programmes

To achieve the goals envisaged in NPP 2000, the objective is to promote a true partnership between the NGOs and the Government as well as to encourage strong NGO participation where the presence of Government functionaries has been weak traditionally. Involving NGOs in population stabilization programmes can indeed be a positive step since through NGOs, big or small, the Government may be able to reach out far more effectively to the people. The vigorous people's movement involving the civil society with the active participation of Panchayati Raj Institutions, NGOs, VOs, Self Help Groups and the Youth Clubs is necessary for the implementation of programmes crucial for early population stabilization. Non-governmental organizations have valuable experience to offer and are very useful in providing services to the poor and unserved. The collaboration between NGOs and the Government is useful in the formulation and implementation of policies, in increasing the knowledge base and in improving the technical and managerial abilities. The contribution that NGOs have made in some of the areas like education, water and sanitation, ICDs, welfare of tribal communities and slum dwellers is especially noteworthy.

### 7.2.4 Inter-State and Sectoral disparities in NGO presence

It has been observed that in high population growth States like Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, Uttranchal, Jharkhand and Chhattisgarh, the contribution of the voluntary sector is also weak compared to more developed States. Data given in Table I show that out of the total 12,265 NGOs in the country 4,397 NGOs i.e. $35.9 \%$ are in these States. As against this the population of the seven States is about 41 \% of the country's population. Further most of the 133 most backward districts in the country having fertility rates more than 3.5 belong to these States. It can also be noticed that most of the NGOs work in the Rural Development and HRD Sectors. This may be a reflection of the larger resources being channelised through the NGOs in these sectors.

The number of NGOs in the Health \& Family Welfare sector is comparatively fewer. UP and Bihar are having a fair share of NGOs whereas Rajashthan and MP have fewer number of NGOs. Of course mere numbers cannot give any proper idea about their impact on sectoral programmes. That will depend upon the quality and capacity of the NGOs.

| State | M/O RD | M/O HRD | H\&FW | YA\&S | Others | Total no of NGOs in the State (all sector) | NGOs in the 7 state as a \% to total NGOs in the Country |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As on | Jul,2000 | Oct,2000 | Sep, 98 | May,2000 |  |  |  |
| BIHAR | 663 | 111 | 98 | 53 | 219 | 1144 | 9.33 |
| JHARKHAND | 110 | 30 | 4 | 15 | 45 | 204 | 1.66 |
| MADHYA | 193 | 164 | 52 | 50 | 92 | 551 | 4.49 |
| PRADESH |  |  |  |  |  |  |  |
| CHHATTISGARH | 25 | 5 | 1 | 0 | 12 | 43 | 0.35 |


| RAJASTHAN | 206 | 60 | 9 | 16 | 62 | 353 | 2.88 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| UTTAR <br> PRADESH | 1115 | 218 | 143 | 125 | 342 | 1943 | 15.84 |
| UTTARANCHAL | 94 | 11 | 4 | 5 | 45 | 159 | 1.30 |
| Total no of NGOs <br> in the Seven States | 2406 | 599 | 311 | 264 | 817 | 4397 |  |
| TOTAL (INDIA) | 6470 | 2082 | 761 | 592 | 2360 | 12265 | 100 |
| 7 States NGOs as a <br> \% of total NGO in <br> Each Sector | 37.19 | 28.77 | 40.87 | 44.59 | 34.62 | 35.85 |  |

Others include NGOs from sectors SJ\&E, M/O E\&F, Labour, NonConven, Textile Source: Planning Commission, NGO database

### 7.2.5 The Need for Voluntary Action

The scope and need for NGO involvement is the highest in the high population growth States which are considerably below the national average in important indicators like female literacy rate, under-age marriage, coverage of full immunization, full anti-natal care, Infant Mortality Rate, Maternal Mortality Rate and the adoption of family planning methods. Due to these factors, the fertility rate of these States are also substantially higher than the national average. The data presented in the table 2 below clearly brings out the considerable scope for improvement in each and every sector.

