

DLHS -2

ARUNACHAL PRADESH

Reproductive and Child Health

District Level Household Survey
2002-04



International Institute for
Population Sciences,
(Deemed University)
Mumbai – 400 088



Ministry of Health & Family
Welfare, Government of India,
New Delhi – 110 011



Development & Research
Services Pvt. Ltd.
New Delhi-110029

Reproductive and Child Health District Level Household Survey (DLHS - 2)

Arunachal Pradesh 2002-04



International Institute for
Population Sciences,
(Deemed University)
Mumbai – 400 088



Ministry of Health & Family
Welfare, Government of India,
New Delhi – 110 011



Development & Research
Services Pvt. Ltd.
New Delhi-110029

Contributors

Development & Research Services Pvt. Ltd., New Delhi

G.V.L. Narasimha. Rao

P.P. Talwar

S.K. Bose

M.Vijay Kumar

M.Aariz Qureshi

International Institute for Population Sciences, Mumbai

F. Ram

B. Paswan

L. Ladu Singh

Uttam J. Sonkamble

Protap Mukherjee

CONTENTS

	Page
Tables	iv
Figures	vii
Maps... ..	vii
Preface and acknowledgement	ix
Key Indicators	xi
Salient Findings	xiii
CHAPTER I INTRODUCTION	
1.1 Background and Objectives of the Survey	1
1.2 Survey Design.....	2
1.3 House Listing and Sample Selection	2
1.4 Questionnaire	3
1.5 Fieldwork and Sample Coverage	5
1.6 Data processing	5
1.7 Sample Weights	5
1.8 Sample Implementation	7
1.9 Basic Demographic Profile of the State.....	8
CHAPTER II BACKGROUND CHARACTERISTICS OF HOUSEHOLD	
2.1 Age –Sex Structure.....	11
2.2 Household Characteristic	12
2.3 Educational Level	14
2.4 Marital Status of the Household Population	17
2.5 Marriages	18
2.6 Morbidity Rates	19
2.7 Morbidity Rates by District.....	20
2.8 Housing Characteristics	21
2.9 Housing Characteristics by District.....	23
2.10 Iodization of Salt	24
2.11 Iodization of Salt by District.....	26
2.12 Availability of Facilities and Services in Rural Population.....	26
2.13 Availability of Education Facility and Health Services by Districts.....	28
CHAPTER III CHARACTERISTICS OF WOMEN, HUSBANDS AND FERTILITY	
3.1 Background Characteristics of Women	33
3.2 Educational Level of Women	35
3.3 Background Characteristics of Husbands’ of Eligible Women	36
3.4 Educational Level of Husbands’ of Eligible Women	38
3.5 Children Ever Born and living	39
3.6 Children Ever Born and living by District.....	41
3.7 Birth Order	42
3.8 Birth Order by District	43
3.9 Fertility Preference	45
3.10 Pregnancy Outcomes	46

CHAPTER IV MATERNAL HEALTH CARE

4.1	Antenatal Check-Ups.....	50
4.2	Antenatal Check-Ups at Health Facility.....	52
4.3	Antenatal Check-Ups by District.....	53
4.4	Reasons for Not Seeking Antenatal Check-Ups.....	54
4.5	Components of Antenatal Check-Ups.....	55
4.6	Antenatal Care Services.....	56
4.7	Antenatal Care Indicator by Districts.....	61
4.8	Pregnancy Complications and Treatment	62
4.9	Delivery Care.....	65
4.9.1	Place of Delivery.....	65
4.9.2	Assistance during Home Delivery	67
4.9.3	Delivery Assisted by Skilled Person.....	69
4.10	Reasons for Not Going to Health Institutions for Delivery.....	70
4.11	Delivery Characteristics by Districts.....	71
4.12	Complication during Delivery.....	72
4.13	Post Delivery Complication and Treatment	74
4.14	Obstetric Morbidity by District.....	78

CHAPTER V CHILD CARE AND IMMUNIZATION

5.1	Breastfeeding.....	83
5.1.1	Breastfeeding by Districts.....	86
5.2	Immunization of Children.....	87
5.3	Source of Immunization.....	92
5.4	Reason for Not Immunizing the Children.....	93
5.5	Vitamin A and IFA Supplements.....	93
5.6	Immunization Coverage by Districts.....	95
5.7	Child Morbidity and Treatment.....	96
5.7.1	Awareness of Diarrhoea.....	96
5.7.2	Treatment of Diarrhoea.....	97
5.7.3	Awareness of Pneumonia.	99
5.7.4	Treatment of Pneumonia.....	99
5.7.5	Awareness of Diarrhoea, ORS and Pneumonia and Incidence of Diarrhoea and Pneumonia by District	101

CHAPTER VI FAMILY PLANNING

6.1	Knowledge of Family Planning Methods.....	105
6.1.1	Knowledge of Family Planning Methods by District.....	108
6.1.2	Knowledge of No-Scalpel Vasectomy (NSV).....	108
6.1.3	Knowledge of No-Scalpel Vasectomy(NSV) by Districts.....	109
6.2	Current Use of Family Planning Methods.....	109
6.2.1	Current Use of Family Planning Methods by Districts.....	111
6.2.2	Current Use and Ever Use of Family Planning Methods by Women.....	112
6.2.3	Current Use and Ever Use of Family Planning Methods by Husbands.....	113
6.3	Reasons for Not Using Male Methods.....	114
6.4	Source of Contraceptive Methods.....	115

	Page
6.5	Problems with Current Use of Contraceptive Method.....117
6.6	Treatment for Health Problems with Current use of Contraception..... 118
6.7	Advice to Non-Users to Use Contraception..... 119
6.7.1	Future Intensions..... 119
6.7.2	Future Intension to Use Among Women by Number of Living Children 120
6.8	Reasons for Discontinuation and Non-Use of Contraception.....121
6.8.1	Reasons for Not Using Contraceptive Methods.....122
6.9	Unmet Need for Family Planning Services.....123
6.9.1	Unmet Need for Family Planning Services by Districts.....125

CHAPTER VII ACCESSIBILITY AND PERCEPTION ABOUT GOVERNMENT HEALTH FACILITIES

7.1	Home Visit By Health Workers..... 127
7.2	Home Visit By Health Worker by Districts..... 128
7.3	Matter Discussed during Home Visit or Visits to Health Facilities..... 129
7.4	Visit to Health Facility.....131
7.5	Visit to Health Facility by Districts..... 132
7.6	Client’s Perception of Quality of Government Health Services..... 133
7.7	Reasons for not visiting Government Health Centre..... 133
7.8	Family Planning Services and Advice Received.....134
7.9	Availability of Pills and Condom.....134
7.10	Quality of Care of Family Planning Services.....135
7.11	Quality of Care Indicators for Contraceptive users by District..... 137
7.12	Quality of Care of Maternal Health Care.....138

CHAPTER VIII REPRODUCTIVE HEALTH PROBLEMS AND AWARENESS OF RTIs/STIs and HIV/AIDS

8.1	Awareness of RTI/STI 141
8.1.1	Knowledge of Mode of Transmission of RTI/STI 145
8.2	Prevalence of RTI/STI..... 147
8.3	Menstruation Related Problems..... 151
8.4	Prevalence of RTI/STI by Districts 153
8.5	HIV/AIDS.....153
8.5.1	Knowledge of HIV/AIDS.....154
8.5.2	Knowledge of Mode of Transmission about HIV/AIDS.....158
8.5.3	How to avoid HIV/AIDS.....160
8.5.4	Misconception about HIV/AIDS.....162
8.5.5	Knowledge of Curability of HIV/AIDS..... 164
8.6	Awareness of RTI/STI and HIV/AIDS by Districts..... 165

APPENDICES

Appendix A	Estimation of Sampling Errors 167
Appendix B	DLHS Staff 175
Appendix C	Questionnaire 179

TABLES

	Page
Table 1.1	Number of households Interviewed 7
Table 1.2	Number of women and husbands Interviewed 8
Table 1.3	Basic demographic indicator 9
Table 2.1	Household population by age and sex 12
Table 2.2	Household characteristics 13
Table 2.3	Educational level of the household population 14
Table 2.4	Marital status of the household population 17
Table 2.5	Marriage 18
Table 2.6	Morbidity rates 19
Table 2.7	Morbidity rates by district..... 20
Table 2.8	Housing characteristics 22
Table 2.9	Housing characteristics by district..... 24
Table 2.10	Iodization of salt..... 25
Table 2.11	Iodization of salt by district..... 26
Table 2.12	Distance from the nearest education facility 27
Table 2.13	Distance from the nearest health facility 27
Table 2.14	Availability of services 28
Table 2.15	Availability of facility and services by district..... 29
Table 3.1	Background characteristics of women 34
Table 3.2	Level of education of eligible women 36
Table 3.3	Background characteristics of men 37
Table 3.4	Level of education of men 39
Table 3.5	Children ever born and living 40
Table 3.6	Completed fertility by district 41
Table 3.7	Birth order 42
Table 3.8	Birth order by district 44
Table 3.9	Fertility preference 46
Table 3.10	Outcomes of pregnancy 47
Table 4.1	Antenatal check-up 51
Table 4.2	Place of antenatal check-up 52
Table 4.3	Antenatal check-ups by district 54
Table 4.4	Reasons for not seeking antenatal check-ups..... 55
Table 4.5	Components of antenatal check-ups 56
Table 4.6	Antenatal care 57
Table 4.7	Antenatal care indicators by district 61
Table 4.8	Pregnancy complications 63
Table 4.9	Treatment for pregnancy complications 65
Table 4.10	Place of delivery..... 66

	Page
Table 4.11	Assistance during home delivery and safe delivery 68
Table 4.12	Reasons for not going to health institutions for delivery 71
Table 4.13	Delivery characteristics by district 72
Table 4.14	Delivery complications 73
Table 4.15	Post delivery complications..... 75
Table 4.16	Treatment for Post Delivery Complications..... 77
Table 4.17	Pregnancy, Delivery and Post Delivery Complications..... 78
Table 5.1	Initiation of breastfeeding 84
Table 5.2	Exclusive breastfeeding by child's age 85
Table 5.3	Breastfeeding by district 86
Table 5.4	Vaccination of children 88
Table 5.5	Childhood vaccination received by 12 months of age 91
Table 5.6	Source of childhood vaccination 92
Table 5.7	Reason for not giving vaccination..... 93
Table 5.8	Vitamin A and IFA supplementation for children 94
Table 5.9	Childhood vaccination by district 95
Table 5.10	Awareness of diarrhoea 97
Table 5.11	Treatment of diarrhoea 98
Table 5.12	Awareness of pneumonia 100
Table 5.13	Treatment of pneumonia 101
Table 5.14	Knowledge of diarrhoea management and pneumonia by district 102
Table 6.1	Knowledge of contraceptive methods 106
Table 6.2	Knowledge of contraceptive methods by districts 107
Table 6.3	No-scalpel vasectomy (NSV)..... 108
Table 6.4	No-scalpel vasectomy by district 109
Table 6.5	Contraceptive prevalence rate 110
Table 6.6	Contraceptive prevalence rates by districts 112
Table 6.7	Use of contraception by women 113
Table 6.8	Use of contraception by men 114
Table 6.9	Reasons for not using male methods 115
Table 6.10	Source of modern contraceptive methods 116
Table 6.11	Health problems with current use of contraception..... 117
Table 6.12	Follow- up Visit and Sought treatment for health problems with current use contraception 118
Table 6.13	Advice on contraceptive use 119
Table 6.14	Future intention to use 120
Table 6.15	Future use of contraception by number of living children 121
Table 6.16	Reasons for discontinuation of contraception 122
Table 6.17	Reason for not using contraceptive method 123
Table 6.18	Unmet need for family planning services 124
Table 6.19	Unmet need by district 125
Table 7.1	Home visit by health worker 128
Table 7.2	Home visit by health worker by district 129
Table 7.3	Matter discussed during contact with a health worker 130
Table 7.4	Visit to health facility 131

	Page
Table 7.5	Visit to health facility by district 132
Table 7.6	Quality of government health facility 133
Table 7.7	Reason for not preferring government health facility 134
Table 7.8	Advise to adopt family planning method 135
Table 7.9	Availability of regular supply of condoms/pills 135
Table 7.10	Information of other modern method before sterilization 136
Table 7.11	Information on side effect and follow-up for current method 136
Table 7.12	Quality of care indicators for contraceptive users by district 137
Table 7.13	Advised to have delivery at health facility and follow-up services for post partum check-up 138
Table 7.14	Quality of care indicators for maternal care 139
Table 8.1	Source of knowledge about RTI/STI among women..... 143
Table 8.2	Source of knowledge about RTI/STI among men..... 144
Table 8.3	Source of knowledge about mode of transmission of RTI/STI among women 145
Table 8.4	Source of knowledge about mode of transmission of RTI/STI among men.. 146
Table 8.5	Symptoms of RTI/STI among women 147
Table 8.6	Symptoms of RTI/STI among men 149
Table 8.7	Abnormal vaginal discharge 151
Table 8.8	Menstruation related problems 152
Table 8.9	Reproductive health care indicators by district 153
Table 8.10	Source of knowledge about HIV/AIDS among women..... 155
Table 8.11	Source of knowledge about HIV/AIDS among Men..... 156
Table 8.12	Source of knowledge about mode of transmission of HIV/AIDS among women 158
Table 8.13	Source of knowledge about mode of transmission of HIV/AIDS among Men 159
Table 8.14	Knowledge about avoidance of HIV/AIDS among women 161
Table 8.15	Knowledge about avoidance of HIV/AIDS among men 162
Table 8.16	Misconception about transmission of HIV/AIDS among women 163
Table 8.17	Misconception about transmission of HIV/AIDS among men 164
Table 8.18	Knowledge of curability about HIV/AIDS 165
Table 8.19	Awareness of RTI/STI and HIV/AIDS by district 166

FIGURES

		Page
Figure 2.1	Age-sex-pyramid	11
Figure 2.2	Percentage literate by age and sex	15
Figure 3.1	Birth order 3 & above by selected background characteristic	43
Figure 3.2	Birth order 3 & above by district	44
Figure 3.3	Fertility preference.....	45
Figure 4.1	Source of antenatal care	50
Figure 4.2	Full antenatal care by background characteristic	60
Figure 4.3	Percentage of women with pregnancy complication and by symptoms	62
Figure 4.4	Place of delivery and assistance during delivery	69
Figure 4.5	Delivery assisted by skilled person by background characteristic	70
Figure 4.6	Percentage of women with delivery complication and by symptoms	74
Figure 4.7	Percentage of women with post delivery complication and by symptoms....	76
Figure 5.1	Initiation of breastfeeding	85
Figure 5.2	Percentage of children age 12-23 months who have received specific vaccination	89
Figure 5.3	Percentage of children age 12-23 months who have received all vaccination	90
Figure 5.4	Child vaccination by age	92
Figure 6.1	Knowledge of family planning method	107
Figure 6.2	Practise of family planning method	111
Figure 6.3	Source of family planning among current users of modern contraceptive methods	116
Figure 8.1	Awareness of RTI/STI by sex according to residence.....	129
Figure 8.2	Symptoms of RTI/STI among women	142
Figure 8.3	Symptoms of RTI/STI among Husbands.....	148
Figure 8.4	Awareness of HIV/AIDS by sex according to residence	148
		157

MAPS

		Page
Map 1	Percent Girl Marrying Below Legal Age at Marriage.....	30
Map 2	Percentage of Households Using salt that Contains 15 PPM Level of Iodine	31
Map 3	Percentage of Women Received Three or More AnteNatal check ups.....	80
Map 4	Percentage of Delivery Attended by Skilled Person	81
Map 5	Percentage of Children (age 12-23) months Who have Received Full Vaccination.....	103
Map 6	Current use of Any Family Planning Method.....	126

PREFACE AND ACKNOWLEDGEMENT

Government of India had launched the Reproductive and Child Health (RCH) program to ensure that couples have access to adequate information and services for reproductive health care. As a first step, family planning target has been withdrawn and an effort is being made to provide a package of reproductive services at different levels of health care centres.

Monitoring of the services is also being improved. New indicators are being added to assess quality of services and provision of an integrated reproductive health care service. The District Level Household Survey (DLHS) was initiated by Government of India and financed by the World Bank covering all the districts in the country. For the second time, district level estimates will be available for most of the critical reproductive health indicators. These important initiatives are certainly quite satisfying for all those who are concerned with taking ICPD reproductive health agenda ahead. The project is being coordinated by International Institute for Population Sciences, Mumbai and implemented by a number of consulting agencies.

For the purpose of data collection, uniform questionnaires, sampling design and field procedures were used throughout the country. The survey thus provided comparable data for all the districts in the state. The present report provides salient findings of Arunachal Pradesh and covered all the districts. The findings of selected indicators of reproductive and child health services from the state of Arunachal Pradesh are presented in the report.

It is believed that the data generated through the survey will meet the requirements of the Programme Administrators and Policy Makers for making effective interventions for providing quality services and achieving multiple objectives.

The DLHS-RCH could not have been successfully completed without cooperation and support from innumerable sources at various stages of the project. Although, it is not possible to acknowledge everyone involved in the survey, several organizations and individuals deserve special mention.

We would like to take this opportunity to acknowledge Shri P.K. Hota, Secretary, Ministry of Health and Family Welfare (MoHFW), Government of India. Our special thanks are due to Shri Y. N. Chaturvedi, Shri A. R. Nanda and Shri J.V.R. Prasada Rao, former Secretaries, Department of Family Welfare, GoI, who have gave us an opportunity to participate as consulting organization in the survey of the national importance. Our special thanks are due to Shri S. K. Sinha, Additional Director General, Ministry of Health and Family Welfare, GoI. Thanks are also due to Dr. K. V. Rao, Shri S. K. Das and Shri D. K. Joshi, former Chief Directors for their help. We are also thankful to Shri Partha Chattopadhyaya, Chief Director and Mr. K. D. Maiti, Director, Mrs. Rashmi Verma, and Mr. Rezimohn, Assistant Director, Statistics division of MoHFW for all the support extended by them. Our special thanks are due to Dr. T. K. Roy, former Director and Senior Professor, IIPS, Mumbai, for his timely advice and valuable guidance. Thanks are also due to Dr. G. Rama Rao, Officiating Director, IIPS, Mumbai. We also acknowledge the contribution of Dr. F. Ram, Dr. B. Paswan, Dr. L. Ladu Singh coordinators of

the project at IIPS, Mumbai. Our thanks are also due to the Directors of Census Operations and the state Department of Health and Family Welfare in all the states and union territories. It also gives us immense pleasure to thanks to Dr. G. N. V. Ramana, Public Health Specialist, World Bank, New Delhi for the able guidance and technical support to the project. We would also like to thanks to NSSO for their help in providing UFS Block for DLHS-2.

Thanks are also due to all officials of the state Government, including Dr. G. Yocha, Health Director of Arunachal Pradesh, Census and NSSO officials, and other district authorities for the support rendered. This facilitated the smooth and timely completion of data collection.

Thanks are also due to Mr. Atunu Ghosh, Research Officer, RCH, IIPS, for his assistance in various stages of the project.

We also express our sincere gratitude towards our respondent who spent their valuable time and responded to the questions patiently.

Thanks are due to all professionals and field staff who worked in very difficult conditions.

We would be failing in our duty if we do not thank our respondents who spent their valuable time with tremendous patience.

Development & Research Services Pvt.Ltd.
New Delhi
August 2006

KEY INDICATORS, ARUNACHAL PRADESH

DISTRICT LEVEL HOUSEHOLD SURVEY- REPRODUCTIVE AND CHILD HEALTH, (DLHS-RCH), 2002-04

Sample size			
Households surveyed.....	13,429		
Currently married women age 15-44.....	11,874		
Husband's of eligible women.....	8,058		
Characteristics of households			
Percent rural.....	73.1		
Percent Hindu.....	35.8		
Percent Muslim.....	3.2		
Percent other religion.....	27.6		
Percent scheduled caste.....	7.1		
Percent scheduled tribe.....	63.9		
Percent with electricity.....	69.5		
Percent with flush toilet.....	21.0		
Percent with no toilet facility.....	24.6		
Percent living in <i>Kachcha</i> houses.....	66.2		
Percent living in <i>Pucca</i> houses.....	12.3		
Percent with low standard of living.....	50.0		
Percent with high standard of living.....	18.5		
Percent with iodized salt (15+ppm).....	67.1		
Characteristics of currently married women age 15-44 years			
Percent below age 30.....	47.5		
Percent with age at first cohabitation below age 18.....	43.6		
Percent illiterate.....	49.8		
Percent having 10 or more years of schooling.....	16.2		
Percent with illiterate husband.....	29.8		
Percent with husband 10+ years of schooling.....	29.7		
Marriage			
Mean age at marriage for boys.....	23.4		
Mean age marriage for girls.....	19.5		
Percent of boys married below age 21.....	31.6		
Percent of girls married below age 18.....	26.6		
Fertility			
Mean children ever born women age 40-44 years... ..	4.3		
Percent of births of order 3 and above ¹	48.8		
Current use of family planning method			
Any method.....	38.8		
Any modern method.....	35.6		
Pill.....	11.7		
IUD.....	3.7		
Condom.....	1.8		
Female sterilization.....	18.0		
Male sterilization.....	0.3		
Any traditional method.....	3.2		
Rhythm/safe period.....	2.4		
Withdrawal.....	0.6		
Unmet need for family planning			
Percent with unmet need for spacing.....	13.3		
Percent with unmet need for limiting.....	21.9		
Percent with total unmet need.....	35.1		
Maternal care²			
Percent of women received antenatal check-ups	58.6		
Antenatal check-up at home.....	0.4		
Antenatal check-up in first trimester.....	22.1		
Three or more visit for ANC.....	40.9		
Two or more tetanus toxoid injections.....	43.6		
Adequate Iron folic acid tablets/syrup ³	12.9		
Full antenatal check-up ⁴	9.8		
Delivery characteristics²			
Delivery at home.....	64.9		
Delivery at government health institutions.....	27.1		
Delivery at private health institutions.....	7.7		
Delivery attendant by skilled persons ⁵	37.7		
Child health			
Percent of children whose mother squeezed out milk from her breast ⁶	49.7		
Percent of children ⁷ with diarrhoea ⁸ who received ORS.....	31.7		
Percentage of woman whose child ⁷ with pneumonia ⁸ sought treatment.....	57.1		
Percent of children who received vaccinations⁹			
BCG.....	56.7		
DPT (3 injections).....	34.9		
Polio (3 drops).....	33.0		
Measles.....	38.1		
All vaccinations ¹⁰	21.6		
No vaccination at all.....	27.5		
Percentage of women who had			
Pregnancy complication ²	27.7		
Delivery complication ²	36.1		
Post delivery complication ²	30.9		
Symptoms of RTI/STI.....	35.1		
Problems of vaginal discharge.....	8.3		
Menstruation related problem.....	15.9		
Awareness of RTI/STI and HIV/AIDS			
Percent of women who have heard of RTI/STI.....	9.7		
Percent of women who have heard of HIV/AIDS.....	60.3		
Utilization of government health services			
Antenatal care.....	50.0		
Treatment for pregnancy complication.....	77.5		
Treatment for post-delivery complication.....	77.9		
Treatment for vaginal discharge.....	70.3		
Treatment for children with diarrhoea.....	83.2		
Treatment for children with pneumonia.....	69.2		
Quality of family planning services			
Percent non-users ever advised to adopt the family planning method.....	6.4		
Percent users told about side effects of method.....	36.1		
Percent users who received follow-up services.....	5.6		
Characteristics of husband of eligible women			
Percent of husband knowing NSV.....	18.2		
Percent of men who have heard of RTI/STI.....	19.6		
Percent of men who have heard of HIV/AIDS.....	71.7		
Percentage who had any symptoms of RTI/STI.....	6.1		
Sought treatment for RTI/STI.....	36.3		

¹ For births in past three years, ² For live/still births during three years preceding the survey, ³ 100 or more IFA tablets/Syrup, ⁴ A minimum of three visits for ANC, at least one TT injections and 100 or more IFA tablets/syrup, ⁵ Either institutional delivery or home delivery assisted by Doctor/ANM/nurse, ⁶ Children age below 3 years, ⁷ Last but one living children below age 3 years, ⁸ Last two weeks preceding the survey, ⁹ Last but one living children (age 12-23 months) born during three years preceding the survey, ¹⁰ BCG, three injections of DPT, three drops of polio and measles.

SALIENT FINDINGS

For the assessment of district level Reproductive and Child Health indicators, Government of India proposed to undertake district level household surveys through non-governmental agencies on an annual basis. The District Level Household Survey (DLHS) was the result of government's initiative. In Arunachal Pradesh, DRS, India was entrusted the work of carrying out of the survey. The survey for Phase-1 of the DLHS covering 7 districts of the state was conducted during May 2002 to August 2002. The survey for Phase-2 covering the remaining districts of the state was carried out during April 2004 to September 2004. The focus of the survey was on: i) Coverage on ante natal care (ANC) and immunization services, ii) Extent of safe deliveries, iii) Contraceptive prevalence rate and unmet need for family planning, iv) Awareness about RTI/STI and HIV/AIDS and v) Utilization of government health services and users' satisfaction. The salient findings of the survey are presented here.

For both the phases together, the data was collected from 13,429 households in Arunachal Pradesh. From these households, 11,874 eligible women (usual resident or visitors who stayed in the sample household the night before the interview, currently married aged 15-44 years whose marriage was consummated) and 8,058 husbands of eligible women were interviewed.

Of the total households interviewed in Arunachal Pradesh, nearly 73 percent were from rural areas. There were 36 percent Hindu households, 3 percent Muslim and 28 percent came under other category in the sample. Seventy one percent of the households belonged to either scheduled castes or scheduled tribes. Sixty six percent of the households lived in *Kachcha* and about 12 percent were in *pucca* houses. The majority of the households belonged to low economic status (50 percent in low SLI)

About 67 percent of population aged seven and above are literate. Percent literate among females is 61 where as it is 74 percent for male. Proportion of non-literate is much higher among the older cohort compared to the younger ones. Nearly 50 percent of eligible women in the state are non-literate, and 16 percent have completed 10 or more years of schooling. In Arunachal Pradesh the level of literacy among the eligible women and their husbands are low. As regards distribution of non-literate women, lesser proportion of younger women's below age 30 are illiterate compared to older women age 30 and above, but in case of non-literate husbands across age is more or less uniform, though it is marginally more for husbands below 30 years.

The reporting of the marriages during three years prior to survey gives the mean age at marriage among the boys and girls in the state as 23.4 and 19.5 years respectively. Thirty-two percent of boys and 27 percent of girls in the state got married before attaining the minimum legal age at marriage of 21 and 18 years respectively. In all the districts, except Changlang and West Kameng more than one-fifth of boys got married below the legal minimum age at marriage. Except in Changlang, Dibang Valley, Papum Pare and Tawang, in all the districts nearly 20 to over 49 percent of the girls got married below the legal minimum age at marriage.

More than half of the households (67 percent) use cooking salt that is iodized at the recommended level of 15 parts per million or higher level of iodine content whereas 0.4 percent

of households used salts that are not iodized at all. Lowest proportion of households (zero percent) in Lohit, Tawang, Papum Pare and Upper Subansiri is using non-iodized salt whereas in East Siang the highest proportion of households (1.4 percent) used non-iodized salt. While more than 60 percent of households in Changlang, Lower Subansiri, East Siang, Lohit, West Kameng, Upper Siang, Dibang Valley, Papum Pare and Upper Subansiri consume adequately iodized salt, only 43 percent of households in Tirap do so.

On an average, women on the verge of completion of reproductive period have given birth to 4.3 children. The completed fertility in the states varies from the lowest of 3.5 children ever born per women in a East Kameng and Tawang to the highest of 5.7 children in Lower Subansiri.

The share of births of order 3 and above in the total births that occurred three years prior to survey is 49 percent. In most of the district, proportion of higher order births is quite high, ranging from the lowest of around 38 percent in West Kameng, to the highest of about 66 percent in Upper Siang.

The data collected on the utilization of ANC services for the women who had their last live/ still birth during three years prior to survey shows that the ANC coverage in the state is high as 59 percent of the women received at least one ante-natal care during pregnancy. Less than one percent of the women during their pregnancy were visited by health worker at their residence for providing ANC. Twenty percent of the women visited private health facilities and 61 percent received ANC from government health facilities. The percent of women who got some kind of ANC during pregnancy range between 30 percent in East Kameng to 77 percent in Lohit. In 8 districts out of 13, 55 percent or more women got some antenatal care.

Though 59 percent of the women in Arunachal Pradesh received ANC, only 80, 72 and 67 percent women had check-up of weight, blood pressure and abdomen respectively. Forty-five percent women received Iron and Folic Acid (IFA) tablets and 44 percent got at least one TT injection. A full package of ANC including minimum three ANC visits, at least one TT injection and 100 or more IFA tablets/Syrup was received by 13 percent of women.

Minimum three ANC and timing of first check up is crucial for maternal and child care. In Arunachal Pradesh nearly 22 percent of women got ANC in the first trimester and nearly 15 percent had minimum three antenatal check-ups. An extent of ANC in first trimester varies from minimum of 9 percent in Tawang to the maximum of 36 percent in Tirap. In East Kameng, only 17 percent of women had minimum three ANC whereas in West Siang more than 58 percent women had got minimum three ANC.

Nearly 35 percent of the total deliveries in Arunachal Pradesh were conducted in the health institutions; 0.9 percentages point up from RCH Round I. The majority of the institutional deliveries were conducted in government institutions (27 percent of total deliveries) as against in private institution 8 percent of total deliveries. Five percent of the total deliveries, that took place at home, were assisted by midwifery trained persons i.e. doctor/ nurse and ANM. So in all, 38 percent of the deliveries, slightly up from RCH Round I (28 percent), in the state were assisted by skilled personnel. The extent of institutional deliveries varies from the highest of 46 percent

in Papum Pare to the lowest of 16 percent in Upper Siang. In all the districts, comparatively higher proportion of the deliveries took place in government health institutions. Safe deliveries were on the similar pattern in all the districts. The percent of the institutional deliveries increases substantially with women's education and economic status, though the variation in the institutional deliveries by women's education is much conspicuous than that by women's economic status.

In Arunachal Pradesh, 28, 36 and 31 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 42 percent of the women sought treatment for the pregnancy and 28 percent for the post-delivery complications. The pregnancy complication varies from the lowest of 14 percent in Tawang and Lower Subansiri to the highest of 47 percent in Dibang Valley. The incidence of all the three types of complications seems to be linked with each other. In the districts where the incidence of pregnancy complications is high, the incidence of delivery and post-delivery complications is also high.

In most of the districts and the state as a whole, the practice of breast-feeding is almost universal. However, the practice of initiation of breastfeeding within two hours of birth of the child is not common. In Arunachal Pradesh, only 47 percent women started breastfeeding the child within two hours of birth and nearly 23 percent started after one day of birth. There is great deal of variation in the pattern of breastfeeding across the districts. In Tirap district only twenty-four percent of the women breastfed the child within two hours of birth. In East Kameng and West Siang district, the percentage is highest (64 percent).

In Arunachal Pradesh 87, 69, 66 and 65 percent of the children received the BCG vaccine, three doses of DPT, Polio and measles vaccine respectively. There is 22 percentage points drop from BCG to measles. It means that large number of children that have contact with services providers are missed out of subsequent services. The complete schedule of immunization including BCG, three doses of DPT and Polio each and measles was received by 50 percent of the children, whereas 7 percent of the children did not receive a single vaccination under routine programme. About 26 percent of the children received supplementation of at least one dose of vitamin A and only 7 percent children received IFA tablets/liquid for iron supplementation.

The extent of complete immunization consisting of BCG, three injections of DPT, three doses of Polio and measles is the lowest in East Kameng (less than one percent) and highest in Tirap (46 percent). In 3 districts (East Siang, Tawang and Tirap) more than 40 percent of the children received complete immunization.

In Arunachal Pradesh, 49 percent of the women were aware of diarrhoea management and 32 percent were aware of Oral Rehydration Salt (ORS). During the two-week period prior to survey, children of 12 percent of the women suffered from diarrhoea. And 52 percent women treated diarrhoea among children by giving ORS. In comparison to awareness about diarrhoea management, the awareness about danger signs of pneumonia is quite low. Only 21 percent of the women reported awareness about danger signs of pneumonia. Eighteen percent of the women reported that their children suffered from cough, cold and difficulty in breathing in two-week period prior to survey and 57 percent sought treatment.

The knowledge of family planning methods is universal in all districts of Arunachal Pradesh, with over 92 percent women reporting knowledge of one method or the other. However, the knowledge of any spacing method is marginally low, but the proportion per se is quite high (81 percent). The knowledge of any modern methods is also universal in all the districts, though the knowledge of all modern methods is only 26 percent. The proportion knowing all modern methods (males and females' sterilization, IUD, oral pills and condom) varies from about 4 percent in Tawang and Lohit to 45 percent in Changlang.

In DLHS, knowledge about No-scalpel vasectomy has been asked to husbands of eligible women. About 14 percent of the husbands were aware of no-scalpel vasectomy in the state. The proportion of husbands knowing No-scalpel vasectomy varies from about zero percent in Dibang Valley to 33 percent in East Siang.

The contraceptive prevalence rate (any methods) in the state is 39 percent, 14 percentage point up from RCH Round I, comprising of prevalence of about 36 percent of modern methods and 3 percent of traditional methods. Eighteen percent of the couples adopted sterilization. The percent user of the two male methods sterilization and condom is only 2 percent. There has been positive association between contraceptive use and female education, economic development and availability of health facility. The highest contraceptive prevalence is in Changlang (56 percent) followed by West Kameng (54 percent) and lowest is in East Kameng (16 percent).

In Arunachal Pradesh, a total of 35 percent of women are found to have unmet need for family planning, with 22 percent for limiting and 13 percent for spacing. There are no inter-district differences in the pattern of unmet need. The total unmet need varies from 21 percent in Changlang to 52 percent in Upper Subansiri followed by Tirap (51 percent).

Only less than one percent of the women in the state reported that either ANM/LHV or health worker visited them at their residence at least once in the past three months. Less than half of women who were visited by ANM felt that ANM had given them sufficient time to discuss health-related matters.

In Tirap and East Siang, 2 percent of the women reported the visit of ANM/LHV to their residence. In the rest of the districts less than one percent of the women reported visits of ANM/LHV.

It has been observed that in three months period prior to survey, 79 percent of the eligible women who were required to consult health facility visited any of the government health facilities. Very small proportion of the women who visited the health facility rated facility as excellent. On the other hand, nearly 31 percent of the women who did not visit the government health facility reported government health facility "poor quality of service" as reason.

The district level variation in the utilization of the government health facilities ranges from 58 percent in Papum Pare to 95 percent in Tawang. A small percentage of women visited to private health facilities (15 percent), ranges from 5 percent in Tawang, to 30 in East Kameng.

In Arunachal Pradesh 10 and 50 percent of women are aware of RTI/STI and HIV/AIDS respectively. The corresponding level of awareness among husbands of eligible women is 20 and 71 percent. The percent of women who are aware of RTI/STI is lowest in East Kameng (4percent) and for HIV/AIDS it is lowest in West Siang (36 percent). The level of awareness regarding RTI/STI is highest in Lohit 16 percent and for HIV/AIDS is highest in East Siang (87 percent). Similarly awareness level of husbands of eligible women of RTI/STI and HIV/AIDS are lowest in Lohit 10 percent and 58 percent respectively, to highest in East Siang 34 and 93 percent respectively. Out of 6, in 13 districts the awareness of HIV/AIDS is below state figure for women and in 6 districts for husbands of eligible women.

About 36 percent of women and 6 percent of husbands of eligible women in the state reported having at least one symptoms of RTI/STI. In most of the districts the reported prevalence of RTI/STI among husbands was low. The prevalence of RTI/STI is lowest in West Siang (13 percent) for women and in Tawang (less than one percent) for husbands to highest in Dibang Valley and East Siang (47 percent) for women and in East Kameng (10 percent) for husbands. About 8 percent of women reported vaginal discharge with low in Dibang Valley, East Kameng and Tawang (2 percent) to highest in West Siang (17 percent). Twenty five percent of women sought treatment for vaginal discharge problem and 36 percent of husbands sought treatment with at least one symptoms of RTI/STI. It may be noted that in 5 out of 13 districts higher proportion of women compared to husbands sought treatment for their reproductive health problems.

CHAPTER I

INTRODUCTION

1.1 Background and Objectives of the Survey

The Reproductive and Child Health (RCH) programme that has been launched by Government of India (GoI) in 1996-97 is expected to provide quality services and achieve multiple objectives. It ushered a positive paradigm shift from method-oriented, target-based activity to providing client-centred, demand-driven quality services. Also, efforts are being made to reorient provider's attitude at grassroots level and to strengthen the services at outreach levels.

The new approach requires decentralization of planning, monitoring and evaluation of the services. The district being the basic nucleus of planning and implementation of the RCH programme, Government of India has been interested in generating district level data on utilization of the services provided by government health facilities, other than that based on service statistics. It is also of interest to assess people's perceptions on quality of services. Therefore, it was decided to undertake District Level Household Survey (DLHS) under the RCH programme in the country.

The Round I of RCH survey was conducted during the year 1998-99 in two phases (each phase covered half of the districts from all states/union territories) in 504 districts for which International Institute for Population Sciences (IIPS), Mumbai was designated as the nodal agency.

In Round II, survey was completed during 2002-04 in 593 districts as per the 2001 Census. In DLHS-RCH, information about RCH has been collected using a slightly modified questionnaire. In Round II, some new dimensions, such as test of cooking salt to assess the consumption of salt fortified with iodine, collection of blood of children, adolescents and pregnant women to assess the level of anaemia, and measurement of weight of children to assess the nutritional status, were incorporated.

The main focus of the DLHS-RCH has been on the following aspects:

- Coverage of ANC & immunization services
- Proportion of safe deliveries
- Contraceptive prevalence rates
- Unmet need for family planning
- Awareness about RTI/ STI and HIV/AIDS
- Utilization of government health services and users' satisfaction.

For the purpose of conducting DLHS-RCH, all the states and the union territories were grouped into 16 regions. A total of twelve research organizations including Population Research Centres (PRCs) were involved in conducting the survey in 16 regions with IIPS as the nodal agency.

1.2 Survey Design

In Round II, a systematic, multi-stage stratified sampling design was adopted. In each district, 40 Primary Sampling Units (PSUs – Villages/Urban Frame Size) were selected with probability proportional to size (PPS) using the 1991 Census data. All the villages were stratified according to population size, and female literacy was used for implicit arrangement within each strata. The number of PSUs in rural and urban areas was decided on the basis of percent of urban population in the district. However, a minimum of 12 urban PSUs were selected in each district in case the percent urban was low. The target sample size in each district was set at 1,000 complete residential households from 40 selected PSUs. In the second stage, within each PSU, 28 residential households were selected with Circular Systematic Random Sampling (CSRS) procedure after house listing. In order to take care of non-response due to various reasons, sample was inflated by 10 percent (i.e. 1,100 households).

For selecting the urban sample, the National Sample Survey Organization (NSSO) provided the list of selected urban frame size (UFS) blocks in the district. The UFS blocks were made available separately for each district for urban areas. The maps of selected blocks were obtained from the NSSO field office located in each state/union-territory.

But in each state, in two districts, the PSUs that were surveyed in Round I of DLHS-RCH (also known as RHS-RCH) were also selected for survey in Round II. This was done in order to measure the changes more accurately. Two districts, one with the highest proportion of safe delivery and another with the lowest proportion of safe delivery among those surveyed during Round I of the survey were selected for this purpose. In all other districts, fresh sample of PSUs were selected.

1.3 House Listing and Sample Selection

The household listing operation was carried out in each of the selected PSU segment prior to the data collection that provided the necessary frame for selecting the households. The household listing operation also involved preparation of location map and layout sketch map of the structures and recording the details of the households in these structures in each selected PSU. This exercise was carried out by independent teams each comprising one lister, one mapper and one supervisor under the overall guidance and monitoring of the survey coordinator of households of the selected regional agencies.

A complete listing of households was carried out in villages with households up to 300. In case of villages with more than 300 households but less than or equal to 600 households, two segments of more or less same size were formed and one segment was selected at random and household listing was carried out. In case of villages with more than 600 households, segments each of about 150 households were formed and two segments were selected for listing using the systematic random sampling method.

Small villages with less than 50 households were linked with a nearest village. After combining it with the nearest village, the same sampling procedure was adopted as mentioned above.

For the urban PSUs, the selected UFS blocks needed no segmentation as they were of almost equal size and contained less than 300 households.

No replacement was made if selected household was absent during data collection. However, if a PSU was inaccessible, a replacement PSU with similar characteristics was selected by the IIPS and provided to the regional agency for survey.

1.4 Questionnaire

DLHS-RCH collected information on a various indicators pertaining to RCH that would assist policymakers and programme managers to formulate and implement the goals set for RCH programmes. The International Institute for Population Sciences (IIPS), Mumbai, the Nodal Agency for DLHS–RCH project has made necessary modifications in the two Questionnaires: Households Questionnaire and Women’s Questionnaire and added three more Questionnaires i.e., Husband’s Questionnaire, Village Questionnaire and Health Questionnaire, in consultation with MoHFW and World Bank. These Questionnaires were discussed and finalized in training cum workshop organized at IIPS during the first week of November 2001.

These modified questionnaires had been canvassed of round II of the DLHS–RCH survey, taking into consideration the views of all the regional agencies involved. The house–listing teams and the interviewers and the supervisors for the main survey were given rigorous training based on the manuals developed for the purpose by the Nodal Agency.

All the questionnaires were bilingual, with questions in both regional and English language.

The Details of questionnaires are as follows:

Household Questionnaire: The household questionnaire lists all usual residents in each sample household including visitors who stayed in the household the night before the interview. For each listed household member, the survey collected basic information on age, sex, and marital status, relationship to the head of the household, education and the prevalence /incidence of tuberculosis, blindness and malaria. Information was also collected on the main source of drinking water, type of toilet facility, source of lighting, type of cooking fuel, religion and caste of household head and ownership of other durable goods in the household. In addition, a test was conducted to assess whether the household used cooking salt that has been fortified with iodine. Besides, details of marriages and deaths which happen to usual residents within reference period were collected. Efforts were also made to get information about maternal deaths.

Women Questionnaire: Women questionnaire is designed to collect information from currently married women age 15 – 44 years who are usual residents of the sample household or visitors who stayed in the sample household the night before the interview. The women questionnaire covered the following sections:

Section I: Background Characteristics: In this section the information collected on age, educational status and birth and death history of biological children including still birth, induced and spontaneous abortions.

Section II: Antenatal, Natal and Post natal Care: In this section the questionnaire collect information only from the women who had live birth, still birth, spontaneous or induced abortion during last three years preceding the survey date. The information on whether women received antenatal and postpartum care, who attended the delivery and the nature of complications during pregnancy for recent births were also collected.

Section III: Immunization and childcare: This section gives information about feeding practices, the length of breastfeeding, immunization coverage and recent occurrence of diarrhoea, and pneumonia for young children (below age 3 years).

Section IV: Contraception: This section provides information on knowledge and use of specific family planning methods. Questions were included about reasons for non use, intentions about future use, desire for additional child, sex preference for next child etc.

Section V: Assessment of quality of Government health services and client satisfaction. In this section the questions are targeted to assess the quality of family planning and health services provided by Government health facilities. The information were also collected about the rating of Government health facilities and staffs and reasons for not visiting to government health facilities by eligible woman.

Section VI: Awareness about RTI/STI and HIV/AIDS: In this section the information were collected about women's knowledge of RTI/STI about awareness, Source of knowledge, aware of mode of transmission, curability, symptoms and treatment seeking behaviour. About HIV/AIDS; Awareness, Source of knowledge, aware of mode of transmission and prevention etc were canvassed.