| Table 7.2: Four high fertility States-Selected indicators |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Indicator | India | Bihar | Madhya <br> Pradesh | Rajasthan | Uttar <br> Pradesh |
| Female Literacy Rate (7 years and <br> above) (Census 2001) | 54.3 | 33.6 | 50.3 | 44.3 | 43.0 |
| \% of women aged 20-24 married <br> before age 18 (NFHS-98-99) | 50.0 | 71 | 64.7 | 68.3 | 62.4 |
| Full anti-natal care (NFHS-98-99) | 43.8 | 17.8 | 28.1 | 22.9 | 14.9 |
| Safe delivery for the mother <br> (NFHS-98-99) | 42.3 | 23.4 | 29.7 | 35.8 | 22.4 |


| Full immunization (RHS 98-99) | 54.2 | 20.1 | 47.3 | 36.9 | 44.5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| (NFHS 98-99) | 42.0 | 11.0 | 22.4 | 17.3 | 21.2 |
| Infant Mortality Rate (SRS-99) | 70 | 66 | 91 | 81 | 84 |
| (NFHS 98-99) | 68 | 73 | 86 | 80 | 87 |
| Maternal Mortality Ratio (SRS <br> 1998) | 407 | 452 | 498 | 670 | 707 |
| Couple Protection Rate (Average <br> NFHS-II and RHS 98-99) | 44.3 | 22.3 | 43.9 | 40.9 | 27.2 |
| Estimated number of eligible <br> couples (March, 2001) (in lakhs) | 1766.8 | 147.5 | 107.5 | 100.5 | 279.0 |
| Number of sterilization per 10,000 <br> Unsterilized Couples (2000-2001) | 320 | 60 | 386 | 318 | 145 |
| Crude Birth Rate (CBR) (SRS 1999) | 26.1 | 30.4 | 30.7 | 31.1 | 32.1 |

There is immediate need for effective intervention to address the various social, economic and demographic problems. Much needs to be done in the area of literacy, education, anti-natal care, immunization and for ensuring safe delivery for the mother.

The poor nutritional status of the mother and child is also reflected in the high MMR and IMR. Even variables such as Couple Protection Rate (CPR) and the rate of sterilization which are directly relevant for fertility control are lagging behind. No doubt along with governmental efforts, involvement of NGOs in a big way can help solve these problems. Thus, there seems to be a strong case of concentrating NGO activity in the backward States. For this purpose, identification of NGOs who are already doing good work in these States and supporting them and encouraging both National level and local level NGOs to take up programmes / projects to benefit backward regions may be necessary. Further, the NGOs should be given a multisectoral orientation and vision so that the linkages between the success of sectoral programmes and achievement of larger objectives like demographic stabilization is not missed.

### 7.3 Role of Self-Help Groups

Since 1990s NGOs have experimented with an innovative approach to rural development by organizing/promoting informal groups of poor, especially women in rural areas for self-help/mutual help. The self-help groups present a highly potential area for their effective utilization for the purpose of population stabilization. This is because of the following reasons:

- As formation of self-groups have become an integral part of the strategy adopted by government to deliver various benefits and services under poverty alleviation programmes, more specifically those relating to income generation, to the target groups and are also sanctified by donor agencies in their projects on social development by virtue of their participatory orientation, a huge space is available where at least health related problems pertaining to maternal and child health/reproductive and child health can be discussed in these groups without inhibition. This forum, therefore, can be effectively utilized to mobilize support of women for various health related programmes, not necessarily confined to RCH/MCH matters. This is turn will help members of these groups acquire necessary knowledge about their own bodies and more specifically its reproductive aspects as also about various devices available to control fertility within the constraints of their social situation.
- Self-help groups can also function as informal NGOs for specific health and family welfare activities such as dissemination of vital information on maternal and child health, contraceptive devices, personal hygiene etc. not only for their members but also for others who come in contact with them. The range of information dissemination can be extended to issues related to public health,
nutrition, availability of services for termination of pregnancy etc. Self-help groups can also become agents of social marketing for contraceptive devices, where they can present their own experiences as a mechanism for convincing others coming in contact with them. These self-help groups can also be used for delivery of 'safety kits' used at the time of delivery, keeping information on births, deaths, pregnancies and marriages and specifically for preventing female foeticide/infanticide.
- Health service providers in the public health delivery system can make use of these self-help groups for getting feed-back on certain crucial programmes such as immunization coverage, ante-natal, post natal check-up, ICDS programme, schemes relating to empowerment of girl child and adolescent girls or any other programmes where such feedback is of a crucial help in improving the delivery system and targeting specified individuals, groups, categories.
- Self-help groups have a great potential for building up confidence among women members (similar possibility exists for men in their groups) to assert and take measures for reducing family size in the face of non-cooperation from husbands/in-laws/other relatives. A small success experienced by a member in the process of self-assertion by skillful negotiation against such odds may boost up the morale of remaining members considerably, which no degree of counseling by public bureaucracy can match.
- Self-help groups can serve as an important conduit for countering disinformation on impact of various contraceptive devices on user's health and reproductive potential. The countering of such disinformation would not only be authentic and effective when a women relates her own experience to another women member but also when experience is shared in respect of her husband or by a husband in respect of his wife. Other women can convince their husbands about the use of contraceptive devices/fertility control mechanisms by relating experiences of fellow women and their husbands.
- Women members of self-help groups borrowing from pooled fund for health related needs can be brought in contact with service providers in public health care institutions to reduce their need for borrowing on this account and to help get services in public health centers free of cost. This would save a valuable part of their meager earnings now spent on health in the private domain which would make it possible to use it for improving intake of food and nutritional diet and meet other vital needs.
- Self-help groups, even if their activities are at present focused on credit delivery, can, in addition, take up activities on sanitation, functional literacy, skill development for income generation, management of assets, environmental improvement, social forestry for fuel and fodder etc. The widening of the area of activities would strengthen their bonds and the effectiveness of the group.
- Self-help groups can be effectively used with appropriate training for early detection of communicable diseases such as TB, Leprosy, STD, as also early signs of various forms of disability. This will enable affected individuals to seek expert medical attention in time so as to obtain curative treatment in respect of communicable diseases and reduce adverse effects in respect of others, which may prevent disabilities. It will also help propagate preventive measures for such afflictions since inevitably individual experiences would be discussed in group meetings.
- Self-help groups can be used for gathering early signals/warning about epidemics, public health related problems such as diahorrea, cholera, conjunctivitis, gastroenteritis, food poisoning etc. and to convey messages related to preventive measures as well as elementary practices to act as first aid before medical aid becomes available. This would reduce the load of grass root level health service providers and improve their own system of information
gathering. The awareness generated by self-help groups would also put demands/pressures on PRIs/public bureaucracy to rush necessary medical help to control such epidemics or medical emergencies.
- Self-help groups can also be used for collecting information on psychological and behavioural health problems, which are usually ignored due to lack of knowledge of their impact and availability of cure in respect of them. This information would be a valuable tool for health authorities to equip their health care centers with necessary infrastructure and training of staff to tackle them at the early stages. A massive information campaign can also be mounted to generate correct appreciation about such problems and approaches to deal with them within the family.
- Self-help groups are also the best means for determining who among the members of their community are the most needy beneficiaries of any programmes particularly those of poverty alleviation which require rigorous targeting and prioritization. This could be cross checked with feedback emerging from various official and semi-official sources which would help in corroborating/discarding information concerning persons so identified and would thus generate greater public confidence in the efforts of implementing authorities to correctly target their alleviating measures. This would be particularly valuable in beneficiary oriented development programmes where under various pressures the most needy and eligible do not get identified and the ineligible persons corner the benefits. The correct targeting resulting from such efforts can have great motivational appeal for pursuing family welfare programmes.
- Self-help groups can also be utilized by service providers in development programmes for operationalising schemes relating to care, treatment and consideration of the girl child, assisting families in accessing them for the
benefit of the girl child and for gathering information on the impact of these measures on the status of the girl child. Their assistance can be taken in targeting families for corrective intervention where girl child is neglected.
- Self-help groups would be effective instruments for carrying out social audit in respect of development programmes, implementation of regulatory measures and social welfare laws particularly where women are the targeted beneficiaries or where programmes impact women in a major way favourably or otherwise. This would have the effect of empowering the groups on one hand and generating consciousness among women on the other. Programmes such as National Maternity Benefit Scheme, National Social Assistance Programme, National Family Benefit Scheme, Indira Awas Yojana, income generating programmes for women, etc., could be taken up for social audit as a lot of complaints are usually received about their implementation of laws against foeticide, infanticide, enforcement of laws relating to restraint of Child Marriage and prohibition regarding Pre-Natal Diagnostic Techniques.
- Self-help groups can provide voice and strength to the poor through appropriate mobilization and support in the deliberations of the Gram Sabhas where issues concerning them are discussed. They can help articulate their problems and predicaments where individual members of the Gram Sabha feel hesitant to speak or cannot coherently put forward their view point through appropriate confidence building efforts, advocacy and mobilizing outside support.

Self-help groups have sprung up in large numbers all over the country, (in fact, this process is happening across the globe) though the state like Bihar has yet to witness the emergence of a vibrant self-help movement. Therefore, Panchayati Raj Institutions, particularly at the village level, have before them readily available instruments for use. PRIs also acquire the facility of easy communicability with the
larger segment of population, i.e. women through these groups which otherwise poses a great challenge.

The field of population stabilization envisages multi-faceted action for influencing the behaviour of targeted population towards a small family norm. This particular activity is amenable to skillful, sensitive and friendly counseling by self-help groups. The group members can manage this task in an unobtrusive manner while respecting the dignity and human rights of the fellow women which official service providers are ill equipped to handle. The groups can also supplement and complement efforts of official health workers so as to achieve better impact of the services they provide. Above all, these groups have the potential of helping the Panchayats in effective utilization of available facilities, resources and services and thereby helping Panchayats to enforce social accountability in respect of them.

While the huge potential that exists for the self-help groups has been outlined above, this cannot be realized without concerted efforts being put in to build up requisite capacity of these groups to discharge the onerous responsibility. This capacity can be built up through training, institutionalization of their role and carefully worked out confidence enhancing measures. A comprehensive programme needs to be launched for this purpose, which would also provide lessons in conflict resolution and management and particularly in withstanding pressures and divisive tendencies generated from within or outside. Various activities for which a role is being crafted for self-help groups fall in the domain of Panchayati Raj Institutions, largely at the lowest tier. Therefore, it is necessary that the self-help groups are appropriately linked to and integrated with the local Panchayati Raj bodies so that they work as instruments of such PRIs and help them discharge their mandated functions. Also, the PRIs can effectively off-load some of their responsibility to the self-help groups through an appropriate division of labour. In fact, self-help groups provide a ready instrument of mobilization of people to the local Panchayati Raj body within its jurisdiction to which specific tasks can be assigned on a continuing basis. In this
process both the PRIs and the self-help groups would get empowered. The friction and tension resulting from their relationship in this regard would throw up interesting possibilities for reassessing strategies of interventions in respect of the Programme.

As the members of self-help groups are ordinary housewives largely illiterate and suffering from crippling constraints, (primarily talking of SHGs for women - there are and can be SHGs for men as well), the capacity building has to be properly designed and its methodology and canvass evolved after considerable discussion and experimentation. Obviously, health and family welfare and other social development related activities having a bearing on population stabilization would constitute and important component of their course design. Developing communication strategies for such a programme would indeed be a challenge considering that membership of these groups would be diverse in different places.

The assistance of NGOs would be required in a larger measure for carrying out capacity building programme for self-help groups and, in particular, for building processes and modes of interaction between self-help groups and Panchayati Raj Institutions. This is an area yet to be explored because virtually no beginnings have been made. This area is also a complex one and is likely to throw up considerable strain in certain situations but needs to be tried out on a more enduring basis, particularly for specially focused programme of population stabilization.

The population policy strategy for the state may have focus on the following :

- Health development strategy to be pursued in the state in the context of National level policies such as NPP (2000), National Health Policy and National Rural Health Mission.
- Priority to be assigned to specific activities of health \& population development in the state.
- Areas and extent of intervention within the constraints of its functional limits and available and mobilized resources specifying improvements to be effected in the delivery and quality of health care and family welfare services, making them more user friendly and responsive to peoples' needs.
- Improving sanitation facilities and hygienic conditions both in public places as well as in residential areas.
- Protection of drinking water sources to make them safe for use.
- Information dissemination regarding regulation of fertility and other health related matters.
- $\quad$ Specific steps for reducing mortality and morbidity among infants, younger children and pregnant mothers, including assistance sought from NGOs, and cooperation forged with the private health practitioners.
- Facilitating access to curative facilities for communicable diseases and other serious health disorders.