Husband Questionnaire: In DLHS-RCH, round II, husband questionnaire was used to collect information from eligible women's husbands about age, educational status, knowledge and source of knowledge of RTI/STI and HIV/AIDS reported symptoms of RTI/STI and male participation. Apart from these information desires for children, reasons for not using F.P. methods, future intention to use F.P. methods and knowledge about no scalpel vasectomy (NSV) has also been collected.

Health Questionnaire: In DLHS-RCH, round II, a health questionnaire is included. The information collected were on weight of children age 0–71 months old and the blood sample to assess the haemoglobin levels of children age 0–71 months old, adolescents 10–19 years old and pregnant eligible women. This information is useful for assessing the levels of nutrition prevailing in the population and prevalence of anaemia among women, adolescent girls and children.

Village Questionnaire: A village questionnaire is also added in this round of DLHS. The information collected on the availability and accessibility of various facilities in the village especially on accessibility of educational and health facilities.

1.5 Fieldwork and Sample Coverage

The fieldwork for RCH Round II was done in two phases. During Phase I, 7 districts were covered from May 2002 to August 2002 and remaining 6 districts were covered during Phase II from April 2004 to September 2004.

During Round II, a total of 13,429 households were covered. From these surveyed households, 11,874 currently married women (aged 15-44 years) and 8,058 husbands of eligible women were interviewed.

1.6 Data processing

All the five types of completed questionnaires were brought to the headquarters of regional agencies and data was processed using microcomputers. The process consisted of office editing of questionnaires, data entry, data cleaning and tabulation. Data cleaning included validation, range and consistency checks. For both data entry and tabulation of the data, IIPS developed the software package. The district and state level reports were prepared by regional agency whereas national report is prepared by the nodal agency.

1.7 Sample Weights

In generating district level demographic indicator sample weight for household, women and husband, weight have been used and these for a particular district are based on three selection probabilities f_1^i , f_2^i and f_3^i pertaining to i^{th} PSU of the district. These probabilities are defined as

$$f_1^i = \text{Probability of selection of } i^{\text{th}} \text{ PSU in a district}$$

$$= \frac{(n_r * H_i)}{H}$$

Where, n_r is the number of rural PSU to be selected in a district, H_i refers to the number of household in the i^{th} PSU and $H = \sum H_i$, total number of household in a district.

$$f_2^i = \text{Probability of selecting segment (s) from segmented PSU}$$

(in case the i^{th} selected PSU is segmented)

$$= (\text{Number of } f_i \text{ segments selected after segmentation of PSU}) / (\text{number of segment created a PSU})$$

The value of f_2 is to be equal to one for un-segmented PSU.

$$f_3^i = \text{probability of selecting a household from the total listed households of a PSU or in segment(s) of a PSU}$$

$$= \frac{28 * HR_i}{HL_i}$$

Where HR_i is the household response rate of the i^{th} sampled PSU and HL_i is the number of households listed in i^{th} PSU in a district.

For urban PSU, f_1^i is computed either as the ratio of number of urban PSUs to be included from the district to the total number of UFS blocks of the district or as the ratio of urban population of the selected PSU to the total urban population of the district.

The probability of selecting a household from the district works out as;

$$f^i = (f_1^i * f_2^i * f_3^i)$$

The non-normalized household weight for the i^{th} PSU of the district is, $w^i = \frac{1}{f^i}$, while the normalized weight used in the generation of district indicators as

$$n_i^d = \frac{\sum_i n_i}{\sum_i n_i * w^i} * w^i, \quad i=1,2,3,\dots,40.$$

Where n_i is the number of households interviewed in the i^{th} PSU. The weight for women and husband are computed in the similar manner after multiplication of expression for f^i by the corresponding response rate. State weights for households, women and husbands are further derived from the district weights n_i^d for the i^{th} psu in d^{th} district using external control so that for sample results do not deviate from the corresponding information about the population.

Let, $n_s = \sum_i n_i^d$ and $N_I = \sum_i N_i^d$, denote the number of households in the sample and census of a particular state, then state level households weights are work out as;

$$n_i^s = n_i^d * \frac{\left(\frac{n_i^d}{n_s} \right)}{\left(\frac{N_i^d}{N_{sc}} \right)}, \quad \text{where } n_i^d \text{ household sample in } i^{\text{th}} \text{ district, } n_s \text{ is the total sample in the}$$

state, N_i^d is the census population in the i^{th} district and N_{sc} is the census population in the state.

These households' weights are controlled for rural-urban separately.

Considering sample and census currently married women in 15-44 years and married males above 15 years for specified state by districts and rural-urban residence, state level women and husbands' weights are obtained for estimation of state level indicators.

1.8 Sample Implementation

Table 1.1 shows the period of fieldwork, number of households interviewed and household's response rates. A total of 13,429 households are interviewed, about seventy three percent were rural. The overall household response rate – the number of households interviewed per 100 occupied households – was 99 percent. The household response rate was more than 97 percent in every district.

Table 1.1 NUMBER OF HOUSEHOLDS INTERVIEWED						
Month and year of fieldwork and number of households interviewed by district, Arunachal Pradesh, 2002-04						
State/District	Month and year of field work		Number of households interviewed			Response rate
	From	To	Total	Rural	Urban	
State	-	-	13,429	9,820	3,609	98.9
State-phase I	05/2002	08/2002	-	-	-	-
State-phase II	04/2004	09/2004	-	-	-	-
Dibang Valley	05/2002	08/2002	1,069	798	271	100.0
East Kameng	07/2002	08/2002	1,024	703	321	100.0
Lohit	05/2002	06/2002	1,067	751	316	100.0
Tawang	07/2002	08/2002	1,067	750	317	100.0
Tirap	07/2002	08/2002	995	677	318	100.0
Upper Subansiri	05/2002	07/2002	1,007	696	311	100.0
West Siang	05/2002	06/2002	1,071	759	312	100.0
Changlang	06/2004	08/2004	972	972	0	94.7
East Siang	04/2004	07/2004	1,072	747	325	98.7
Lower Subansiri	04/2004	09/2004	1,047	727	320	98.2
Papum Pare	04/2004	09/2004	981	480	501	97.2
Upper Siang	04/2004	08/2004	1,048	1,048	0	98.3
West Kameng	07/2004	08/2004	1,009	712	297	98.3

Note: Table based on unweighted cases.

In the interviewed households, interviews were completed with 11,874 currently married women who are the usual member of the household or stayed night before the household interview and 8,058 husbands of eligible women were also interviewed (Table 1.2). The number of completed interviews per 100 identified eligible women and husbands in the households with completed interviews were 90 and 64 percent respectively. The variation in the women's response rate by district was highest in Tawang (98 percent) and lowest in East Kameng and Papum Pare (85 percent), similarly husband's response rate was found to be highest in Lower Subansiri (76percent) and lowest in East Kameng (31 percent).

Table 1.2 NUMBER OF WOMEN AND HUSBANDS INTERVIEWED

Number of women and husbands interviewed by district, Arunachal Pradesh, 2002-04

State/District	Number of women interviewed			Response rate	Number of husbands interviewed			Response rate
	Total	Rural	Urban		Total	Rural	Urban	
State	11,874	8,644	3,230	89.8	8,058	5,926	2,132	63.8
Dibang Valley	1,018	763	255	96.2	646	540	106	61.1
East Kameng	829	562	267	85.2	292	174	118	31.1
Lohit	1,048	738	310	95.1	750	541	209	68.4
Tawang	869	611	258	97.9	568	391	177	64.1
Tirap	835	550	285	86.9	569	362	207	59.3
Upper Subansiri	875	581	294	88.7	551	355	196	56.4
West Siang	847	577	270	81.1	526	360	166	50.8
Changlang	877	877	0	89.8	664	664	0	73.1
East Siang	1,011	709	302	88.9	761	539	222	73.7
Lower Subansiri	919	630	289	87.5	717	491	226	76.1
Papum Pare	847	430	417	85.2	628	325	303	71.0
Upper Siang	936	936	0	91.5	687	687	0	74.2
West Kameng	963	680	283	93.3	699	497	202	71.6

Note :Table based on unweighted cases.

1.9 Basic Demographic Profile of the State

Before presenting the survey result, the basic demographic features of Arunachal Pradesh and its districts (as per census, 2001) are presented here.

The state of Arunachal Pradesh, located in the North Eastern part of the country with 1.09 million populations in 2001, is the largest state in the northeastern region in terms of area. Sixth in population size and last in density. The geographical location of the state is quite unique. It stretches from snow – capped mountains in the north to the plains of Brahmaputra valley in the South. It lies to its north bound ring Chines , Tibet, to the north, and Bhutan to the west, Myanmar to the east and India state of Nagaland. The state is consisted of 13 districts, 149 sub-districts (Blocks) and 4,065 villages. The urban areas of the state comprise 17 towns during 2001. Itanagar is the capital of the state.

According to 2001 census the population of Arunachal Pradesh is 1.09 million out of which 0.58 millions are males and 0.52 millions are females. The rural and urban breakup of the population shows that 79.2 percent of the population was enumerated in rural areas and 20.8 percent in urban areas. Keeping pace with the national average, Arunachal Pradesh has recorded a sharp decline in the decadal growth rate from 36.8 per cent in 1981-91 to 26.2 percent during 1991-2001. Among the districts, Papum Pare with 67.2 percent has the highest decadal growth rate whereas Upper Subansiri with 9.8 percent has the lowest decadal growth rate of total population during 1991-2001.

Percentage of both Scheduled Caste and Schedule Tribe population have experienced a marginal decline during 1991-2001 and the proportion of schedule caste and scheduled tribe population in total population of 2001 are 0.6 percent and 64.2 percent respectively. Highest proportion of Schedule Caste population has been recorded in Lohit district (1.3 per cent) and that of Schedule

Tribe in Lower Subansiri (90.1 per cent) and Triap as well as Subansari has the lowest proportion of Schedule Caste (0.2 per cent) and that of Schedule Tribe in Changlang (36.2 per cent). With a population density of 13 per sq. km., Arunachal Pradesh ranks 35th among the states and union territories in India and this figure is almost three times higher than the all India density of 325 persons per square km. Among the districts, Tirap has the highest density (42 person/sq. km.) and Dibang Valley has the lowest (4 person/sq. km).

The sex ratio of the total population in the state has improved since 1991 Census from 859 to 901 per 1000 males. East Kemeng has recorded the highest sex ratio (985) and surprisingly Upper Subansiri has the lowest (754) within the state.

The literacy rate in the state has improved from 41.59 percent in 1991 to 54.3 percent in 2001. The literacy rate in urban (65.6 percent) is considerably higher in the state than that in rural areas (38.5 percent). Among the districts, Papumpare has the highest literacy rate of 57.4 percent. East Kemeng has the lowest literacy rate of 32.1 percent. The male literacy for the state is 63.8 percent and the female literacy rate is 43.5 percent. Both the rates have increased from 1991 census to 2001 census.

Table 1.3 BASIC DEMOGRAPHIC INDICATOR							
Basic demographic indicator of India, state and districts, Census 2001							
India/state/district	Population (in thousand)	Percentage urban	Percentage decadal growth rate ¹	Sex ratio ²	Percentage literate 7+		
					Male	Female	Persons
India	1,028,737	28.0	21.5	933	75.3	53.7	64.8
State	1,098	20.8	26.21	893	63.8	43.5	54.3
Changlang	125	9.9	30.84	906	62.1	39.2	51.3
Dibang Valley	58	17.5	33.61	836	67.2	48.7	58.9
East Kemeng	57	26.2	13.24	985	52.4	28.6	40.6
East Siang	87	25.1	21.66	931	68.4	52.4	60.7
Lohit	144	18.6	30.78	856	65.7	44.5	56.1
Lower Subansiri	98	12.6	17.37	983	53.4	36.0	44.8
Papumpare	122	50.9	67.21	901	77.3	60.4	69.3
Tawang	39	21.5	22.69	782	60.3	30.0	47.3
Tirap	100	15.2	17.21	910	53.4	28.8	41.7
Upper Siang	33	0.0	19.32	848	58.7	38.8	49.8
Upper Subansiri	55	28.5	9.8	960	59.5	40.7	50.3
West Kemeng	75	9.0	32.21	754	70.3	47.5	60.8
West Siang	104	20.3	15.17	912	66.6	51.6	59.5

Source: Primary Census Abstract, Series 20, Census of India, 2001. ¹ 1991-2001, ² Females per 1,000 males.

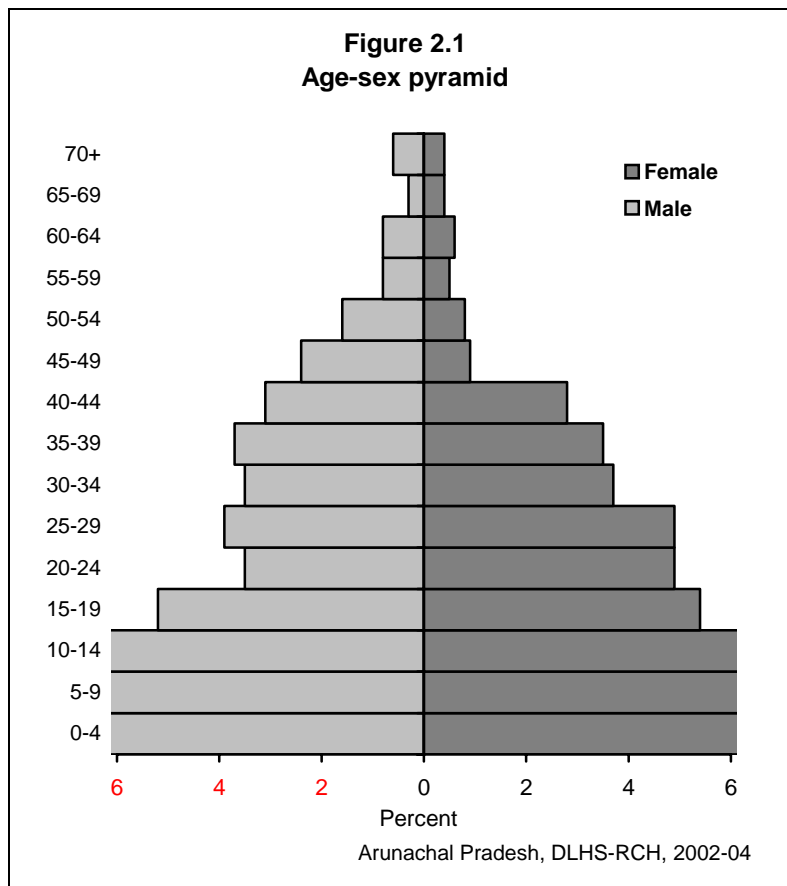
CHAPTER II

BACKGROUND CHARACTERISTICS OF HOUSEHOLD

This chapter provides a socio-economic and demographic profile of households interviewed in the District Level Household Survey-Reproductive and Child Health. Facilities and services such as Health, Education and Communication available in the representative sampled village are also presented here. The *de facto* producer of enumeration is adopted in order to include every individual staying in the sampled Primary Sampling Units (PSU), either a village or an urban area, the night before the survey. The objective of adopting the *de facto* method is to avoid duplication of persons who are in transit.

2.1 Age –Sex Structure

The age-sex distribution of sampled household population classified by residence is presented in Table 2.1. The percent distribution is based on sampled *de facto* population of 72,893 persons of whom 73 percent lived in the rural areas of Arunachal Pradesh. The state of Arunachal Pradesh depicts a young and growing population with 42 percent below the age of 15 years (Figure 2.1). There is not much difference between number of children below 15 years recorded in rural areas (42 percent) compared to those in urban areas (41 percent).



The overall sex ratio of 101 males per 100 females is recorded for the *de facto* population. The sex ratio is more skewed, 103 in favour of males in urban areas compared to 100 in rural areas.

Table 2.1 HOUSEHOLD POPULATION BY AGE AND SEX

Percent distribution of the household population by age and by residence and sex, Arunachal Pradesh, 2002-04

Age	Total			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
< 1	2.8	2.8	2.9	3.0	2.8	3.1	2.3	2.5	2.2
1-4	11.3	11.1	11.6	11.6	11.2	11.9	10.6	10.5	10.7
5-9	14.7	14.9	14.4	14.9	15.2	14.7	13.8	13.9	13.6
10-14	13.1	12.8	13.5	12.9	12.6	13.1	13.8	13.2	14.5
15-19	10.6	10.3	10.8	10.4	10.1	10.6	11.3	11.1	11.5
20-24	8.4	6.9	9.8	8.3	6.9	9.7	8.5	6.9	10.2
25-29	8.8	7.8	9.8	8.6	7.9	9.3	9.4	7.5	11.4
30-34	7.1	6.9	7.4	6.7	6.5	6.9	8.5	8.2	8.8
35-39	7.2	7.4	7.0	6.9	7.1	6.7	8.1	8.5	7.6
40-44	5.9	6.1	5.6	5.8	5.9	5.8	6.0	6.8	5.2
45-49	3.3	4.9	1.8	3.3	4.7	1.8	3.5	5.3	1.7
50-54	2.4	3.1	1.6	2.5	3.2	1.8	1.9	2.9	0.9
55-59	1.3	1.7	1.0	1.4	1.8	1.1	0.9	1.4	0.5
60-64	1.4	1.5	1.2	1.6	1.8	1.5	0.6	0.6	0.5
65-69	0.7	0.7	0.7	0.8	0.8	0.8	0.3	0.3	0.3
70-74	0.6	0.7	0.5	0.8	0.9	0.6	0.2	0.2	0.2
75-79	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
80+	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of persons	72,893	36,559	36,334	54,944	27,432	27,512	17,949	9,127	8,822
Sex ratio ¹	101	NA	NA	100	NA	NA	103	NA	NA

Note: Table is based on the de facto population, i.e. persons who stayed in the household the night before the interview (including both usual resident and visitors). NA: Not applicable. ¹ Male per 100 females

2.2 Household Characteristics

The percent distribution of 13,429 households surveyed in the state of Arunachal Pradesh by selected characteristics of the household head and the number of usual household members are shown in Table 2.2. This is based on *de jure*, the usual resident population. More than 97 percent of household heads are male invariant of place of resident while only 3 percent are female-headed households. Nearly 76 percent of household heads are in the 30-59 years age group. The median age of household heads is 39 years for the state as a whole, while it is 40 years in rural areas and 38 years in urban areas. About 17 percent of household heads are younger than 30 years and 7 percent are at least 60 years old. Majority of the household heads are Hindu (36 percent), 3 percent are Muslim, and 28 percent belongs to other religions. Hindus constitute a higher proportion of population in urban areas (55 percent) than in rural areas (29 percent). Only 2 percent of the rural households are Muslim, and only 5 percent of urban households.

Table 2.2 HOUSEHOLD CHARACTERISTICS			
Percent distribution of the household head by selected characteristics of the household head and household size, according to residence, Arunachal Pradesh, 2002-04			
Characteristic	Total	Residence	
		Rural	Urban
Sex of the household head			
Male	97.1	96.9	97.5
Female	2.9	3.1	2.5
Age of the household head			
< 30	17.0	17.4	16.0
30-44	50.7	48.1	57.8
45-59	25.3	26.0	23.6
60+	6.9	8.5	2.6
Median age of the household head	39.0	39.6	37.5
Religion of the household head			
Hindu	35.8	28.6	55.4
Muslim	3.2	2.4	5.4
Christian	20.1	23.6	10.5
Sikh	0.2	0.2	0.2
Buddhist	11.0	12.8	6.2
Jain	0.1	0.0	0.1
No Religion	2.0	2.4	0.9
Other	27.6	30.0	21.3
Caste/tribe of the household head			
Scheduled caste	7.1	4.8	13.3
Scheduled tribe	63.9	72.9	39.3
Other backward class	6.4	4.7	11.2
Other #	18.4	14.3	29.5
Don't know	4.2	3.3	6.7
Number of usual members			
1	0.9	1.0	0.8
2	5.3	5.3	5.1
3	12.2	11.2	14.9
4	18.9	17.1	23.9
5	20.3	19.4	22.7
6	15.0	15.5	13.7
7	11.4	12.2	9.3
8	7.0	7.7	4.9
9+	9.0	10.5	4.7
Mean household size	5.4	5.6	5.0
Total percent	100.0	100.0	100.0
Number of households	13,429	9,820	3,609
Note: Table is based on the <i>de jure</i> population			
# Higher caste (Not belonging to a scheduled caste, a scheduled tribe and an other backward class)			

Seven percent of the households in Arunachal Pradesh belong to schedule caste, 64 percent to schedule tribes and only 6 percent belong to other backward classes while the remaining 18 percent of the households are headed by other castes not under schedule caste, schedule tribe and other backward classes. About 78 percent of the household head belong to schedule caste or tribe in rural areas and it is only 53 percent in urban areas. The overall state

average household size is 5.6 persons. The rural-urban differential in average household size is 6.1 in rural areas and 5.1 in urban areas.

2.3 Educational Level

The educational background of Arunachal Pradesh presented in this section is based on *de facto* household population. Level of literacy and years of schooling, according to age, sex and residence are shown in Table 2.3.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION									
Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age, residence and sex, Arunachal Pradesh, 2002-04									
Age	Non-literate	Literate but no schooling	Years of schooling				Missing	Total Percent	Number of persons
			1-5	6-8	9-10	11 or more			
Total									
Male									
7-9	25.6	6.6	65.0	1.1	0.0	0.0	1.7	100.0	3,277
10-14	11.7	1.6	56.4	26.0	3.6	0.0	0.6	100.0	4,669
15-19	10.1	1.0	18.5	29.9	27.4	13.1	0.1	100.0	3,781
20-29	17.7	1.5	13.9	17.8	22.3	26.7	0.1	100.0	5,382
30-39	26.2	2.0	15.0	16.1	16.7	23.9	0.1	100.0	5,235
40-49	39.2	2.3	13.9	12.4	14.1	17.9	0.1	100.0	4,016
50+	67.1	3.1	11.1	5.7	5.7	7.2	0.1	100.0	2,993
Total	26.2	2.4	26.9	16.5	13.7	14.0	0.4	100.0	29,353
Female									
7-9	26.4	7.5	64.1	0.8	0.0	0.0	1.3	100.0	3,093
10-14	15.8	1.4	55.0	23.3	3.9	0.0	0.6	100.0	4,895
15-19	16.6	0.8	19.0	29.9	22.1	11.5	0.1	100.0	3,938
20-29	35.5	1.1	14.0	18.0	18.0	13.2	0.1	100.0	7,141
30-39	54.9	2.2	12.2	9.7	11.0	9.8	0.1	100.0	5,207
40-49	73.1	2.2	8.7	5.8	5.4	4.7	0.1	100.0	2,701
50+	89.2	1.8	4.9	0.9	1.9	1.3	0.0	100.0	1,943
Total	39.2	2.1	25.5	14.9	10.7	7.1	0.3	100.0	28,917
Total									
7-9	26.0	7.0	64.6	0.9	0.0	0.0	1.5	100.0	6,370
10-14	13.8	1.5	55.7	24.6	3.8	0.0	0.6	100.0	9,564
15-19	13.4	0.9	18.7	29.9	24.7	12.3	0.1	100.0	7,719
20-29	27.9	1.3	13.9	17.9	19.9	19.0	0.1	100.0	12,522
30-39	40.6	2.1	13.6	12.9	13.9	16.9	0.1	100.0	10,442
40-49	52.9	2.3	11.8	9.8	10.6	12.6	0.1	100.0	6,718
50+	75.8	2.6	8.6	3.8	4.2	4.9	0.1	100.0	4,936
Total	32.7	2.3	26.2	15.7	12.2	10.6	0.3	100.0	58,271
Note: Table is based on de facto population.									

Contd.

Table 2.3 indicates that, 33 percent of the population aged seven and above are illiterate. The proportion of illiterates is 39 percent for females compared to 26 percent for males. The proportion of illiterates is much higher among the older cohorts compared to the younger ones. For both males and females, going by expected trend, the level of literacy is higher in the younger population than in the older age groups with the exception of the youngest age group of 7-9 years (Figure 2.2).

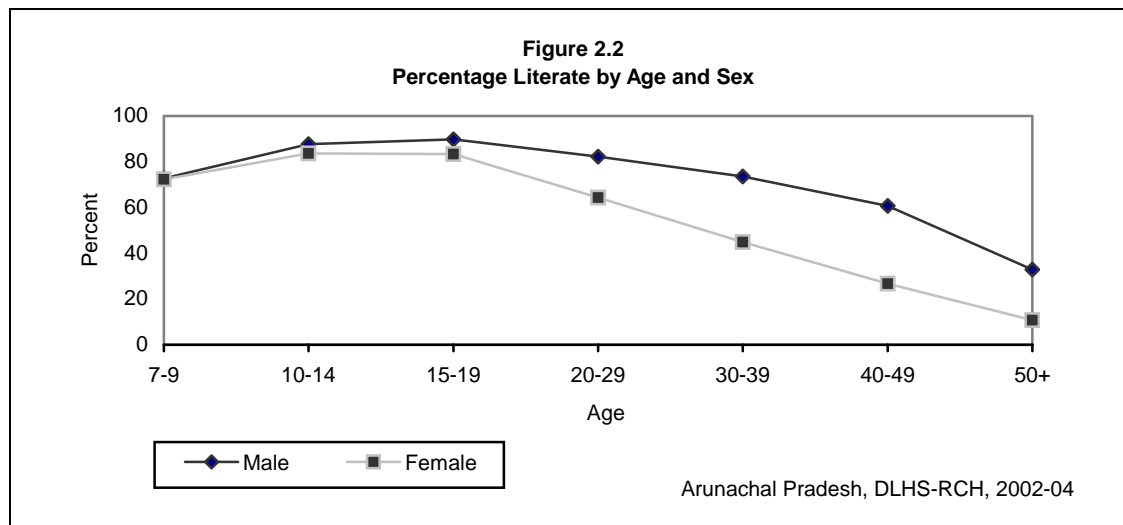


Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION

Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age, residence and sex, Arunachal Pradesh, 2002-04

Age	Non-literate	Literate but no schooling	Years of schooling				Missing	Total Percent	Number of persons
			1-5	6-8	9-10	11 or more			
RURAL									
Male									
7-9	29.0	7.5	60.8	1.1	0.0	0.0	1.7	100.0	2,463
10-14	13.5	1.9	58.3	23.1	2.6	0.0	0.5	100.0	3,467
15-19	11.9	1.1	20.6	32.2	24.9	9.2	0.1	100.0	2,769
20-29	19.7	1.5	14.7	18.7	22.5	22.9	0.1	100.0	4,070
30-39	31.0	1.8	15.8	16.4	15.2	19.7	0.1	100.0	3,716
40-49	46.8	2.2	14.0	12.4	12.3	12.2	0.1	100.0	2,911
50+	74.1	3.3	9.7	4.8	3.6	4.3	0.1	100.0	2,475
Total	30.4	2.5	27.1	16.3	12.4	10.9	0.3	100.0	21,871
Female									
7-9	29.9	8.9	59.2	0.6	0.0	0.0	1.4	100.0	2,388
10-14	18.1	1.6	56.5	20.5	2.9	0.0	0.4	100.0	3,613
15-19	17.9	0.8	21.2	31.7	20.1	8.2	0.1	100.0	2,919
20-29	38.8	1.2	14.6	18.7	16.6	10.0	0.1	100.0	5,242
30-39	61.1	2.2	13.0	9.0	8.4	6.2	0.1	100.0	3,760
40-49	80.4	2.2	7.5	4.2	3.4	2.3	0.1	100.0	2,096
50+	91.8	1.8	4.3	0.4	1.1	0.5	0.0	100.0	1,717
Total	43.6	2.4	25.6	14.2	9.0	4.8	0.3	100.0	21,734
Total									
7-9	29.5	8.2	60.0	0.8	0.0	0.0	1.5	100.0	4,851
10-14	15.9	1.8	57.4	21.8	2.8	0.0	0.5	100.0	7,079
15-19	15.0	1.0	20.9	32.0	22.4	8.7	0.1	100.0	5,688
20-29	30.4	1.3	14.6	18.7	19.2	15.6	0.1	100.0	9,312
30-39	46.1	2.0	14.4	12.7	11.8	12.9	0.1	100.0	7,476
40-49	60.8	2.2	11.3	8.9	8.6	8.1	0.1	100.0	5,007
50+	81.3	2.7	7.5	3.0	2.6	2.8	0.1	100.0	4,192
Total	37.0	2.5	26.3	15.3	10.7	7.9	0.3	100.0	43,605

Contd.

Around 65 percent of males as well females in this age group had 1-5 years of schooling. Nearly 27percent of males have had education for 1-5 years. Females are also not far behind compared to their male counterparts in this category with a corresponding share of 26 percent. Lesser proportion of females are found in higher education of 9-10 years (11 percent) and 11 or more years (7 percent) compared to the males having corresponding figures of 14 percent for each. Just about two percent of the total population, three percent of males and two percent of females are found to be literate without any formal schooling.

Table 2.3 EDUCATIONAL LEVEL OF THE HOUSEHOLD POPULATION									
Percent distribution of household population age 7 and above by literacy level and years of schooling, according to age , residence and sex, Arunachal Pradesh, 2002-04									
Age	Non-literate	Literate but no schooling	Years of schooling				Missing	Total Percent	Number of persons
			1-5	6-8	9-10	11 or more			
URBAN									
Male									
7-9	15.5	3.8	77.8	1.2	0.0	0.0	1.7	100.0	815
10-14	6.5	0.8	51.1	34.2	6.6	0.0	0.9	100.0	1,202
15-19	5.2	0.5	12.8	23.3	34.3	23.7	0.2	100.0	1,011
20-29	11.6	1.5	11.5	15.0	22.0	38.4	0.0	100.0	1,312
30-39	14.6	2.4	13.1	15.4	20.5	34.0	0.1	100.0	1,519
40-49	19.3	2.6	13.6	12.6	18.7	32.9	0.2	100.0	1,105
50+	33.9	2.0	17.4	10.2	15.6	20.9	0.0	100.0	518
Total	13.6	1.9	26.3	17.1	17.6	23.1	0.4	100.0	7,482
Female									
7-9	14.4	2.8	80.5	1.4	0.0	0.0	0.9	100.0	705
10-14	9.0	1.0	50.8	31.4	6.8	0.0	1.1	100.0	1,282
15-19	12.8	0.5	12.6	24.9	28.1	21.0	0.1	100.0	1,019
20-29	26.6	0.8	12.3	15.9	21.9	22.3	0.2	100.0	1,899
30-39	38.9	2.2	10.1	11.4	17.9	19.3	0.2	100.0	1,447
40-49	48.0	2.0	12.6	11.4	12.6	13.1	0.4	100.0	606
50+	69.0	1.7	9.0	5.1	8.2	7.0	0.0	100.0	226
Total	25.9	1.4	25.4	16.9	15.9	14.1	0.4	100.0	7,184
Total									
7-9	15.0	3.3	79.1	1.3	0.0	0.0	1.3	100.0	1,520
10-14	7.8	0.9	50.9	32.7	6.7	0.0	1.0	100.0	2,485
15-19	9.1	0.5	12.7	24.1	31.2	22.4	0.1	100.0	2,030
20-29	20.4	1.1	12.0	15.5	21.9	28.9	0.1	100.0	3,211
30-39	26.5	2.3	11.7	13.4	19.2	26.8	0.1	100.0	2,966
40-49	29.5	2.4	13.2	12.2	16.5	25.9	0.3	100.0	1,711
50+	44.6	1.9	14.8	8.6	13.4	16.7	0.0	100.0	744
Total	19.6	1.6	25.9	17.0	16.7	18.7	0.4	100.0	14,666

An examination of the educational attainment by place of residence revealed that the urban-rural differential was quite pronounced. In urban areas, only 20 percent of the total population is illiterate in comparison to 37 percent of the rural population. The numbers of illiterate females live in rural areas of Arunachal Pradesh accruing a share as high as 44 percent, while illiterate rural males is 30 percent. Prevalence of illiterate is much less in urban areas with figures of 26 percent and 14 percent illiterate females and males respectively. A contrasting feature of rural-urban difference in educational level is that in rural areas most people had 1-5 years of schooling (26 percent), and those who had 11 or more years of schooling was just 8 percent, whereas in urban areas a significant proportion of people (19 percent) had this level of education.

2.4 Marital Status of the Household Population

The DLHS, collected information on the marital status of all household members aged 10 years and above. Table 2.4 shows the percent distribution of household population by marital status distribution of *de facto* household population by age and sex. Seventeen percent of females in the age group 15-19 years, followed by 92 percent in the age group 25-29 years, and 96 percent in the age group 30-44 years, are currently married. The proportion of never married for both males and female is 39 percent in the state, and it is higher for males (41 percent) than for females (36 percent). The proportion of never married among males declines with increasing age and reaches the lowest by the time they are in the age group 45-59 years. A similar pattern has been observed in the case of females, with the lowest never married proportion for the age group 45-59 years. The proportions of divorced, separated or widowed are negligible and limited to the older ages. Fifty four percent of women aged 60 years or above are widowed /divorced /separated. Among the *de facto* population aged 10 years and above, 57 percent of males and 59 percent of females are currently married.

Table 2.4 MARITAL STATUS OF THE HOUSEHOLD POPULATION						
Percent distribution of the household population aged 10 years and above by marital status, according to age and sex, Arunachal Pradesh, 2002-04						
Age	Marital status				Total Percent	Number of persons
	Never married	Currently married	Married, <i>gaunna</i> not performed	Widowed/divorced/Separated		
Male						
10-14	96.3	2.8	0.8	0.1	100.0	4,669
15-19	95.7	3.6	0.6	0.1	100.0	3,781
20-24	62.2	36.3	1.0	0.4	100.0	2,522
25-29	23.0	76.1	0.5	0.4	100.0	2,860
30-44	3.2	96.9	0.1	0.7	100.0	7,477
45-59	0.9	95.1	0.2	3.8	100.0	3,533
60+	1.0	77.8	0.7	20.2	100.0	1,234
Total	40.8	56.9	0.5	1.8	100.0	26,076
Female						
10-14	97.0	2.2	0.7	0.0	100.0	4,895
15-19	82.9	16.7	0.3	0.1	100.0	3,938
20-24	26.7	72.2	0.6	0.5	100.0	3,576
25-29	7.3	91.8	0.0	0.8	100.0	3,565
30-44	1.6	95.7	0.1	2.6	100.0	7,251
45-59	1.2	71.4	0.3	27.0	100.0	1,573
60+	1.8	42.9	1.1	54.1	100.0	1,027
Total	36.3	58.6	0.4	4.7	100.0	25,825
Total						
10-14	96.7	2.5	0.7	0.0	100.0	9,564
15-19	89.2	10.3	0.4	0.1	100.0	7,719
20-24	41.4	57.4	0.8	0.5	100.0	6,097
25-29	14.3	84.8	0.2	0.7	100.0	6,425
30-44	2.4	95.8	0.1	1.6	100.0	14,728
45-59	1.0	87.8	0.2	11.0	100.0	5,106
60+	1.4	62.0	0.9	35.6	100.0	2,261
Total	38.6	57.7	0.4	3.2	100.0	51,901
Note: Table is based on <i>de facto</i> population						

2.5 Marriage

Marriage in the household is an important event that reflects the socio-cultural practices of the communities surveyed in DLHS. This section outlines the marriages ceremonies during the three years period prior to the survey. Mean age at marriage by sex and percentage of total marriages which are below legal age at marriage, 21 years for boys and 18 years for girls by resident at the state and at district levels are shown in Table 2.5.

Table 2.5 MARRIAGE				
Mean age at marriage and percentage of marriages below legal at marriage by sex and by districts, Arunachal Pradesh, 2002-04				
Place of residence/ District	Mean age at marriage		Percentage of marriage below legal age at marriage	
	Boy	Girl	Boy (<21)	Girl (<18)
State – Total	23.4	19.5	31.6	26.6
State – Rural	23.0	19.4	34.3	27.0
State – Urban	24.8	19.6	21.8	25.4
District				
Changlang	23.8	20.0	13.3	17.3
Dibang Valley	25.9	20.2	25.2	19.2
East Kameng	22.5	18.8	32.8	29.5
East Siang	23.9	19.7	30.7	24.8
Lohit	22.1	18.5	37.8	31.0
Lower Subansiri	23.5	19.7	37.9	23.3
Papum Pare	24.6	20.8	23.6	13.7
Tawang	24.2	21.8	22.0	9.5
Tirap	23.5	19.1	25.2	20.6
Upper Siang	25.2	18.9	26.8	28.4
Upper Subansiri	20.7	17.5	57.5	49.3
West Kameng	24.9	19.3	19.3	37.4
West Siang	22.6	19.2	37.7	32.5

Note: Table based on *de jure* population.
Reference period: - January 1st, 1999 to survey date for phase-1, and January 1st, 2001 to survey date for phase-2.

Mean age at marriage for boys and girls in urban areas of Arunachal Pradesh are 25 years and 20 years respectively. The corresponding figures in rural areas are 23 years and 19 years. On the whole, as far as Arunachal Pradesh is concerned, both boys and girls seem to oblige the legal age marriage, the average age at marriage being 23 years for boys and 20 years for girls. However, 32 percent boys and nearly 27 percent girls got married below the corresponding specified legal age marriage. The proportion is much higher in the rural areas compared to the urban areas of the state.

When it comes to district level variation in mean age at marriage, it is highest in Dibang Valley, 26 years for boys and in Tawang, 22 years for girls. The lowest mean age at marriage for boys is 21 years and for girls is 18 years, recorded for the district of Upper Subansiri.

It is also found that, the percentage of girls who were married below the legal age at marriage was the highest in Upper Subansiri (49 percent) and the lowest in Tawang (10 percent). In the case of boys, marriages below the legal age at marriage are the highest in Upper Subansiri district (58 percent) and lowest in Changlang (13 percent).

2.6 Morbidity Rates

The DLHS-RCH has collected information on the morbidity status relating to blindness, tuberculosis and malaria of the *de jure* members of the household. Table 2.6 provides prevalence rates.

Table 2.6 MORBIDITY RATES			
Prevalence of blindness, tuberculosis, and malaria, according to place of residence, Arunchal Pradesh, 2002-04.			
Morbidity	Total	Residence	
		Rural	Urban
Prevalence rate of blindness			
Male			
Partial	3,628	3,755	3,244
Complete	929	994	733
Night blindness	342	339	352
Female			
Partial	3,726	3,972	2,959
Complete	978	1111	565
Night blindness	366	369	356
Persons			
Partial	3,676	3,863	3,104
Complete	954	1053	650
Night blindness	354	354	354
Prevalence rate of tuberculosis			
Male	942	1,049	622
Female	667	721	497
Person	806	886	560
Prevalence rate of malaria¹			
Male	3,251	3,830	1,509
Female	3,264	3,835	1,478
Person	3,258	3,832	1,494
Note: All the rates refer to <i>de jure</i> population. Prevalence rate per 100,000 population Reference period: - January 1 st , 1999 to survey date for phase-1, and January 1 st , 2001 to survey date for phase-2. ¹ Last two weeks prior to the survey			

Partial, Complete and Night Blindness

The overall prevalence of partial blindness is 3,676 per 100,000 population in the state and is higher in rural areas (3,863 per 100,000) than in urban areas (3,104 per 100,000). It is more among females. The prevalence of complete blindness is 954 per 100,000 population with a rural-urban differential of 1,053 against 650 per 100,000. Sex differential in complete blindness is not significant. The prevalence of night blindness due to vitamin A deficiency is 354 per 100,000 population, and is same in rural areas (354) and in urban areas (354).

Tuberculosis

The prevalence of tuberculosis is 806 per 100,000 population, with rural areas having a higher prevalence of 886 compared to 560 per 100,000 in urban areas. The prevalence of TB is higher among males (942 per 100,000) than among females (667 per 100,000).

Malaria

In the DLHS-RCH, household respondents were asked to state whether any member of their household suffered from malaria (characterized by recurrent fever with shivering) any time during the two weeks prior the survey. In the state of Arunachal Pradesh, 3,258 persons per 100,000 population were reported to have suffered from malaria. Rural residents are almost two times more likely to suffer from malaria (3,832 per 100,000) than urban residents (1,494 per 100,000).

2.7 Morbidity Rates by Districts

Table 2.7 shows the prevalence of blindness, tuberculosis and malaria in the districts of Arunachal Pradesh. The prevalence of partial blindness varies considerably among the districts the lowest being 506 per 100,000 in Papum Pare and the highest, 8,924 per 100,000 in West Siang.

Table 2.7 MORBIDITY RATES BY DISTRICT				
Prevalence of blindness, tuberculosis, and malaria, by district, Arunachal Pradesh, 2002-04				
District	Prevalence ¹ of morbidity			
	Partial blindness	Complete blindness	Tuberculosis	Malaria ²
Changlang	4,162	509	612	1,116
Dibang Valley	2,132	832	523	2,369
East Kameng	5,451	909	1,378	5,905
East Siang	4,935	671	1,357	4,486
Lohit	3,819	1,277	390	1,815
Lower Subansiri	2,377	736	820	2,976
Papum Pare	506	66	1,012	694
Tawang	3,541	1,161	1,069	163
Tirap	3,874	1,661	507	933
Upper Siang	2,486	580	510	1,030
Upper Subansiri	3,190	1,755	1,662	5,458
West Kameng	2,137	644	324	807
West Siang	8,924	1,286	559	9,196
Arunachal Pradesh	3,676	954	806	3,258

Note: All the rates refer to *de jure* population.¹ Prevalence rate per 100,000 population
Reference period: - January 1st, 1999 to survey date for phase-1, and January 1st, 2001 to survey date for phase-2. ² Last two weeks prior to the survey

The districts with a prevalence rate below 1,000 per 100,000 is Papum Pare. The prevalence rate of complete blindness ranges from 66 per 100,000 in Papum Pare to 1,755 per 100,000 in Upper Subansiri. Inter-district variations are substantial for tuberculosis and malaria.

The prevalence rate of tuberculosis is the highest in district Upper Subansiri (1,662 per 100,000 population) and it is lowest in West Kameng (324 per 100,000). In the case of malaria, the prevalence rate is highest in West Siang (9,196 per 100,000) and lowest in Tawang (163 per 100,000).

2.8 Housing Characteristics

This section describes the availability of basic amenities in the state. Table 2.8 presents the percent distribution of households by selected housing characteristics. Seventy percent of the households in Arunachal Pradesh have electricity connection and it is much more in urban areas (89 percent) than in rural areas (62 percent).

As regards household source of drinking water about 73 percent of the households get drinking water through taps, while 8 percent drink water from hand pumps/ bore-wells, and 5 percent drink water from wells. About 87 percent of households in urban areas get piped water for drinking, whereas in rural areas only 68 percent of the households have such provision.

When it comes to sanitation facility, only 21 percent of the households have flush toilets, while 44 percent have pit based toilets or latrines, 8 percent depend on shared toilets and nearly 25 percent of the households have no toilet facility at all. There is a large rural-urban difference; 30 percent of rural households have no toilet facility, compared to just 10 percent of urban households.

DLHS-RCH has also collected data on type of fuel used in the households for cooking. Thirty three percent of the households used liquid petroleum/gas or electricity for cooking in Arunachal Pradesh. About 63 percent of households rely on fire woods, 3 percent on kerosene, and a large proportion of households (0.6 percent) use other types of fuel for cooking. The use of liquid petroleum gas/electricity for cooking is reported more in urban areas (69 percent), and firewood as source for cooking are reported more in rural areas.

There is considerable variation in the quality of housing. On the basis of building material, type of floor, walls and roof, households are categorised into *kachcha*, *semi-pucca* and *pucca*. More than twice of the households are living in *kachcha* houses, 22 percent in semi *pucca* houses and 12 percent in *pucca* houses. Twenty five percent of urban households live in *pucca* houses compared to 8 percent of rural households.

The possession of consumer durable goods is an indication of a household's socio-economic status. Table 2.8 shows that majority of the households in the state own radio/transistor (43 percent), bicycles (24 percent), an electric fan (31 percent), and television (43 percent).