The Planning process at the District level under NRHM could provide an arena to PRIs to get support for its projects, assertion of control over the bureaucrats and making management of service delivery Institutions responsive to peoples’ need. The development dimensions of the district outside the empowered zone of PRIs is to be accomplished through the district level Planning committee provided for under the law. The District Planning committee is required to prepare a district level development plan with the help of the specialized agencies under its jurisdiction. This plan would incorporate necessary inputs of resources, prioritization of projects, mechanism for inter sectoral coordination, patterns of public-private partnership, strategy for mobilizing non-governmental organizations and resources and horizontally bringing in supportive inputs from sectoral organizations in the field of
education, agriculture, industry etc. which have a field presence and are in touch with people. This plan is expected to lay down (if it is not happening, it should be so mandated through executive order) the sequence of activities, specify the role of each agency and outline mechanisms and processes by which feed back coming from PRIs and community level institutions can also be dovetailed. This effort at planning should be a comprehensive exercise in utilizing available financial resources, material and manpower, both governmental and non-governmental

It also needs to be ensured that similar plans are prepared at the level of blocks, i.e. the second tier of Panchayati Raj bodies and are in harmony with the overall framework of the district plan and fully reflect its objectives, strategies and the ethos of its approach, while at the same time leaving sufficient space for the block level plan to identify and operationalise area specific initiatives. This block level plan so prepared has to be taken to the level of Panchayat where a Panchayat level plan has already been prepared. The planning agencies of the district have to ensure that the Panchayat level plan is appropriately dovetailed into and reflected in the block level plan and finally gets harmonized with the district level plan. In the process of interaction between the District level plan and the Block Level Plan and between the block level plan and Panchayat level plan, instruments of pressure exertion and advocacy have to be used to see that crucial interventions required by lower PRI agencies are incorporated in the district level plan within the constraints of their power and resources.

## CHAPTER - 8

## CHALLENGES AND STRATEGY FOR DEVELOPMENT OF BIHAR

### 8.1 Challenges

Bihar State is one of India's largest and most densely populated, with onetwelfth of the country's population. Bihar is far from homogeneous with regard to the distribution of its natural resources and growth patterns. It is divided into two geographical units; the plain and the plateau. The Ganga separates the plains into two very different regions with regard to the natural, social and economic environment: the Northern and Southern Bihar plains.

Bihar is one of India's poorest and largest States, lagging significantly behind national averages in most developmental indicators. The causes are related to natural endowments, geographical factors, population pressures, social factors such as the caste system and public policies.

Bihar's low human development indicators and high incidence of poverty in the context of its overall pattern of weak economic growth are a matter of concern. Indeed Bihar's growth in recent years, averaging less than 4\% over the five-year period, places the State (along with Orissa) at the bottom of the major Indian States.

The extent to which the country as a whole can achieve better outcome is linked to the level of development in Bihar. At current progress, Bihar is projected to fall behind most of the MDG targets for 2015, thus adversely impacting the national prospect of achieving these targets.

The absolute level of poverty continues to be high in Bihar, making it one of India's poorest States. Both, rural poverty ratio at $41 \%$ and urban poverty ratio
at $24.7 \%$ are significantly higher than the national average ( $26.3 \%$ for rural; 12\% for urban).

The level of rural poverty varies widely across regions and sectors in the State, North Bihar and the Chhotanagpur plateau are significantly poorer than South Bihar.

The question: 'Who are poor' is closely related to regions where poverty is concentrated or to the factors that make an individual more vulnerable to poverty.

The wage employment in agricultural labour accounts for nearly $40 \%$ of the rural workforce in Bihar. Agricultural labour and cultivation together account for around $80 \%$ of occupations in Bihar. There is still very limited occupational opportunity outside the agricultural sector in rural Bihar.

The poor are far more likely to be agricultural wage workers or casual nonfarm laborers, rather than cultivators employed in a regular non-farm job.

Self-employment activities include a wide variety of occupations that could be as vulnerable as casual labour, especially for the poor.

In urban areas more than $40 \%$ of household holds are self-employed and around $30 \%$ have regular employment while casual wage labour represents only around $10 \%$ of occupations among all urban households.

The underemployment in rural Bihar is very high as compared to the national average.

Out-migration is a crucial survival strategy for the rural poor in Bihar. Bihar has the highest rate of gross inter-State out-migration in India.

The marginal landholders and individuals engaged in agricultural labour and casual non-farm labour are likely to be poor.

The poor and socially disadvantaged households tend to own low-quality livestock (goats rather than cows and buffaloes).

Social or caste characteristics are associated with constraints and lack of opportunities in the State. The caste identity is a strong indicator of poor.

In Bihar, the SC/ST are likely to be around three times poorer than the upper castes, and appreciably poorer than other backward castes and Muslims.

The lack of economic growth imposes strict limits on the State government's ability to finance critical public services in the social sector. It also creates a cycle of low human development and lack of economic opportunities that act as a poverty trap. Breaking out of this cycle will require combining the right economic policies with governance reforms that provide an enabling environment for investment, growth and effective public programs.

### 8.2 Strategy

There are many pragmatic and affordable policy reforms that can move the development agenda forward in the State. For this, it is critical to place people and human development first, and make economic and social development the primary objective of government policy. The development strategy must aim to help shift standards of living, improve human well-being and thereby eliminate poverty.

The development strategy rests on two key pillars : (a) enhancing Bihar's growth performance by establishing a healthy investment climate to encourage entrepreneurship, investment and the spread of improved technologies, particularly in the rural sector; and (b) supporting human resource development through improved quality and access to social services, particularly for the poor and socially disadvantaged communities.

The government should prioritise two strategic changes focusing on: (a) public provision of basic infrastructure services in the State, and (b) road infrastructure and water control.

The first priority - improving rural infrastructure, and strengthening agricultural extension with targeted R\&D - can help boost the performance of agriculture, agro-industry and related services, thereby helping reverse Bihar's weak agricultural growth performance and reducing volatility in rural incomes.

The second priority for strengthening the investment climate is improving law and order, and in so doing reversing the perception of persistent law and order problems.

Improving social service delivery requires three core relationships: first, the relationship between policy makers and service recipients to make policies responsive to peoples' needs; second the relationship between policy makers and service providers to ensure high standards of quality; and third, between end clients and service providers, to strengthen accountability mechanisms which help ensure that social services are actually provided, well targeted, and responsive to community needs. Under the right circumstances, development efforts in Bihar can not only be highly effective but can also provide lessons for taking similar initiatives in the States with the same level of development in India.

## CHAPTER - 9

## SALIENT FINDINGS

An in-depth analysis presented in earlier Chapters shows that the rapidly growing population in Bihar is adversely affecting health and quality of life of people.

Majority of households are headed by males in almost all districts. The domination of male as head of the household in different districts varies from 73 percent to 98 percent.

The proportion of currently married women is higher than the never married women in all districts of Bihar. The proportion of currently married women is highest ( 74 percent) in Samastipur district followed by East Champaran (73 percent), West Champaran (70 percent), Begusarai (70 percent),Vaishali (68 percent), Sitamarhi ( 67 percent), Muzaffarpur ( 66 percent), Darbhanga ( 65 percent) and Purnia ( 61 percent).

Secondly, the proportion of never married is higher for male as compared to females. The proportion of never married male is highest in Begusrai (43 percent), followed by Purnia (43 percent), Sitamarhi (40 percent), Darbhanga (39 percent), East Champaran (38 percent), Vaishali (38 percent), Muzaffarpur (35 percent), West Champaran (31 Percent) and Samastipur (31 percent).

The proportion of Widower/divorced/separated females is higher than male in all districts. About more than half of the women age 45 or older are Widower/divorced/separated in all districts.

It has been found that slightly more than half of currently married women in Bihar report some type of reproductive-health problem, including abnormal vaginal discharge, symptoms of urinary tract infections, and pain or bleeding associated with intercourse, much higher than the all-India level of 39 percent.

About 75\% pregnant women belonging to the low and middle groups in Bihar are zinc deficient. This deficiency advanced with pregnancy. There is a transfer of zinc from mother to children through placenta which reduces its level in pregnant women as compared to non-pregnant women. The deficiency is widely spread in developing countries and has been associated with complications during pregnancy, growth retardation, congenital abnormalities and low birth weight.