Table 2.8 HOUSING CHARACTERISTICS			
Percent distribution of the household by housing characteristics and percentage of households owing selected durable goods, according to residence, Arunachal Pradesh , 2002-04			
Housing characteristic	Total	Residence	
		Rural	Urban
Electricity			
Yes	69.5	62.4	89.1
No	30.5	37.6	10.9
Source of drinking water			
Tap inside	30.4	23.4	49.4
Tap shared public	42.5	44.5	37.2
Hand pump/ bore well	7.6	8.0	6.3
Well covered	1.2	0.9	1.9
Well uncovered	3.4	3.8	2.3
River	2.3	2.9	0.9
Pond	0.4	0.5	0.1
Spring	11.7	15.5	1.4
Other	0.4	0.4	0.5
Sanitation facility			
Own flush toilet	21.0	12.4	44.5
Own pit toilet / latrine	43.9	48.9	30.4
Shared toilet of any type	7.9	6.2	12.4
Public / community toilet	2.5	2.3	3.1
No toilet facility	24.6	30.2	9.6
Main type of fuel used for cooking			
Liquid petroleum gas/ electricity	33.1	20.0	68.8
Kerosene	3.1	3.0	3.3
Wood	63.0	76.2	27.0
Other	0.9	0.8	0.9
Type of house			
Kachcha	66.2	74.5	43.6
Semi - pucca	21.5	17.5	32.2
Pucca	12.3	8.0	24.3
Household assets			
Fan	35.1	24.7	63.5
Radio/transistor	43.2	42.0	46.6
Sewing machine	9.4	6.3	18.1
Television	42.9	32.5	71.4
Telephone	16.9	11.1	32.5
Bicycle	23.6	22.0	27.9
Motor cycle/ scooter	12.3	10.1	18.3
Car / Jeep	3.1	2.2	5.6
Tractor	0.6	0.6	0.5
Standard of living index			
Low	50.0	61.1	19.6
Medium	31.5	28.2	40.4
High	18.5	10.6	40.0
Number of households	13,429	9,820	3,609

Other durable goods found in the surveyed households are telephone (17 percent), sewing machine (9 percent), and motorcycle or scooter (12 percent). Car/jeep and tractor each are owned by three percent of households in Arunachal Pradesh. Ownership of most of the consumer durable items is more among the urban households than among the rural households.

Considering household amenities, such as, source of drinking water, type of house, source of lighting, fuel for cooking, toilet facility and ownership of durable goods a composite measure, standard of living index (SLI) is made for classification of households. The standard of living index is calculated as by adding the following scores;

Source of drinking water: 3 for Tap (own), 2 for Tap (shared), 1 for hand pump and well, and 0 for other;

Type of house: 4 for *pucca*, 2 for *semi-pucca*, and 0 for *kachcha*;
Source of lighting: 2 for electricity, 1 for kerosene, and 0 for other;
Fuel for cooking: 2 for LPG gas/electricity, 1 for kerosene and 0 for other;
Toilet facility: 4 for own flush toilet, 2 for own pit toilet, 2 for shared toilet and 0 for no toilet;
Ownership for items: 4 each for car and tractor, 3 each for television, telephone and motorcycle/scooter, and 2 each for fan, radio/transistor, sewing machine and bicycle.

The total of the scores may vary from the lowest of a 0 to maximum of 40. On the basis of total score, households are divided into three categories as;

- a) Low – if total score is less than or equal to 9,
- b) Medium – if total score is greater than 9 but less than or equal to 19 and
- c) High – if total score is greater than 19.

As per the standard of living index, half of the households come under the low standard of living category, 32 percent of households to medium standard of living, and 19 percent of the households to high standard of living.

The proportion of sample households with medium and high standard of living is comparatively higher in urban areas than in rural areas, and the proportion of households with a low standard of living is much higher in rural households (61 percent) than in urban households (20 percent) in the state of Arunachal Pradesh.

2.9 Housing Characteristics by Districts

The 13 districts in Arunachal Pradesh are not uniform in terms of basic amenities and possession of consumer durables. Table 2.9 presents an inter-district comparison of housing characteristics. The percentage of households with electricity is 42 percent in the district of East Siang. The household with electricity is highest in Papum Pare (90 percent). Ninety percent or more of households used piped water or water from a hand pump for drinking in most districts except for Chanlang (87 percent), East Kameng (87 percent), Lower Subansiri (53 percent), Papum Pare (71 percent), Tirap (77 percent), Upper Siang (80 percent) and Upper Subansiri (70 percent).

Largely the districts in Arunachal Pradesh have adequate toilet facility, in West Siang 33 percent households have toilet facilities, which is the lowest among all districts.

In West Kameng district the percentage of households using liquid petroleum gas/electricity for cooking is 62 percent and in the rest of the districts, it is relatively low ranging between 15 to 50 percent. The percentage of households living in *pucca* houses is quite low in all the districts of Arunachal Pradesh. In 4 of the 13 districts, less than 10 percent of the households live in *pucca* houses. Dibang Valley is the only district where 27 percent of the households live in *pucca* houses.

Table 2.9 HOUSING CHARACTERISTICS BY DISTRICT					
Selected housing characteristics by district, Arunachal Pradesh, 2002-04					
Districts	Percentage of households:				
	With electricity	With drinking water ¹	With toilet facility	Using Liquid petroleum gas/ electricity	Living in <i>pucca</i> house
Changlang	61.5	86.8	81.3	26.8	12.3
Dibang Valley	59.8	90.4	77.8	38.5	27.2
East Kameng	61.6	87.1	63.3	28.5	23.6
East Siang	42.1	95.0	80.1	23.6	8.0
Lohit	72.0	95.4	95.0	36.4	7.0
Lower Subansiri	62.7	53.4	66.3	20.5	11.9
Papum Pare	90.4	71.3	79.1	49.8	16.6
Tawang	74.4	97.1	94.6	42.6	11.8
Tirap	78.4	77.2	92.1	33.0	17.4
Upper Siang	77.4	80.1	80.7	15.0	6.8
Upper Subansiri	53.7	69.8	67.1	30.1	15.0
West Kameng	93.1	91.7	86.6	62.3	10.0
West Siang	72.1	90.6	33.3	27.8	8.9
Arunachal Pradesh	69.5	81.7	75.4	33.1	12.3

Note: ¹ That is piped or from a hand pump/bore well / covered well

2.10 Iodization of Salt

Consumption of salt fortified with iodine is recommended to avoid miscarriages, brain disorders, cretinism and retarded psychomotor development. As per the Prevention of Food Adulteration Act, 1988, the minimum iodine content of edible salt is 30 parts per million (PPM) at the manufacturing level.

In the DLHS-RCH survey, each interviewer was provided with a test kit to measure the level of iodine content of salt consumed by the surveyed households. The test results (Table 2.10) are classified by degree of ionization of salt and categorised by background characteristics. It is observed that nearly 67 percent of households used salt that contained a minimum recommended 15 ppm or higher level of iodine content whereas 0.4 percent of households used salt that is not iodized at all and another 14 percent used salt, which was inadequately iodized.

In rural areas, 0.5 percent of households against 0.1 percent in urban areas used non-iodized salts. Percentage of households using inadequately iodized salt in rural areas is higher compared to that in urban areas. Number of households using non-iodized or inadequately iodized salt is closely associated with the educational level of the household head. Nearly 71 percent of households headed by persons who had more than 10 years of schooling reported the use of adequately iodized salts. Consumption of adequately iodised salt among households of other caste is 71 percent, followed by 62 percent in other backward class households and among scheduled caste and scheduled tribe it is 66 percent of households.

Table 2.10 IODIZATION OF SALT

Percent distribution of household heads by degree of iodization of salt, according to selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Not iodised	7ppm	15+ppm	Other ¹	Total percent	Number of households
Place of Residence						
Rural	0.5	15.4	67.0	17.2	100.0	9,820
Urban	0.1	11.4	67.6	20.9	100.0	3,609
Education of the household heads						
Non-literate	0.4	14.8	64.7	20.2	100.0	5,008
0-9@ years	0.5	16.1	67.1	16.3	100.0	4,761
10 and above	0.2	11.3	70.6	17.9	100.0	3,643
Religion of household head						
Hindu	0.3	13.7	68.5	17.6	100.0	4,805
Muslim	0.2	27.1	57.7	15.0	100.0	429
Christian	0.5	19.7	66.4	13.5	100.0	2,696
Buddhist	0.2	17.1	61.0	21.7	100.0	1,478
No Religion	0.2	8.5	66.5	24.8	100.0	266
Other	0.5	9.2	69.5	20.8	100.0	3,754
Caste/tribe of the household head#						
Scheduled caste	0.0	14.2	65.5	20.3	100.0	954
Scheduled tribe	0.4	14.3	66.4	18.8	100.0	8,578
Other backward class	0.5	13.8	66.2	19.5	100.0	862
Other	0.2	14.0	70.9	14.9	100.0	2,470
Standard of living index						
Low	0.6	15.4	66.9	17.1	100.0	6,712
Medium	0.2	16.2	64.1	19.5	100.0	4,227
High	0.0	8.2	72.8	19.0	100.0	2,489
Total	0.4	14.3	67.1	18.2	100.0	13,429
Note:Ppm: Parts per million						
@ Literate persons with no years of schooling are also included. # Total number of cases may not add upto N due to do not know and missing cases. ¹ Includes salt not at home, salt not tested, refused and missing cases.						

Differential in the consumption of properly iodized salt is more pronounced when analysed by religion of the household head and standard of living index. Percentage of households using adequately iodized salt is only 58 percent among Muslims households, whereas the corresponding figures for Hindu and other religion households are 69 percent and 70 percent respectively. Again, households with low standard of living are more likely to use non-iodized or inadequately iodized salt compared to households with medium or high standard of living index. While 0.6 percent of households with low standard of living used non-iodized salt, zero percent households with a high standard of living fall in this category. The number of households with a high standard of living using adequately iodized salt is higher than those with a low standard of living (73 percent and 67 percent).

2.11 Iodization of Salt by Districts

Table 2.11 shows district level variation in the percent distribution of households by level of iodization of salt used in the households. Lohit has the lowest proportion of households (zero percent) using non-iodized salt, whereas East Siang has the highest proportion of households (1.4 percent) using non-iodized salt. Percentage of households using inadequately iodized salt is the highest (33 percent) in Papum Pare and the lowest in Esat Siang (3 percent). Around 67 percent of the households in the state used adequately iodized salt, the highest being in the district of East Siang (96 percent). About half of the households in East Kameng (51 percent) and West Siang (52 percent) were using adequately iodized salt (see Map-2).

Table 2.11 IDOIZATION OF SALT BY DISTRICT				
Percent distribution of household heads by degree of idoization of salt by district, Arunachal Pradesh, 2002-04				
District	Not idoized	7ppm	15+ppm	Other ¹
Changlang	0.5	23.6	75.1	0.8
Dibang Valley	0.6	9.3	76.9	13.3
East Kameng	0.5	4.9	51.1	43.5
East Siang	1.4	2.8	95.8	0.1
Lohit	0.0	17.0	67.7	15.3
Lower Subansiri	0.4	20.0	76.1	3.5
Papum Pare	0.0	33.3	66.3	0.4
Tawang	0.0	6.0	39.0	55.0
Tirap	0.1	8.0	43.2	48.6
Upper Siang	0.2	14.1	84.8	0.9
Upper Subansiri	0.0	7.3	70.8	21.9
West Kameng	0.7	22.8	75.1	1.5
West Siang	0.6	4.9	51.9	42.7
Arunachal Pradesh	0.4	14.3	67.1	18.2

Note:Ppm: Parts per million. ¹ Includes salt not at home, salt not tested, refused and missing cases

2.12 Availability of Facility and Services to the Rural Population

The DLHS-RCH collected information about surveyed village from knowledgeable persons such as, the 'Sarpanch' or 'Pradhan', (village head) or other village officials or other persons including 'teacher' in the villages on health and educational facilities and other services available in the village. One important aspect was on the distance of the village, if not available within the village, from various types of education facilities, including primary school, middle school, secondary school, higher secondary school and college. Further information on the distance of the village, if not available within the village, from various types of health facility, including sub-centres, primary health centres (PHCs), community health centres/ Rural Hospitals (CHCs/RHs), Government dispensary, hospital, private clinic or hospitals and health facilities of Indian system of Medicine (ISM).

Table 2.12 gives the distance of surveyed villages from an education facility. The unit of analysis is usual residents of rural population. Majority of the rural residents (75 percent) (the *de jure* rural population) in the state live in villages that have a primary school, 34 percent live in villages with middle school and 20 percent of the rural population live in villages with secondary schools. Higher secondary schools are available for 9 percent of the rural population. Less than one percent of the surveyed villages have a college. As regards the distribution of educational institutions within 5 kilometres distance from of the village, it can be seen that, 26 percent of the villages have middle school, 21 percent have secondary school, 20 percent have higher secondary school

Table 2.12 DISTANCE FROM THE NEAREST EDUCATION FACILITY						
Percent distribution of rural household population by distance from the nearest education facility, Arunachal Pradesh, 2002-04						
Education facility	Within village	Distance from the village:			Don't know/missing	Total percent
		< 5 km	5-9 km	10+ km		
Primary School	74.7	14.5	7.6	3.1	0.0	100.0
Middle School	34.2	25.5	16.8	23.5	0.0	100.0
Secondary School	18.9	20.9	18.9	40.2	1.0	100.0
Higher Secondary School	9.2	20.2	14.2	53.0	3.5	100.0
College	0.2	7.3	7.2	52.6	32.6	100.0

Note: Table based on rural *de jure* population.

Table 2.13 DISTANCE FROM THE NEAREST HEALTH FACILITY						
Percent distribution of rural household population by distance from the nearest health facility, Arunachal Pradesh, 2002-04						
Health facility	Within village	Distance from the village:			Don't know/missing	Total percent
		< 5 km	5-9 km	10+ km		
Rural household population						
Sub-centre	31.5	22.8	20.8	24.8	0.2	100.0
Primary health centre	11.3	14.5	23.5	50.5	0.2	100.0
Either sub-centre or PHC	39.0	23.1	19.6	18.3	0.0	100.0
Community health centre/ Referral hospital	2.7	11.2	12.3	68.2	5.7	100.0
Government dispensary	6.0	9.8	13.1	67.9	3.1	100.0
Government hospital	0.0	15.1	10.0	59.5	15.3	100.0
Private clinic	4.8	10.4	11.7	59.0	14.1	100.0
Private hospital	0.1	8.0	7.0	62.3	22.6	100.0
ISM health facility	0.8	0.4	3.0	17.0	78.9	100.0

Note: Table based on rural *de jure* population.

Table 2.13 summarises the availability of health facilities within the surveyed villages and provides information on the distance between the villages and the nearest health facility. About 32 percent of the rural population live in villages with Sub-centres. Only 12 percent of the rural household population live in a village with a primary health centre, though the proportion of villages having facilities of either Sub-centre or primary health centre is 39 percent. The proportion of rural population with other health facilities is 3 percent for CHCs/RHs, 6 percent for Government dispensary. No village has Government hospitals, whereas 5 percent have private clinics, and less than one percent has facility of private hospitals and for Indian System of Medicine.

Table 2.14 AVAILABILITY OF SERVICES	
Percentage of rural residents living in villages that have selected services, Arunachal Pradesh, 2002-04	
Services	Percentage of rural Residents
Anganwadi centre	75.0
Anganwadi worker	69.9
Private doctor	7.9
Visiting doctor	16.6
Homeopathic doctor	5.9
Village health guide	7.4
Trained birth attendant	27.1
Traditional healer	58.5
	57.1
Note: Table based on rural <i>de jure</i> population.	

The proportion of rural population located within a distance of 5 kilometres from health facilities are 23 percent for sub-centres, 15 percent for primary health centres, 23 percent for CHCs/RHs. 10 percent for a Government dispensary, 15 percent for Government hospitals, 10 percent for private clinic, 8 percent for private hospitals and 0.4 percent for ISM health facilities. Distance of particular health facilities is beyond 10 kilometres from surveyed villages in the case of Government hospitals (60 percent) and for private hospitals, (62 percent).

Table 2.14 shows the proportion of rural residents in the state that live in the villages with various health services. Almost 75 percent of rural residents live in villages that have an *anganwadi*, (a nursery school for children age 3-6 years) and at the same time 70 percent of rural households live in villages with *anganwadi* workers (*Anganwadi* workers provide integrated child development services) are available.

About one-fifth of the rural residents live in villages that have a private doctor, 17 percent live in villages with a visiting doctor, 6 percent with a homeopathy doctor, 27 percent with a village health guide, 59 percent with a trained birth attendant and 57 percent with a traditional healer.

2.13 Availability of Education Facility and Health Services by Districts

Table 2.15 shows the availability of education and health facilities for the rural population within the surveyed villages by districts in Arunachal Pradesh. In all the districts, the rural population have access to primary schools. In the state of Arunachal Pradesh, 79 percent of the rural population live in villages having primary schools. Around 32 percent of the rural population in the state have sub-centres within the village, with the highest coverage of 52 percent in West Kameng and the lowest of 14 percent of the population in Papum Pare.

There are some districts with no PHCs within the villages. These districts include Tirap, Upper Subansiri and West Siang. Highest availability of PHCs within the village is found in Dibang Valley (49 percent). In Dibang Valley, 67 percent of the households in the rural area (highest in the area) have access to at least one government health facility including sub-centre,

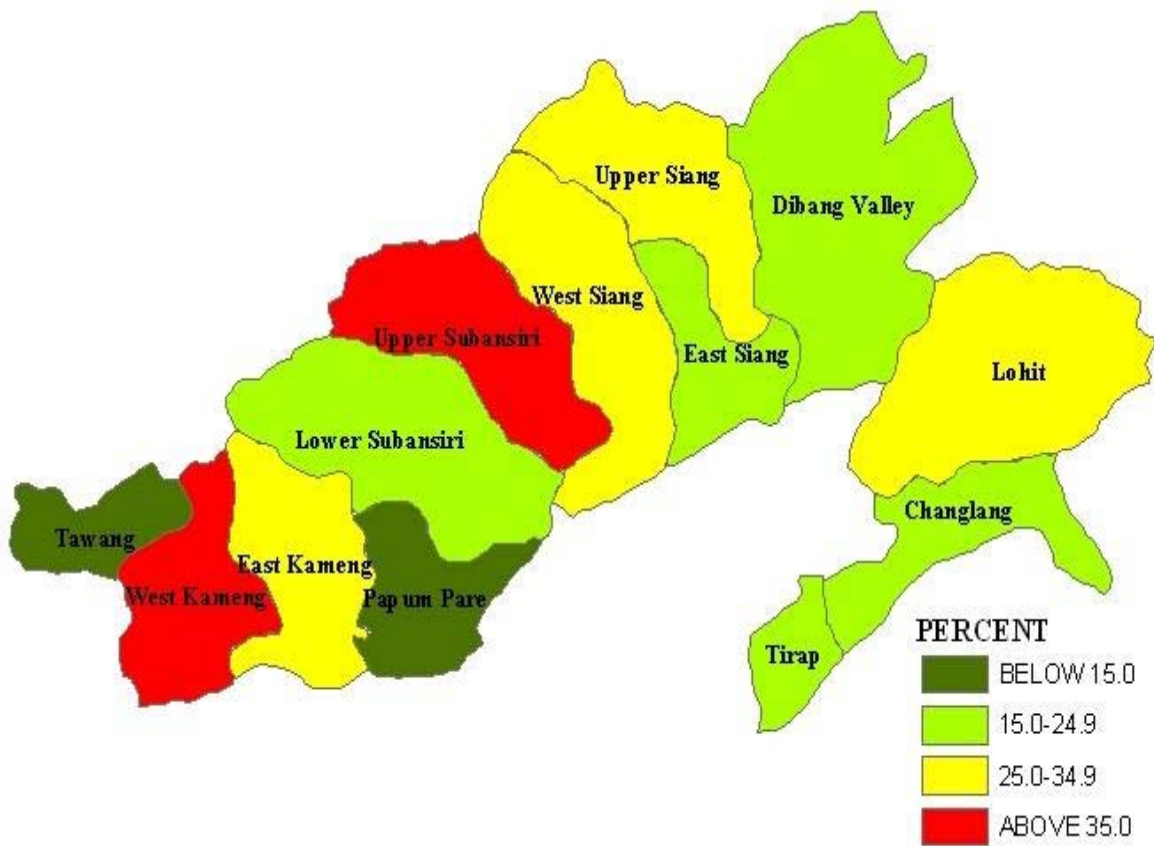
primary health centre, community health centre or referral hospital, government hospital and government dispensary within the village.

Table 2.15 AVAILABILITY OF FACILITY AND SERVICES BY DISTRICT							
Selected facility and services of rural household population within village by district, Arunachal Pradesh, 2002-04							
Districts	Percentage of rural household population with:						
	Primary or middle school	Sub-centre	PHCs	Any government health facility ¹	Doctor ²	TBA ³	Anganwadi worker
Changlang	91.9	38.9	25.7	56.6	47.1	31.1	74.1
Dibang Valley	96.7	27.9	49.2	67.0	32.8	16.5	70.1
East Kameng	68.0	50.2	2.8	53.0	6.3	6.7	58.4
East Siang	100.0	16.1	21.0	38.9	2.5	25.3	100.0
Lohit	86.7	48.0	24.6	57.0	36.4	22.0	94.9
Lower Subansiri	65.3	38.5	5.7	43.2	0.0	30.0	88.5
Papum Pare	51.8	14.1	13.0	29.3	7.4	86.7	93.2
Tawang	70.7	18.7	3.7	18.7	14.4	3.7	88.1
Tirap	89.0	21.9	0.0	41.2	19.4	33.6	50.6
Upper Siang	92.8	37.4	1.9	39.3	2.2	29.2	83.1
Upper Subansiri	58.0	20.5	0.0	20.5	7.5	7.5	9.9
West Kameng	100.0	51.6	5.9	66.3	75.9	19.4	60.6
West Siang	61.1	25.3	0.0	25.3	10.3	15.7	24.3
Arunachal Pradesh	78.7	31.5	11.3	42.7	19.1	27.1	69.9

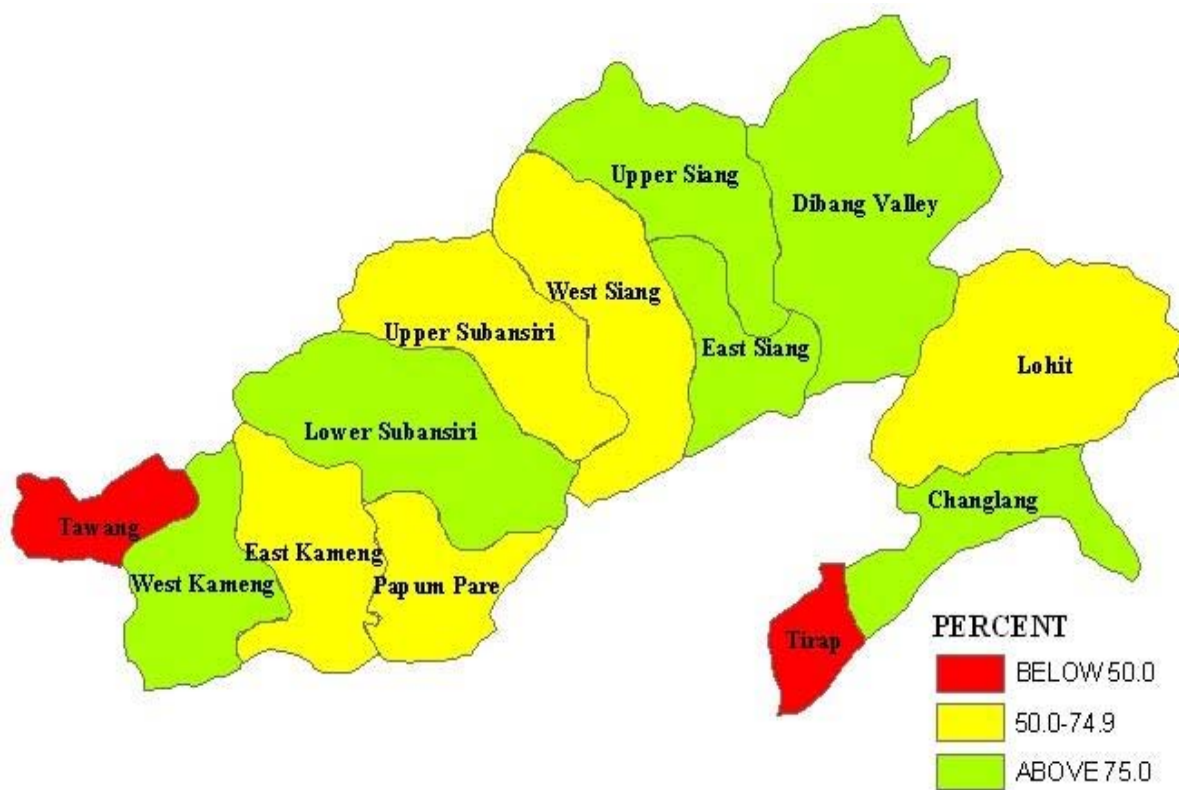
Note: ¹ Includes sub-center, primary health center, community health center or referral hospital, government hospital, and government dispensary within the village ² Either private or visiting doctor ³ Trained birth attendant

Around 76 percent of the rural population are visited either by private or by visiting doctors in the surveyed villages of West Kameng district, whereas no households can be classified in this category in Lower Subansiri district. Highest numbers of rural population (87 percent) are attended by trained birth assistants in Papum Pare, while only 4 percent of rural population, availed themselves of such a provision in Tawang. A visit by *anganwadi* workers to rural households is highest (100 percent) in East Siang and the lowest in Upper Subansiri (10 percent).

MAP-1
Percent Girl Marrying Below Legal Age at Marriage



MAP-2
Percentage of Households Using Salt that Contains 15 PPM Level of Iodine



CHAPTER III

CHARACTERISTICS OF WOMEN, HUSBANDS AND FERTILITY

The Reproductive and Child Health (RCH) programme is targeted towards the underprivileged section of the population, particularly, women and children. The utilization of RCH services provided across the country depends to a large extent on the characteristics of women, their husbands and episodes of pregnancies, miscarriages, abortions, number of children born to them and survival status of children. Age of women, marital duration, educational attainment, social background and living standard are important factors, which influence reproductive and child health. With this in view, the DLHS-RCH data were collected on demographic characteristics, such as current age, age at consummation of marriage and number of pregnancies, live births and surviving children from eligible women respondents of selected representative households. Information regarding household background characteristics was collected using a separate household questionnaire that covered religion and caste of head of household, type of house, source of drinking water and possession of consumer durables. Fertility preference of women in terms of timing and desire for additional children in comparison to the number of living children provides information on the need for reproductive and child health services.

This chapter provides a comprehensive outline of distribution of currently married women by present age, age at consummation of marriage, duration of marriage, complete years of schooling, pregnancy episodes, children ever born and children surviving, along with social and economic characteristics of households the women represent.

3.1 Background Characteristics of Women

The percent distribution of currently married women in the reproductive age group 15-44 years by residence, religion and caste of head of household, economic standard of household and other demographic characteristics are shown in Table 3.1. A sample of 11,874 eligible women represents the state of Arunachal Pradesh in DLHS-RCH and 8,644 of these women are drawn from rural areas. About 63 percent of the currently married women are in the age range of 20-34 years and a similar age distribution is observed both for urban and rural areas. Age at consummation of marriage, particularly in rural areas is found to be almost same as urban area where 46 percent of the women having cohabited before 18 years of age, while it is 43 percent in rural areas. Looking at the distribution of marital duration it is noted that about 37 percent of the women across the state are married for more than 15 years.

Among the sample 11,874 representative women in Arunachal Pradesh, Hindus and Muslims constitute 39 percent and 3 percent respectively. Whereas Christian, Buddhist and those belonging to other religions comprise of 19, 11 and 25 percent respectively. More, Hindu women are found in urban areas (57 percent) than in rural areas (32 percent). The presence of women belonging to other religious groups is insignificant in proportional and absolute terms. Eight percent of the women belong to scheduled castes, 59 percent to scheduled tribes and seven percent to other backward classes. Majority of the sample women (23 percent) belong to a general caste other than scheduled caste/tribe and other backward class. In rural areas, there are more women belonging to scheduled caste, scheduled tribe and other backward classes than in

urban areas, while more women from other castes are found in urban areas. There is a clear rural-urban differential in the educational attainment of women. For the state of Arunachal Pradesh, 50 percent of women are non-literate and women of this literacy category constitute 55 percent in rural areas, while it is just 36 percent in urban areas.

Table 3.1 BACKGROUND CHARACTERISTICS OF WOMEN			
Percent distribution of currently married women aged 15-44 by selected background characteristics, according to residence, Arunachal Pradesh, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
Age group			
15-19	4.4	4.7	3.8
20-24	18.1	18.7	16.5
25-29	25.0	24.4	26.8
30-34	19.6	18.6	22.2
35-39	18.5	18.6	18.2
40-44	14.4	15.1	12.6
Age at consummation of marriage			
Below 18 years	43.6	42.6	46.4
18 years & above	56.4	57.4	53.6
Marital duration			
0-4	17.8	18.3	16.6
5-9	22.4	22.0	23.2
10-14	22.7	22.5	23.1
15+	37.1	37.2	37.1
Religion			
Hindu	38.7	31.8	57.2
Muslim	3.4	2.5	5.7
Christian	19.0	22.2	10.5
Sikh	0.2	0.2	0.3
Buddhist	11.4	13.8	4.8
Jain	0.1	0.0	0.1
No religion	1.7	2.1	0.8
Other	25.4	27.2	20.6
Caste/tribe			
Scheduled caste	7.5	5.2	13.5
Scheduled tribe	58.7	66.8	37.2
Other backward class	6.8	4.9	11.9
Other #	22.7	19.8	30.2
Don't know	4.3	3.2	7.2
Education (Years of schooling)			
Non-literate	49.8	55.1	35.8
0-9@ years	34.0	33.6	34.9
10 years & above	16.2	11.3	29.3
Husband's education (Years of schooling)			
Non-literate	29.8	34.8	16.5
0-9@ years	39.8	40.2	38.5
10 years & above	29.7	24.1	44.5
Don't know	0.7	0.8	0.6
Missing	0.0	0.0	0.0
Standard of living index			
Low	47.7	58.4	18.9
Medium	32.5	29.2	41.3
High	19.8	12.3	39.8
Number of women	11,874	8,644	3,230
Note:# Not belonging to a scheduled caste, scheduled tribe and an other backward class. @ Literate persons with no year of schooling are included.			

34 percent of women across the state have completed 0-9 years of schooling. Only 11 percent of rural women have completed 10 or more years of schooling compared to 29 percent for urban

women. Men are more literate than their spouses. In Arunachal Pradesh, 30 percent of the husbands of eligible women are non-literate and the corresponding figures are 35 percent in rural areas and 17 percent in urban areas. The DLHS-RCH, includes data on materials used for floor, walls and roofs of the housing structure along with status of possession of a list of durables and these are utilized to construct a composite index of household standard of living. Households are further classified as those with low, medium and high standard of living. Forty eight percent of women in the state live in low standard of living households and this is 58 percent in rural areas and 19 percent in urban areas. Majority of women across the state live in households categorised as medium standard of living. In urban areas, 40 percent of women belong to high standard of living households and the corresponding figure is just 12 percent in rural areas.

3.2 Educational Level of Women

Table 3.2 provides details of educational level of eligible women in terms of classification by years of schooling, and selected background characteristics, such as, place of residence, religion, and caste and husbands' education. As regards distribution of non-literate women, it is observed that a lesser proportion of younger women below 30 years of age are non-literate compared to older women above 30 years. This age divide remains true even among literate women. A distinct pattern of educational attainment of women is that maximum of them attended schooling either for 1-5 years or 6-8 years and not many had 11 or more years of schooling. For the women in the age group 15-19 years, 20 percent and 25 percent of them had 1-5 years and 6-8 years of schooling, while only 2 percent had 11 or more years of schooling. Among the senior women in the age group 40-44 years, distribution by year of schooling is more or less uniform with 10 percent of them having attended school for 1-5 and 7 percent (in each category) of them having attended school for 6-8, 9-10 and 11 or more years of schooling.

There is a significant rural-urban differential in the level of education of women in Arunachal Pradesh. About 55 percent of rural eligible women are non-literate and 13 percent, 13 percent, 11 percent and 6 percent of the women have 1-5, 6-8, 9-10 and 11 or more years of schooling. The corresponding figures in urban areas are 36 percent non-literate and 13 percent, 14 percent, 20 percent and 17 percent respectively. More Christian women (60 percent) are non-literate compared to Hindu women (44 percent), Muslim women (56 percent) and women belonging to other religious communities (49 percent). For literate eligible women from all religious communities, maximum of them have either 1-5 or 6-8 years of schooling. The proportion of Hindu women with 1-5 years of schooling is 13 percent and for the same is 13 percent for Muslim women, 12 percent for Christian women and 15 percent for women from other religions. Among the literate Muslim women hardly 4 percent of them have 11 or more years of schooling, while 13 percent of literate Hindu women have attained this level of education.

The uneven level of educational attainment by caste can be noted from the recorded proportion of non-literate women among scheduled caste (48 percent), scheduled tribe (54 percent), other backward class (41 percent) and other caste or tribe (42 percent). The literate women belonging to different castes or tribes are concentrated more in the range of 1-5 to 6-8 and 9-10 years of schooling. The husband's education is an important characteristic, which has strong association with the education of eligible women. As many as 88 percent of women

whose husbands are non-literate are also non-literate, while only 10 percent of women whose husbands have 11 or more or years of schooling are non-literate. Thirty six percent of literate women educated for 11 or more years of schooling have husbands who have the same level of education.

Table 3.2 LEVEL OF EDUCATION OF ELIGIBLE WOMEN									
Percent distribution of currently married women aged 15-44 by years of schooling, according to selected background characteristics, Arunachal Pradesh, 2002-04									
Background characteristic	Non-literate	Literate but no schooling	Years of schooling				Missing	Total percent	Number of women
			1-5 years	6-8 years	9-10 years	11 or more years			
Age group									
15-19	40.3	1.5	20.0	24.6	11.2	2.4	0.0	100.0	525
20-24	40.1	1.3	15.1	19.9	17.1	6.5	0.0	100.0	2,149
25-29	41.4	1.7	14.8	16.0	16.3	9.8	0.0	100.0	2,973
30-34	51.3	2.0	12.1	10.1	12.6	12.0	0.0	100.0	2,325
35-39	58.2	2.2	10.2	9.5	11.2	8.6	0.0	100.0	2,191
40-44	67.2	2.4	10.1	6.5	7.0	6.7	0.1	100.0	1,710
Place of residence									
Rural	55.1	2.0	13.2	13.3	10.7	5.7	0.0	100.0	8,644
Urban	35.8	1.4	12.6	13.6	19.9	16.6	0.0	100.0	3,230
Religion									
Hindu	43.8	1.6	12.5	12.3	16.5	13.2	0.0	100.0	4,601
Muslim	55.8	5.5	12.8	8.8	12.6	4.4	0.0	100.0	405
Christian	59.6	2.1	11.5	11.8	9.4	5.6	0.0	100.0	2,259
Buddhist	54.0	1.0	14.1	16.2	10.8	3.9	0.0	100.0	1,353
No Religion	57.2	1.1	12.4	18.2	7.4	3.7	0.0	100.0	205
Other	48.6	2.0	14.6	15.2	12.7	6.9	0.0	100.0	3,051
Caste/tribe #									
Scheduled caste	48.1	1.2	11.6	16.4	16.2	6.6	0.0	100.0	885
Scheduled tribe	53.7	1.9	13.1	13.8	11.6	6.0	0.0	100.0	6,976
Other backward class	40.7	0.9	13.7	11.6	19.4	13.6	0.1	100.0	811
Other	41.7	2.0	12.9	12.5	15.2	15.7	0.0	100.0	2,692
Husband's education									
Non-literate	88.4	0.5	4.9	3.8	1.9	0.4	0.0	100.0	3,542
Literate but no schooling	62.5	23.1	8.4	3.7	2.1	0.2	0.0	100.0	279
1-5 years	58.5	2.7	22.2	11.3	5.1	0.2	0.0	100.0	1,761
6-8 years	42.2	2.2	24.4	18.9	11.1	1.2	0.0	100.0	1,852
9-10 years	25.2	1.3	16.1	26.1	25.5	5.7	0.0	100.0	1,924
11 or more years	10.2	0.9	7.8	15.8	29.1	36.1	0.1	100.0	2,425
Total	49.8	1.9	13.1	13.4	13.2	8.6	0.0	100.0	11,874

Note: Table includes 90 do not know cases on husband's education who were not shown separately. # Total number may not add upto N due to don't know and missing cases.

3.3 Background Characteristics of Husbands of Eligible Women

In DLHS-RCH husbands of eligible women were also interviewed. The response rate for husbands is relatively low compared to that of eligible women. Selected background characteristics of husbands are shown in Table 3.3. Across the state of Arunachal Pradesh, husbands are mostly in the age group 35-44 years. Fewer husbands are less than 25 years old. In Arunachal Pradesh, 39 percent of the husbands are Hindus, 18 percent are Christians and 13 percent are Buddhist, whereas the presence of other religious groups is insignificant. Sixty percent of husbands in the state belong to the scheduled tribe and it is little more in rural areas

(67 percent) than in urban areas (40 percent). Nearly 23 percent of the husbands belong to other backward classes. In urban areas husbands from other castes constitute 29 percent, while it is 20 percent rural areas. As regards educational characteristics of the husbands of surveyed eligible women, 40 percent of them have completed 0-9 years of schooling and the proportion of non-literate husband ranges from 20 percent in urban areas to 35 percent in rural areas, while the overall state figure is 31 percent.

Table 3.3 BACKGROUND CHARACTERISTICS OF MEN			
Percent distribution of husbands of eligible women by selected background characteristics, according to residence, Arunachal Pradesh, 2002-04			
Background characteristic	Total	Residence	
		Rural	Urban
Age group			
< 25	6.5	7.1	5.1
25-34	34.8	35.0	34.3
35-44	38.3	37.2	41.4
45 +	20.4	20.8	19.2
Religion			
Hindu	38.6	32.7	54.8
Muslim	3.1	2.3	5.1
Christian	18.1	20.7	10.7
Sikh	0.2	0.2	0.2
Buddhist	13.0	14.6	8.6
Jain	0.0	0.1	0.0
No religion	1.6	1.9	0.7
Other	25.4	27.4	19.8
Caste/tribe			
Scheduled caste	7.3	5.2	13.1
Scheduled tribe	59.6	66.5	40.4
Other backward class	7.0	5.4	11.6
Other #	22.5	20.1	29.4
Don't know	3.5	2.8	5.4
Education (Years of schooling)			
Non-literate	31.1	35.1	19.8
0-9@ years	39.6	39.9	38.9
10 years & above	29.2	24.8	41.3
Missing	0.2	0.2	0.0
Standard of living index			
Low	47.7	58.2	18.5
Medium	32.5	29.1	42.1
High	19.8	12.7	39.5
Number of living children			
0	7.8	7.4	9.0
1	17.8	17.5	18.8
2	22.9	21.9	25.8
3	20.5	19.4	23.8
4+	30.9	33.8	22.6
Number of Men	8,058	5,927	2,131

Note:# Not belonging to a scheduled caste, scheduled tribe and other backward classes.
@ Literate persons with no year of schooling are included.

The proportion of husbands living in households classified as low, medium and high standard of living index are 48 percent, 33 percent and 20 percent respectively. In rural areas, 58 percent of the husbands live in low standard of living households compared to 20 percent in urban areas. This is complementary in the case of husbands living in high standard of living households, 40 percent in urban and 13 percent in rural. In terms of household standard of living composition, those living in medium standard of living dominate in urban (42 percent) and in rural Arunachal Pradesh most (29 percent) husbands live in low standard of living households. Around 31 percent of husbands across the state reported to have four or more living children. More husbands in urban areas (26 percent) reported to have two living children, while more husbands in rural areas (34 percent) have four or more living children. Above 24 percent of the husbands of urban eligible women have more than three living children and it is 19 percent for husbands of rural eligible women.

3.4 Educational Level of Husbands of Eligible Women

Educational levels in categories of years of schooling classified by age, place of residence, religion and caste/tribe of husbands of eligible women are shown in Table 3.4. The distribution of non-literate husbands across age is more or less uniform, though it is more for husbands above 45 years (44 percent) and other than 35-45 years (32 percent) compared to 24 percent and 25 percent for husbands in the age groups 25-34 years and less than 25 years respectively. Among the literate husbands, irrespective of their age at the time of survey most of them have upto 11 years or more of schooling, 18 percent of those below 25 years and 44 percent of those in the age group 25-44 years of age. As expected less number of husbands (18 percent) below 25 years have 11 or more years of schooling. As in the case of eligible women, 40 percent each of Muslim, Buddhist and Christian husbands are non-literate while the corresponding non-literate husbands of Hindu and other religions are 23 percent and 31 percent respectively. The proportions of husbands of Hindu, Christian and other religions who have 11 or more years of schooling constitute 24 percent, 16 percent and 23 percent respectively. Most of the literate Muslim husbands (18 percent) have completed 1-5 years of schooling and the corresponding numbers are 16 percent and 13 percent respectively for Hindu and other religions husbands. Educational attainment of husbands of eligible women varies according to the caste/tribe they belong. There are more non-literate husbands belonging to scheduled tribes (36 percent) followed by scheduled caste and other backward classes husbands (23 percent in each). Among the husbands belonging to other backward classes, 26 percent and 21 percent of them have 11 years or more and 9-10 of schooling respectively. The literacy level of other backward classes is comparable with that of husbands from castes other than scheduled tribe, scheduled caste and other backward classes. Among the husbands belonging to scheduled tribes, 36 percent of them are non-literate and 48 percent of them have 11 or more years of schooling.

Table 3.4 LEVEL OF EDUCATION OF MEN

Percent distribution of husbands of eligible women by years of schooling, according to selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristics	Non-literate	Literate but no schooling	Years of schooling				Missing	Total percent	Number of men
			1-5 years	6-8 years	9-10 years	11 or more years			
Age group									
< 25	24.8	2.4	15.4	22.4	17.2	17.8	0.0	100.0	528
25-34	23.9	2.3	15.9	17.1	18.8	21.9	0.1	100.0	2,803
35-44	31.9	2.0	14.4	14.1	15.3	22.0	0.3	100.0	3,085
45+	43.7	3.2	13.9	11.6	12.0	15.4	0.2	100.0	1,642
Place of residence									
Rural	35.1	2.5	15.4	15.3	14.5	17.0	0.2	100.0	5,927
Urban	19.8	2.0	13.7	14.9	20.1	29.6	0.0	100.0	2,131
Religion									
Hindu	23.4	2.9	16.0	16.0	17.2	24.3	0.3	100.0	3,109
Muslim	39.8	4.7	17.9	15.8	12.3	9.1	0.4	100.0	247
Christian	39.4	2.1	13.4	13.5	15.5	16.0	0.2	100.0	1,457
Buddhist	40.1	1.5	17.1	14.8	12.8	13.7	0.0	100.0	1,050
No Religion	40.5	0.7	20.8	16.3	8.9	11.5	1.3	100.0	128
Other	30.5	2.1	12.5	15.2	16.8	22.7	0.0	100.0	2,067
Caste/tribe #									
Scheduled caste	22.6	4.1	16.0	19.8	18.7	18.4	0.4	100.0	589
Scheduled tribe	36.1	1.8	13.8	14.4	15.4	18.4	0.2	100.0	4,805
Other backward class	23.4	2.6	11.2	15.4	21.2	26.3	0.0	100.0	568
Other	21.9	3.1	18.4	15.0	15.9	25.5	0.2	100.0	1,816
Total	31.1	2.4	14.9	15.2	15.9	20.3	0.2	100.0	8,058

Note:# Total number may not add up to N due to don't know and missing cases.

3.5 Children Ever Born and Surviving

In DLHS-RCH, currently married women in the age group of 15-44 years were asked about the children ever born alive and the number of children surviving. Table 3.5 shows mean children ever born and mean surviving children by selected background characteristics and sex of children. A look at the mean children ever born by age of the women reveals that older women had experience more average live births than younger women. On the average, women in the reproductive age group have given birth to more male children than female children and similar a sex differential is also noted when it comes to mean surviving children, but in both cases the difference is marginal. Completed fertility, that is, mean children ever born to women in the age group 40-44 years is 4.3 for the state of Arunachal Pradesh and it comprises an average of 2.2 for male and 2.1 for female children. Out of the 4.3 mean children ever born to women in the 40-44 year age group an average of 3.8 children survived. By sex of children, out of 2.2 mean numbers of males, 1.9 survived on the average and the corresponding mean number of females surviving was 2.1 out of 1.9.

Women with longer marital duration have higher mean children ever born. On the average, women who are married for 15 or more years have 4.2 children ever born and on the average 3.8 of them are surviving. There is a clear rural-urban divide in terms of mean children ever born with 3.0 children in rural areas and 2.6 children in urban areas. The mean children ever born to women who are Hindu, Muslim, Christian and other religions are 2.6, 2.8, 3.3 and 3.2

respectively. The corresponding mean surviving children are respectively 2.4, 2.7, 2.8 and 1.5 for these religious groups. The average children ever born also vary by caste/tribe of the eligible women. For women belonging to scheduled caste, the mean children ever born are 2.5, for the scheduled tribe are 3.1, other backward classes are 2.6 and other castes are 2.6. For all religious groups, the mean number of surviving children is slightly more than 2 shared almost by one surviving male and one surviving female children on the average.

Table 3.5 CHILDREN EVER BORN AND LIVING							
Mean children ever born (CEB) and children surviving (CS) by selected background characteristics of currently married women aged 15-44 years, Arunachal Pradesh, 2002-04							
Background characteristic	Mean children ever born			Mean children surviving			Number of women
	Total	Male	Female	Total	Male	Female	
Age group (years)							
15-19	0.6	0.3	0.3	0.6	0.3	0.3	525
20-24	1.5	0.7	0.7	1.4	0.7	0.7	2,149
25-29	2.5	1.3	1.2	2.3	1.2	1.1	2,973
30-34	3.3	1.7	1.6	3.1	1.6	1.5	2,325
35-39	3.9	2.0	1.9	3.5	1.8	1.7	2,191
40-44	4.3	2.2	2.1	3.8	1.9	1.9	1,710
Marital duration							
0-4	0.8	0.4	0.4	0.8	0.4	0.4	2,114
5-9	2.1	1.1	1.0	2.0	1.0	1.0	2,655
10-14	3.2	1.6	1.6	2.9	1.5	1.5	2,696
15+	4.2	2.1	2.1	3.8	1.9	1.8	4,409
Residence							
Rural	3.0	1.5	1.5	2.7	1.4	1.4	8,644
Urban	2.6	1.3	1.3	2.4	1.2	1.2	3,230
Religion							
Hindu	2.6	1.3	1.3	2.4	1.3	1.2	4,601
Muslim	2.8	1.4	1.5	2.7	1.3	1.4	405
Christian	3.3	1.7	1.6	2.8	1.4	1.4	2,259
Buddhist	2.6	1.3	1.3	2.5	1.2	1.3	1,353
No religion	3.2	1.5	1.7	3.0	1.4	1.6	205
Other	3.2	1.6	1.6	2.9	1.5	1.4	3,051
Caste/tribe #							
Scheduled caste	2.5	1.3	1.2	2.3	1.2	1.1	885
Scheduled tribe	3.1	1.6	1.6	2.8	1.4	1.4	6,976
Other backward class	2.6	1.3	1.2	2.4	1.3	1.2	811
Other	2.6	1.3	1.2	2.4	1.3	1.2	2,692
Education							
Non-literate	3.5	1.8	1.7	3.1	1.6	1.5	5,918
0-9@ years	2.5	1.3	1.2	2.4	1.2	1.2	4,034
10 years & above	1.9	1.0	0.9	1.8	0.9	0.9	1,920
Standard of living index							
Low	3.2	1.6	1.6	2.8	1.4	1.4	5,662
Medium	2.8	1.4	1.4	2.6	1.3	1.3	3,861
High	2.5	1.3	1.2	2.4	1.2	1.1	2,351
All women	2.9	1.5	1.4	2.7	1.3	1.3	11,874
Note: Table includes 3 women with missing information on education. # Total number may not add up to N due to don't know and missing cases. @ Literate women with no year of schooling are included.							

The mean children ever born is higher for non-literate women (3.5) than women who have completed 0-9 years of schooling (2.5) and 10 or more years of schooling (1.9). The mean

number of surviving children for women corresponding to these educational levels is 3.1, 2.4 and 1.8 respectively. Further the mean children ever born for women classified into low, medium and high standard of living by SLI are 3.2, 2.8 and 2.5 respectively. For the state of Arunachal Pradesh, the DLHS-RCH shows inverse association between mean children ever born and educational attainment of women and also the level of household economic comfort.

3.6 Completed Fertility by District

The level of completed fertility as measured by mean children, ever born to women of 40-44 years by districts in Arunachal Pradesh together with mean number of surviving children are shown in Table 3.6. On the average, women on the verge of completing reproductive period have given birth to 4.3 children in their reproductive life of which 3.9 children are surviving on the average. Completed fertility in Arunachal Pradesh varies from the low of 3.5 mean children ever born for East Kameng and Tawang to the highest of 5.7 children in Lower Subansiri district. Completed fertility in terms of mean children ever born are high in the districts of Upper Siang (5.3), East Siang (5.1), Upper Subansiri and West Siang (4.4), Papum Pare (4.3), Dibang Valley (4.1) and Chandlang (4). Mean children ever born in all other districts of Arunachal Pradesh is more than 3 children. It is also true that in most of the districts mean number of male children is more than the mean of female children born to women in the 40-44 year age group. Upper Siang and Lower Subansiri (4.7 each) recorded highest mean number of surviving children. Looking at the absolute difference between mean children ever born and mean number of surviving children, it seems that infant and child mortality is quite high and varies among districts in Arunachal Pradesh.

Table 3.6 CHILDREN EVER BORN AND LIVING BY DISTRICT							
Mean children ever born (CEB) and children surviving (CS) to currently married women aged 40-44 by district, Arunachal Pradesh, 2002-04							
District	Mean children ever born			Mean children surviving			
	Total	Male	Female	Total	Male	Female	
Changlang	4.0	2.1	1.9	3.6	1.9	1.7	
Dibang Valley	4.1	2.3	1.7	3.8	2.2	1.6	
East Kameng	3.5	2.0	1.5	3.0	1.7	1.3	
East Siang	5.1	2.6	2.5	4.6	2.3	2.3	
Lohit	3.8	2.0	1.8	3.6	1.9	1.7	
Lower Subansiri	5.7	2.8	2.9	4.7	2.3	2.4	
Papum Pare	4.3	2.2	2.1	3.9	2.0	2.0	
Tawang	3.5	1.7	1.8	3.5	1.7	1.8	
Tirap	3.6	2.0	1.7	3.2	1.8	1.5	
Upper Siang	5.3	2.8	2.5	4.7	2.5	2.2	
Upper Subansiri	4.4	2.3	2.1	3.5	1.8	1.8	
West Kameng	3.6	1.5	2.2	3.5	1.4	2.1	
West Siang	4.4	2.1	2.3	4.1	1.9	2.1	
Arunachal Pradesh	4.3	2.2	2.1	3.9	1.9	1.9	

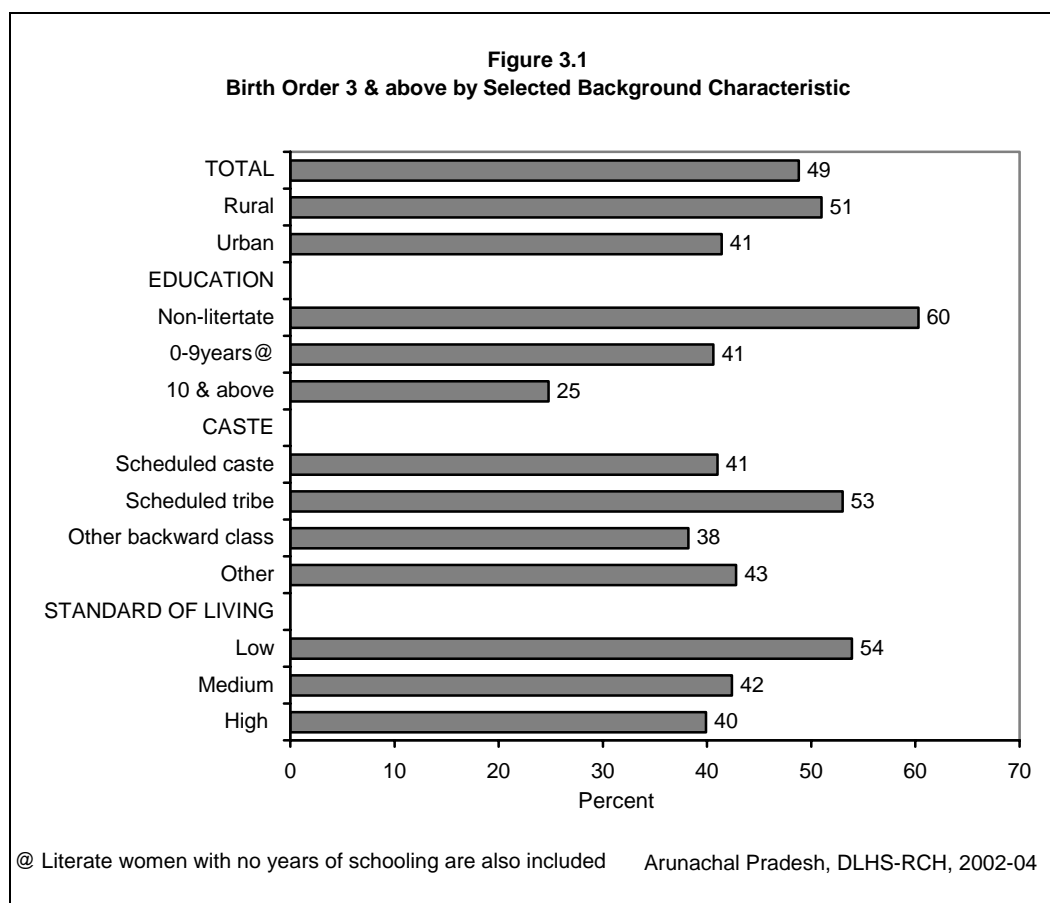
3.7 Birth Order

Birth order distribution by selected background characteristics of women are provided in Table 3.7 and Figure 3.1. This distribution can be use as a measure of fertility in the absence of formal measures of fertility, such as, crude birth rate and total fertility rate.

Table 3.7 BIRTH ORDER						
Percent distribution of births during three years preceding the survey by birth order by selected background characteristics, Arunachal Pradesh, 2002-04						
Background characteristic	Birth order				Total percent	Number of births
	1	2	3	4+		
Age of women						
15-19	83.3	14.8	1.6	0.3	100.0	279
20-24	48.4	34.3	12.6	4.7	100.0	1,727
25-29	16.2	28.0	29.2	26.6	100.0	1,735
30-34	6.5	14.3	19.2	60.1	100.0	936
35-39	2.2	9.1	13.4	75.2	100.0	487
40-44	2.0	11.6	8.6	77.7	100.0	188
Place of residence						
Rural	25.3	23.7	18.1	32.9	100.0	4,105
Urban	30.9	27.8	19.9	21.5	100.0	1,247
Education (Years of schooling)						
Non-literate	19.4	20.3	18.3	42.0	100.0	2,757
0-9@ years	31.1	28.3	19.7	20.9	100.0	1,903
10 years & above	43.3	31.9	15.8	9.0	100.0	692
Religion						
Hindu	30.8	27.1	19.0	23.1	100.0	1,741
Muslim	26.6	29.3	16.5	27.5	100.0	240
Christian	23.8	19.3	16.4	40.5	100.0	1,210
Buddhist	28.7	30.1	19.7	21.5	100.0	547
No religion	21.1	19.1	15.4	44.4	100.0	113
Other	23.7	23.8	19.7	32.9	100.0	1,502
Caste/tribe #						
Scheduled caste	28.6	30.6	19.2	21.5	100.0	368
Scheduled tribe	25.0	22.4	18.6	34.0	100.0	3,468
Other backward class	26.3	35.6	15.6	22.6	100.0	325
Other	30.7	26.5	19.3	23.5	100.0	952
Standard of living index						
Low	23.4	22.8	17.8	36.1	100.0	3,122
Medium	30.2	27.4	19.0	23.4	100.0	1,564
High	33.4	26.7	20.8	19.1	100.0	666
Total	26.6	24.6	18.5	30.3	100.0	5,352
Note: Total includes 1 births with missing information on mother's education. @ Literate women with no year of schooling are included.# Total number of births may not add upto N due to don't know and missing cases.						

For the state of Arunachal Pradesh, 27 percent of the births born in the three years period preceding the survey were of first order, 25 percent of second order and the remaining 49 percent were of order 3 and higher order births. By current age of eligible women, more than 75 percent and 78 percent of births to women in the age group 35-39 years and 40-44 years are 4 and higher order births. For women of 15-19 years, 83 percent births are of first order and 15 percent births are of second order. In the case of eligible women in urban areas 31 percent of the births are of

first order whereas this order births constitute 25 percent for rural women indicating that first order births are more concentrated in urban areas. Of the total births born to non-literate women, 42 percent are 4 and higher order births, followed by 21 percent for women with 0-9 years of schooling and 9 percent for women who had 10 or more years of schooling. In short, births born to non-literate women are of higher order whereas much lower order births occurred to women who completed 10 or more years of schooling. Looking at the religion differential in birth order distribution, it is observed that 44 percent of births born to Muslim women are 3 and higher order births. For Hindu and Christian women, the 3 and higher order births constitute 42 percent and 57 percent respectively. The occurrence of births of order 3 and above is more among scheduled tribe (34 percent) than among scheduled caste (22 percent), other backward classes (23 percent) and other castes (24 percent) women. Incidence of births of order 3 and above for women classified by household standard of living index are 40 percent for high, 42 percent for medium and 54 percent for low living standard households women.



3.8 Birth Order by District

Table 3.8 and Figure 3.2 shows the births order distribution by districts in Arunachal Pradesh. The proportion of births of order 3 and above ranges from the lowest of 38 percent in West Kameng to the highest of 66 percent in Upper Siang. The districts, which have lower proportion

of births of order 3 and above, are Tawang (42 percent), Changlang (43 percent), Lohit, Papum Pare and West Siang (45 percent). The districts, which can be classified as having higher

proportion of births of order 3 and above, are Lower Subansiri (64 percent), Upper Subansiri (58 percent), and East Kameng (50 percent). The remaining districts fall midway between these districts in terms of incidence of births of order 3 and above.

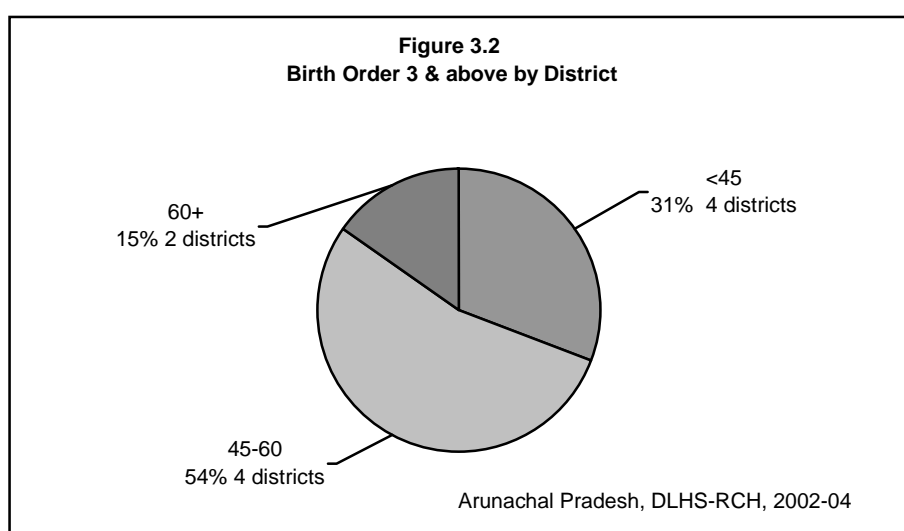


Table 3.8 BIRTH ORDER BY DISTRICT
Percent distribution of births during three years preceding the survey by birth order, according to district, Arunachal Pradesh, 2002-04

District	Birth order			
	1	2	3	4+
Changlang	29.0	28.1	20.7	22.3
Dibang Valley	23.3	28.9	21.6	26.3
East Kameng	26.2	23.6	20.5	29.6
East Siang	28.5	23.8	15.9	31.9
Lohit	29.4	26.0	19.3	25.2
Lower Subansiri	19.1	17.3	17.6	46.0
Papum Pare	27.0	28.1	14.7	30.3
Tawang	28.0	29.9	20.2	21.9
Tirap	32.8	21.5	20.0	25.6
Upper Siang	16.9	17.5	18.8	46.8
Upper Subansiri	18.5	23.1	20.9	37.5
West Kameng	31.8	30.4	15.7	22.0
West Siang	28.5	26.1	20.3	25.1
Arunachal Pradesh	26.6	24.6	18.5	30.3

3.9 Fertility Preference

The distribution of currently married women desiring additional children and preferred sex of additional children by number of living children of the women is shown vividly in Table 3.9 and Figure 3.3. Out of the 1,053 women with no living child, 21 percent are currently pregnant and 8 percent are using spacing methods, while 44 percent want to have children within two years, less than one percent want to have children after two years, 7 percent are undecided about the timing of birth and 8 percent desired not to have any children. Among the currently married women, the desire for additional children dwindles down with increasing number of living children. As many as 23 percent of the women having one living child are using spacing methods, 27 percent of them want additional children within two years, 6 percent after two years, 10 percent are undecided about the timing of the next child, 10 percent of them want no more additional children and 2 percent are sterilized. Use of permanent as well as temporary means of contraception tends to be accelerated with number of living children. In the state of Arunachal Pradesh, out of the 11,874 surveyed representative women, 16 percent desired to have additional children within two years, 2 percent after two years, 22 percent want no more children, 8 percent are currently pregnant and 39 percent are using either terminal or temporary contraceptive methods. A total of 3,362 women want additional children irrespective of the number of living children. Out of 592 women who have no living children and desire for additional children, 33 percent want a boy as the first child, 8 percent desired for girl, for 33 percent, the sex of the child is immaterial and 27 percent leave it to God. With increasing number of living children, is male the dominating preferred sex of the next child though a sizeable proportion of women desiring additional children expressed that the sex of the child was immaterial.

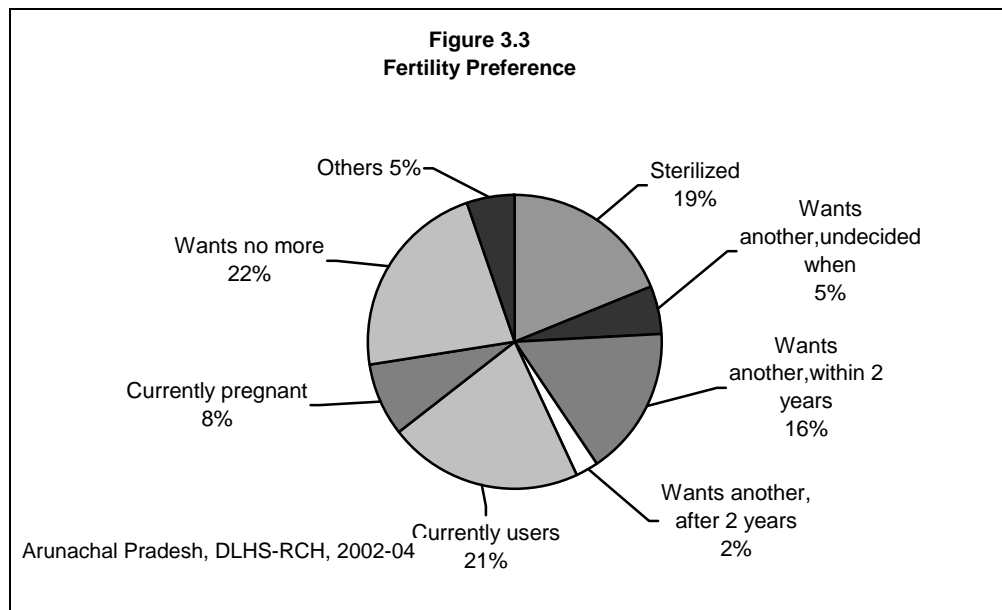


Table 3.9 FERTILITY PREFERENCE						
Percent distribution of currently married women by desire for children, according to number of living children, Arunachal Pradesh , 2002-04						
Desire for children	Number of living children					Total
	0	1	2	3	4+	
Desire for additional child						
Wants another soon ¹	43.6	26.8	12.9	8.4	8.5	15.6
Wants another later ²	0.4	6.0	2.6	1.9	1.2	2.4
Want another, undecided when	6.6	10.1	4.4	3.3	3.8	5.1
Undecided	3.0	4.5	3.1	3.2	3.5	3.5
Up to God	2.6	2.2	1.9	1.4	1.5	1.8
Want no more	7.8	10.1	21.7	25.9	29.4	21.9
Sterilized	4.3	2.1	15.2	26.0	27.6	18.3
Currently users ³	7.7	23.3	28.5	22.3	16.2	20.6
Currently pregnant	20.6	12.7	7.8	4.7	3.5	7.7
Declared infecund	2.8	2.2	2.0	2.9	4.7	3.2
Missing	0.6	0.0	0.0	0.0	0.1	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,053	1,948	2,646	2,390	3,837	11,874
Preferred sex of additional children						
Boy	32.5	43.5	43.9	44.7	45.9	42.3
Girl	8.3	18.1	16.3	18.3	11.2	14.6
Doesn't matter	32.6	21.0	16.8	19.9	15.8	21.0
Up to God	26.5	17.3	23.1	17.1	26.9	22.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	592	967	656	436	711	3,362
Note: ¹ Wants next births within 2 years. ² Wants to delay next birth for 2 or more years. ³ Other than sterilization. Total includes 3 missing information on preferred sex of the child were not shown separately.						

3.10 Pregnancy Outcomes

Table 3.10 shows distribution of pregnancy outcomes including live birth, stillbirth, induced abortion and spontaneous abortion by districts in Arunachal Pradesh. For the state as a whole, 97 percent of pregnancy ends in live births, less than one percent in induced abortions, 1 percent in spontaneous abortion and 1 percent in stillbirth. More pregnancies in rural areas end in live births (98 percent) than in urban areas (94 percent), while the incidence of induced abortion is more in urban areas (0.9 percent) than in rural areas (0.4 percent). The proportion of pregnancies ending in live births ranges from 91 percent in Papum Pare to 99 percent in West Kameng. The district on the lower side of pregnancies ending in live birth includes Upper Siang (95 percent), East Kameng (96 percent), Tirap and Upper Subansiri (97 percent). Changlang, Dibang Valley, East Siang, Lohit, Lower Subansiri and West Siang are the other districts with 98 percent of pregnancies ending in live births. The incidence of stillbirth is highest in Upper Siang and Papum Pare (3 percent) followed by East Kameng (2 percent) and almost nil in West Kameng. Induced abortion is higher in the districts of Papum Pare (2 percent) and Dibang Valley (1 percent). In

rest of the districts it is less than one percent. Spontaneous abortion is nil in East Siang, Tawang and West Kameng.).

Table 3.10 OUTCOMES OF PREGNANCY						
Percent distribution of all pregnancies of currently married women aged 15-44 years by their outcomes three year preceding the survey currently married women, according to districts, Arunachal Pradesh , 2002-04						
Districts	Live birth	Stillbirth	Induced abortion	Spontaneous abortion	Missing	Total percent
State-Rural	97.8	0.8	0.4	0.9	0.0	100.0
State-Urban	94.4	1.9	0.9	2.5	0.2	100.0
State-Total	97.0	1.1	0.6	1.3	0.1	100.0
Changlang	97.9	0.2	0.2	1.7	0.0	100.0
Dibang Valley	97.6	0.1	1.0	1.2	0.0	100.0
East Kameng	96.2	2.1	0.0	1.8	0.0	100.0
East Siang	98.4	0.8	0.0	0.0	0.8	100.0
Lohit	98.2	0.5	0.7	0.6	0.0	100.0
Lower Subansiri	97.9	0.6	0.2	1.3	0.0	100.0
Papum Pare	91.1	2.7	2.0	4.2	0.0	100.0
Tawang	98.1	1.9	0.0	0.0	0.0	100.0
Tirap	97.4	1.4	0.3	0.9	0.0	100.0
Upper Siang	94.5	3.2	0.3	2.0	0.0	100.0
Upper Subansiri	97.2	0.9	0.7	1.1	0.0	100.0
West Kameng	99.4	0.0	0.6	0.0	0.0	100.0
West Siang	98.3	1.3	0.0	0.4	0.0	100.0

CHAPTER IV

MATERNAL HEALTH CARE

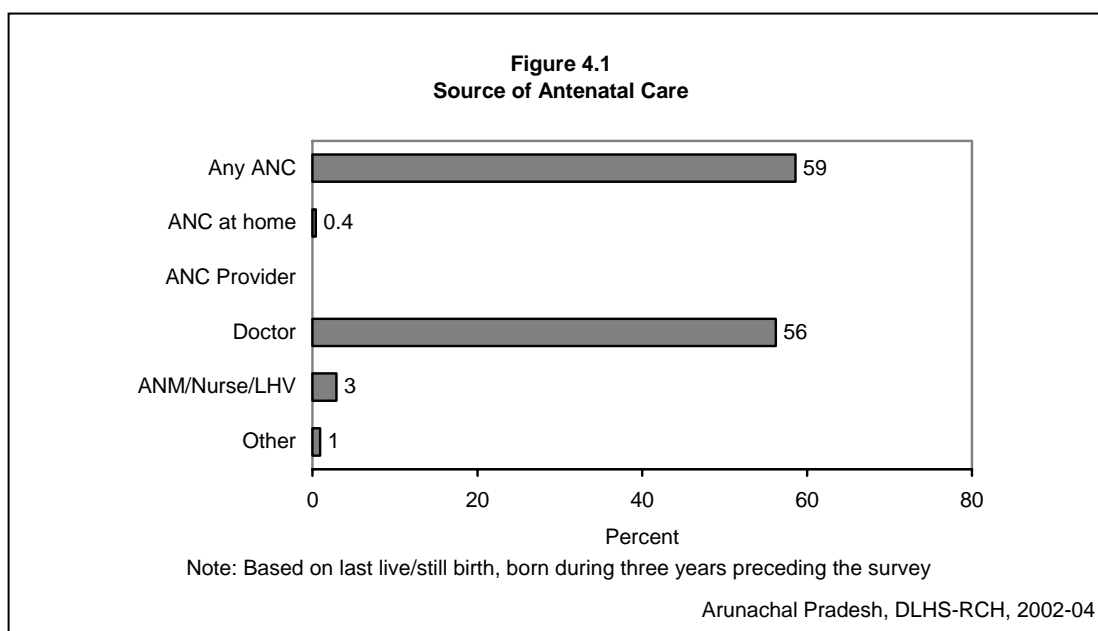
Provisions of maternal health care services to ensure safe motherhood is one of the major components of the Reproductive and Child Health (RCH) programme. The RCH programme services for antenatal care, includes at least three antenatal care visits, iron prophylaxis for pregnant and lactating women, at least one dose of tetanus toxoid vaccine, detection and treatment of anaemia in mothers, and management and referral of high-risk pregnancies, natal care, that is encouragement of safe delivery, post-natal care, and management of unwanted pregnancies. In rural areas, the government delivers reproductive health and other health services through its network of Sub-Centres (SCs), Primary Health Centres (PHCs) and other health facilities. In addition, pregnant women and children can get services from private maternity homes, hospitals, private practitioners, and in some case non-governmental organisations (NGOs) and trust hospitals. In urban areas, reproductive health services are available mainly through government or municipal hospitals, Urban Health Posts (UHPs), Urban Family Welfare Centres (UFWCs), hospitals and nursing homes operated by NGOs, and private nursing and maternity homes.

The National Population Policy (NPP), 2000 adopted by the Government of India (Ministry of Health and Family Welfare, 2000) reiterates the Government's commitments to the safe motherhood programme within the wider context of reproductive health. Among the national socio-demographic goals for 2010 specified by the policy, several goals pertain to safe motherhood, that 80 percent of all deliveries should take place in institutions by 2010, hundred percent deliveries should be attended by trained personnel, and the maternal mortality ratio should be reduced to a level below 100 per 100,000 live births. Empowering women for improved health and nutrition is one of the 12 strategic themes identified in the policy to be pursued either as stand-alone programmes or as intersectoral programmes.

In DLHS-RCH Phase-I, to all the eligible women who had their last pregnancy after January 1, 1999 a separate section on the status of maternal health and utilisation of maternal health care services was canvassed. In Phase-II, the same section was canvassed to all the eligible women who had their last pregnancy after January 1, 2001. The women whose last pregnancy terminated into live/still birth were asked about the details of antenatal, natal and post-natal care they received; pregnancy, delivery and post-delivery complications they suffered from and the treatment seeking behaviour in case of complications. Women whose last pregnancy terminated into abortion, either spontaneous or induced, were asked about the utilisation of safe abortion services and the post-abortion complications they experienced. This chapter presents information on antenatal, natal and postnatal care received by women whose last pregnancy had terminated during the three years preceding the survey as live birth or as stillbirth.

4.1 Antenatal Check-Ups

Women who had given a birth during the three years preceding the survey were asked whether they had gone for antenatal check-ups outside the home, and if they had, what type of service provider had given them the check-ups. They were also asked whether any health worker had visited them at home to provide antenatal check-ups. Table 4.1 and Figure 4.1 present the percentage of women who had given birth during the three years preceding the survey and information regarding the antenatal check-ups they had by source of antenatal check-ups according to some selected background characteristics. Results show that nine out of every ten women received antenatal check-ups during the three years preceding the survey, slightly more than RCH Round I (44 percent). Fifty Six percent of women received antenatal check-ups from doctors, and 3 percent from ANM/Nurse/LHV. Less than one percent women received antenatal check-ups at the doorstep from the ANMs or health worker.



Antenatal check-ups are more common among younger women age below 35 years than among older women, and it is more common among those women who had given their first birth. The percentage of women who received antenatal check-up was comparatively higher in urban areas (75 percent) than in rural areas (54 percent), and the percentage of women who received antenatal check-ups from doctors is much higher in urban areas (73 percent) than in rural areas (51 percent), and on the other hand an 3 percent of rural women as well as urban areas received antenatal check-ups from auxiliary nurse midwife, nurse or LHVs. Forty three percent of non-literate women received antenatal check-ups, nearly all women (86 percent) who had completed high school received antenatal check-ups for their last pregnancy that terminated into births (either live or still birth) during the three years preceding the survey.

Table 4.1 ANTENATAL CHECK-UP

Percentage of women* who received any antenatal check-up (ANC) during pregnancy by source of antenatal provider, according to selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Any ¹ antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC ²				Number of women
			Doctor	ANM/ Nurse/ LHV	Other health professional	Other ³	
Age group							
Less than 20 years	68.0	0.2	65.4	3.3	0.3	0.0	264
20-34 years	62.0	0.4	59.5	2.9	0.6	0.3	4,184
35 years & above	35.1	0.0	33.7	2.6	0.6	0.8	717
Children ever born							
1	73.9	0.2	71.3	3.3	0.2	0.2	1,291
2	64.3	0.3	61.8	3.4	1.5	0.7	1,287
3	59.9	0.8	56.9	3.2	0.6	0.2	970
4+	41.1	0.3	39.3	1.9	0.2	0.2	1,586
Residence							
Rural	53.6	0.4	51.0	2.9	0.7	0.3	3,943
Urban	74.7	0.4	72.8	2.8	0.4	0.6	1,222
Education							
Non-literate	43.0	0.4	40.6	2.6	0.6	0.2	2,623
0-9 @ years	70.1	0.2	68.1	2.8	0.6	0.3	1,826
10 years & above	86.2	0.4	83.1	4.0	0.7	0.7	715
Religion							
Hindu	69.9	0.5	66.6	4.4	1.1	0.6	1,708
Muslim	54.9	0.9	52.9	1.9	0.9	0.0	217
Christian	50.6	0.3	48.5	1.7	0.1	0.1	1,164
Buddhist	57.9	0.0	55.4	2.9	0.8	0.7	567
No religion	52.3	0.0	46.9	8.3	0.7	0.0	111
Other	52.7	0.4	51.4	1.7	0.3	0.0	1,399
Caste/tribe#							
Scheduled caste	72.2	0.2	68.7	4.8	1.2	1.0	355
Scheduled tribe	52.7	0.3	50.4	2.5	0.4	0.2	3,307
Other backward class	73.9	1.7	69.9	3.3	0.4	0.0	309
Other	68.2	0.4	66.4	3.3	1.4	0.7	961
Standard of living index							
Low	45.1	0.4	42.6	2.6	0.5	0.1	2,951
Medium	74.1	0.3	71.7	3.0	0.8	0.5	1,524
High	82.0	0.5	79.8	3.8	0.9	0.8	690
Availability of health facility⁴ in the village							
No	50.2	0.5	47.6	2.7	0.4	0.1	2,162
Yes	57.6	0.2	55.3	3.1	0.9	0.5	1,781
Total	58.6	0.4	56.2	2.9	0.6	0.3	5,165

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001. Total includes 31 women with zero parity who were not shown separately. ¹ Antenatal check-ups either at home or outside from home at health facility. ² Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. ³ Other also includes trained and untrained *dai*. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. ⁴ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The proportion of women who received antenatal check-ups from a doctor, increased steadily with the level of education and the standard of living index. Forty one percent non-literate women as compared to 83 percent having education of more than 10 years received ANC from doctors. Similarly, 43 percent women belonging to households with a low standard of living against 80 percent of that from a high standard of living fall in this category. The proportion of Hindu women who received antenatal check-ups from doctors (67 percent) was much higher than that of Muslim women (53 percent), and Buddhist women (55 percent). Seventy percent of women from the other backward classes category received antenatal check-ups from doctors, while it was 69 percent for scheduled caste women, and 50 percent for scheduled tribe women, and for women from other castes, it was 66 percent. Women from scheduled castes were more likely to receive antenatal check-ups from auxiliary nurse midwives, or LHVs. Five percent of scheduled caste

women received antenatal check-ups from ANMs, while it was 3 percent each among scheduled tribes, other backward classes and women from the 'other' castes category.

4.2 Antenatal Check-Ups at Health Facility

DLHS-RCH asked women who had a birth during the three years preceding the survey whether women had received antenatal check-ups, and if they had, from where they had availed such services.

Table 4.2 PLACE OF ANTENATAL CHECK-UP									
Percentage of women* who received any antenatal check-ups (ANC) during pregnancy by source and place of antenatal check-ups, according to selected background characteristics, Arunachal Pradesh, 2002-04									
Background characteristic	Antenatal check-up only at home	Place of antenatal check-ups ¹							Number of women
		Government ² health facility	Private ³ health facility	PHC	SC	ISM ⁴ facility			
						Govt.	Private	Other	
Age group									
Less than 20 years	0.2	54.4	10.6	19.8	2.1	3.8	0.5	0.4	264
20-34 years	0.4	53.1	7.8	14.9	6.1	0.2	1.8	1.0	4,184
35 years & above	0.0	30.1	3.7	11.9	6.1	2.3	1.3	0.2	717
Children ever born									
1	0.2	59.8	12.9	14.6	3.9	1.0	2.1	0.3	1,291
2	0.3	55.0	8.5	13.7	6.3	0.2	2.1	0.3	1,287
3	0.8	52.5	5.8	14.3	6.0	0.1	0.8	2.2	970
4+	0.3	36.8	3.0	17.6	8.3	0.9	1.3	1.3	1,586
Residence									
Rural	0.4	48.6	3.6	19.1	8.0	0.7	1.5	0.6	3,943
Urban	0.4	54.5	19.4	5.2	1.0	0.5	2.2	1.4	1,222
Education									
Non-literate	0.4	38.7	3.3	18.6	7.6	0.6	0.9	1.3	2,623
0-9 @ years	0.2	61.2	7.9	15.0	5.5	0.6	1.4	0.7	1,826
10 years & above	0.4	62.7	20.8	8.0	3.4	0.6	3.6	0.5	715
Religion									
Hindu	0.5	56.8	11.4	17.4	7.1	1.0	1.8	0.7	1,708
Muslim	0.9	47.2	6.8	6.9	7.3	0.0	3.7	1.0	217
Christian	0.3	42.7	6.5	16.3	2.5	0.4	2.3	1.3	1,164
Buddhist	0.0	53.9	3.7	21.5	12.1	0.3	0.8	0.1	567
No religion	0.0	51.9	0.0	11.3	0.5	0.0	0.8	5.8	111
Other	0.4	46.5	5.3	8.4	4.0	0.4	1.1	0.8	1,399
Caste/tribe#									
Scheduled caste	0.2	59.4	10.2	6.7	3.8	0.0	1.6	2.3	355
Scheduled tribe	0.3	46.4	5.3	16.7	4.6	0.4	1.5	1.0	3,307
Other backward class	1.7	57.3	13.3	7.0	9.6	4.7	1.0	0.0	309
Other	0.4	58.5	8.4	18.4	7.9	0.3	2.6	0.5	961
Standard of living index									
Low	0.4	40.7	3.3	20.3	7.5	0.8	0.9	1.2	2,951
Medium	0.3	63.2	9.6	10.3	5.6	0.4	1.5	0.6	1,524
High	0.5	60.5	20.0	11.4	2.5	0.6	3.8	0.5	690
Availability of health facility⁵ in the village									
No	0.5	45.7	2.9	23.5	7.4	1.0	1.2	1.1	2,162
Yes	0.2	52.2	4.5	14.6	8.6	0.3	1.8	0.2	1,781
Total	0.4	50.0	7.4	14.9	5.9	0.6	1.7	0.9	5,165

Note: Women who had their last live/still birth since 1-1-1999/1-1-2001. Total includes 31 women with zero parity were not shown separately. # Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included. ¹ Antenatal check-ups outside home and percentage add more than 100.0 due to multiple responses. ² Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary. ³ Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. ⁴ Indian system of medicine. ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Table 4.2 shows the percentage of women who had received antenatal check-ups during pregnancy by place. During pregnancy, women received antenatal check-ups from multiple sources such as, health workers providing ANC at home, Government health facility, private health facility, and at Indian System of medicine etc. Women who received antenatal check-ups both at home and outside the home are categorised as having received care outside the home. Around 50 percent of women received antenatal check-ups at Government health facility, including 15 percent through primary health centre and 6 percent through sub-centre, and 7 percent at a private health facility. Other than this, less than one percent of women reported that they had received antenatal check-ups at the Government Indian system of medicine, and 2 percent at private Indian system of medicine. As mentioned above women availed antenatal check-ups from multiple sources. Women who were visited by an ANM might have also visited government and/ or private health facilities including Indian system of medicine.

Younger women were more likely to receive antenatal-check-ups at government health facilities (54 percent) than older women 53 percent for age 20-34 and 30 percent for age 35 and above. Forty nine percent women from rural areas availed government health facilities for antenatal check-ups that were much lower than women in urban areas (55 percent), and a high proportion of women (19 percent) from urban areas availed private health facilities for antenatal check-ups than women from rural areas (4 percent). It may be mentioned that about 8 percent of the women from rural areas and women aged above 20 years (12 percent) received antenatal check-ups at sub-centre. This indicates that the services are reaching the target population, particularly through the public sector. A comparatively high proportion of women who received antenatal check-ups at Government health facilities are literate, Hindu, scheduled caste or tribe, living in households with a medium or high standard of living and women from those villages where health facilities are not available.

4.3 Antenatal Check-Ups by District

Table 4.3 indicates the antenatal coverage in Arunachal Pradesh that ranges from the highest of 77 percent in Lohit to the lowest of 29 percent in East Kameng. Almost all districts, except East Kameng more than 38 percent of women got some kind of antenatal check-ups for their last births during the three years preceding the survey. Antenatal check-ups received from doctor was low in East Kameng (26 percent), and Upper Subansiri (37 percent), and in all the remaining districts more than 40 percent of the women received antenatal check-ups from doctor and it is highest in West Siang (69 percent) followed by Papum Pare and Changlang (63 percent). In Dibang Valley and Tirap, 8 percent of the women received antenatal check-ups by ANM/Nurse/LHV. In the rest of the districts the percentage of women who received antenatal check-ups by ANM/Nurse/LHV ranged between one to two percent.

The extent of utilisation of government health facilities for antenatal check-ups was higher than that of private health facilities. The range of antenatal check-ups coverage through government facilities was highest in West Siang (69percent) to the lowest of 26 percent in East Kameng, and only in Papum Pare 29 percent of the women visited private health facility. In Arunachal Pradesh, 3 percent pregnant women in Papum Pare and Lower Subansiri district

availed the Indian system of medicine (either government or private) for an antenatal check-up.

Table 4.3 ANTENATAL CHECK-UPS BY DISTRICT
Percentage of women* who received any antenatal care (ANC), by source and place of antenatal check-ups by district, Arunachal Pradesh, 2002-04

District	Any ¹ antenatal check-up	Antenatal check-up only at home by ANM	Health personnel providing ANC		Place of antenatal check-ups		
			Doctor	ANM/ Nurse	Government ² health facility	Private ³ health facility	ISM ⁴ facility
Changlang	63.1	0.0	63.1	0.0	59.4	3.0	1.0
Dibang Valley	59.3	1.3	56.6	8.4	55.0	3.1	1.0
East Kameng	29.4	0.8	27.5	1.2	26.4	2.9	0.5
East Siang	62.9	0.4	61.2	1.6	58.3	3.3	0.6
Lohit	77.1	0.5	74.3	4.8	74.2	3.3	0.1
Lower Subansiri	48.1	0.2	46.8	1.3	37.6	7.8	3.0
Papum Pare	63.9	0.0	62.9	1.4	32.5	28.5	2.7
Tawang	45.5	0.0	43.9	1.1	45.0	0.0	0.5
Tirap	64.2	0.8	56.2	7.9	61.2	3.2	1.4
Upper Siang	39.9	0.0	38.3	1.6	35.2	4.2	0.2
Upper Subansiri	38.7	0.4	36.8	2.5	36.0	2.7	0.6
West Kameng	56.9	0.3	54.3	2.2	49.3	5.4	1.6
West Siang	71.7	0.6	69.2	2.0	68.7	1.4	1.2
Arunachal Pradesh	58.6	0.4	56.2	2.9	50.0	7.4	1.3

Note:* Women who had last live/still birth during three years preceding the survey. ¹ Antenatal check-ups either at home or health facility. ² Includes sub-centre, primary health centre, community health centre or rural hospital, urban health centre/ urban health post/ urban family welfare centre, government hospital or dispensary. ³ Includes Private hospital/clinic or non-governmental hospital/ trust hospital or clinic. ⁴ Either government or private Indian system of medicine.

4.4 Reasons for Not Seeking Antenatal Check-Ups

Table 4.4 shows the percentage of women who had given live/still births during the three years preceding the survey and who did not receive any antenatal check-ups by the main reason for not seeking check-ups according to residence and availability of health facility in the village. Fifty six percent of women stated that it was not necessary to have an antenatal check-up. It was surprising to see that a higher proportion of urban women (64 percent) than rural women (55 percent) felt that it was not necessary to have an antenatal check-up. Fifty two percent of the women stated that an antenatal check-up was not necessary in villages with a health facility whereas 57 percent of women from those villages where a health facility is not available fall in this category. About 6 percent of women felt that it was not customary to go for an antenatal check-up. Other factors contributing to non-use of antenatal care were that it costs too much (7 percent), it was situated too far, or there was no transportation (18 percent), no time to go and family did not allow to avail antenatal care (3 percent each), and other 12 percent were reported lack of knowledge of these services. Seven percent of the women reported 'poor quality of services' as the main reason. Eighteen percent of women from villages with a health facility reported that health facility was too far to go and 8 percent

of women reported that because of the poor quality of service they did not have an antenatal check-up. The corresponding figures were 20 percent and 7 percent of women respectively from villages without a health facility.

Table 4.4 REASONS FOR NOT SEEKING ANTENATAL CHECK-UPS					
Percentage of women* who did not receive any antenatal check-up by the main reason for not receiving an antenatal check-up, according to residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Reason	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Not Necessary	56.4	55.2	63.7	57.2	52.3
Not customary	5.5	5.6	4.8	3.0	9.3
Cost too much	7.2	7.3	6.1	8.2	6.0
Health facility too far/ No transport	17.7	19.4	7.7	20.4	18.0
Poor quality service	6.9	7.3	4.6	6.6	8.4
No time to go	3.0	2.9	4.0	2.6	3.3
Family did not allow	3.1	2.8	4.7	2.4	3.5
Lack of knowledge	12.0	11.9	12.3	9.9	14.9
Other	2.5	2.1	4.9	2.2	2.0
Number of women	2,140	1,831	309	1,077	754

Note: * Women who had their last live/still birth since 1-1-1999/1-1-2001. ¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. Percentage may add more than 100.0 due to multiple response

4.5 Components of Antenatal Check-ups

Women who received any kind of antenatal check-ups were asked whether they received each of the several components of antenatal check-ups at least once during their pregnancy. Table 4.5 presents the percentage of women who received specific components of check-ups by residence. Except for X-rays (which are not recommended as a standard component of antenatal care), all of the measurements and tests are part of essential obstetric care or are required for monitoring high-risk pregnancies.

Eighty percent of women were weighed, 72 percent had their blood pressure checked, and 67 percent had an abdominal examination as the part of the antenatal check-ups. Other common components of antenatal check-ups were blood test (70 percent), urine test (68 percent), the measurement of height (22 percent), internal examination (28 percent), and breast examination (18 percent). About 13 percent of women had a sonogram or ultrasound, 4 percent had an X-ray and only two percent of women reported that they had amniocentesis test. All of these measurements or producers were performed more often during antenatal check-ups in urban areas than in rural areas.

The type of advice received by women who had antenatal check-ups for last live/still births during three years preceding the survey is also presented in Table 4.5. Advice on diet was given to 56 percent of urban women as compared to 46 percent of rural women and 49 percent in general. Nineteen percent of the women received advice on danger signs of pregnancy. Women were less likely to receive advice on delivery care (22 percent), on

breastfeeding (14 percent), and on newborn care (15 percent). Advice on family planning was given to 9 percent of rural women and 12 percent of urban women.

Table 4.5 COMPONENTS OF ANTENATAL CHECK-UPS			
Percentage of women* who received an antenatal check-up by specific components of antenatal check-up, according to residence, Arunachal Pradesh, 2002-04			
Components of antenatal check-ups	Total	Rural	Urban
Antenatal measurements/tests			
Weight measured	80.3	77.6	86.5
Height measured	21.5	21.1	22.3
Blood pressure checked	72.2	69.6	78.3
Blood tested	69.9	64.6	82.2
Urine tested	67.6	61.8	80.9
Abdomen examined	66.6	64.5	71.5
Internal examined	27.7	22.0	40.8
Breast examined	17.7	15.1	23.6
X-ray	4.2	3.1	6.6
Sonography /ultrasound	12.6	7.8	23.7
Amniocentesis	1.8	1.4	2.7
Antenatal advice			
Diet			
Danger signs of pregnancy	48.8	45.6	56.1
Delivery care	19.1	15.4	27.6
Breast feeding	22.3	20.5	26.3
New born care	14.1	12.1	18.7
Family planning	14.8	12.9	19.4
	10.1	9.3	12.0
Number of women who received any antenatal check-up	3,025	2,112	913
Note:* Women who had their last live/still birth since 1-1-1999/1-1-2001			

4.6 Antenatal Care Services

In India, the Reproductive and Child Health Programme includes all pregnant women should be registered in the first 12-16 weeks (Ministry of Health and Family Welfare, 1997). Accordingly the first antenatal check-ups should take place at latest during the first trimester of the pregnancy. It also includes the provision of at least three antenatal care visits, of at least one tetanus toxoid injection, and supplementary iron in the form of IFA tablets daily for 100 days. To assess whether the women had received all the care during pregnancy, information was collected regarding number of antenatal visits, timing of the first visit, received tetanus toxoid injection and supplement iron folic acid tablets. The results are presented in Table 4.6. In Arunachal Pradesh, 53 percent of the women received at least three antenatal check-ups and 34 percent had four or more check-ups. At least four antenatal check-ups were received by 45 percent of women in urban areas compared with 20 percent of women in rural areas. Number of visits for antenatal care varies by education, children ever born, religion, caste and standard of living index. 25 percent of non-literate, 51 percent literate women (educated below high school) and 72 percent of women who had 10 or more years of schooling visited for minimum three antenatal care. Parity of women is negatively associated with antenatal check-ups. About 18 percent of women with parity one received three antenatal check-ups compared to only 12 percent of the women with parity 4 and above.

Table 4.6 ANTENATAL CARE

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Arunachal Pradesh, 2002-04

Antenatal care indicators	Total	Residence		Education			Children ever born			
		Rural	Urban	Non-literate	0-9@ years	10 years & above	1	2	3	4+
Number of ANC visits										
No visit	41.4	46.4	25.3	57.0	29.9	13.8	26.1	35.7	40.1	58.9
1	7.5	8.1	5.5	7.9	8.1	4.6	7.4	6.5	6.7	8.8
2	10.1	10.4	9.2	9.9	10.8	9.4	11.9	11.0	9.8	8.4
3	14.9	14.8	15.5	12.0	18.7	16.1	17.5	15.9	16.3	11.4
4+	26.0	20.2	44.5	13.2	32.5	56.0	37.1	30.8	27.2	12.5
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	41.4	46.4	25.3	57.0	29.9	13.8	26.1	35.7	40.1	58.9
First trimester	22.1	18.5	33.5	13.6	25.0	45.5	30.9	24.5	23.7	12.0
Second trimester	29.2	27.5	34.9	22.3	36.7	35.7	35.9	33.9	29.0	20.5
Third trimester	7.3	7.6	6.3	7.1	8.4	4.9	7.1	5.9	7.3	8.6
Women who received TT										
No TT	44.5	50.8	24.1	60.8	33.2	13.2	29.4	37.4	42.6	63.1
1	10.6	10.2	11.9	8.8	13.4	10.4	11.3	10.6	11.4	9.6
2+	43.6	37.9	62.1	29.5	51.7	75.0	57.8	50.3	45.1	26.4
Do not remember/missing	1.3	1.1	1.9	0.9	1.7	1.5	1.5	1.7	0.9	1.0
Women who received IFA tablets/syrup										
No IFA/syrup	45.0	50.4	27.3	61.9	33.2	12.8	29.5	38.5	43.5	63.3
Received but not consumed	3.2	3.3	3.0	2.5	4.3	3.0	4.4	3.1	3.6	2.2
Consumed one IFA per day	38.6	35.6	48.4	26.3	48.5	58.7	47.4	45.1	39.4	26.1
Received 100+ IFA tablets/syrup	13.1	10.6	21.2	9.2	14.0	25.2	18.8	13.3	13.1	8.3
Percentage of women who received full ¹ antenatal check-ups	12.9	10.2	21.4	8.1	13.6	28.5	17.4	14.8	12.5	7.8
Number of women	9.8	7.4	17.5	5.6	10.3	23.8	14.7	10.5	8.6	5.8
Number of women	5,165	3,943	1,222	2,623	1,826	715	1,291	1,287	970	1,586

Note: Total includes 31 women with zero parity were not shown separately.

@ Literate women with no years of schooling are also included. ¹ At least three visits for antenatal check-ups, at least one TT injection received and were given adequate amount of IFA tablets/syrup.

Continued.....

Table 4.6 ANTENATAL CARE (contd)

Percent distribution of women who had live/still births during three years preceding the survey by number of antenatal check-ups, the stage of pregnancy at the time of first check-up, the number of tetanus toxoid injections received and iron and were given iron folic acid (IFA) tablets/syrup during pregnancy, and percentage who received full antenatal check-ups by some selected background characteristics, Arunachal Pradesh, 2002-04

Antenatal care indicators	Religion						Caste#			
	Hindu	Muslim	Christian	Buddhist	No Religion	Other	Scheduled caste	Scheduled tribe	Other backward class	Other
Number of ANC visits										
No visit	30.1	45.1	49.4	42.1	47.7	47.3	27.8	47.3	26.1	31.8
1	6.3	4.7	8.8	7.5	1.6	9.0	5.7	8.3	8.5	4.9
2	10.8	9.8	9.9	13.9	4.3	8.6	12.6	9.8	10.5	10.5
3	18.8	10.2	12.4	17.6	14.0	12.0	22.1	13.2	15.0	19.2
4+	34.0	30.2	19.5	18.9	32.3	23.2	31.9	21.5	39.9	33.6
Stage of pregnancy at the time of the first antenatal check-up										
No antenatal check-up	30.1	45.1	49.4	42.1	47.7	47.3	27.8	47.3	26.1	31.8
First trimester	30.2	22.6	18.1	19.9	25.5	16.0	29.0	18.3	31.4	28.4
Second trimester	33.4	27.7	23.7	33.7	23.1	27.7	37.0	26.3	36.2	34.9
Third trimester	6.3	4.6	8.8	4.3	3.7	9.0	6.3	8.2	6.3	4.9
Women who received TT										
No TT	35.0	44.9	53.7	46.4	46.3	47.4	30.4	49.7	30.9	36.0
1	8.9	8.3	12.9	6.4	7.9	13.1	11.1	11.9	11.2	6.6
2+	54.8	44.9	32.5	45.8	45.8	38.0	57.7	37.1	55.8	56.2
Do not remember/missing	1.2	1.9	0.9	1.4	0.0	1.5	0.8	1.3	2.1	1.2
Women who received IFA tablets/syrup										
No IFA/syrup	34.5	50.0	53.6	43.9	51.4	49.7	34.1	50.4	32.3	34.6
Received but not consumed	2.4	3.6	3.6	4.9	0.5	3.4	2.6	3.7	3.3	2.1
Consumed one IFA per day	44.1	31.1	32.5	43.2	41.8	36.0	45.1	35.1	42.1	49.5
Received 100+ IFA tablets/syrup	19.5	10.8	7.9	16.8	9.4	7.9	15.0	10.1	14.4	20.9
Percentage of women who received full ¹ antenatal check-ups	15.6	8.8	6.4	10.0	8.3	5.6	13.7	7.2	10.9	16.2
Number of women	1,708	217	1,164	567	111	1,399	355	3,307	309	961

Note: # Total figure may not add to N due to don't know and missing cases.

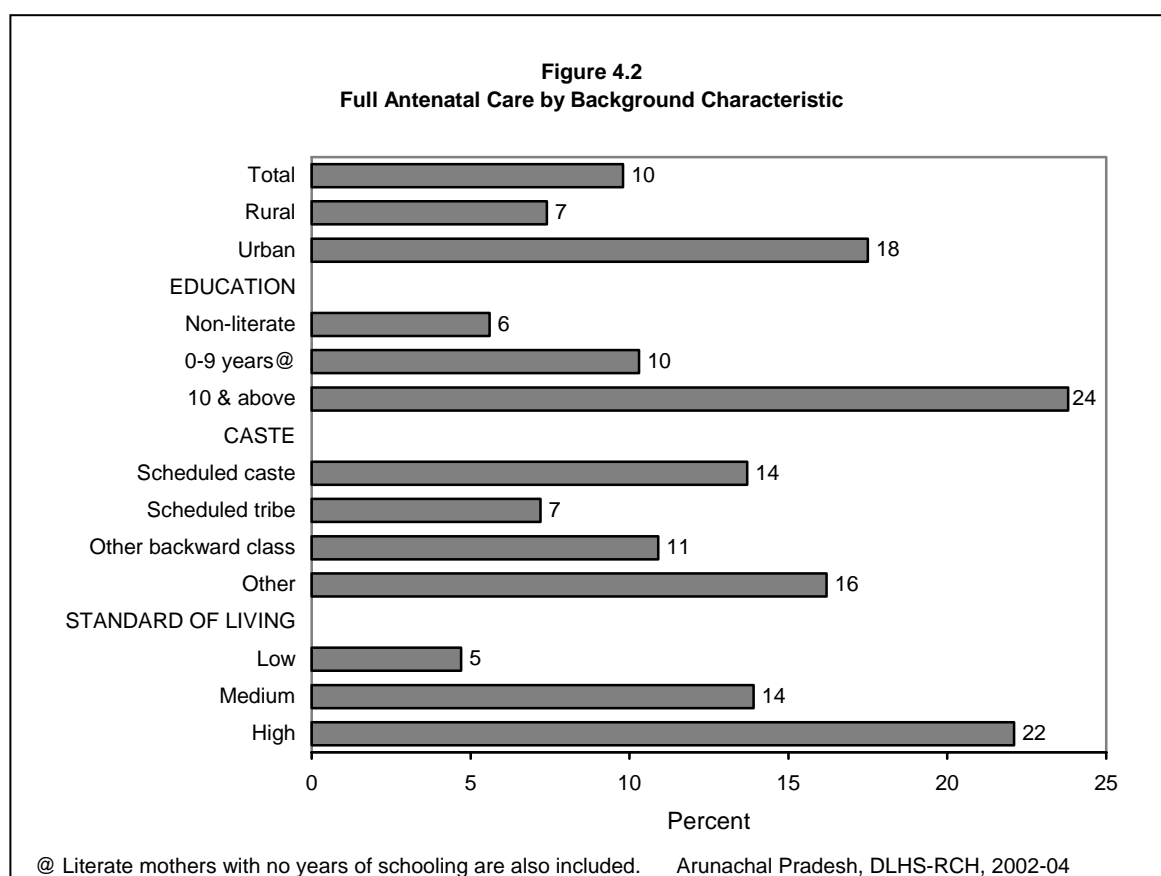
¹ At least three visits for antenatal check-ups, at least one TT injection received and was given adequate amount of IFA tablets/syrup.

Hindu women (53 percent) were more likely to have at least three visits for antenatal check-ups than Muslim women (40 percent) and Buddhist women (37 percent). Coverage is substantially lower for women from scheduled-tribes (35 percent) than to women of other than scheduled tribe (54-53 percent). Having three or more antenatal visits also increased with the standard of living-27 percent for women with a low standard of living, 56 percent for women with a medium standard of living and 67 percent for women with a high standard of living. Availability of health facility in the village does not make any difference to the minimum three visits for antenatal check-ups.

Data on timing of first antenatal check-ups shows that about 22 percent of the women received their first antenatal check-up in the first trimester of pregnancy, and another 29 percent received their first check-up in the second trimester, and 7 percent of women received their first check-up in the third trimester. A relatively higher proportion of women in the urban areas (34 percent) as compared to those in rural areas (19 percent) had a check-up in the first trimester of pregnancy. The first antenatal check-up in the first trimester has steadily increased with education. Fourteen percent of non-literate women had undergone their first antenatal check-up in the first trimester, and 46 percent of women who had completed at least 10 years of schooling received their first antenatal check-up in the first trimester. More women (31 percent) with parity-1 were visited in first trimester and only 12 percent women with parity- four and above had undergone antenatal check-up in first trimester. Muslim women were less likely to go for first antenatal check-up in first trimester of their pregnancy as compared to Hindu and women of other religion, and 18 percent of scheduled tribe women were visited in first trimester for first antenatal check-ups compared with 29 percent to scheduled caste women, 31 percent of other backward class of women and 28 percent women from 'other' caste category. Fourteen percent women with low standard of living, 28 percent with medium standard of living, and 44 percent of women with high standard of living respectively had undergone their first antenatal check-up in the first trimester of their pregnancy period

Nutritional deficiencies in women are often exacerbated during pregnancy because of the additional nutrient requirements of foetal growth; therefore a pregnant woman needs six times more iron than a non-pregnant woman. The information on receiving iron folic acid tablets/syrup during pregnancy is also collected. Table 4.6 shows that women in Arunachal Pradesh received IFA supplements for more than two-thirds (65 percent) of the last birth during three years preceding the survey. The coverage of IFA tablets is relatively lower in rural areas (56 percent) than in urban areas (91 percent). IFA coverage is much below for non-literate women, women with medium standard of living, scheduled caste-tribe women, and women of higher parity. IFA coverage is higher among 'other' religion women (70 percent) than Hindu (64 percent), Muslim (42 percent) women and Buddhist women (60 percent). Again, during pregnancy in the last three years preceding the survey, only 13 percent of women received 100 or more IFA, 10 percent in rural areas and 21 percent in urban areas. Intake of 100 or more IFA is positively associated with education and standard of living index and negatively associated with parity. Women from other religions and other backward classes received an intake of 35 percent of 100 or more IFA than their counterparts. Such a large difference in receiving IFA or intake of 100 or more IFA tablets/syrup is not found while analysing the situation by availability of health facility in the village.

For the last live birth or stillbirth during the three years preceding the survey, women were asked whether they were given tetanus toxoid injection to prevent them and their baby from getting tetanus. Table 4.6 shows that forty-four percent of the women received two or more tetanus toxoid injections. Coverage of two or more TT injection is slightly higher in urban areas (62 percent) than that in rural areas (38 percent). The coverage of at least one tetanus toxoid injection for Hindu women (64 percent) is more than that for Muslim women (53 percent) and women from other religions (51 percent). Coverage of at least one tetanus toxoid injection is almost similar for schedule tribe (49 percent), schedule caste (69 percent), other backward classes (67 percent), and for 'other' caste category women (63 percent). Non-literate women received at least one tetanus toxoid injection for 35 percent of their last birth, whereas literate women with 9 years of schooling received at least one tetanus toxoid injection for 65 percent, and women who had completed 10 years or more of schooling received at least one tetanus toxoid injection for 85 percent of their last birth. Eighty-two percent of women with a high standard of living received at least one tetanus toxoid injection, and 40-70 percent women with low or medium standard of living received at least one tetanus toxoid injection for their last live/still birth. The coverage varies inversely by parity. At least one tetanus toxoid injection was received by 69 percent women of Parity-1 compared with 36 percent of Parity 4 and above.



The percentage of women who received full antenatal care, (that is, at least three antenatal check-ups, and at least one tetanus toxoid injection and supplementary iron in the form of IFA tablets daily for 100 days as recommended by the RCH programme,) has been presented in Figure 4.2. Only 10 percent of women in Arunachal Pradesh received full antenatal care. Coverage of full antenatal care is low for non-literate women, women with higher parity, Muslim women, women from scheduled caste, women with a low standard of living, and women from those villages where health facilities are available. Full antenatal coverage was also lower in rural areas (7 percent) than in urban areas (18 percent).

4.7 Antenatal Care Indicator by District

Table 4.7 shows the percentage of women who had given live/still birth during the three years preceding the survey who received different types of antenatal care; (the percentage who received antenatal check-up in the first trimester of pregnancy, the percentage who received at least three antenatal check-ups, the percentage who received at least one tetanus toxoid injection, the percentage given 100 or more iron folic acid tablets/syrup, and the percentage who received full antenatal care services) by district.

Table 4.7 ANTENATAL CARE INDICATORS BY DISTRICT					
Percentage of women* who received different type of antenatal care by district, Arunachal Pradesh, 2002-04					
District	Percentage that received an antenatal check-up in the first trimester of pregnancy	Percentage that received three or more antenatal check-ups	Percentage that received at least one tetanus toxoid injection	Percentage that received adequate amount of IFA ¹	Percentage that received full ² antenatal check-ups
Changlang	32.1	44.3	54.8	6.5	4.4
Dibang Valley	15.1	40.6	54.7	11.9	8.0
East Kameng	15.2	17.2	35.4	6.0	4.4
East Siang	13.5	47.8	57.5	11.1	9.8
Lohit	18.5	53.7	65.6	28.9	19.7
Lower Subansiri	18.7	30.4	44.1	12.0	10.4
Papum Pare	31.1	45.8	61.7	10.8	10.4
Tawang	9.1	21.5	44.7	26.2	13.3
Tirap	35.9	51.3	61.6	15.0	13.6
Upper Siang	10.2	19.6	31.5	7.5	5.7
Upper Subansiri	18.3	18.6	40.3	3.4	2.7
West Kameng	35.1	39.4	57.8	18.3	12.5
West Siang	12.5	57.6	63.4	9.8	6.6
Arunachal Pradesh	22.1	40.9	54.2	12.9	9.8

Note:* Women who had their last live/still birth since 1-1-1999/1-1-2001.¹ 100 or more iron folic acid tablets including syrup .² At least three visits for antenatal check-ups, at least one TT injection received and adequate amount of IFA

The utilisation of antenatal care services differs from district to district. In Changlang, Papum Pare, West Kamang and Tirap about 32 percent, 31 percent, 35 percent and 36 percent women received their first antenatal check-up in the first trimester of pregnancy. The percentage of women who received at least three visits for antenatal check-ups ranges from 17 percent in East Kameng to 57 percent in West Siang.. In three districts namely East Kameng, Upper Subansiri and Upper Siang, the coverage of at least three visits of ANC were less than 20 percent (see Map-3). There has been fairly good coverage of tetanus toxoid injection in the all districts, ranging from 32 to 66 percent, but on the other hand, performance regarding receipt of 100 or more IFA is poor. In all the districts, the value ranges from 3 to 29 percent, and it is lowest in Upper Subansiri. The percentage of women who received full antenatal care ranges from 3 percent in Upper Subansiri to 20 percent in Lohit. In 6 of 13 districts, Changlang, Dibang Valley, East Kameng, Upper Siang, Upper Subansiri and West Siang coverage rate of full antenatal care is below than that of the state average.

4.8 Pregnancy Complications and Treatment

Complications during pregnancy may affect both women’s health and the outcome of the pregnancy adversely. Early detection of complications during pregnancy and their management are important components of the safe motherhood programme. In the survey, all the eligible women who had given last live or still birth during the three years preceding the survey were asked if at any time during the pregnancy, they had experienced any of the following pregnancy-related problems such as swelling of hands and feet, paleness, visual disturbance, vaginal bleeding, convulsions, weak or no movement of foetus, abnormal position of foetus, and other problems. All the information is based on women’s self-reporting which is presented in Table 4.8 and Figure 4.3.

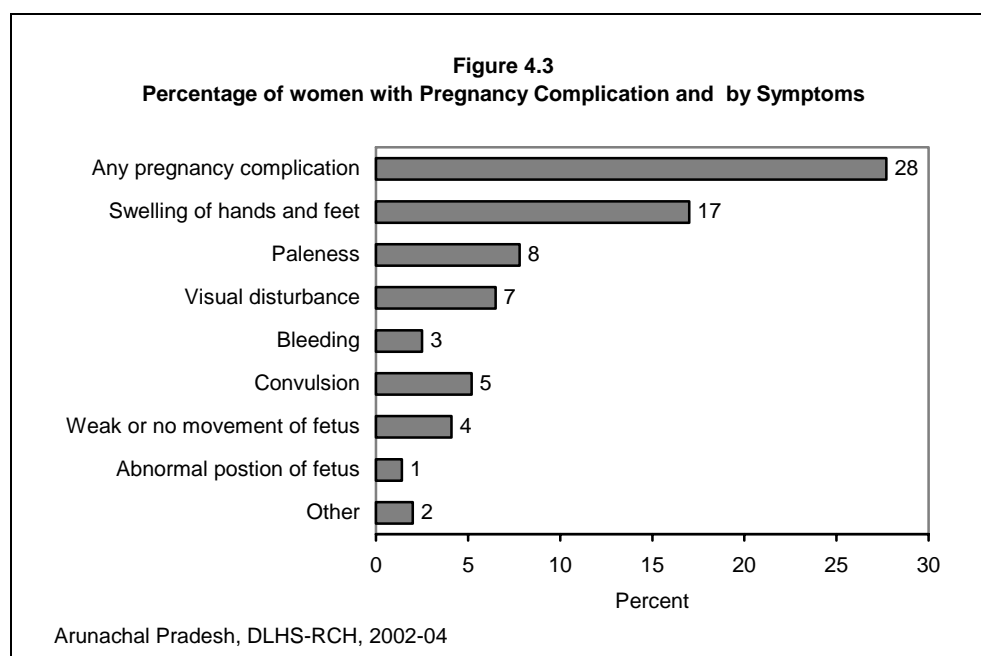


Table 4.8 PREGNANCY COMPLICATIONS

Percentage of women who had live/still births during three years preceding the survey by pregnancy complication and type of complication during pregnancy by some selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Percentage of women with any pregnancy complication	Type of pregnancy complication;								Number of women
		Swelling of hands and feet	Paleness	Visual disturbances	Excessive Bleeding	Convulsion	Weak or no movement of foetus	Abnormal position of foetus	Other	
Age group (years)										
15-19	22.1	13.9	6.7	4.8	3.2	7.1	2.4	0.9	1.3	264
20-24	27.1	17.2	7.7	7.0	2.3	4.1	3.2	1.9	1.4	1,586
25-29	29.2	17.7	8.3	6.2	2.3	6.2	4.7	1.1	2.2	1,660
30-34	30.5	19.6	7.3	6.7	1.9	6.5	5.7	1.0	2.4	938
35-39	24.7	12.4	7.4	6.0	3.4	3.0	2.9	2.1	1.0	519
40-44	22.5	13.4	8.6	7.0	3.7	3.8	5.1	1.2	1.1	198
Children ever born										
1	28.0	19.3	7.4	6.1	2.3	4.1	2.7	1.4	1.1	1,291
2	28.1	15.6	8.3	6.8	3.7	4.8	5.0	1.6	1.2	1,287
3	29.5	17.4	7.8	5.3	1.5	5.8	5.1	1.3	2.9	970
4+	25.9	15.8	7.7	7.2	2.1	6.1	4.0	1.3	2.0	1,586
Residence										
Rural	25.7	15.3	7.8	5.6	2.6	5.2	3.9	1.3	1.8	3,943
Urban	34.1	22.4	7.6	9.2	2.2	5.5	4.9	1.7	1.5	1,222
Standard of living index										
Low	24.9	15.2	7.6	6.5	2.8	4.9	3.6	1.0	1.8	2,951
Medium	29.7	18.1	7.8	7.1	2.1	6.3	4.9	1.6	1.6	1,524
High	35.2	22.4	8.2	4.8	1.8	4.7	5.0	2.6	1.8	690
Received any ANC										
Yes	32.9	20.6	9.1	7.8	2.4	6.3	5.1	1.9	1.9	3,025
No	20.3	12.0	5.9	4.6	2.6	3.7	2.8	0.7	1.5	2,140
Total	27.7	17.0	7.8	6.5	2.5	5.2	4.1	1.4	1.8	5,165

Note: Total include 31 women with zero parity were not shown separately
 @ Literate women with no years of schooling are also included

About 27 percent of the women experienced at least one pregnancy related problem. The proportion was higher among urban women (34 percent) than among rural women (26 percent). Women aged 30 years and above, and women with higher parity face at least one pregnancy related problem more than younger women and women with low parity do. This proportion is relatively high among women who had received some kind of antenatal care during the pregnancy. Thirty three percent of women who had an antenatal check-up reported that they had experienced at least one problem during their pregnancy while 20 percent of women did not receive any antenatal check-up during their pregnancy fall in this category. The major problems reported were 'swelling of hand and feet' (21 percent), 'paleness' (9 percent), and 'visual disturbance' (8 percent). Only 2 percent reported 'abnormal position of foetus', and 'vaginal bleeding', 'convulsions', and 'weak or no movement of foetus' 2 percent, 6 percent and 5 percent. Other problems related to pregnancy were reported by 2 percent of women. Swelling of hands and feet is more common among older women, women with parity-1 and parity-4 and above, and women with high a standard of living. The percentage of women who were more anaemic belonging to the age group 25-29 years and 40-44 years, women from rural areas, women with a low standard of living and women who did not receive any kind of antenatal care during the pregnancy. Anaemia, visual disturbance, and convulsion increased steadily with increase of parity, whereas women with parity-2 and 3 reported vaginal bleeding, weak or no movement of foetus and abnormal position of foetus more. The women in the age group 30-34 years and 35-39 years were more likely to report vaginal bleeding and abnormal position of foetus as pregnancy complications.

Women who reported at least one pregnancy related complication were asked whether they had consulted someone or had sought treatment for their problem and also the source of treatment. Table 4.9 shows the percentage of women who had pregnancy complications who obtained advice or had sought treatment by source of treatment according to residence and availability of health facility in the village. Forty two percent of women reported that they had obtained advice or consulted someone for their problem. The proportion was higher among urban women (50 percent) than among rural women (38 percent), and 41 percent of women sought treatment from those villages where health facility was available as compared to 35 percent of women with non-availability of health facility within the village.

Among women who sought treatment for pregnancy complications, 76 percent visited a government health facility including a primary health centre (13 percent) and sub-centre (5 percent). 17 percent of them visited a private health facility, and 6 percent had gone to a facility with the Indian system of medicine, while another 2 percent obtained advice from another health facility. The proportion of women who visited a private health facility is higher in urban areas (35 percent) than in rural areas (8 percent). Among women who sought treatment, 93 percent went to a doctor and 4 percent to an auxiliary nurse midwife or nurse or LHV, and another less than one percent to someone else. Ninety-four percent of these women in urban areas, and 93 percent in rural areas were examined by a doctor, whereas ANM/Nurse/LHV examined 6 percent women in rural areas and 2 percent in urban areas.

Table 4.9 TREATMENT FOR PREGNANCY COMPLICATIONS					
Percentage of women* who had any pregnancy complication, sought treatment and source of treatment according to residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Treatment and source	Total	Residence		Availability of health facility ⁵ in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any pregnancy complication	41.5	38.2	49.5	35.1	41.4
Number of women	1,431	1,014	417	520	494
Percentage sought treatment at health facility					
Government health facility ¹	77.5	87.1	59.5	89.6	84.8
Primary health centre	13.3	17.1	6.1	17.8	16.4
Sub centre	4.7	6.5	1.2	4.1	8.7
Private health facility ²	17.4	8.1	34.7	8.0	8.2
ISM ³ facility	5.6	5.7	5.6	4.3	6.9
Other	2.0	2.7	0.6	2.4	3.0
Percent distribution of women who obtained treatment from					
Doctor	93.1	92.9	93.5	92.2	93.5
ANM/nurse/midwife/LHV	4.2	5.7	1.5	6.8	4.7
Other ⁴	0.5	0.2	1.1	0.0	0.4
Missing	2.1	1.2	3.9	1.0	1.4
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	594	387	207	182	205
Note: ¹ Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre ² Include private hospital/clinic and non-governmental organization/ trust hospital ³ Either government or private Indian system of medicine ⁴ Other include Dai trained or untrained, other health professional and ISM practitioner ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village					

4.9 Delivery Care

4.9.1 Place of Delivery

One of the important thrusts of the Reproductive and Child Health Programme is to encourage deliveries under proper hygienic conditions under the supervision of trained health professionals. The provision of delivery services in the government health institutions is one of the components of the RCH programme. For each live/still birth during three years preceding the survey, DLHS-RCH asked the women where (place) their children were born, who assisted during the deliveries in case of home deliveries, characteristics of delivery, and any problems that occurred during the delivery. Table 4.10 and Figure 4.4 present the place of delivery. About 27 percent of the birth took place in government health institutions, 8 percent in private health institutions, and a large proportion of births (65 percent) took place at home. About twenty-three percent of the deliveries in rural areas and 41 percent of the deliveries in rural areas took place in public health

institutions. Deliveries in health facilities in Arunachal Pradesh rose from 26.3 percent in Round-I to 28.1 percent in Round-II.

Table 4.10 PLACE OF DELIVERY							
Percent distribution of women who had given live/still births during three years preceding the survey, by place of delivery, according to selected background characteristics, Arunachal Pradesh, 2002-04							
Background characteristics	Health institutions					Total percent	Number of women
	Public	Private	Home	Other	Missing		
Age group (in years)							
Below 20	35.6	7.0	57.5	0.0	0.0	100.0	264
20-34	28.3	8.2	63.2	0.1	0.2	100.0	4,184
35 and above	17.1	5.1	77.3	0.2	0.2	100.0	717
Children ever born							
1	40.9	14.1	44.9	0.1	0.1	100.0	1,291
2	29.6	7.2	62.8	0.1	0.3	100.0	1,287
3	24.9	7.1	67.6	0.1	0.3	100.0	970
4+	14.6	3.4	81.9	0.1	0.1	100.0	1,586
Residence							
Rural	22.9	4.2	72.7	0.1	0.2	100.0	3,943
Urban	40.8	19.2	39.9	0.0	0.2	100.0	1,222
Education							
Non-literate	16.7	3.4	79.7	0.1	0.1	100.0	2,623
0-9@ years	34.0	5.7	60.0	0.1	0.2	100.0	1,826
10 years & above	47.6	28.6	23.2	0.1	0.4	100.0	715
Religion							
Hindu	30.2	13.5	56.0	0.0	0.3	100.0	1,708
Muslim	24.7	9.9	65.0	0.0	0.4	100.0	217
Christian	20.0	6.0	73.8	0.1	0.0	100.0	1,164
Buddhist	24.5	2.8	72.7	0.0	0.0	100.0	567
No religion	28.8	0.2	70.6	0.4	0.0	100.0	111
Other	30.5	4.3	64.7	0.2	0.2	100.0	1,399
Caste#							
Scheduled caste	37.0	12.3	50.3	0.2	0.2	100.0	355
Scheduled tribe	24.9	5.0	69.8	0.1	0.1	100.0	3,307
Other backward class	36.1	12.7	51.2	0.0	0.0	100.0	309
Other	29.9	11.9	57.9	0.0	0.3	100.0	961
Standard of living index							
Low	16.9	3.0	79.9	0.2	0.1	100.0	2,951
Medium	38.2	8.5	53.0	0.1	0.2	100.0	1,524
High	46.2	26.4	27.3	0.0	0.2	100.0	690
Number of antenatal check-ups							
No check-up	10.9	1.3	87.3	0.2	0.2	100.0	2,140
1	25.5	5.1	69.4	0.0	0.0	100.0	389
2	29.2	8.5	62.2	0.1	0.1	100.0	524
3	36.0	5.2	58.4	0.1	0.4	100.0	771
4+	47.4	19.9	32.7	0.0	0.0	100.0	1,341
Delivery characteristics							
Normal	27.0	6.2	66.7	0.1	0.0	100.0	4,621
Caesarean	43.2	45.6	11.1	0.0	0.0	100.0	201
Assisted	18.0	6.5	75.5	0.0	0.0	100.0	327
Availability of health facility¹ in the village							
No	20.0	3.7	75.9	0.2	0.2	100.0	2,162
Yes	26.3	4.7	68.7	0.1	0.1	100.0	1,781
Total	27.1	7.7	64.9	0.1	0.2	100.0	5,165

Note: Total includes 31 women with zero parity and 17 on delivery characteristics who were not shown separately.
Total figure may not add to N due to do not know and missing cases. @ Literate women with no years of schooling are also included.¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The proportion of births occurring in health institutions is higher for young women under 35 years (37-43 percent) than for women aged 35 years and above (22 percent). Institutional deliveries, particularly in private health facilities, increase sharply with education and the standard of living. Around one-fourth (20 percent) of the births to non-literate women and 76 percent births to literate women who had completed at least 10 or more years of schooling took place at health institutions. Women with a high standard of living were more likely to give birth in health institutions than women with a low standard of living (Figure 4.4). The proportion of institutional deliveries decreases as parity increases from parity one (55 percent) to parity four and above (18 percent). Institutional delivery is much lower for Christian women (26 percent) than for Hindus (44 percent) and other religion women (35 percent). Only 30 percent births of women from scheduled-tribes are institutional deliveries as compared to 50 percent of births to women from scheduled-castes, 49 percent to other backward classes and 42 percent of births to women from the 'other' caste category. Institutional deliveries are more common among women who had four or more antenatal check-ups (67 percent) than among who had fewer antenatal check-ups (31-41 percent). Institutional deliveries are least prevalent among births to women who did not receive any antenatal check-ups (12 percent). As expected, a large proportion of births occurred through caesarean section (89 percent), and 25 percent of assisted deliveries took place at health institutions. At the same time, 11 percent of caesarean deliveries and 76 percent of assisted deliveries took place at home. Thirty-one percent of births took place at health institutions in the village with availability of health facility compared to 24 percent of births from villages without any health facility.

4.9.2 Assistance During Home Delivery

Table 4.11 shows distribution of assistance during home delivery by selected background characteristics. Generally, assistance during delivery can be provided by medical staff (doctors, ANM/nurse/LHV, TBA, un-trained *dai*), and relatives/friends. If more than one type of attendant assisted during the delivery, then only the most qualified person is considered. In the last three years only 3 percent of home deliveries were attended by doctors, two percent by ANM or nurse or LHV, 4 percent by trained birth attendants, 10 percent by untrained *dais*, 74 percent were attended by relatives and friends and 7 percent of home deliveries were not attended by anyone (Figure 4.4). Overall, health professionals attended 5 percent of deliveries that took place at home. The percentage of births (home delivery) attended by health professionals do not differ much between women age. About 4 percent (each) of births attended by health professional for women age below 20 and 20-34 years and only 5 percent of births for women age 35 and above were attended by health professionals. In rural areas, 4 percent of births were attended by health professionals as compared to 6 percent of that in urban areas. The percentage of births attended by health professionals were decreased steadily with increasing with parity of women.

Births to literate women who had completed 10 or more years of schooling which were attended by health professionals is higher than those of non-literate women. About six percent of home deliveries to women with a medium standard of living and 4 percent of deliveries to women with a low standard of living were attended by health professionals. Home deliveries are more likely to be attended by health professionals among Hindu women and Buddhist women (5 percent each) than among Muslim women (3 percent). Only 5 percent of births to women from

Table 4.11 ASSISTANCE DURING HOME DELIVERY AND SAFE DELIVERY

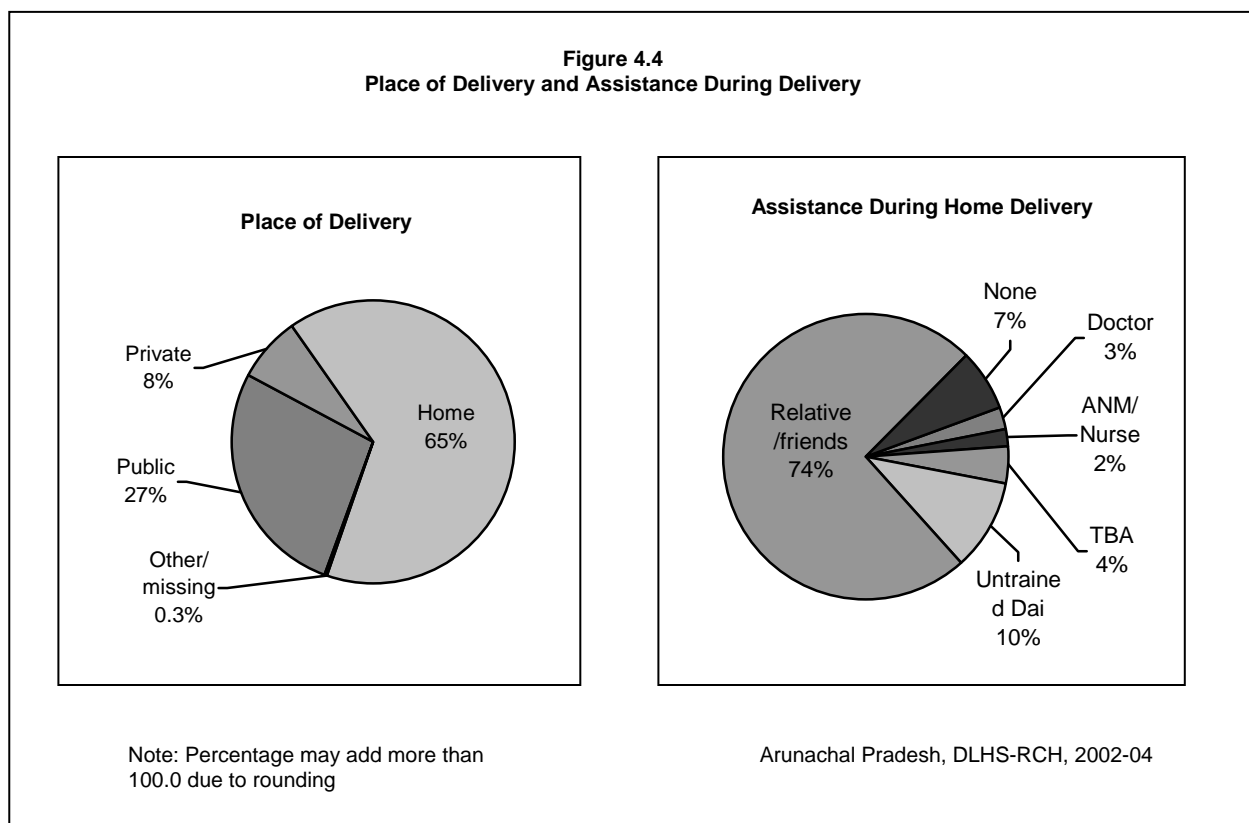
Percent distribution of women who had given live/still births during three years preceding the survey, by assistance during home delivery, and percentage of safe delivery, according to selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristics	Attendant assisting during home delivery ¹						Number of women	Percentage of safe ² delivery
	Doctor	ANM/ Nurse/ LHV	TBA	Un-trained <i>dai</i>	Relative / friends	None		
Age group (in years)								
Below 20	1.2	3.2	4.8	10.6	76.3	3.8	152	45.1
20-34	2.3	2.1	4.2	10.6	74.1	6.6	2,646	39.3
35 and above	4.1	0.7	4.0	7.2	75.1	9.0	554	25.9
Children ever born								
1	1.7	2.4	3.5	12.0	76.5	3.8	579	56.8
2	2.7	1.5	4.3	11.5	74.0	6.0	809	39.4
3	2.3	2.4	4.1	10.0	75.4	5.8	655	35.2
4+	2.9	1.7	4.3	8.4	73.2	9.4	1,299	21.8
Residence								
Rural	2.5	1.8	4.2	10.0	75.4	6.2	2,865	30.1
Urban	3.2	2.5	4.1	10.4	68.5	11.3	487	62.3
Education								
Non-literate	2.8	1.3	4.0	9.8	74.8	7.2	2,090	23.5
0-9@ years	1.9	2.4	4.8	10.9	73.5	6.4	1,096	42.3
10 years & above	4.1	5.9	1.2	7.4	74.7	6.6	166	78.6
Religion								
Hindu	2.7	2.3	8.6	16.5	61.3	8.6	956	46.6
Muslim	1.5	1.9	4.0	18.8	64.9	8.9	141	36.7
Christian	2.4	1.6	1.1	8.3	81.5	5.2	859	29.0
Buddhist	4.3	0.6	4.9	9.2	77.7	3.3	412	30.8
No Religion	3.2	4.5	0.0	1.5	85.4	5.4	78	34.4
Other	1.9	2.3	2.3	4.8	80.4	8.3	906	37.5
Caste#								
Scheduled caste	3.5	0.8	8.5	5.4	74.1	7.8	179	51.5
Scheduled tribe	2.4	2.0	2.8	7.3	78.9	6.5	2,309	33.0
Other backward class	1.5	1.5	5.1	10.7	65.0	16.1	158	50.3
Other	3.7	2.2	7.7	20.8	59.1	6.6	557	45.1
Standard of living index								
Low	2.1	1.5	4.3	9.6	75.5	7.1	2,357	22.7
Medium	3.3	2.7	4.1	10.5	72.9	6.6	807	49.9
High	5.3	4.5	3.3	13.2	67.2	6.5	188	75.3
Number of antenatal check-ups								
No check-up	2.2	1.3	2.9	8.8	77.1	7.7	1,868	15.3
1	3.3	1.3	6.7	10.2	72.7	5.9	270	33.8
2	3.9	3.6	4.3	13.2	69.2	5.9	326	42.3
3	3.5	2.3	5.8	13.4	68.2	6.9	450	44.5
4+	1.8	3.4	6.2	9.7	74.0	4.8	439	69.0
Delivery characteristics								
Normal	1.9	1.6	4.1	10.6	75.2	6.6	3,083	35.5
Caesarean	*	*	*	*	*	*	22	92.1
Assisted	9.1	5.3	2.8	4.5	67.3	11.0	247	35.4
Availability of health facility³ in the village								
No	2.5	1.4	4.4	10.6	75.2	5.8	1,642	26.7
Yes	2.5	2.3	3.8	9.2	75.5	6.6	1,223	34.4
Total	2.6	1.9	4.2	10.1	74.4	6.9	3,352	37.7

Note: Total includes 10 women with zero parity and 22 caesarean delivery who were not shown separately. @ Literate women with no years of schooling are also included.# Total figure may not add to N due to do not know and missing cases ¹ If the respondent mentioned more than one attendant, only the most qualified attendant is shown ² Either institutional delivery or home delivery assisted by doctor/ANM/Nurse/LHV ³ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.* Percentage not shown: Based on few cases.

scheduled castes, 4 percent to scheduled tribes, 3 percent to other backward classes and 6 percent to women belonging to 'other castes' category were attended by health professionals. Four percent of home deliveries to women who did not have any antenatal check-ups were attended by health professionals compared to 5 percent of home deliveries to women who had four or more

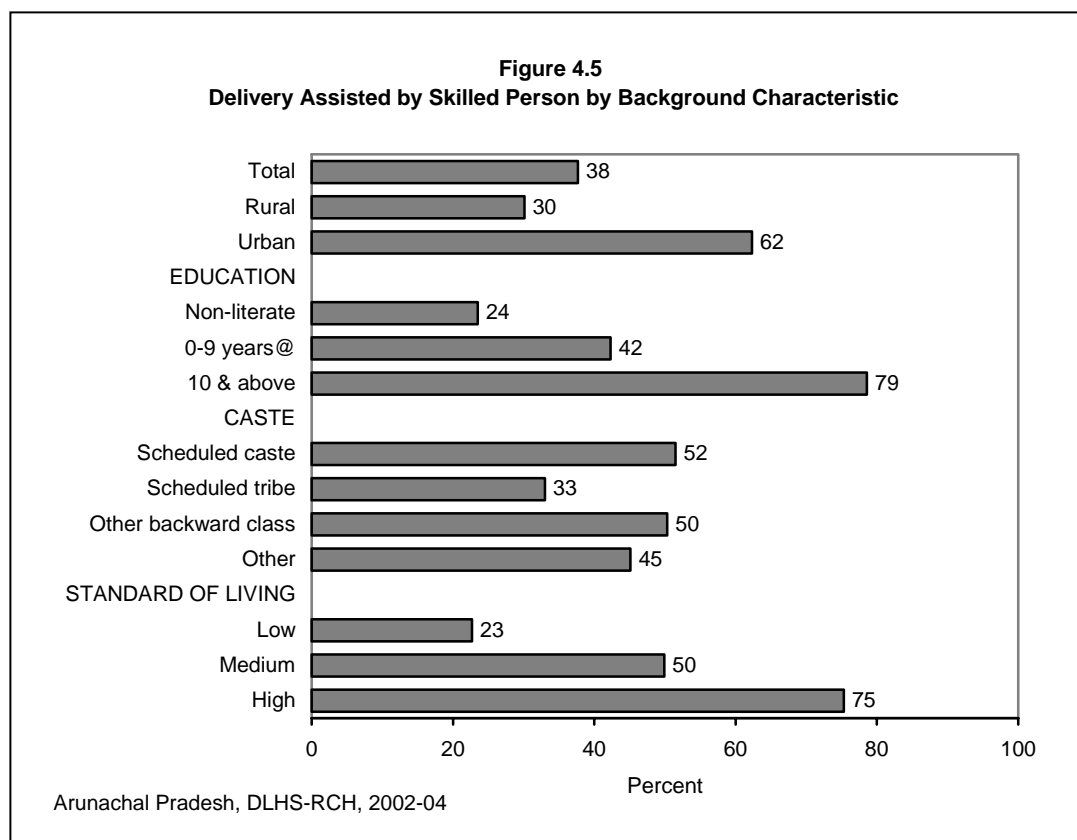
antenatal check-ups. About 4 percent of home deliveries that were normal were attended by health professionals, but the result should be interpreted with caution due to the small number of cases. Four percent home deliveries were attended by health professionals in villages with non-availability of a health facility and the corresponding figure for villages with availability of a health facility is 5 percent.



4.9.3 Delivery Assisted by Skilled Persons

The extent of safe deliveries varied substantially by background characteristics of women (Table 4.11 and Figure 4.5). More than half of the births (38 percent) were safe in Arunachal Pradesh. In urban areas less than three-fourths (62 percent) of the deliveries were safe as against little more than one third (30 percent) in rural areas. About 39-45 percent of the deliveries were safe for younger women aged below 35 than to elderly women (26 percent). The proportion of safe deliveries was much lower among Christian women (29 percent) than among Hindu women and women from other religions (31-47 percent). Only 33 percent of births to women from scheduled-tribe were safe deliveries, compared to 52 percent to women from scheduled-castes, 51 percent to women from other backward classes, and 38 percent of births to women from 'other castes' category. Proportion of safe deliveries decreases as parity rises from 1 (57 percent) to 4 and above (22 percent). Safe deliveries were least prevalent among women who did not receive any antenatal check-ups (15 percent), and it is most prevalent among women who had four or more antenatal check-ups (69 percent). The proportion of safe deliveries increased sizeably with

women's education and standard of living. Only twenty-four percent of non-literate women had safe deliveries whereas its prevalence is 79 percent among women who had completed at least high school. Women with a high standard of living had 75 percent safe deliveries compared to 50 percent of women with a medium standard of living and 23 percent with a low standard of living. As compared to women who had caesarean and assisted deliveries (92-35 percent) only 36 percent of women with normal deliveries are safe deliveries. The proportion of safe deliveries was slightly higher in villages with a health facility than to women from those villages where health facilities are not available.



4.10 Reasons for Not Going to Health Institutions for Delivery

Table 4.12 shows the percentage distribution of women who did not deliver in health institutions in the three years preceding the survey. The main reason for not going to health institutions has been presented according to residence and availability of health facility in the village. A little less than half (47 percent) of the women stated that it was not necessary to deliver in health institutions. It is surprising to see that almost same proportion of urban women (42 percent) and rural women (48 percent) felt this way. Also, 47 percent of women stated that it was not necessary to deliver in health institutions when their villages were equipped with health facilities, when compared to 49 percent of women from villages where a health facility is not available. About 3 percent of the women felt that it was not customary to deliver in health institutions. Other factors contributing for not going to health institutions for delivery were, 'it cost too much'

(3 percent), 'no transportation' or 'health facility is too far' (13 percent), 'no time to go' (14 percent), 'family did not allow' (less than one percent), 'better care at home' (11 percent), and 'other' (3 percent). About 5 percent reported lack of knowledge regarding the delivery facilities. Two percent women did not opt for institutional delivery due to poor quality of services. The corresponding figures were 1 percent in urban areas and 2 percent in rural areas. It is also needs mention that 5 percent of women from villages with a health facility reported lack of knowledge as a reason for not having delivery at home.

Table 4.12 REASONS FOR NOT GOING TO HEALTH INSTITUTIONS FOR DELIVERY					
Percent distribution of women who had given last live/still birth at home during three years preceding the survey by the main reason for not going to health institution for delivery, according to residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Reason	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Not Necessary	47.3	48.2	42.1	49.4	46.5
Not customary	3.3	3.7	0.7	3.0	4.7
Cost too much	2.5	2.6	1.6	2.9	2.3
Health facility too far/ No transport	12.6	13.8	5.5	14.8	12.6
Poor quality service	2.0	2.1	1.1	2.4	1.8
No time to go	14.0	12.6	22.2	13.0	12.0
Family did not allow	0.8	0.7	1.6	0.5	1.0
Better care at home	10.5	9.8	14.7	8.6	11.5
Lack of knowledge	4.6	4.7	3.8	4.1	5.4
Other	2.5	1.8	6.6	1.5	2.2
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	3,352	2,865	487	1,642	1,223

Note: ¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

4.11 Delivery Characteristics by District

Table 4.13 shows the delivery characteristics by district; institutional delivery (delivery in government or private health institutions), home delivery and attendant assistance during home delivery for last live/still births to women during the three years preceding the survey. The proportion of institutional delivery is lowest in Upper Siang (16 percent) and followed by Tawang (20 percent) and it is highest in Papum Pare (46 percent).

Table 4.13 DELIVERY CHARACTERISTICS BY DISTRICT				
Place of delivery, assistance during home deliveries, and percentage of safe deliveries by district, Arunachal Pradesh, 2002-04				
Districts	Percentage of women who had institutional delivery	Percentage of women who had delivery at home	Home delivery assisted by skilled ¹ persons	Percentage of safe ² delivery
Changlang	38.7	60.8	3.6	40.9
Dibang Valley	38.8	60.6	5.1	41.9
East Kameng	38.0	61.7	6.1	41.7
East Siang	31.8	68.2	6.8	36.5
Lohit	41.2	58.8	4.4	43.8
Lower Subansiri	25.8	73.9	5.0	29.5
Papum Pare	45.6	54.3	1.7	46.5
Tawang	19.8	80.2	3.0	22.2
Tirap	39.6	60.4	8.7	44.8
Upper Siang	15.7	81.9	2.5	17.7
Upper Subansiri	25.4	73.8	3.0	27.6
West Kameng	25.6	74.4	4.1	28.7
West Siang	40.7	58.8	4.8	43.5
Arunachal Pradesh	34.8	64.9	4.5	37.7

Note: *Table includes last live/still birth since 1-1-1999/1-1-2001.
¹ Includes Doctor/ANM/Nurse. ² Either institutional delivery or home delivery assisted by skilled person.

Compared to delivery in a private health facility, deliveries at home are more common in all the districts of Arunachal Pradesh. Almost 65 percent of births are by delivery at home in the state.

In all the districts, more than half of the births took place at home and Upper Siang and Tawang had more than 80 percent of home deliveries. Percentage of home deliveries which were attended by a health professionals in all the districts range from 3 percent to 9 percent. The extent of safe deliveries also varies by district, in 6 of 13 districts, the proportion of safe deliveries are below state average, it ranges from 22 percent in Tawang to 47 percent in Papum Pare. The proportion of safe deliveries is less than 30 percent in five districts i.e. Lower Subansiri, Tawang, Upper Siang, Upper Subansiri and West Kameng (see Map-4).

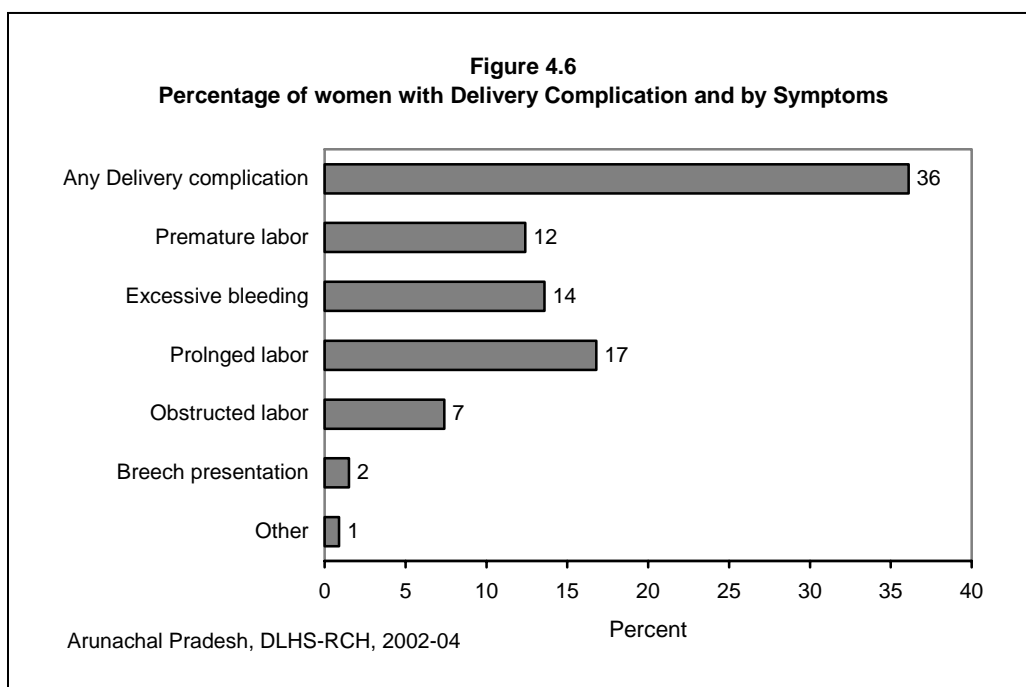
4.12 Complications During Delivery

Complications during delivery include ‘premature labour’, ‘obstructed labour’, ‘prolonged labour (more than 12 hours)’, ‘breech presentations’, ‘excessive bleeding during delivery’ and ‘other problems’ at the time of delivery reported by women during the three years preceding the survey. Thirty-six percent of the women experienced at least one problem during delivery (Table 4.14 and Figure 4.6). The proportion of delivery complications is higher among urban women (42 percent) than among rural women (34 percent). Younger women below the age of 20 years, and women with low parity 1-2 reported more at least one delivery related problem than older women aged 35 years and above and women with higher parity. This proportion is relatively high among women who had received some kind of antenatal care during their pregnancy. Thirty-one percent of

women who had not had any antenatal check-up reported that they experienced at least one problem during their pregnancy when compared to 37-42 percent of women who had received some kind of antenatal check-up. Among women who had assisted or caesarean delivery, 52-67 percent reported experiencing such problems, and 54 percent women with normal deliveries also cited complications during delivery. A relatively higher proportion of women who delivered in health institutions (42-46 percent) faced at least one delivery complication compared to those who delivered at home or other places (31 percent).

Table 4.14 DELIVERY COMPLICATIONS								
Percentage of women who had given last live/still births during three years preceding the survey by delivery complication, according to selected background characteristics, Arunachal Pradesh, 2002-04								
Background characteristics	Any delivery complication	Type of delivery complication;						Number of women
		Premature labour	Excessive bleeding	Prolonged labour	Obstructed labour	Breech presentation	Other	
Age group (in years)								
Below 20	38.5	12.1	13.0	23.8	8.5	0.6	1.9	264
25-34	36.7	12.8	13.7	16.5	7.7	1.6	0.9	4,184
35 and above	32.1	10.3	13.2	15.3	4.9	1.4	0.6	717
Children ever born								
1	41.9	12.9	13.6	22.3	12.1	1.4	1.3	1,291
2	36.8	13.5	13.5	16.1	5.7	1.2	0.7	1,287
3	33.3	11.6	12.9	13.5	6.5	2.4	1.2	970
4+	32.2	11.1	14.1	14.6	5.1	1.1	0.7	1,586
Residence								
Rural	34.4	12.0	13.9	16.1	6.4	1.4	0.7	3,943
Urban	41.8	13.6	12.4	18.9	10.5	2.0	1.6	1,222
Number of antenatal check-ups								
No check-up	30.7	12.1	12.3	12.5	6.1	1.1	0.8	2,140
1	37.3	11.2	16.6	16.3	6.9	0.8	2.0	389
2	36.7	10.5	11.3	18.8	8.8	1.9	0.8	524
3	40.4	14.3	18.6	17.4	7.5	1.1	0.7	771
4+	41.8	12.7	12.8	22.5	9.0	2.5	1.0	1,341
Delivery characteristics								
Normal	33.8	12.0	13.0	15.3	5.4	1.0	0.6	4,621
Caesarean	67.1	19.1	17.9	35.1	31.4	12.4	4.1	201
Assisted	52.4	13.9	19.2	27.2	21.3	2.7	4.0	327
Place of delivery								
Government sector	46.3	17.1	15.3	24.2	9.6	1.6	1.2	1,399
Private sector	42.0	9.0	10.6	21.7	18.1	4.3	0.9	399
Home	31.3	10.9	13.2	13.1	5.2	1.2	0.8	3,352
Total	36.1	12.4	13.6	16.8	7.4	1.5	0.9	5,165
Note: Table include 31 women with zero parity, 17 with missing information on delivery characteristics, 9 missing information on place of delivery and 5 other delivery place cases who were not shown separately.								

The major problems reported were ‘obstructed labour’ (7 percent), ‘prolonged labour’ (17 percent), ‘premature labour’ (12 percent), and ‘excessive bleeding’ (14 percent). Only 2 percent reported ‘breech presentation’, and less than one percent reported ‘other’ problems related to delivery. Premature labour, prolonged labour, obstructed labour and breech presentation are more common among younger women, and women with low parity. Rural women were more likely to report delivery complications such as excessive bleeding, whereas premature labour, prolonged labour, obstructed labour and breech presentations are more prevalent among urban women. Premature labour, prolonged labour, obstructed labour and other health problems related to delivery were more among women whose last delivery was assisted with instruments, and breech presentation was more likely among those who had a caesarean, and excessive bleeding during delivery than by women with normal delivery during the three years preceding the survey. Women whose recent delivery was performed in medical institutions were more likely to report premature labour, prolonged labour, breech presentation and obstructed labour compared with place of delivery other than medical institutions.



4.13 Post Delivery Complications and Treatment

Table 4.15 and Figure 4.7 present information about women who faced complications after delivery according to some selected background characteristics. The incidence of post delivery complications judged by any of the following during the first six-weeks of delivery- ‘high fever’, ‘lower abdominal pain’, ‘foul smelling vaginal discharge’, ‘excessive bleeding’, ‘convulsion’, ‘severe headache’, and ‘other’ problems. Thirty-one percent of women reported that they faced any of the problems during the first six weeks after their delivery. The proportion of women who cited at least one post delivery complication is higher in urban areas (33 percent) than in rural areas (31 percent). Older women aged 35 years and above, and women with higher parity 4 and

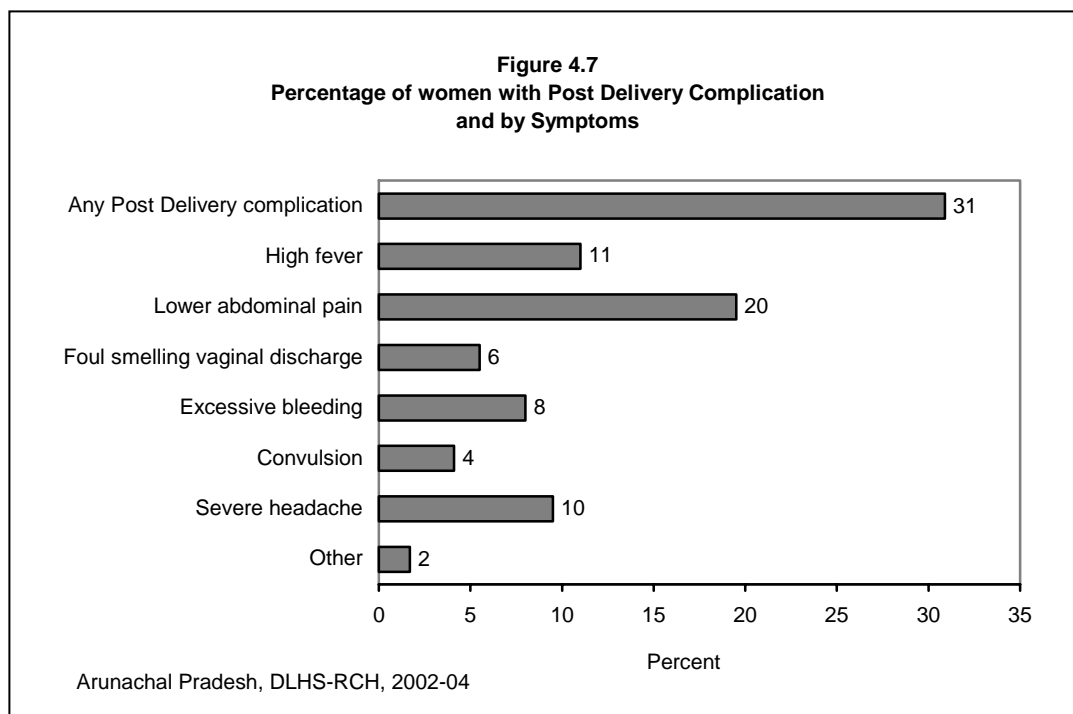
over, had their deliveries assisted with instruments, and those whose deliveries took place at home, and those whose deliveries at home were attended by none are more prone to report at least one post delivery related problem.

Table 4.15 POST DELIVERY COMPLICATIONS									
Percentage of women who had given last live/still births during three years preceding the survey by post delivery complication, according to selected background characteristics, Arunachal Pradesh I, 2002-04									
Background characteristics	Any post delivery complication	Type of post delivery complication;							Number of women
		High fever	Lower abdominal pain	Foul smelling vaginal discharge	Excessive bleeding	Convulsion	Severe headache	Other	
Age									
Below 20	31.3	12.2	17.5	5.6	9.2	4.4	10.3	1.4	264
25-34	31.1	10.5	19.7	5.7	8.2	4.1	9.4	1.7	4,184
35 and above	29.7	13.4	18.8	4.5	6.3	3.6	9.7	1.6	717
Children ever born									
1	30.3	10.8	16.0	5.7	7.6	3.8	8.8	2.3	1,291
2	30.7	9.4	20.3	4.4	7.8	3.2	9.7	1.3	1,287
3	31.5	11.0	19.6	5.7	8.0	4.0	9.3	1.5	970
4+	30.7	12.3	21.5	6.0	8.3	4.9	9.6	1.7	1,586
Residence									
Rural	30.5	10.4	20.0	5.3	8.4	3.7	8.8	1.6	3,943
Urban	32.5	12.9	17.8	6.1	6.8	5.1	11.7	2.1	1,222
Delivery characteristics									
Normal	30.6	10.6	19.4	5.1	8.0	4.1	9.2	1.6	4,621
Caesarean	37.6	15.1	21.7	8.2	9.1	2.2	12.6	4.0	201
Assisted	33.3	14.5	19.9	9.6	7.0	5.1	12.3	1.6	327
Place of delivery									
Government sector	34.2	9.6	19.6	6.6	8.4	4.3	10.5	3.0	1,399
Private sector	27.1	11.3	13.4	4.3	7.6	4.2	11.7	1.2	399
Home	30.1	11.6	20.2	5.2	7.9	4.0	8.9	1.2	3,352
Assistance during home delivery									
Doctor	41.9	18.0	21.4	12.6	10.7	6.8	8.1	5.0	86
ANM/Nurse/LHV	39.7	7.9	31.6	0.0	8.2	2.3	3.8	0.7	65
TBA	53.7	24.0	39.8	11.6	13.3	5.8	15.3	3.2	139
Untrained dai	32.0	14.6	22.6	6.2	7.3	4.9	11.5	0.5	337
Relative/friends	27.4	9.8	17.8	4.4	6.9	3.3	8.2	1.1	2,493
None	35.9	17.7	27.7	7.4	14.5	8.1	9.7	1.1	231
Total	30.9	11.0	19.5	5.5	8.0	4.1	9.5	1.7	5,165

Note: Total includes 31 women with zero parity, 17 with missing information on delivery characteristics, 5 other and 9 with missing information on place of delivery who were not shown separately.

Women reported high fever (11 percent), severe headache (10 percent), lower abdominal pain (20 percent), foul smelling vaginal discharge (6 percent), excessive vaginal bleeding (8 percent), and convulsion (4 percent). Two percent of women reported other problems. Rural-urban differences in all symptoms of postpartum complication are large. All the postpartum complications, except convulsions, are more prevalent among older women aged 35 years and above than among women below 35 years. The symptoms of postpartum complications were increasing steadily with increased parity. There are minimal differences in the likelihood of

having different symptoms in the postpartum period by place of delivery. Women who had the last delivery at home and were not assisted by anyone were more likely to have high fever, lower abdominal pain and other postpartum problems during the first six weeks of delivery. Symptoms like high fever and severe headache are more common for women who delivered at home assisted by an ANM/nurse/LHV, trained birth attendant, untrained *dai*, or relatives or friends.



Women who reported at least one complication during the postpartum period were asked, whether they had consulted or sought treatment for their problems and also the source of treatment. Table 4.16 shows the percentage of women who had post delivery complications and who sought treatment by source of treatment according to residence and availability of health facility in the village. Twenty-eight percent of women reported that they had obtained advice or had consulted someone for their problems. The proportion was higher among urban women (36 percent) than among rural women (25 percent), and 26 percent of women sought treatment from those villages where health facility was available as compared to 24 percent of women who did not have a health facility within the village.

Table 4.16 TREATMENT FOR POST DELIVERY COMPLICATIONS					
Percentage of women who had last live/still births during three years preceding the survey and who had any post delivery complication, sought treatment for the problems, and source of treatment according to residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Treatment and source	Total	Residence		Availability of health facility ⁵ in the village	
		Rural	Urban	No	Yes
Percentage of women sought treatment who had any post delivery complication	27.5	24.7	36.0	23.7	25.7
Number of women	1,598	1,201	397	609	592
Percentage sought treatment at health facility					
Government health facility ¹	77.9	85.1	63.1	89.2	81.2
Primary health centre	18.5	22.0	11.1	27.0	17.3
Sub centre	3.8	3.3	4.9	1.7	4.8
Private health facility ²	28.0	22.9	38.6	17.4	28.1
ISM ³ facility	8.1	6.6	11.3	3.8	9.3
Other	9.6	7.0	15.0	6.6	7.4
Percent distribution of women who obtained treatment from					
Doctor	83.3	81.0	88.1	78.3	83.6
ANM/nurse/midwife/LHV	11.8	14.2	6.9	17.2	11.4
Other health professionals ⁴	0.8	0.8	0.8	0.6	0.9
Other	4.1	4.0	4.2	3.9	4.1
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	440	297	143	145	152
Note: ¹ Include municipal hospital, dispensary, urban health centre/urban health post/urban family welfare centre, community health centre/rural hospital, primary health centre and sub centre ² Include private hospital/clinic and non-governmental organization/ trust hospital ³ Either government or private Indian system of medicine ⁴ Other health professionals include Dai (trained or untrained), relative/friends and ISM practitioner ⁵ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village					

Among women who sought treatment for complications in the postpartum period, only 78 percent visited a government health facility including primary health centre and sub-centre (19 percent and 4 percent). About twenty-eight percent of women visited a private health facility, and 8 percent went to a facility with the Indian system of medicine (either government or private) and another 10 percent obtained advice from other health facilities. The proportion of women who visited a government health facility is relatively higher in rural areas (85 percent) than in urban areas (63 percent). On the other hand, the proportion of women seeking treatment from a private health facility is more among women who belonged to villages with availability of health facility within the village. Among women who sought treatment, 83 percent preferred to go to a doctor and 12 percent visited an auxiliary nurse midwife or nurse or LHV, less than one percent went to other health professionals, and 4 percent went to some one else. Eighty-eight percent of these women in urban areas, and 81 percent in rural areas went to a doctor, whereas a visit to an ANM/nurse/LHV was 14 percent in rural areas and 7 percent in urban areas. There are also

differences by availability of health facilities and non-availability of health facilities in the village. Eighty-four percent of women who belonged to villages with availability of health facilities were seen by doctor compared to 78 percent of women belonging to villages with non-availability of health facilities.

4.14 Obstetric Morbidity by District

The extent of health problems/ complications women suffer during pregnancy, delivery and post delivery period indicates the state of obstetric morbidity. Table 4.17 presents the incidence of pregnancy, delivery and post-delivery complications and treatment seeking behaviour in case of pregnancy and post delivery complications by district. As mentioned earlier, in the state, 28 percent, 36 percent and 31 percent of the women experienced pregnancy, delivery and post delivery complications respectively. About 42 percent of the women sought treatment for pregnancy complications and 28 percent for post delivery complications. In every district, more than 14 percent of the women experienced at least one of the symptoms of pregnancy complications.

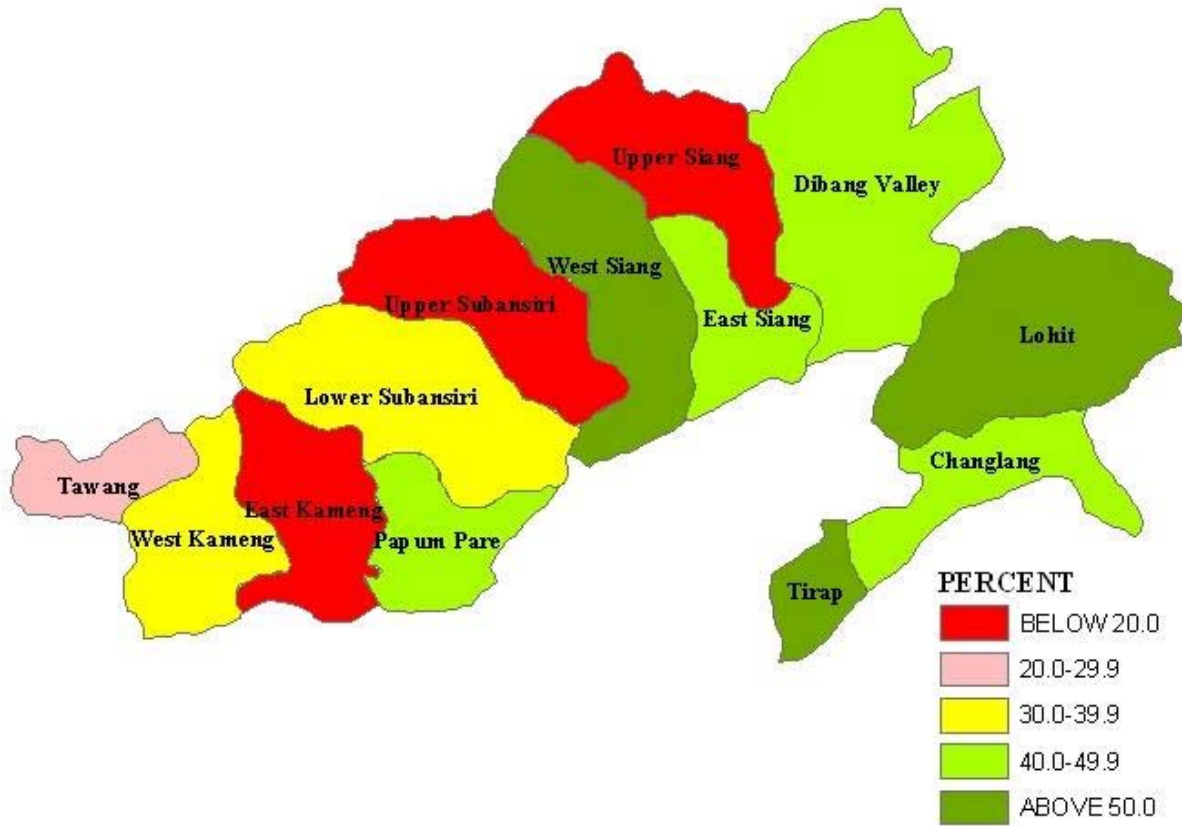
Table 4.17 PREGNANCY, DELIVERY AND POST DELIVERY COMPLICATIONS					
Extent of pregnancy, delivery and post delivery complications and treatment seeking behaviour by districts, Arunachal Pradesh, 2002-04					
District	Percentage of women ¹				
	Who had complication during pregnancy	Sought ² treatment for pregnancy complication	Who had delivery complication	Who had post delivery complication	Sought ³ treatment for post delivery complication
Changlang	25.5	36.3	31.2	28.9	24.1
Dibang Valley	47.0	29.5	49.8	47.8	2.4
East Kameng	26.0	22.0	62.9	22.3	24.7
East Siang	38.3	48.4	33.2	42.0	19.9
Lohit	35.4	46.7	36.3	40.6	31.0
Lower Subansiri	14.4	57.1	18.6	13.7	35.8
Papum Pare	28.4	52.8	29.6	30.1	42.8
Tawang	14.3	24.7	7.7	8.6	10.5
Tirap	28.0	32.7	39.1	34.3	27.8
Upper Siang	27.0	39.2	26.4	44.0	15.6
Upper Subansiri	42.9	27.8	47.4	37.8	26.4
West Kameng	24.3	45.7	59.6	45.3	25.7
West Siang	15.9	43.8	36.5	13.8	42.7
Arunachal Pradesh	27.7	41.5	36.1	30.9	27.5

Note: ¹ Women who had last live/still birth during three years preceding the survey. ² Women who reported at least one complication of pregnancy. ³ Women who reported at least one post delivery complication.

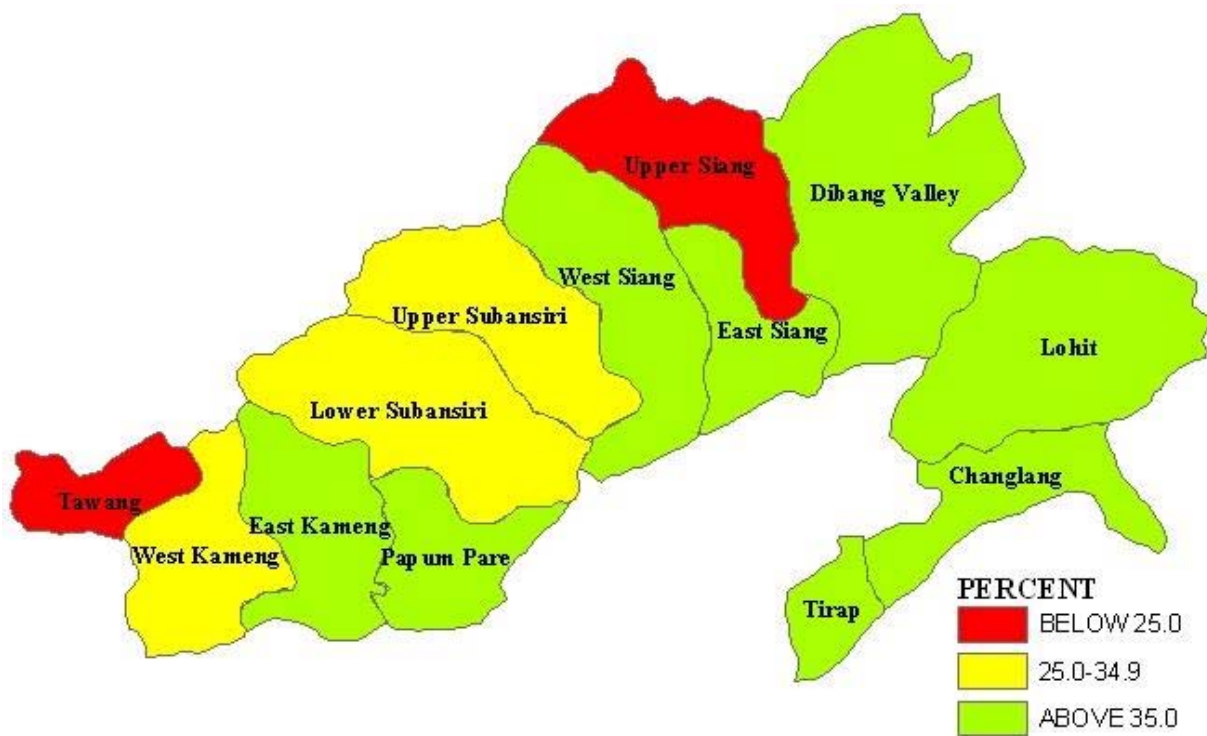
In a few districts like, Dibang Valley (47 percent), Upper Subansiri (43 percent) and East Siang (38 percent), the incidence of pregnancy complications is comparatively higher than other districts. The incidence of post delivery complication is higher than that of pregnancy and delivery complications. The percentage of women who experienced at least one type of delivery complication ranges from 8 percent in Tawang to 63 percent in East Kameng, and incidence of post delivery complication varies from 9 percent in Tawang to 48 percent in Dibang Valley. The incidence of all three types of complications seems to be linked with each other in varying proportions.

In most of the districts of Arunachal Pradesh about three-quarters of the women received some kind of antenatal care. In spite of a large proportion of women having contact with a doctor or any other health workers during the antenatal period, in all districts less than 60 percent of the women sought treatment for pregnancy complication. Similarly, among women who experienced at least one symptoms of postpartum complication, the proportion seeking treatment also varies across the districts, ranging from 3 percent in Dibang Valley to 43 percent in Papum Pare and West Siang.

MAP-3
Percentage of Women Received Three or More Antenatal Check-Ups



MAP -4
Percentage of Delivery Attended by Skilled Person



CHAPTER V

CHILD CARE AND IMMUNIZATION

Child health services under the Reproductive and Child Health (RCH) programme include health education to mothers on breast-feeding and services for immunization, Vitamin A supplements and Iron prophylaxis, treatment of diarrhoea and Acute Respiratory Infections (ARIs). The District Level Household Survey (DLHS) covered all the currently married women whose last surviving child was born during the three years preceding the survey, and information on those breastfeeding currently and duration of breastfeeding. They were also asked about their awareness of diarrhoea management and danger signs of pneumonia and practices followed in case of episodes of diarrhoea and ARI among the children. Data on immunization, administering Vitamin A supplements and Iron prophylaxis was collected for the last two living children born after January 1, 1999/2001. This chapter presents an analysis of the data collected on the above aspects.

5.1 Breastfeeding

Educating mothers on correct breastfeeding practices and child nutrition is one of the components of the RCH programme. Infant feeding practices have significant effects on the health of both mothers and children. Mothers are affected through the influences of breastfeeding on the period of postpartum infertility, and hence on fertility levels and the length of birth intervals. These effects vary according to the duration and intensity of breastfeeding. Proper infant feeding, starting from the time of birth, is important for the physical and mental development of the child. Breastfeeding improves the nutritional status of young children and reduces morbidity and mortality. Breast milk not only provides important nutrients, but also protects the child against infection. The timing and type of supplementary foods introduced in an infant's diet have significant effects on the child's nutritional status.

As recommended by the World Health Organization (WHO), breastfeeding should be initiated immediately after birth and should be continued upto a minimum of six months. The WHO also suggests that the yellowish milk, known as colostrums, should be given to the baby because it provides protection against certain infections. Afterwards, it has to be supplemented with other semi-solid and solid foods at the proper time intervals.

Table 5.1 shows the breastfeeding practices among children born during the three years preceding the survey in Arunachal Pradesh. Although, the practice of breastfeeding is common in Arunachal Pradesh, the initiation of breastfeeding within two hours of the birth of the child is not always followed. Forty-seven percent of the children were breastfed within two hours of birth, and 78 percent were breastfed within one day of birth (including those who were breastfed within two hours of birth), while 23 percent of children were breastfed after one day of birth. As shown in Figure 5.1, about 30 percent of the children were breastfed within one day of birth but after two hours of birth, 16 percent were breastfed after the first day of birth but before 3 days, and 7 percent children were put to the breast after three days. Less than one percent of the children were never breastfed. About half of the women (50 percent) who gave birth to children during the three years preceding the survey squeezed the first milk from the breast before they

began breastfeeding. Not more than 50 percent of children in any socio-economic groups shown in Table 5.1 were breastfed within two hours of birth. Forty-nine percent of children from scheduled tribe were breastfed within two hours of birth, and 47 percent of children from scheduled castes were breastfed within one day of birth. Women who reside in urban areas, women who have had high school education and above and women who live in households with a high standard of living are much less likely to start breastfeeding their children early. A large proportion of children from urban areas (30 percent), Muslim children (39 percent), children from other castes (27 percent), children of educated mothers (27 percent), and children from households with a high standard of living were put to the breast after one day of birth.

Table 5.1 INITIATION OF BREASTFEEDING					
Percentage of children under age 3 whose mother started breastfeeding within two hours of births, within one day of birth, and after one day of birth and percentage whose mother squeezed the first milk from her breast before breastfeeding by selected background characteristics, Arunachal Pradesh, 2002-04					
Background characteristic	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Number of children
	Within two hours of birth	Within one day of birth ¹	After one day of birth		
Residence					
Rural	48.4	79.1	20.5	48.3	3,386
Urban	40.5	69.2	30.2	54.3	1,059
Mother's education					
Non-literate	49.1	77.3	22.1	47.9	2,242
0-9@ years	45.4	77.4	22.4	51.7	1,578
10 and above	40.1	72.9	26.6	51.3	624
Religion					
Hindu	45.3	74.2	25.4	55.7	1,443
Muslim	36.2	60.6	39.4	58.0	202
Christian	47.0	76.9	22.2	43.3	1,024
Buddhist	38.5	81.8	18.1	59.0	478
No Religion	33.7	83.1	16.9	46.9	97
Other	53.4	79.8	19.8	43.2	1,201
Caste/tribe#					
Scheduled caste	46.8	77.8	21.6	53.9	315
Scheduled tribe	49.0	78.7	20.8	45.7	2,834
Other backward class	39.2	74.0	25.7	51.7	259
Other	42.9	73.2	26.5	63.0	823
Standard of living index					
Low	49.9	78.8	20.7	49.3	2,527
Medium	41.6	75.2	24.6	49.4	1,329
High	43.0	71.3	27.7	52.5	588
Total	46.5	76.7	22.8	49.7	4,444
Note: Table based on youngest living child born during the three years preceding the survey. ¹ Includes children whose mother started breastfeeding within two hours of births. @ Literate mother with no years of schooling are included. #Total figure may not add to N due to do not know and missing cases.					

The custom of squeezing the first milk from the breast before breastfeeding is widely practised in every group, but it is slightly higher among the mothers of scheduled caste children, children belonging to Hindu, Muslim and Buddhist religion, those belonging to other castes, and children whose mothers are Non-literate or literate. The standard of living has no reflection on the percentage of mothers who squeezed the first milk from the breast before breastfeeding. In

the urban areas the percentage of the custom of squeezing the first milk from the breast before breastfeeding is slightly higher (54 percent) than rural areas (48 percent). Mothers of children born in the three years preceding the survey were asked whether the child had been fed breast milk exclusively and if so, what the duration was. Here it needs to be mentioned that, exclusive breastfeeding includes breastfeeding the child without giving it anything including water. Results are shown in Table 5.2.

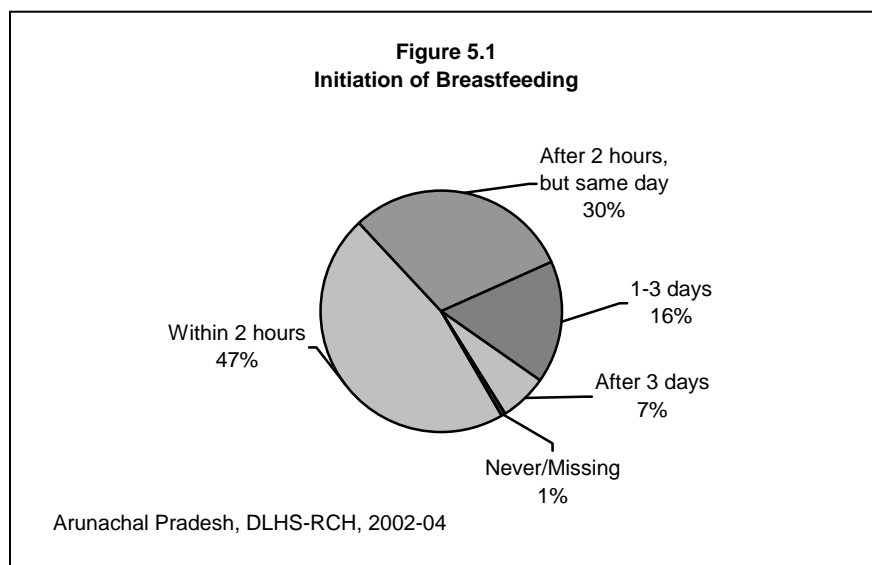


Table 5.2 EXCLUSIVE BREASTFEEDING BY CHILD'S AGE
Percentage of children under age 3 years by exclusive breastfeeding and child's age in month, Arunachal Pradesh, 2002-04

Age in months	Status of exclusive breastfeeding			Number of children
	Exclusive breastfeeding	At least 4 months	At least 6 months	
<2	75.0	*	*	188
2-3	77.9	*	*	287
4-5	50.0	70.5	*	340
6-7	23.1	72.5	46.5	404
8-9	15.2	74.6	39.1	304
10-11	6.0	72.9	36.7	252
12-13	6.6	64.7	28.1	326
14-15	7.5	69.5	35.3	323
16-17	5.7	70.7	33.6	263
18-19	9.4	67.3	38.3	214
20-21	2.6	69.2	30.8	187
22-23	6.6	69.8	33.5	165
24-25	4.5	69.4	33.1	241
26-27	1.1	65.6	29.4	223
28-29	2.7	68.0	29.7	248
30-31	4.4	62.6	34.8	187
32-33	1.3	65.5	24.5	168
34-35	4.6	64.7	23.5	125
< 4 months	76.7	*	*	475
4-6 months	41.6	71.2	*	528
7-9 Months	17.4	73.8	43.4	520

Note: Table based on youngest living child born during the three years preceding the survey

In Arunachal Pradesh, 77 percent of children under four months of age are exclusively breastfed. The percentage of infants exclusively breastfed drops steadily from 75 percent for children under 2 months of age to 50 percent for children who are 4-5 months old. About 71 percent of children in the age group 4-6 months were exclusively breastfed up to 4 months and 43 percent of children in the age group 7-9 months are exclusively breastfed upto 6 months.

5.1.1 Breastfeeding by Districts

Table 5.3 shows that in all the districts of Arunachal Pradesh, except East Kameng and West Siang, not more than 60 percent of the children were put to the breast within two hours of birth. Less than 25 percent of the children were breastfed within two hours of birth in Tirap district. More than three-fourth of the children were put to the breast after one day of birth in Changlang, East Kameng, Lohit, Lower Subansiri, Tawang, Tirap, Upper Siang, Upper Subansiri, West Kameng and West Siang districts. In 4 of the 13 districts, the mothers of more than 60 percent children squeezed the first milk before breastfeeding.

District	Percentage started breastfeeding			Percentage whose mother squeezed first milk from breast	Exclusive breastfeeding ²
	Within two hours of birth	Within one day of birth ¹	After one day of birth		
	Changlang	44.2	82.4		
Dibang Valley	51.0	68.1	31.9	48.7	40.3
East Kameng	64.2	92.1	7.8	63.7	53.3
East Siang	26.6	59.0	39.8	26.5	28.9
Lohit	50.5	75.9	24.0	49.5	39.9
Lower Subansiri	59.3	80.7	18.5	26.7	32.2
Papum Pare	37.2	64.5	34.5	51.3	22.1
Tawang	51.2	96.1	3.9	53.8	42.7
Tirap	23.6	77.1	22.2	66.9	36.3
Upper Siang	36.0	75.5	24.5	21.0	32.9
Upper Subansiri	50.9	78.8	20.6	48.7	55.2
West Kameng	35.5	77.3	22.7	53.7	26.2
West Siang	63.7	85.9	14.1	63.4	37.5
Arunachal Pradesh	46.5	76.7	22.8	49.7	34.2

Note: Table based on youngest living child born during the three years preceding the survey
¹ Includes children whose mother started breastfeeding within two hours of births. ² Based on youngest children age 6 months and older at the time of survey and breastfed exclusively 6 months or more as mother reported.

There is a great deal of variation in the extent of exclusive breastfeeding for six months. It is highest in Upper Subansiri (55 percent) and lowest in Changlang (14 percent).

5.2 Immunization of Children

The immunization of children against six serious but preventable diseases namely, tuberculosis, diphtheria, pertusis, poliomyelitis and measles is the main component of the child survival programme. As part of the National Health Policy, the National Immunization Programme is being implemented on a priority basis. The Government of India initiated the Expanded Programme on Immunization (EPI) in 1978 with the objective of reducing morbidity, mortality and disabilities among children from six diseases.

The Universal Immunization Programme (UIP) was introduced in 1985-86 with the objective of covering at least 85 percent of all infants against the six vaccine preventable diseases by 1990. This scheme has been introduced in every district of the country. The standard immunization schedule developed for the child immunization programme specifies the age at which each vaccine should be administered and the number of doses to be given. Routine vaccinations received by infants and children are usually recorded on a vaccination card that is issued for the child.

In the first phase of Round II, all the women with last and last but one living child born after January 1, 1999 were asked whether the child/children had received the vaccination against polio, tuberculosis (BCG), diphtheria, whooping cough (pertusis), tetanus (DPT) and measles, and for the second phase, the reference period was from January 1, 2001. For Polio and DPT, further information on polio at birth and number of doses was asked. Children who received BCG, three doses of DPT and polio (excluding polio 0) and measles are considered to be fully vaccinated. Information on the source of immunization for last dose and in case where immunization was not given, the reason for not giving immunization was also compiled.

Table 5.4, Figures 5.2 and 5.3 presents vaccination coverage rates for children in the age group 12-25 months. Only 22 percent of the children are fully vaccinated, and around 28 percent have not received any routine vaccination. Coverage of each vaccination is much higher than the percentage fully vaccinated. BCG, the first and second dose of DPT and Polio vaccine has each been given to more than three-fourths of children (Figure 5.3). Only 35 percent of the children have received three doses of DPT and 33 percent of the children received 3 drops of Polio, and only 38 percent of the children have been vaccinated against measles. Moreover, not all children who begin the DPT and polio vaccination series go on to complete them. The differences between the percentage of children receiving the first and third doses is 16-percentage point for DPT and 26 percentage points for polio.

There has been some improvement in full vaccination coverage in Arunachal Pradesh since the time of Round I in 1998-99. These data indicate that despite the progress that has been made in immunization coverage for children in Arunachal Pradesh, coverage levels are still low and a large proportion of children who received some early vaccinations dropped out of the programme before receiving all of the recommended vaccinations.

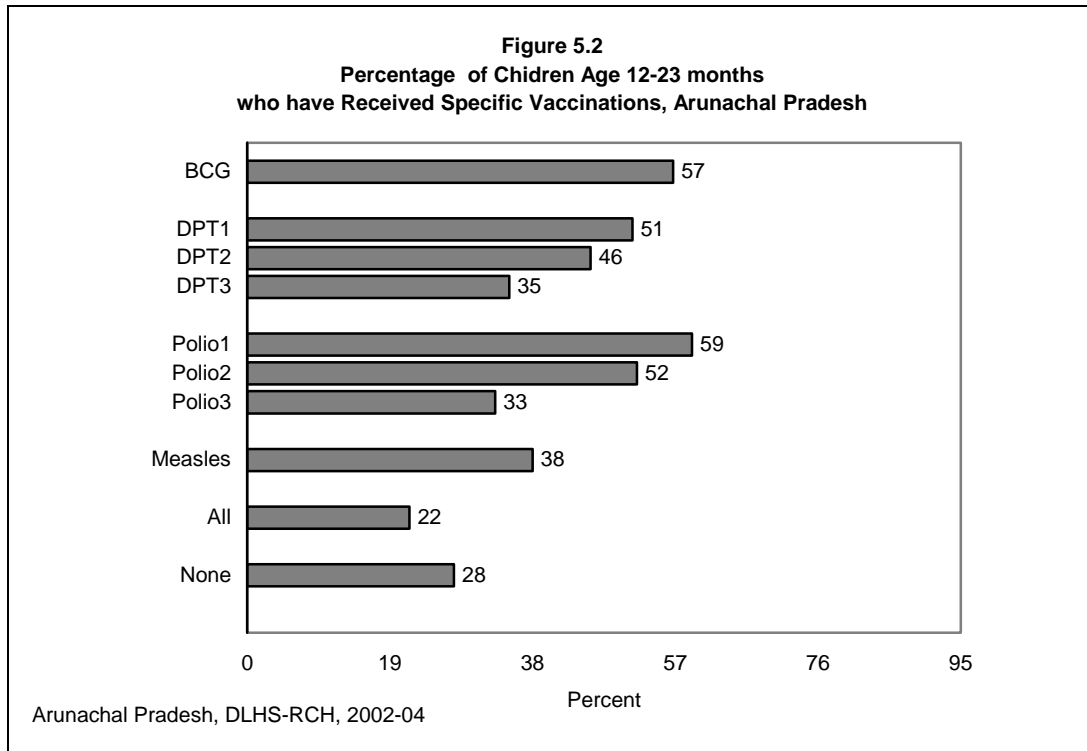
Table 5.4 VACCINATION OF CHILDREN

Percentage of children age 12-23 months who received vaccination according to some selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Polio 0	BCG	DPT			Polio			Measles	Full ¹ vaccination	No vaccination	Number of children
			1	2	3	1	2	3				
Residence												
Rural	39.6	51.8	48.0	42.3	32.0	57.3	49.4	30.5	35.0	19.6	30.9	1,238
Urban	67.1	73.4	62.4	57.1	44.5	65.7	60.4	41.5	48.7	28.2	15.9	364
Sex of the child												
Male	48.5	58.1	52.5	45.8	35.2	60.5	53.1	34.1	38.9	22.7	26.4	822
Female	43.1	55.2	50.0	45.6	34.5	57.8	50.6	31.8	37.3	20.4	28.7	780
Birth order												
1	60.0	72.0	69.0	63.0	50.9	71.2	65.0	42.7	50.1	31.4	15.4	431
2	48.6	57.3	46.7	41.4	33.0	61.4	55.9	36.1	38.4	20.3	24.2	382
3	46.1	61.0	54.4	48.9	34.4	62.3	54.0	34.5	43.3	24.9	24.9	321
4+	30.5	39.1	36.6	31.0	21.9	44.2	35.2	20.4	23.2	11.3	43.2	467
Mother's education												
Non-literate	33.0	42.4	37.7	33.0	24.3	50.6	43.1	26.1	25.1	14.1	37.2	840
0-9@ years	52.4	67.1	60.1	53.0	40.7	63.7	56.4	34.3	46.8	25.9	21.1	573
10 years and above	83.2	88.8	85.4	80.2	64.3	83.9	77.9	60.0	69.5	41.8	4.0	189
Religion												
Hindu	56.7	64.5	58.5	52.0	40.5	63.5	57.3	37.0	45.0	23.5	19.7	516
Muslim	51.6	52.4	39.4	38.1	28.5	47.2	40.3	28.0	31.2	17.7	38.7	64
Christian	30.5	40.9	39.0	34.9	25.8	46.9	38.3	24.7	26.6	14.2	40.2	356
Buddhist	35.9	61.9	53.2	47.2	31.5	66.8	62.3	45.0	43.3	23.6	18.9	185
No Religion	(29.2)	(50.0)	(45.8)	(43.8)	(35.4)	(45.8)	(41.7)	(33.3)	(33.3)	(29.2)	(45.8)	43
Other	49.1	57.8	52.7	46.0	36.0	62.7	53.5	28.6	36.5	22.1	27.9	436
Caste/tribe#												
Scheduled caste	59.5	66.1	62.6	56.4	46.6	65.4	57.9	39.2	40.1	27.3	18.7	117
Scheduled tribe	40.4	53.6	49.6	43.9	34.0	58.2	49.8	30.1	36.2	21.1	29.6	1,049
Other backward class	53.8	57.9	47.4	42.3	39.3	48.9	41.4	34.7	43.9	28.6	30.7	95
Other	57.4	64.8	54.7	48.9	31.8	66.4	62.8	41.7	42.7	18.3	19.7	273
Standard of living index												
Low	31.5	42.3	39.4	34.3	25.5	48.0	40.4	23.9	28.2	15.4	39.1	920
Medium	59.8	73.2	63.7	57.5	44.1	73.5	66.4	43.0	47.4	26.5	14.1	495
High	79.8	84.2	77.2	70.6	56.5	76.7	70.2	51.3	62.3	38.9	5.9	187
Total	45.9	56.7	51.3	45.7	34.9	59.2	51.9	33.0	38.1	21.6	27.5	1,602

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001. @ Literate mothers with no years of schooling are included. # Total figure may not add to N due to do not and missing cases. ¹ BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles () Based on less than 50 unweighted cases).

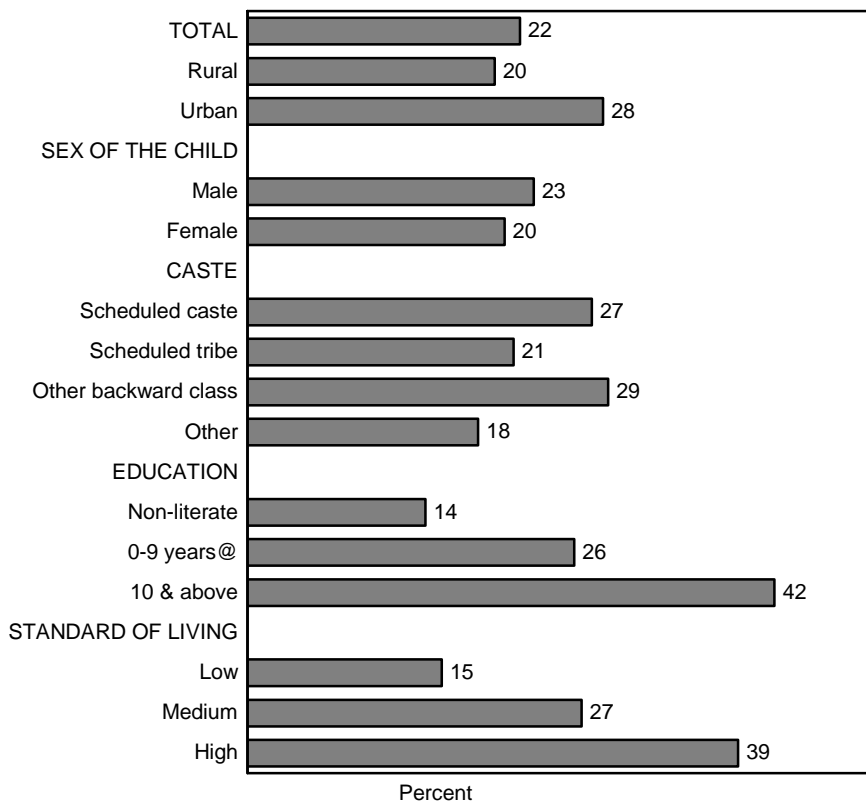
The data indicates that the coverage of each type of vaccine is more in urban areas than in rural areas. Twenty-eight percent of the children in urban areas had received all the recommended vaccinations by the time of the survey, compared with 20 percent in rural areas. Differentials in rural-urban against polio 0 may be observed from the table. Sixty-seven percent of the children have received polio vaccine at the time of birth in urban areas whereas a little less than half (40 percent) it received the same in the rural areas.



Male children (23 percent) are more likely than female children (20 percent) to be fully vaccinated. Male children are also much more likely than female children to have received most of the individual vaccinations. The relationship between vaccination coverage and birth order is consistently negative for almost all vaccinations. A large majority of first-order births occur to younger women who are more likely than older women to utilize child health care services. As with the use of child health care services, there is a positive relationship between mother's education and children's vaccination coverage. Only 14 percent children of non-literate mothers are fully vaccinated compared to 26 percent of children with mothers' education below high school and 42 percent of mothers who have at least completed high school. Hindu children and Buddhist children are much more likely than Muslim children to have received each of the recommended vaccinations. Children from Scheduled Castes and children from other backward classes are more likely to have BCG, DPT-1, DPT-2, Polio-1, Polio-3 and measles vaccinations, and children from scheduled tribes. The standard of living index of the household has a strong positive relationship with vaccination coverage. Thirty-nine percent of children from households with a high standard of living are fully vaccinated, whereas only 28 percent of children are from households with a low standard of living are fully vaccinated.

Error!

Figure 5.3
Percentage of Children Age 12-23 months
Who Have Received All Vaccination, Arunachal Pradesh



@Literate mothers with no years of schooling are also included.

Arunachal Pradesh, DLHS-RCH, 2002-04

Table 5.5 shows the percentage of children in the age group 12-23 months and 24-35 months with a vaccination card, and the percentage who received various vaccinations during the first year of life by current age of children and place of residence. The interviewer was shown this vaccination card.

The proportion of children fully vaccinated by age 12 months increased slightly from 22 percent for children in the age group 12-23 months to 23 percent for children in the age group 24-35 months. A rural-urban differential for the coverage of full vaccination is also observed. Twenty percent of children in the age group 12-23 months are fully vaccinated against 21 percent of children in the age group 24-35 months in rural areas, and this gap is slightly more in urban areas (Figure 5.4). Only 28 percent of children in the age group 12-23 months have received all vaccinations in rural areas compared to 31 percent with children in the age group 24-35 months. Younger children aged 12-23 months are more likely to receive each type of vaccine except Polio-3, DPT-3 and measles.

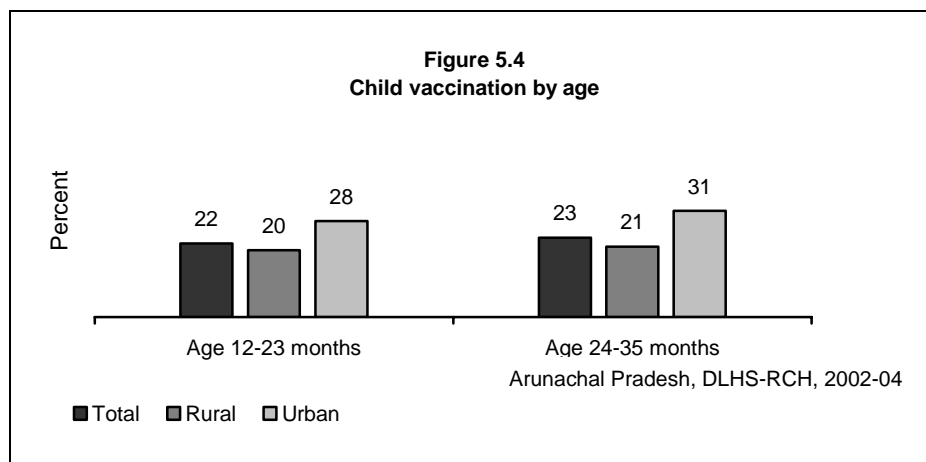
Table 5.5 CHILDHOOD VACCINATION RECEIVED BY 12 MONTHS OF AGE

Percentage of children age 12-23 months and 24-35 months with a vaccination card that was shown to the interviewer and percentage who received specific vaccinations by 12 months of age according to residence, Arunachal Pradesh , 2002-04

Vaccination status	Total		Rural		Urban	
	12-23 months	24-35 months	12-23 months	24-35 months	12-23 months	24-35 months
Vaccination card shown to interviewer	36.5	30.1	33.5	28.1	46.8	36.0
Percentage vaccinated by 12 months of age						
Polio 0	45.9	46.3	39.6	37.6	67.1	72.2
BCG	56.7	55.5	51.8	49.9	73.4	72.2
DPT injection						
No DPT	44.4	44.3	47.6	48.3	33.7	32.7
1	5.6	6.0	5.7	5.9	5.3	6.3
2	10.8	7.8	10.3	7.8	12.6	7.7
3	34.9	37.0	32.0	32.8	44.5	49.5
Don't remember/missing	4.2	4.8	4.2	5.1	3.9	3.8
Polio doses						
No Polio	35.9	40.3	37.8	45.7	29.5	24.0
1	7.4	7.6	8.0	7.4	5.3	8.3
2	19.1	13.0	19.1	11.8	19.0	16.4
3	33.3	31.6	30.8	27.9	41.7	42.4
Don't remember/missing	4.3	7.5	4.2	7.0	4.5	8.9
Measles	38.1	40.6	35.0	36.2	48.7	53.4
Full ¹ vaccination	21.6	23.3	19.6	20.7	28.2	31.2
No vaccination at all	27.5	31.0	30.9	36.1	15.9	15.8
Number of children	1,602	1,639	1,238	1,225	364	414

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001

¹ BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles



5.3 Source of Immunization

Table 5.6 gives the percent distribution of children under three years of age who have received any vaccination by the source of last vaccine, according to place of residence and availability of health facilities in the village. The sub-centre is the primary provider of childhood vaccinations in Arunachal Pradesh. Most of the children (94 percent) were immunized at the government health facilities and only two percent at private health facilities. Further, among the children immunized, 61 percent of them had received vaccination from the Government/Municipal hospital, 23 percent from PHC's, and 8 percent from Sub-centre. The percentage of children receiving vaccination from the private sector is same in rural areas (2 percent) as well as in urban areas (2 percent). Even in urban areas, however, 94 percent of children received their vaccination from the government health facility. Children from those villages where health facilities are available are slightly more likely to receive vaccination from the government health facility.

Source of vaccination	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Government health sector					
Government/municipal hospital	61.4	56.3	74.2	50.2	62.6
Community/primary health centre	23.3	26.0	16.6	31.7	20.0
Sub-centre	8.4	10.7	2.7	11.6	9.7
RCH/MCP camp	0.5	0.6	0.3	1.0	0.3
Private health sector					
Private hospital	1.1	1.2	0.9	1.1	1.3
Private doctor	0.7	0.5	1.4	0.3	0.6
ISM ² health facility	0.6	0.5	0.8	0.7	0.2
Other	2.8	3.1	2.0	2.2	4.0
Do not remember	0.4	0.3	0.8	0.1	0.5
Missing	0.7	0.8	0.3	0.9	0.7
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	3,430	2,458	972	1,250	1,208

Note: Table includes last and last but one living children born in the three years preceding the survey.¹ Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. ² Either government or private health facility of Indian System of Medicine

5.4 Reason for Not Immunizing the Children

Table 5.7 presents the percent distribution of children under the age of three years who did not receive any vaccination by reason as reported by the mother according to place of residence and availability of health facilities in the village. About 32 percent of the children did not receive any vaccination because the mothers of children were unaware of the need for immunization, and 14 percent of children were not vaccinated, as the mothers feel that they were too young. The other reasons for not immunizing the children as reported by the mothers were place or time of vaccination was not known (15 percent), place or time of vaccination was inconvenient (14 percent), fear of side effects (3 percent), no faith in vaccination (4 percent) and ANM absent/vaccine not available (3 percent), and family problems (14 percent). The percentage of children who did not receive any vaccinations is almost the same in rural areas (32 percent) and in urban areas (33 percent), as they were unaware of the need for immunization as reported by their mothers. Children from those villages where health facilities are available are have also reported that they were unaware of the need for immunization (33 percent) as compared to those villages where health facilities are not available (31 percent). Where health facilities were available, place/time unknown, place/time inconvenient, family problems and child too young were reported more as reasons for not immunizing the children compared to the areas without having the same.

Table 5.7 REASON FOR NOT GIVING VACCINATION					
Percent distribution of children under age 3 who did not receive any vaccination by reason reported by mother for not giving vaccination, according to place of residence and availability of health facilities in the village, Arunachal Pradesh, 2002-04					
Reason	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Unaware of need for immunization	31.8	31.6	33.1	30.7	33.0
Place/time unknown	14.7	15.2	11.1	14.8	15.9
Place/time inconvenient	14.3	15.3	6.9	14.5	16.7
Fear of side effect	3.1	2.6	6.7	2.8	2.4
No faith in Immunization	4.0	3.9	4.3	5.1	1.9
ANM absent/vaccine not available	3.2	3.2	2.8	2.5	4.4
Long waiting time	0.4	0.2	1.8	0.2	0.1
Child too young	13.6	13.4	14.4	13.5	13.4
Family problems ²	13.5	13.3	15.1	14.4	11.5
Other	1.5	1.2	3.9	1.4	0.8
Total percent	100.0	100.0	100.0	100.0	100.0
Number of children	1,644	1,431	213	898	533

Note: Table includes last and last but one living children born in the three years preceding the survey¹ Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village² Includes mother too busy, family problems, including illness of mother, and illness of child

5.5 Vitamin A and IFA Supplements

Vitamin A deficiency is one of the most common nutritional deficiency disorders in the world, affecting more than 250 million children worldwide (Bolem et. al., 1997). The child survival programme also includes administration of five doses of Vitamin A for prevention of night blindness and distribution of IFA for iron supplement. In Round II, mothers of children born during the three years before the survey were asked whether their children had received a dose of

Vitamin A and IFA tablets/syrup. Those who said that their children had received a dose of Vitamin A and IFA tablets/syrup were further asked how many doses were given. Table 5.8 shows the percentage of children in the age group 12-35 months who received at least one dose of Vitamin A and IFA tablets/syrup by selected background characteristics. In the state of Arunachal Pradesh as a whole, 26 percent of the children received at least one dose of Vitamin A, and only seven percent received IFA tablets/syrup. This indicates that a large number of children in Arunachal Pradesh did not receive Vitamin A supplements and very few children received IFA tablets/syrup supplementation.

Table 5.8 VITAMIN A AND IFA SUPPLEMENTATION FOR CHILDREN			
Percentage of children age 12-35 months who have received at least one dose of Vitamin A and iron folic acid tablets/syrup, according to selected background characteristics, Arunachal Pradesh, 2002-04			
Background characteristic	Percentage who received at least one dose of vitamin A	Percentage who received iron folic acid tablets/syrup	Number of children
Age of the child			
12-23 months	24.9	7.2	1,602
24-35 months	27.7	7.5	1,639
Sex of the child			
Male	27.2	7.0	1,581
Female	25.4	7.7	1,660
Birth order			
1	33.7	9.6	878
2	25.9	6.4	792
3	30.3	8.8	605
4+	17.3	5.3	965
Residence			
Rural	23.1	6.6	2,463
Urban	36.5	9.6	778
Mother's education			
Non-literate	16.6	4.3	1,644
0-9 years@	29.9	7.4	1,152
10 years and above	52.7	18.7	444
Religion			
Hindu	29.2	9.8	1,067
Muslim	23.7	6.9	149
Christian	18.7	5.4	732
Buddhist	28.1	5.9	333
No Religion	35.0	3.6	81
Other	28.0	6.9	878
Caste/tribe #			
Scheduled caste	31.5	9.0	241
Scheduled tribe	24.2	6.1	2,049
Other backward class	31.3	9.4	194
Other	29.9	9.7	592
Standard of living index			
Low	16.2	4.0	1,835
Medium	35.6	9.8	987
High	48.4	16.4	419
Availability of health facility in the village¹			
Yes	25.1	9.5	1,133
No	21.4	4.2	1,330
Total	26.3	7.4	3,241

Note: Table includes last and last but one living children born in the three years preceding the survey. @ Literate mother with no years of schooling are also included here. # Total figure may not add to N due to do not know and missing cases. ¹ Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village.

Children in the age group 24-35 months are more likely to receive at least one dose of Vitamin A and IFA tablets/syrup each than children in the age group 12-23 months. Male children are more likely to receive Vitamin A than female children but in case of IFA tablets/syrup the pattern is reverse. Children living in rural areas, children whose mother completed high school and above, children living in households with a high standard of living, and children living in those villages where health facilities are available are more likely to receive a dose of Vitamin A and IFA tablets/syrup. Children of birth order 1 or above are much less likely than children of birth order 2, 3 or 4 to receive any dose of vitamin A and IFA tablets/syrup. Similarly, children from Schedule Tribes are less likely to receive at least one dose of Vitamin A and a dose of IFA tablets/syrup than other caste category.

Table 5.9 CHILDHOOD VACCINATION BY DISTRICT								
Percentage of children who received specific vaccinations and Vitamin A supplementation by district, Arunachal Pradesh, 2002-04								
District	Percentage vaccinated ¹							Percentage received at least one dose of Vitamin A ³
	Polio 0	BCG	DPT3	Polio3	Measles	Full ²	None	
Changlang	48.0	62.3	31.9	39.5	39.1	25.2	33.9	28.5
Dibang Valley	73.6	60.1	29.1	30.2	39.8	10.4	10.2	16.4
East Kameng	38.5	40.5	10.8	18.6	16.8	0.7	20.6	12.6
East Siang	40.9	55.5	47.9	48.7	44.6	40.5	39.9	26.2
Lohit	50.1	64.7	43.0	32.1	48.0	21.0	12.2	31.1
Lower Subansiri	27.3	40.0	26.4	20.7	27.2	14.1	49.0	20.5
Papum Pare	49.7	56.8	32.5	33.7	32.0	22.3	37.4	30.2
Tawang	31.1	73.5	46.2	53.6	52.1	42.7	8.5	55.5
Tirap	52.1	69.4	63.1	53.4	61.0	46.2	17.8	34.0
Upper Siang	15.2	26.6	24.3	19.5	22.2	16.1	65.2	18.6
Upper Subansiri	31.8	54.0	18.9	12.6	25.2	3.0	18.1	17.0
West Kameng	43.2	62.0	36.1	47.6	38.4	15.4	15.5	20.0
West Siang	74.4	74.8	44.8	32.6	50.5	32.2	19.0	38.3
Arunachal Pradesh	45.9	56.7	34.9	33.0	38.1	21.6	27.5	26.3

Note: Table includes only last and last but one living child born since 1.1.1999/1.1.2001¹ Children age 12-23 months, ² BCG, three injection of DPT, three doses of Polio (excluding Polio 0) and measles. ³ Children age 12-35 months.

5.6 Immunization Coverage by District

The coverage of vaccination rates for all vaccines for children in the age group 12-23 months in each district is presented in Table 5.9. There are inter-district differentials in the coverage for different vaccinations, and for children receiving all vaccinations and those that did not receive any vaccination at all. The percentage of children who are fully vaccinated ranges from less than one percent in East Kameng to 46 percent in Tirap. In 7 out of 13 districts, namely Dibang Valley (10 percent), East Kameng (less than 1 percent), Lohit (21 percent), Lower Subansiri (14 percent), Upper Siang (16 percent), Upper Subansiri (3 percent) and West Kameng (15 percent) the coverage rate of full immunization is below the state average of 22 percent. Sixty-five percent of children in Upper Siang district were not vaccinated at all, and in five districts, the percentage of children not vaccinated is higher than the state average of 28 percent. In nearly all

the districts, relatively fewer children have received the measles vaccine than any of the other vaccinations. The coverage of polio drops at the time of birth varies from the lowest in Upper Siang (15 percent) to the highest in West Siang (74 percent).

District wise variations in the percentage of children who received at least one dose of Vitamin A are also shown in Table 5.9. The percentage of children in the age group 12-35 months who received at least one dose of Vitamin 'A' supplements ranges from 13 percent in East Kameng to 55 percent in Tawang. Dibang Valley (16 percent), East Kameng (13 percent), Lower Subansiri (21 percent), Upper Siang (19 percent), Upper Subansiri (17 percent) and West Kameng (20 percent) stand out as having below the state average to receive at least one dose of Vitamin A.

5.7 Child Morbidity and Treatment

This section discusses the awareness, prevalence and treatment of diarrhoea and acute respiratory infection (ARI). Mothers of surviving children born during the three years preceding the survey were asked if their children suffered from cough and cold or diarrhoea during the two weeks preceding the survey, and if so, the type of treatment that had been given. Accuracy of all these measures is affected by the reliability of the mother's recall of when the diseases occurred.

5.7.1 Awareness of Diarrhoea

Diarrhoea is a major killer disease of children under five years of age. Deaths from acute diarrhoea are mostly due to dehydration resulting from loss of water and electrolytes. An attempt was made to collect data on awareness of diarrhoea management and the practice followed during the episode of diarrhoea. This has been presented in Table 5.10.

In Arunachal Pradesh, 49 percent of the mothers with births three years preceding the survey were aware of what to do when a child had diarrhoea, as compared to 40 percent in Round I,) and 28 percent were aware of ORS, (which was four percent point down from Round I.) Nineteen percent of the women were aware of salt and sugar solution. Some of the women also reported that they would continue normal food (5 percent), continue breastfeeding (9 percent), and give plenty of fluids (4 percent), and about 58 percent of women did not know what to give a child who had diarrhoea. As expected, knowledge of ORS is higher among urban women (60 percent) than rural women (45 percent), and among high school and above educated women (80 percent) as compared to non-literate women (37 percent). Women belonging to Schedule Tribes (47 percent) are less likely to know about ORS than women belonging to scheduled caste (56 percent) and other caste groups (51 percent). Seventy-four percent of women with children having a high standard of living know about ORS and it declines to 54 percent for women with a medium standard of living and 40 percent with a low standard of living. Knowledge of ORS is more among 25-34 years age groups and among younger women than among older women. The availability of health facilities in the village has no effect on the knowledge of diarrhoea management among the women.

Table 5.10 AWARENESS OF DIARRHOEA

Percentage of women who are aware of diarrhoea management, type of practice followed if child gets diarrhoea, and percentage of women whose child suffered¹ from diarrhoea by selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Knowledge of diarrhoea management	Type of practices to be followed if child gets diarrhoea*					Do not know	Number of women
		Give ORS	Salt and sugar solution	Continue normal food	Continue breastfeeding	Give plenty of fluids		
Age								
15-24	45.9	31.9	15.9	4.5	8.3	2.8	61.3	1,805
25-34	52.9	33.7	22.1	5.1	9.5	4.0	54.3	2,520
35-44	42.1	24.1	17.7	7.3	8.6	3.7	65.7	692
Residence								
Rural	45.3	27.5	16.6	4.7	8.1	2.6	61.4	3,823
Urban	60.4	45.1	27.7	6.7	11.7	6.6	48.8	1,194
Mother's education								
Non-literate	36.5	19.4	12.2	3.9	7.0	1.9	67.6	2,527
0-9@ years	54.2	37.0	19.0	5.4	10.5	3.1	57.7	1,781
10 and above	79.7	62.2	45.0	9.1	12.1	10.7	27.5	709
Religion								
Hindu	49.1	32.4	20.8	4.6	8.5	3.9	56.8	1,645
Muslim	54.6	41.7	13.9	4.1	12.4	1.8	55.0	211
Christian	44.3	25.4	15.3	3.5	5.3	2.3	60.3	1,138
Buddhist	40.3	23.2	21.2	2.9	3.0	4.2	60.5	560
No Religion	23.1	21.1	11.3	4.3	9.6	2.6	81.5	108
Other	57.2	39.0	21.5	8.5	14.4	4.2	56.5	1,355
Caste/tribe#								
Scheduled caste	55.7	39.8	23.2	4.3	10.9	5.1	50.8	357
Scheduled tribe	47.1	29.9	18.3	5.8	9.2	3.6	60.6	3,204
Other backward class	49.3	25.3	22.7	2.9	7.5	3.9	56.3	287
Other	50.7	35.9	21.8	4.4	8.3	3.4	55.8	939
Standard of living index								
Low	40.2	22.2	12.3	5.0	9.0	2.5	67.1	2,836
Medium	54.0	38.3	22.5	4.3	7.6	2.7	53.3	1,503
High	73.9	56.7	41.1	7.9	11.6	9.8	33.2	678
Availability of health facility² in the village								
Yes	44.7	29.9	16.8	4.1	6.1	2.0	60.7	1,739
No	45.8	25.5	16.5	5.3	9.8	3.1	61.9	2,083
Total	48.9	31.7	19.3	5.2	9.0	3.5	58.4	5,017

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. ¹ Last two weeks prior to survey. @ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases.

² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village.

5.7.2 Treatment of Diarrhoea

During the two weeks before the survey, 12 percent of the women reported that their children suffered from diarrhoea (Table 5.11). Women, whose children had diarrhoea, were further asked about treatment with ORS, any other medical treatment and source of treatment. About 52 percent of the women mentioned that they gave ORS therapy, and 54 percent of the women said that their child had been treated at health facility. Use of ORS for the treatment of childhood diarrhoea in Arunachal Pradesh is relatively high among urban women than among rural women.

It was observed that a relatively high proportion of women from those villages where health facilities are available within the village used ORS for the treatment of childhood diarrhoea.

Table 5.11 TREATMENT OF DIARRHOEA					
Percentage of women who sought treatment whose child suffered from diarrhoea and by source of treatment, according to place of residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Sought treatment/ source of treatment	Total	Residence		Availability of health facility ² in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered ¹ from diarrhoea	11.9	11.9	12.1	12.3	11.5
Number of women	5,017	3,823	1,194	1,739	2,083
Percentage of women whose child suffered ¹ from diarrhoea treated with ORS	51.8	47.8	64.3	45.9	49.5
Percentage of women whose child suffered ¹ from diarrhoea sought treatment	54.4	51.4	63.9	53.2	49.9
Number of women	598	454	145	215	239
Source of treatment					
Government health facility					
Hospital/dispensary	56.7	54.2	63.2	65.4	43.5
UHC/UHP/UFWC	0.2	0.2	0.0	0.0	0.5
CHC/ Rural hospital	5.6	6.5	3.4	5.3	7.6
Primary health centre	16.0	21.6	2.0	11.8	31.0
Sub centre	7.6	10.6	0.0	11.8	9.5
Private health facility					
NGO/Trust hospital/clinic	5.9	0.7	19.0	0.9	0.5
Private hospital clinic	2.1	1.0	5.0	0.2	1.7
ISM ³ facility	55.5	53.8	59.9	63.4	44.6
Home remedy	5.3	4.5	7.4	3.9	5.1
Other	5.0	3.9	7.7	3.2	4.7
Percent distribution of women who seek treatment by					
Doctor	93.0	91.7	96.3	94.3	89.2
ANM/Nurse/LHV	1.3	1.5	0.5	2.2	0.9
Dai	3.4	4.3	1.4	2.0	6.4
Relative/friends	0.9	0.9	1.0	0.0	1.8
Chemist/medical shop	0.8	0.9	0.7	0.0	1.7
ISM Practitioner	0.5	0.7	0.0	1.5	0.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	326	233	92	114	119
Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II.					
¹ Last two weeks prior to survey. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village. ³ Either government or private health facility of Indian System of Medicine					

Among those mothers whose children suffered from diarrhoea during the last two weeks before the survey and those women who consulted or obtained advice, about 8 percent of women visited private hospitals/clinics and 56 percent of women treated their children through the Indian System of Medicine.

5.7.3 Awareness of Pneumonia

Another major killer disease among infants and children is Acute Respiratory Infections (ARI) including pneumonia. Early diagnosis and treatment with antibiotics can prevent a large proportion of ARI/pneumonia deaths. An attempt was made to understand the awareness level of pneumonia, and the proportion of children who had suffered from pneumonia during the last two weeks before the survey and their health seeking behaviour. This is presented in Table 5.12. It was found that a low proportion (21 percent) of women with births three years preceding the survey in Arunachal Pradesh were aware of danger signs of pneumonia. The figure was slightly up from 26 percent in Round I. A relatively high proportion of women in urban areas (33 percent) were aware of the danger signs of pneumonia as compared to women from rural areas (17 percent). Knowledge of danger signs of pneumonia is higher among the age group 25-34 years old women (23 percent), Muslim women (43 percent), other castes category (36 percent), highly educated women (43 percent), women living in high standard of living household (39 percent), and women living in those villages with health facilities (20 percent).

Women, who were aware of the danger signs of pneumonia, were further asked about different types of signs of pneumonia. Most of the women mentioned about 'difficulty in breathing' (58 percent), 'pain in chest and productive cough' (55 percent), 'wheezing / whistling' (12 percent), 'chest in drawing' (30 percent), 'not able to drink or take a feed' (16 percent), 'rapid breathing' (23 percent), 'condition get worse than before' (11 percent) and 'excessive drowsy and difficulty in keeping awake' (10 percent).

5.7.4 Treatment of Pneumonia

About 18 percent of women reported that their child had suffered from pneumonia during two weeks before the survey, the corresponding figures were 16 percent in rural areas and 24 percent in urban areas (Table 5.13). The incidence of pneumonia varies little with availability of health facilities in the villages.

Table 5.13 also shows that the percentage of women whose children suffered from ARI symptoms in the last two weeks before the survey who sought advice/treatment and taken to a health facility or provider. Ninety-one percent of women received some advice or treatment whose children were ill with ARI. This percentage is relatively low in rural areas (89 percent) than in urban areas (93 percent) and village without health facilities (91 percent) than village with health facility (88 percent).

Among them who got advice for children ill with ARI, 17 percent of women visited private hospital/clinic, and 52 percent went to government hospital/dispensary, whereas 4 percent through Indian System of Medicine and 10 percent of them obtained treatment through home remedies.

Table 5.12 AWARENESS OF PNEUMONIA

Percentage of women who are aware of danger signs of pneumonia by signs by selected background characteristics and availability of health facility in the village, Arunachal Pradesh , 2002-04

Background characteristic	Percentage of women aware of danger signs of pneumonia	Number of women	Danger signs of ARI								Number of women	
			Difficulty in breathing	Chest in-drawing	Not able to drink or take a feeding	Excessive drowsy and difficulty in keeping awake	Pain in chest and productive cough	Conditions get worse than before	Wheezing/whistling	Rapid breathing		
Age												
15- 24	20.0	1,805	56.9	34.0	17.6	9.0	56.8	12.2	13.5	26.7	362	
25-34	23.3	2,520	58.1	28.7	14.1	10.8	55.5	10.6	11.6	20.5	588	
35-44	13.3	692	59.3	22.4	17.9	8.1	48.0	8.2	3.6	18.8	92	
Residence												
Rural	17.0	3,823	58.5	31.6	15.1	9.9	53.0	11.5	12.1	24.9	651	
Urban	32.7	1,194	56.5	27.3	16.5	9.8	59.1	9.9	10.6	18.4	390	
Mother's education												
Non-literate	14.5	2,527	49.9	24.9	12.0	9.4	55.8	8.6	9.4	20.2	366	
0-9@ years	20.9	1,781	61.4	31.4	13.7	7.9	52.9	13.0	13.6	23.3	372	
10 and above	42.8	709	62.9	34.6	22.3	12.9	57.5	11.2	11.6	24.2	304	
Religion												
Hindu	30.7	1,645	53.4	31.7	21.3	11.5	60.0	11.8	14.1	21.2	506	
Muslim	43.0	211	65.9	44.4	7.4	8.4	50.0	6.4	11.0	31.1	91	
Christian	13.1	1,138	63.4	24.3	9.6	5.3	46.5	12.3	7.6	22.6	148	
Buddhist	16.1	560	49.8	31.6	15.5	9.9	65.6	12.8	14.1	23.1	90	
No Religion	12.4	108	*	*	*	*	*	*	*	*	13	
Other	14.3	1,355	62.4	22.4	7.9	9.9	46.1	9.7	7.4	19.7	193	
Caste/tribe#												
Scheduled caste	25.2	357	54.4	38.2	20.4	14.2	68.2	20.6	10.8	26.4	90	
Scheduled tribe	14.6	3,204	63.7	23.3	10.7	8.8	50.5	10.3	10.0	21.8	467	
Other backward class	29.9	287	54.1	35.4	25.9	8.0	53.5	5.1	11.9	18.8	86	
Other	34.5	939	48.4	35.4	19.6	10.9	59.5	12.6	15.3	24.3	324	
Standard of living index												
Low	14.8	2,836	57.2	27.6	12.7	7.9	54.4	10.5	9.7	23.3	421	
Medium	23.9	1,503	56.8	27.8	14.7	9.9	51.2	11.1	12.0	22.6	359	
High	38.7	678	60.1	37.0	21.7	13.2	62.2	11.3	13.8	21.0	262	
Availability of health facility ² in the village												
Yes	20.4	1,739	55.9	35.3	16.1	9.8	58.6	11.0	12.3	25.6	356	
No	14.2	2,083	61.7	27.2	13.9	10.1	46.3	12.2	11.9	24.2	296	
Total	20.8	5,017	57.8	30.0	15.6	9.9	55.3	10.9	11.5	22.5	1,042	

Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. ¹ Last two weeks prior to survey. Table includes 20 missing information on awareness of pneumonia. @ Literate mother with no years of schooling are included. # Total figure may not add to N due to do not know and missing cases. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village * Percentage not shown: Based on few cases.

Table 5.13 TREATMENT OF PNEUMONIA					
Percentage of women who sought treatment whose child suffered ¹ from cough and cold and source of treatment, according to place of residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Sought treatment/ source of treatment	Total	Residence		Availability of health facility ² in the village	
		Rural	Urban	Yes	No
Percentage of women whose child suffered from cough, cold and difficulty in breathing	17.5	15.6	23.6	13.8	17.0
Number of women	5,017	3,823	1,194	1,739	2,083
Percentage of women sought treatment whose child suffered from cough and cold	57.1	52.7	66.6	57.6	49.4
Number of women	875	595	281	240	354
Source of treatment					
Government health facility					
Hospital/dispensary	52.4	55.7	46.9	56.0	55.4
CHC/ Rural hospital	3.2	5.1	0.0	4.2	5.8
Primary health centre	10.8	15.8	2.4	17.5	14.4
Sub centre	3.7	5.1	1.3	9.1	2.0
Private health facility					
NGO/Trust hospital/clinic	11.1	1.7	26.9	0.0	3.0
Private hospital clinic	5.7	5.1	6.7	8.2	2.6
ISM ³ facility	4.1	5.0	2.8	2.5	6.9
Home remedy	10.1	8.5	13.0	8.5	8.4
Other	5.4	3.1	9.3	1.3	4.6
Percent distribution of women who seek treatment by					
Doctor	90.8	89.4	93.2	88.0	90.6
ANM/Nurse/LHV	2.8	4.2	0.7	5.5	3.1
Dai(Trained/Untrained)	1.8	1.5	2.4	1.9	1.1
Relative/friends	1.0	0.4	2.0	0.0	0.8
Chemist/medical shop	2.2	2.9	1.0	4.0	2.1
ISM practitioner	0.7	1.1	0.0	0.3	1.7
Other	0.5	0.3	0.8	0.0	0.6
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	500	313	187	139	175
Note: Table based on women with living children born since 01.01.1999 for phase - I /01.01.2001 for phase - II. ¹ Last two weeks prior to survey.. ² Includes sub-centre, primary health centre, Community health centre or referral hospital, government hospital, and government dispensary within the village ³ Either government or private health facility of Indian System of Medicine					

5.7.5 Awareness of Diarrhoea, ORS and Pneumonia and Incidence of Diarrhoea and Pneumonia by District

Table 5.14 presents the knowledge of diarrhoea management, knowledge of ORS, and incidence of diarrhoea by district. Although knowledge of diarrhoea management is high in almost all districts but knowledge about ORS is among half of the respondents. Knowledge of ORS is also not common, and it is lowest in Lohit (17 percent). Women in Lower Subansiri, Tirap, Upper

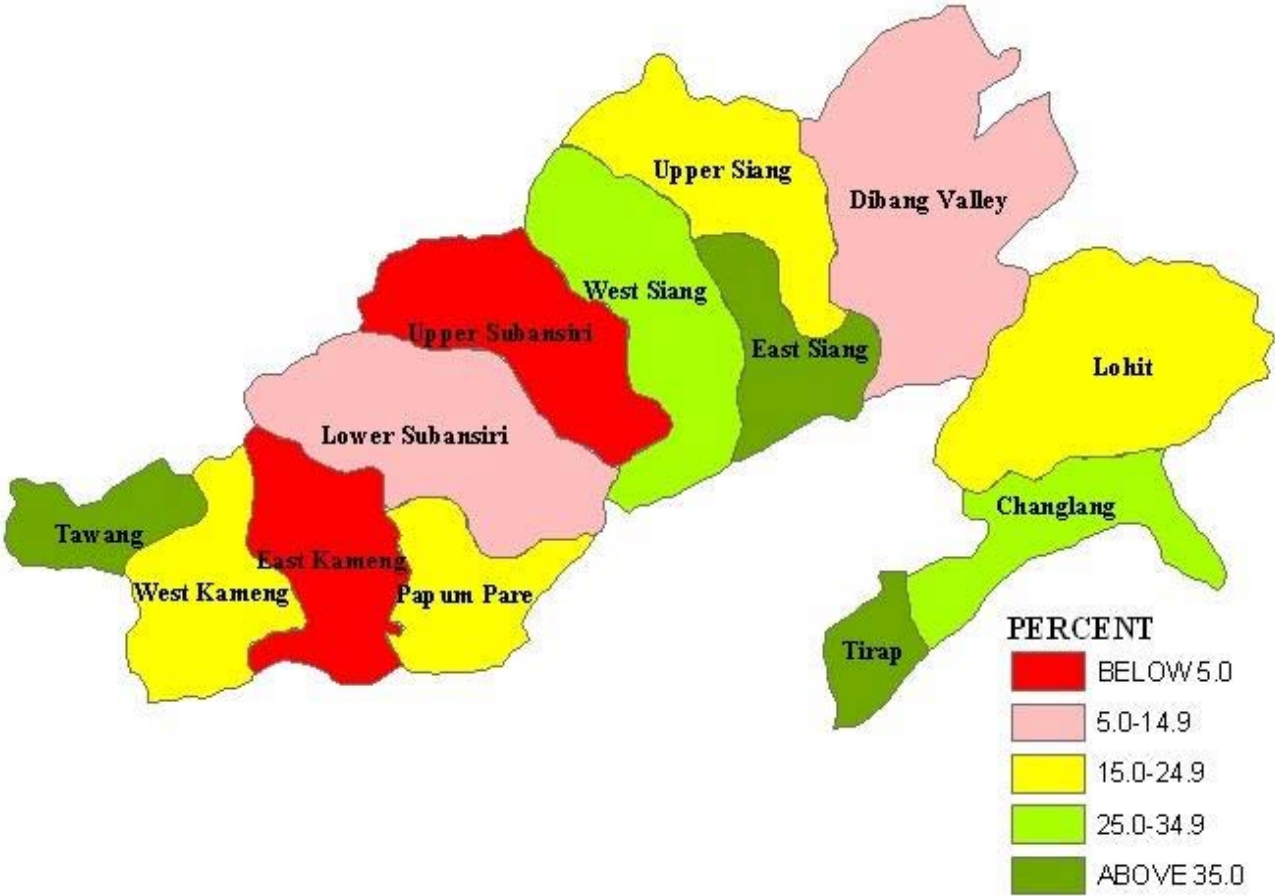
Siang, West Kameng, Papum Pare, East Kameng and West Kameng also have relatively low level of knowledge of ORS. The incidence of diarrhoea is 12 percent in the state as a whole and it varies from two percent in Tirap to 29 percent in East Siang. Table 5.14 also shows differentials in the awareness of danger signs of pneumonia and incidence of pneumonia. In comparison to awareness about diarrhoea management, the awareness of danger signs of pneumonia is quite low. It is the lowest in Tawangr (7 percent) and highest in Lohit (37 percent). Incidence of ARI symptoms is comparatively high in nearly all the districts in Arunachal Pradesh. It is highest in Papum Pare (42 percent), East Siang (35 percent), Tawang (26 percent), Upper Siang (21 percent) and lowest in East Kameng (3 percent).

Table 5.14 KNOWLEDGE OF DIARRHOEA MANAGEMENT AND PNEUMONIA BY DISTRICT					
Percentage of women by awareness of diarrhoea management, ORS, danger signs of pneumonia and whose child had suffered from diarrhoea and pneumonia during last two weeks prior to survey by district, Arunachal Pradesh, 2002-04					
District	Percentage of women aware of		Percentage of women whose child suffered ¹ from diarrhoea	Percentage of women aware of danger signs of pneumonia	Percentage of women whose child suffered ¹ from pneumonia
	Diarrhoea Management	ORS			
Changlang	54.2	36.3	8.9	30.3	12.4
Dibang Valley	56.2	45.0	10.5	18.9	9.2
East Kameng	54.9	31.6	2.6	21.7	2.6
East Siang	99.8	74.8	28.9	14.9	35.0
Lohit	33.7	16.8	12.5	37.1	10.3
Lower Subansiri	32.2	17.9	12.3	15.7	9.0
Papum Pare	66.2	31.4	8.5	27.9	42.0
Tawang	55.6	35.2	28.3	7.3	26.2
Tirap	26.4	21.6	1.6	16.5	12.4
Upper Siang	36.9	24.5	15.1	11.6	21.4
Upper Subansiri	63.9	52.8	10.0	12.2	18.8
West Kameng	36.7	26.7	17.4	10.5	10.2
West Siang	48.1	32.2	11.4	19.0	16.3
Arunachal Pradesh	48.9	51.8	11.9	20.8	17.5

Note: Table based on women with last and last but one living children born since 01.01.1999 /01.01.2001. ¹ Last two weeks prior to survey.

Under the RCH programme, the government health facilities are strengthened to provide treatment of ARI. However, the percentage of women who visited to a government health facility for treatment of their children sick with ARI symptoms was very low.

MAP- 5
Percentage of Children (age 12-23 months), Who Have Received Full Vaccination



CHAPTER VI

FAMILY PLANNING

The Reproductive and Child Health Programme has been implemented with a new philosophy and direction to meet the health care needs of women and children. It envisages the provision of couples to control their fertility and have sexual relations free from the fear of pregnancy. Provision of free contraceptive services to all the needy couples is one of the components of the RCH programme. In DLHS-RCH a separate section on family planning was canvassed to all the eligible women to assess the knowledge and practice of various family planning methods. The information on source of currently adopted contraceptive method, source of supply of the method and health problems related to contraceptive use were collected from current users. The current non-users were asked about the past status of contraceptive use, reason for not using contraceptives currently and future intention to adopt a family planning method.

An attempt was made to understand why male methods of family planning especially that of vasectomy was not in common use. The husbands of sampled eligible women were asked about the contraceptive method they would recommend to a couple who was not desirous of any additional children. They were also asked about the reasons for not preferring male methods and their knowledge about the no-scalpel vasectomy. This chapter presents the results of data on contraceptive practices collected from both the sampled women and their husbands.

6.1 Knowledge of Family Planning Methods

Lack of knowledge of various contraceptive choices can be a major barrier to promotion and use of contraceptives among couples. In DLHS-RCH information on knowledge of contraceptives was obtained by asking a question, "Which are the family planning methods you know?" to each sampled eligible women. The knowledge of no-scalpel vasectomy was also asked to the husbands of eligible women. If the respondent did not recognise the name of the family planning method, he was given a brief description on how the particular method was to be used. The DLHS-RCH assesses the knowledge of female sterilisation, male sterilisation including NSV, IUD, Pills, condom and traditional methods along similar lines.

The extent of knowledge of contraceptive methods among currently married women for specific methods and selected background characteristics are shown in Table 6.1 and Figure 6.1. Knowledge of any method including any modern contraceptive method is almost universal in the state of Arunachal Pradesh. The knowledge of any method and any modern method do not vary much by residence. The knowledge of modern spacing method among currently married women is around 81 percent, and slightly higher among the women with an urban residence. There are large differentials in knowledge of all modern methods with respect to the aforesaid background characteristics. For instance, 23 percent of women from rural areas are aware about all modern methods compared to 33 percent of their urban counterparts.

Table 6.1 KNOWLEDGE OF CONTRACEPTIVE METHODS					
Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and selected background characteristics, Arunachal Pradesh, 2002-04.					
Contraceptive methods	Total	Residence		Availability of health facility in the village ³	
		Rural	Urban	No	Yes
Any method	92.2	92.3	91.7	92.2	92.5
Any modern method	91.9	92.2	91.2	92.0	92.3
Any modern spacing method ¹	80.5	79.0	84.6	76.3	82.1
All modern methods ²	25.6	23.0	32.5	19.3	27.3
Female sterilization	84.2	85.2	81.6	84.3	86.1
Tubectomy	49.8	49.5	50.4	49.7	49.3
Laparoscopy	22.6	21.1	26.5	20.2	22.2
Male sterilization	38.9	36.2	46.2	33.6	39.1
Vasectomy	25.8	24.2	29.9	21.7	27.2
No-scalpel vasectomy	14.3	12.6	18.7	12.2	13.2
IUD/Loop	64.8	63.0	69.5	58.9	67.8
Pills	76.8	75.1	81.4	72.3	78.3
Daily	48.5	46.5	53.6	44.4	49.0
Weekly	28.0	24.9	36.0	21.9	28.5
Condom/Nirodh	43.0	40.2	50.8	37.5	43.2
Sponge (today)	7.4	6.0	11.1	5.1	6.9
Injectables	21.4	21.3	21.5	18.1	25.0
Norplant	3.8	3.1	5.8	2.8	3.4
Contraceptive herbs	12.5	11.9	14.1	11.0	13.0
Any traditional method	20.4	20.5	20.1	18.5	22.8
Any other Indian system of Medicinal contraceptives	2.3	2.0	3.1	1.8	2.3
Number of women	11,874	8,644	3,230	4,626	4,018

Note: ¹ Include IUD, pills and condom. ² Include Female sterilization, Male sterilization, IUD, pills and condom
³ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

Female sterilisation is the most widely known method of all contraceptive methods in Arunachal Pradesh followed by Pills. Overall, 84 percent of currently married women are aware of female sterilization and 39 percent knew about male sterilization. There is very little rural - urban difference in knowledge of female sterilization but it is not the case of male sterilization. A sizable number of urban women (46 percent) know about male sterilization as compared to 36 percent of rural women. There are differentials in spacing methods such as IUD/Loop, Pill and condom users with respect to the background characteristics. The best-known spacing methods are Pills (77 percent) and IUD/Loop (65 percent). Only 43 percent of women know about the condom. There is a large differential in knowledge of spacing methods by residence only 40 percent of the rural women know condom compared to 51 percent of urban women. The modern spacing methods, Pill and IUD are known by 75 and 63 percent of rural women respectively while the corresponding figures in urban areas are 81 and 70 percent respectively of eligible women respondents. The knowledge of these spacing methods remains low as compared to knowledge of sterilization.

In Arunachal Pradesh, only 20 percent of the women are aware of a traditional method and only 2 percent are also aware of other contraceptives of the Indian System of Medicine. It is also observed that women from villages with a health facility are slightly more aware about modern spacing methods.

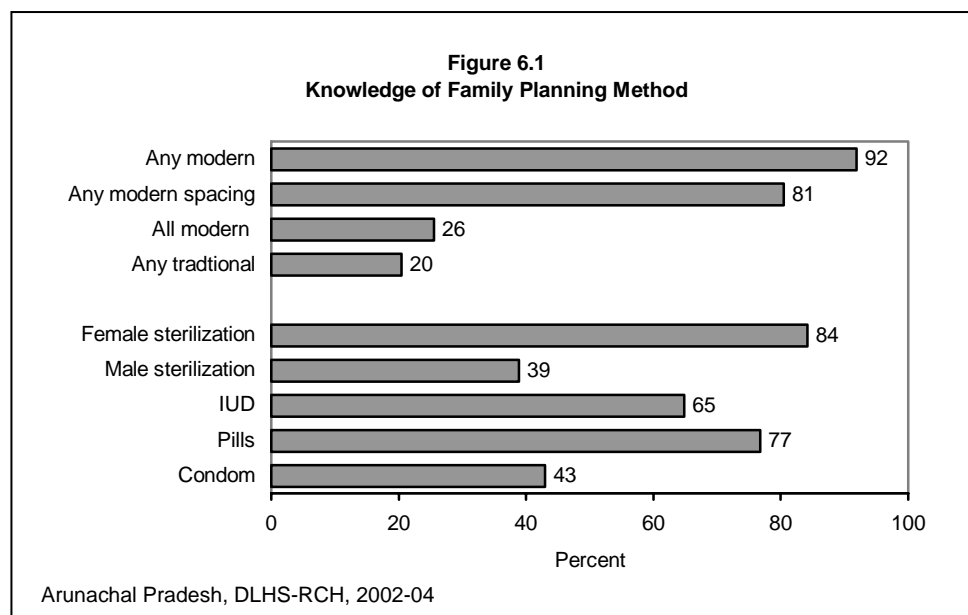


Table 6.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY DISTRICT

Percentage of currently married women age 15-44 years who know any contraceptive method by specific method and district, Arunachal Pradesh, 2002-04

Districts	Any method	Any modern ¹ method	Any modern spacing ² method	All modern ³ methods	Male sterilization	Female sterilization	IUD	Pill	Condom /Nirodh	Any traditional method
Changlang	99.7	99.7	95.3	44.9	58.0	99.3	83.0	93.3	59.1	56.4
Dibang Valley	84.5	84.1	80.6	16.1	25.4	70.7	69.1	75.5	27.2	7.9
East Kameng	75.3	75.3	71.9	20.2	33.0	67.6	54.3	66.5	38.3	4.2
East Siang	99.7	99.7	94.6	40.8	51.7	99.2	85.0	93.0	72.8	47.8
Lohit	88.5	86.8	71.8	4.2	11.6	69.1	39.1	65.6	19.6	7.1
Lower Subansiri	93.2	93.2	71.9	31.4	46.2	88.7	63.5	65.8	41.1	15.1
Papum Pare	97.2	97.2	92.9	39.3	63.8	94.4	80.5	91.2	54.9	23.8
Tawang	81.9	81.7	81.1	3.8	7.0	13.1	58.8	76.4	37.0	2.2
Tirap	97.1	97.1	78.8	12.9	26.3	95.4	67.9	75.7	37.4	11.3
Upper Siang	88.1	87.5	69.4	16.6	28.9	84.8	57.7	61.4	36.6	19.1
Upper Subansiri	80.2	80.0	73.5	14.4	26.1	65.2	49.9	69.8	31.2	10.5
West Kameng	97.4	97.4	94.5	42.2	62.0	91.5	87.7	91.8	59.9	36.5
West Siang	91.1	91.1	62.5	19.0	25.4	85.8	43.7	60.0	37.3	0.4
Arunachal Pradesh	92.2	91.9	80.5	25.6	38.9	84.2	64.8	76.8	43.0	20.4

Note: ¹ Includes Female sterilization, Male sterilization, IUD, Pills and Condom. ² Includes IUD, Pills and Condom. ³ Includes Female sterilization & Male sterilization & IUD & Pills and Condom.

6.1.1 Knowledge of Family Planning Methods by Districts

Table 6.2 shows the knowledge of contraceptive methods by districts in Arunachal Pradesh. In all districts more than 92 percent of women know about contraceptives including modern methods. A large differential is noticed in the knowledge of all modern methods by districts. The awareness ranges from 4 percent women in Tawang and Lohit to 45 percent in Changlang district. The knowledge of female sterilization, is the lowest in Tawang (13 percent) and the highest in Changlang and East Siang district (99 percent). Knowledge about IUD/Loop is 39 in Lohit and highest in West Kameng (88 percent). Whereas the knowledge of pill lowest in West Siang (60 percent) and highest in Changlang and East Siang (93 percent). As for any traditional method, awareness is 56 percent in Changlang district and the least in West Siang district (less than one percent).

6.1.2 Knowledge of No-Scalpel Vasectomy (NSV)

Knowledge of no-scalpel vasectomy among the husbands of currently married women in the state of Arunachal Pradesh is shown in Table 6.3. Only eighteen percent of the husbands know about the no-scalpel vasectomy. In rural areas, 16 percent of husbands know about NSV compared to 24 percent in urban areas. For women residing in villages with a health facility, 19 percent of their husbands are aware of No-scalpel vasectomy and it is a little less, that is, 14 percent for those living in villages without health facilities. Among the husbands who know about NSV, 62 percent reported that NSV is simpler than a conventional family planning method, 47 percent feel that reported as NSV does not lead to any complication and 36 percent reported that NSV does not affect a man's sexual performance. Only 31 percent of the husbands in villages with a health facility reported that, NSV does not affect sexual performance compared to 38 percent of husbands in villages without a health facility.

Table 6.3 KNOWLEDGE OF NO-SCALPEL VASECTOMY (NSV)					
Husbands knowledge of NSV by residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Knowledge of NSV	Total	Residence		Availability of health facility in the village ¹	
		Rural	Urban	No	Yes
Percentage of husband who had knowledge about NSV	18.2	16.0	24.2	13.6	18.9
Number of husbands	8,058	5,927	2,131	3,163	2,764
Who know that NSV is simpler than conventional vasectomy	61.9	60.9	63.7	62.2	59.9
Who feel that NSV does not lead to any complication	46.5	41.3	56.1	39.9	42.4
Who feel that NSV does not affect man's sexual performance	35.7	33.9	39.0	37.5	31.0
Number of husbands	1,466	951	515	429	522

Note:¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

6.1.3 Knowledge of No-Scalpel Vasectomy (NSV) by Districts

No-scalpel vasectomy awareness by districts in Arunachal Pradesh are provided in Table 6.4. The districts in which at least 18 percent of husbands know about NSV are East Kameng (11 percent), Lohit (13 percent), Lower Subansiri (15 percent), Tawang (3 percent), Tirap (7 percent), Upper Siang (17 percent), Upper Subansiri (8 percent) and West Siang (16 percent). None of the husbands in Dibang Valley know about the no-scalpel vasectomy. That NSV does not lead to any complications was reported by 89 percent of the husbands in Tirap district, followed by 64 percent in Papum Pare and only 12 percent in Upper Siang. Zero percent husband from Dibang reported that the NSV does not affect a man's sexual performance and it was the highest in East Kameng (53 percent).

Districts	Knowledge about NSV	NSV is simpler than conventional method	Who reported NSV does not lead to any complication	Who reported NSV does not affect man's sexual performance
Changlang	32.1	83.6	53.8	43.6
Dibang Valley	0.0	0.0	0.0	0.0
East Kameng	10.9	54.7	44.1	52.5
East Siang	33.4	52.0	46.9	43.4
Lohit	13.3	66.8	26.2	25.4
Lower Subansiri	15.3	50.0	35.2	40.9
Papum Pare	29.5	68.1	63.5	31.3
Tawang	2.8	71.3	54.6	34.6
Tirap	7.1	91.3	88.7	39.7
Upper Siang	17.1	51.9	11.6	27.3
Upper Subansiri	8.0	48.2	33.5	47.2
West Kameng	28.7	46.4	37.3	28.9
West Siang	15.6	35.8	32.3	28.2
Arunachal Pradesh	18.2	61.9	46.5	35.7

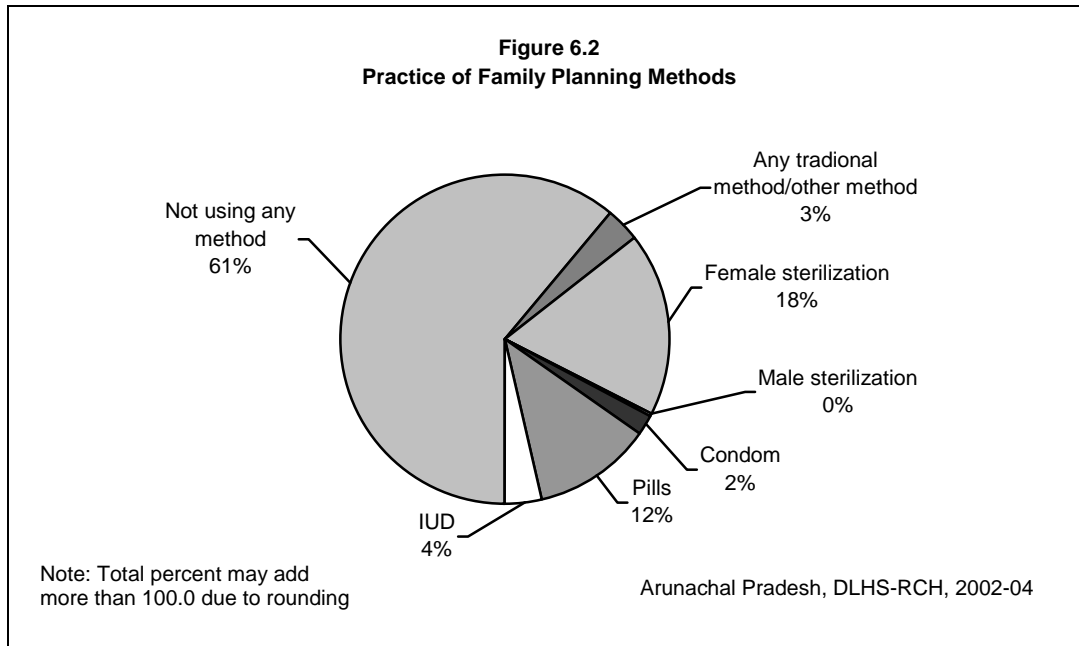
6.2 Current use of Family Planning Methods

Table 6.5 and Figure 6.2 provide the information on current use of family planning methods for currently married women in Arunachal Pradesh. At the time of DLHS-RCH, 39 percent of currently married women were using some method of contraception, (51 percentage points up from Round I.) Current contraceptive use is slightly higher in urban areas (43 percent) than in rural areas (37 percent). Use of modern method is reported by 36 percent of the women, the breakdown of which is 18 percent for permanent methods and 17 percent for spacing methods. Among the users of sterilization methods most prefer female sterilization, which invalidates the use of male sterilization (0.3 percent).

Table 6.5 CONTRACEPTIVE PREVALENCE RATE													
Percentage of currently married women age 15-44 years currently using any contraceptive method by selected background characteristics, Arunachal Pradesh, 2002-04													
Method	Any method	Any modern ¹ method	Any modern spacing method ²	Any sterilization	Male sterilization	Female sterilization	IUD/ Loop	Pill	Condom / Nirodh	Any traditional method ³	Rhythm/ periodic abstinence	Withdrawal	Number of women
Residence													
Rural	37.3	34.1	17.0	16.9	0.2	16.7	3.7	12.1	1.3	3.2	2.4	0.6	8,644
Urban	43.0	39.6	17.9	21.8	0.4	21.4	3.8	10.8	3.2	3.4	2.3	0.8	3,230
Education													
Non-literate	33.7	31.6	13.4	18.2	0.3	17.9	2.8	10.0	0.7	2.0	1.3	0.4	5,918
0-9@ years	43.4	40.2	20.7	19.5	0.1	19.3	4.4	14.7	1.6	3.2	2.6	0.4	4,034
10 years & above	45.1	38.1	21.9	16.0	0.6	15.4	5.3	11.0	5.6	7.0	5.2	1.6	1,920
Religion													
Hindu	44.2	38.7	18.8	19.8	0.5	19.3	2.8	13.5	2.5	5.4	4.0	1.1	4,601
Muslim	32.6	27.0	17.1	9.7	0.0	9.7	3.7	11.2	2.3	5.6	4.0	0.7	405
Christian	30.8	29.0	12.9	16.1	0.0	16.1	2.7	9.1	1.0	1.8	1.2	0.5	2,259
Buddhist	45.4	42.5	30.6	11.9	0.2	11.7	8.6	19.4	2.5	2.9	2.3	0.4	1,353
No religion	30.2	29.9	8.0	21.6	0.0	21.6	2.0	5.1	0.8	0.3	0.3	0.0	205
Other	35.3	34.3	13.0	21.2	0.3	20.9	3.8	8.2	0.9	1.0	0.8	0.1	3,051
Caste/tribe#													
Scheduled caste	45.0	41.8	22.4	19.3	0.7	18.6	5.7	14.6	2.1	3.3	3.1	0.2	885
Scheduled tribe	33.9	32.4	15.0	17.4	0.1	17.2	4.2	9.7	1.1	1.5	1.0	0.3	6,976
Other backward class	45.5	40.2	17.6	22.6	0.5	22.1	3.0	11.3	3.3	5.3	3.4	1.5	811
Other	48.2	41.7	22.0	19.6	0.4	19.2	2.6	16.2	3.2	6.5	4.8	1.3	2,692
Standard of living index													
Low	28.8	26.7	13.1	13.5	0.1	13.4	2.6	9.8	0.6	2.1	1.5	0.4	5,662
Medium	46.5	43.5	21.6	21.7	0.4	21.2	5.0	14.9	1.7	3.1	2.2	0.6	3,861
High	50.4	44.3	20.2	24.0	0.5	23.5	4.3	11.1	4.8	6.1	4.8	1.2	2,351
Availability of health facility in the village⁴													
No	34.6	31.9	14.7	17.1	0.3	16.8	3.1	10.8	0.8	2.8	2.3	0.2	4,626
Yes	40.3	36.7	19.7	16.8	0.2	16.6	4.4	13.6	1.7	3.6	2.6	1.0	4,018
Total	38.8	35.6	17.3	18.3	0.3	18.0	3.7	11.7	1.8	3.2	2.4	0.6	11,874

Note: ¹ Include Female sterilization, Male sterilization, IUD, Pills and Condom. ² Include IUD, Pills and Condom. ³ Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method. @ Literate women with no years of schooling are also included. #Total figure may not add to N due to don't know and missing cases. ⁴ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village. Total includes 3 missing information on education were not shown separately.

The use of traditional methods is reported by 3 percent of the women of which 0.6 percent are using withdrawal and 2 percent follow the rhythm or periodic abstinence practice. The rural-urban differential is minor in the case of traditional methods, where 2.4 percent of the urban women are using this means of contraception compared to 2.3 percent in rural areas.



Current use of contraception is high among women of scheduled castes and other backward classes (45 percent each) than among scheduled caste women (34 percent). The current use is also high among the women who have 10 or more years of schooling (45 percent) than the women who have less than 10 years of schooling (43 percent) and also among non-literate women (34 percent). Similarly, current contraceptive use varies positively with respect to the standard of living of the women, increasing the prevalence rate from 29 percent to 50 percent for women from the lowest to the highest standard of living households. The availability of the health facility in the village is an important factor in motivating eligible women to use contraceptives. Forty percent of the women living in villages with a health facility are currently under contraception and this is higher than the women from villages deprived of a health facility (35 percent). The current use of the traditional method is also higher among women with a higher education level and with a high standard of living than their counterparts not on par with these categories of women.

6.2.1 Current Use of Family Planning Methods by Districts

Table 6.6 presents a picture of current contraceptive use in the districts of Arunachal Pradesh. The contraceptive use is a couple concepts as family planning methods can be used either by women or by their husbands. In most of the districts, the current use of contraception exceeds 40 percent of eligible women except for the district of Dibang Valley, East Kameng, Lower Subansiri, Tawang, Tirap and Upper Subansiri. (see Map-6). The state figure of current spacing

methods use is 17 percent and it ranges from 9 percent in Tirap district to 40 percent in West Kameng. The variation in contraceptive prevalence at district level is basically due to the variation in the use of spacing methods while both modern and traditional contraceptive uses do not show much variation across districts.

Table 6.6 CONTRACEPTIVE PREVALENCE BY DISTRICT

Percentage of currently married women age 15-44 years currently using any contraceptive method by district, Arunachal Pradesh, 2002-04

Districts	Any method	Any modern ¹ method	Any modern spacing ² method	Male sterilization	Female sterilization	IUD	Pill	Condom / Nirodh	Any traditional ³ method
Changlang	57.5	46.8	27.5	0.2	19.1	2.9	23.9	0.7	10.7
Dibang Valley	30.1	29.1	16.3	0.0	12.8	2.4	12.6	1.4	1.0
East Kameng	16.1	15.7	9.8	0.8	5.2	0.5	8.6	0.7	0.4
East Siang	47.2	43.0	14.7	0.5	27.6	4.1	8.5	2.1	4.2
Lohit	39.7	37.6	17.8	0.4	19.0	4.1	11.5	2.3	2.1
Lower Subansiri	25.0	22.8	10.7	0.0	12.0	2.3	6.6	1.8	2.2
Papum Pare	42.9	37.0	16.2	0.3	20.5	3.6	10.0	2.6	5.9
Tawang	31.9	31.9	28.4	0.5	3.0	12.1	15.8	0.6	0.0
Tirap	23.8	22.0	8.7	0.2	13.1	1.7	5.1	1.9	1.8
Upper Siang	41.4	37.4	15.6	0.2	21.4	3.7	11.2	0.7	4.0
Upper Subansiri	22.4	22.0	11.8	0.1	10.1	2.4	8.5	1.0	0.4
West Kameng	54.1	51.5	39.8	0.6	11.0	11.2	24.2	4.4	2.5
West Siang	50.9	50.8	14.4	0.0	36.4	3.9	9.6	0.9	0.1
Arunachal Pradesh	38.8	35.6	17.3	0.3	18.0	3.7	11.7	1.8	3.2

Note: ¹ Include Female sterilization, Male sterilization, IUD, Pills and Condom. ² Include IUD, Pills and Condom. ³ Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method

The pattern of use of contraceptive methods in Arunachal Pradesh is different from the general existing pattern in India. The contraceptive prevalence rate of 3 percent for traditional methods in the state is lower than that in other states in the country. The use of oral Pills exceeds 12 percent in the districts of Changlang, Dibang Valley, Lohit, Tawang, Upper Siang and West Kameng. In almost all the districts the use of condom is less than 2 percent except in West Kameng (4 percent) and Papum Pare (3 percent).

6.2.2 Current Use and Ever Use of Family Planning Methods by Women

Table 6.7 provides information on current contraceptive use and ever used of contraception by age and number of surviving children, living sons and daughters. The current use of any method of contraception among currently married women in the 15-19 years age group is 13 percent and this attains a peak of 45 percent in the age group, 35-39 years. A similar age pattern of contraceptive use is also observed both in case of modern and traditional methods. The use of traditional method is 5 percent for the women aged 35-39 years and 3 percent for the women aged 40-44 years and it is least (1 percent) for the women in younger age groups 15-19 years. The use of modern methods ranges from 13 percent for women in the age group 15-19 years to 45 percent for women in the age group 35-39 years.

Table 6.7 USE OF CONTRACEPTION BY WOMEN

Percentage of currently married women in 15-44 years by current use and ever use of contraception according to selected demographic characteristics, Arunachal Pradesh, 2002-04

Demographic Characteristic	Percentage of women/husbands using				Percentage of women/husbands by contraceptive status		Number of women
	Any modern ¹ method	Any traditional ² method	Any method	Not using any method	Ever used	Never used	
Age-group							
15-19	12.5	1.2	13.7	86.3	18.7	81.1	525
20-24	21.9	1.9	23.7	76.3	31.7	68.3	2,149
25-29	35.5	3.2	38.7	61.3	49.6	50.4	2,973
30-34	41.4	4.0	45.4	54.6	52.1	47.9	2,325
35-39	44.7	4.6	49.4	50.6	55.5	44.4	2,191
40-44	40.6	2.7	43.3	56.7	49.1	50.9	1,710
Surviving children							
0	10.2	1.4	11.7	88.3	15.2	84.3	1,134
1	21.6	3.0	24.6	75.4	33.3	66.7	2,135
2	38.6	5.0	43.6	56.4	52.1	47.9	2,817
3 or more	44.3	2.8	47.1	52.9	54.8	45.2	5,788
Surviving sons							
0	18.3	3.0	21.3	78.7	29.4	70.4	3,168
1	35.3	3.8	39.1	60.9	46.9	53.1	3,962
2 or more	47.5	2.9	50.4	49.6	57.6	42.4	4,744
Surviving daughters							
0	26.9	3.1	30.0	70.0	36.6	63.3	3,503
1	40.4	3.2	43.6	56.4	51.1	48.9	4,122
2 or more	38.2	3.3	41.6	58.4	50.2	49.8	4,249
All women	35.6	3.2	38.8	61.2	46.5	53.5	11,874

Note: ¹ Include Female sterilization, Male sterilization, IUD, Pills and Condom. ² Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method.

It is crucial to understand the association between the number of living children and contraceptive use. The contraceptive use is high among the women who have three or more surviving children invariably of methods in Arunachal Pradesh. The use of any method of contraception is 50 percent for the women who have two or more sons and is marginally higher than the women who have two or more daughters (42 percent). The same trend can be observed in the case of use of any modern method which is 48 percent for the women who have two or more surviving sons and it is higher than the women who have two or more daughters (38 percent).

6.2.3 Current Use and Ever Use of Family Planning Methods as Reported by Husbands

Information pertaining to current use of family planning methods among the husbands of currently married women in Arunachal Pradesh by age and number of surviving children, sons and daughters are given in Table 6.8. The current use of any method of contraception among the husbands (aged below 25 years) of currently married women is 22 percent and it gradually picks up with the age of husband, to a peak of 45 percent in the age group, 35-44 years. Similar age

patterns of contraceptive use are observed both in the case of modern methods. Among the husbands in the age group, 35-44 years the use of traditional methods is 5 percent and it is 1 percent among the husbands in the younger age group of below 25 years. The use of modern methods ranges from 22 percent for husbands below 25 years of age to 45 percent for the husbands in the age group 35-44 years.

Table 6.8 USE OF CONTRACEPTION BY MEN					
Percentage of husband of currently married women by current use and ever use of contraception by selected demographic variables, Arunachal Pradesh, 2002-04					
Demographic Characteristic	Percentage of husbands/women using				Number of men
	Any modern ¹ method	Any traditional ² method	Any method	Not using any method	
Age-group					
<25	21.7	1.2	22.9	75.9	528
25-34	35.3	2.8	38.1	61.4	2,803
35-44	45.2	4.7	50.0	49.4	3,085
45+	41.3	4.3	45.6	53.9	1,642
Surviving children					
0	9.3	1.7	10.9	86.6	628
1	22.6	3.3	25.9	73.6	1,437
2	41.9	5.6	47.5	52.2	1,849
3 or more	48.7	3.4	52.1	47.4	4,144
Surviving sons					
0	20.1	2.8	22.9	76.0	1,919
1	38.1	4.3	42.4	57.3	2,750
2 or more	51.5	3.8	55.3	44.2	3,390
Surviving daughters					
0	27.8	4.4	32.2	67.0	2,194
1	44.6	3.6	48.2	51.1	2,775
2 or more	43.0	3.4	46.4	53.2	3,088
All men	39.4	3.7	43.2	56.2	8,058
Note: ¹ Include Female sterilization, Male sterilization, IUD, Pills and Condom. ² Include Rhythm/Periodic abstinence, Withdrawal and Other traditional method.					

6.3 Reasons for Not Using Male Methods

The DLHS-RCH asked husbands of currently married women about the contraceptive methods that he or his wife was using currently. The husbands who were not using male methods were further asked the reasons for it. Table 6.9 provides information about reasons for not using male contraceptive methods in Arunachal Pradesh. Among all the husbands interviewed, 82 percent reported about female methods. Reporting of female methods is higher in rural areas (85 percent) than in urban areas (77 percent). The reasons cited for not preferring the male methods are fear of weakness (28 percent), greater popularity of female methods (55 percent), lack of sexual pleasure (5 percent), fear of method failure (3 percent) and fear of operation (6 percent). Four percent reported fear of impotency as one of the reasons for not using male methods. However, there is not much rural-urban differential in the reasons for not using male methods, except in the case of fear of impotency and lack of sexual pleasure which is reported higher in urban areas.

The expression for fear of weakness is same in urban as well as rural areas. Popularity of female methods as a reason for not using male methods of contraception is more in rural areas (56 percent) than in urban areas (52 percent).

Table 6.9 REASONS FOR NOT USING MALE METHODS			
Percentage of husbands with their choice of family planning methods and reasons for not accepting male methods according to residence, Arunachal Pradesh, 2002-04			
Female method users and reason for not accepting male methods	Total	Residence	
		Rural	Urban
Percentage of husband who have reported female methods	82.2	84.8	76.5
Number of men	3,479	2,373	1,106
Reasons for not accepting male methods*			
Fear of impotency	4.3	3.6	5.9
Lack of sexual pleasure	4.7	4.3	5.4
Fear of method failure	3.1	2.9	3.4
Fear of operation	5.5	5.9	4.7
Fear of weakness	28.2	28.2	28.3
Female methods are more popular	54.9	56.2	51.8
Other	7.3	5.8	10.7
Number of men	2,859	2,013	846

Note: * Percentages may add to more than 100.0 because multiple responses could be recorded.

6.4 Source of Contraceptive Methods

To assess the various sources of contraceptive methods, DLHS-RCH collected information on source of obtaining methods. Table 6.10 and Figure 6.3 show the percent distribution of current users of modern contraceptives by source of contraceptives. Family planning methods and services in Arunachal Pradesh are provided primarily through a network of government hospitals. The services are also provided by private hospitals and clinics, as well as non-governmental organisations (NGOs). Modern spacing methods like IUD, Pill and condom are available through both the government and private sectors. Government/municipal hospitals are the main source for female sterilization (73 percent) followed by community health centres or primary health centres (8 percent), family planning camps or RCH camp (less than one percent) and private hospital (8 percent). For male sterilization as well the aforesaid are the main sources with the exception of 7 percent obtaining the service from Government Doctor. Among the IUD users, 70 percent reported the source as government/municipal hospital and 11 percent from the community health centres and 2 percent from sub-centre and 6 percent from private hospital. It is found that the chemist is the main source for Pills (63 percent) and condom (66 percent).

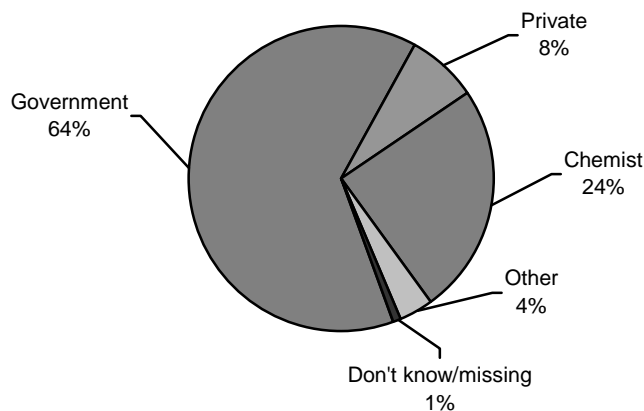
Table 6.10 SOURCE OF MODERN CONTRACEPTIVE METHODS

Percent distribution of current users of modern contraceptive methods by method and source of supply, Arunachal Pradesh, 2002-04

Source	Contraceptive method					All modern methods ¹
	Female sterilization	Male sterilization	IUD/ Loop	Pills	Condom / Nirodh	
Government medical centre	83.8	94.4	84.5	31.0	23.1	63.5
Government/Municipal hospital	73.3	85.2	69.5	19.7	13.8	52.3
CHC/PHC	8.4	0.0	10.7	7.4	4.5	8.1
Sub-centre	0.9	0.0	2.3	2.9	1.6	1.7
Government doctor	0.4	4.4	1.0	0.3	0.2	0.4
Government nurse/ ANM	0.0	0.0	0.2	0.2	0.6	0.1
Family planning/RCH camp	0.5	4.8	0.7	0.0	0.4	0.4
Out reach/MCP clinic in village	0.0	0.0	0.0	0.1	0.8	0.1
Mobile clinic	0.3	0.0	0.0	0.4	1.1	0.3
Private medical centre	10.1	1.4	7.6	4.3	7.0	7.7
Private hospital	8.0	1.4	5.7	3.2	6.2	6.0
Private doctor	2.0	0.0	1.3	1.0	0.3	1.5
Private nurse	0.1	0.0	0.6	0.2	0.5	0.2
Chemist	NA	NA	NA	63.4	66.2	24.3
Other	5.6	4.2	6.8	0.6	1.1	3.8
Do not know	0.4	0.0	1.1	0.8	2.7	0.7
Missing	0.1	0.0	0.0	0.0	0.0	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	2,134	34	444	1,395	212	4,219

Note:¹