Among these women, only about one-quarter sought any advice or treatment. This suggests a need to expand reproductive-health services and information programmes that encourage women to discuss their problems with a health-care provider.

Awareness of AIDS is particularly low among women in rural areas, women living in households with a low standard of living, Muslim women, women who are illiterate, and women who are not regularly exposed to any media. Even among women who have heard of AIDS, however, more than half ( 52 percent) do not know of any way to avoid infection. Health personnel can play a much larger role in promoting AIDS awareness.

In course of interaction with people in rural, urban slums and tribal areas of Bihar, we have found that several groups of children have particularly high levels of anaemia. These include children of 12-13 months, children of high birth orders, rural children, children whose mothers are illiterate, children from SC/ST categories and children from poor families. There is a strong positive relationship between the haemoglobin levels of mothers and prevalence of anaemia among children.

Fund allocated for Kalazar was meagre in view of the dangerous consequences of this disease. It is pity that even the meagre amount was not fully utilised for all the years.

There is issue of governance in the State. The utilisation of allocated funds in the State for general health, family welfare and Kalazar requires to be improved in near future for a dent and reversing the trend in the desired direction.

Comparison of Bihar with All India in terms of important indicators, revealed the following :

- Prevalence of tuberculosis including medically treated tuberculosis, Jaundice as well as Malaria is much higher in Bihar as compared to All India.
- Infant mortality \& child mortality rate continue to be higher in Bihar as compared to All India level.
- The ANC coverage level as well as immunization coverage levels are much lower for Bihar as compared to All India.
- Institutional deliveries are also much lower in Bihar as compared to All India.

The utilisation of Government health facilities for pregnancy related complications and for post delivery complications was $11 \%$ each in the State as a whole. Further, in Bihar about 1 out of 10 women availed Government health services for ANC and RTI/STI. Further, a large variation has been observed among the districts in the utilisation of Government health facilities. Sheikhpura district ranks first with $29 \%$ women utilizing Government health facilities for pregnancy related complications while Nawada, Jehanabad and Purnia districts stood lowest where less than $5 \%$ of women reported such utilisation. On the other hand, utilisation of Government health facilities for post delivery complications is lowest in Rohtas, Saran, Banka and Jamui districts (<5\%) and highest in Paschim Champaran (76\%). For ANC services utilisation is lowest in Madhepura (only 1\%) and highest in Paschim Champaran (17\%). The district wise information shows that this proportion utilizing services for RTI/STI is lowest in the Madhepura and Saran districts where utilisation of Government health services is almost negligible while it is highest in Paschim Champaran (51\%).

In the state of Bihar more than $3 / 4^{\text {th }}$ of the districts fall in the category of demographically weak districts. These are the districts where the availability of health infrastructure is poor and therefore required to be strengthened. In better performing districts the female literacy is also very high as also low proportion marrying below 18 yrs.

Improvement in literacy as well as in availability and access to family welfare services are needed in the demographically weak districts in order to achieve a faster decline in fertility rates.

The PRIs have been given critical role through a resolution by the Central Council of Ministers of Health and Family Welfare (2003), stating "that the State would involve PRI in the implementation of HFW programmes by progressive transfer of funds, functions and functionaries, by training, equipping and empowering them suitably to manage and supervise the functioning of health care infrastructure and manpower and further to coordinate the activities of the works of different departments such : Health and Family Welfare, Social Welfare, and education which are functioning at the Village and Block Levels".

The factors which could influence the progress of decentralized planning and implementation are political will, people's readiness to engage with decentralization as well as capacity of PRIs to effectively function as per the provisions in Population and Health Policy documents.

The National Rural Health Mission (NRHM) launched by the Prime Minister in April 2005 provides an opportunity and challenge to PRIs and NGOs to act and perform.


[^0]:    Source : Field Survey

[^1]:    energisation of health and family welfare infrastructure at the village, sub-centre and primary health center levels to function as a caring system and motivation of personnel at the cutting edge
    improving penetration into rural areas, urban slums among vulnerable groups.
    arranging transportation for referral patients
    increasing easy availability and efficient distribution of affordable contraceptives
    communicating comprehensive information through user-friendly methods of advocacy.

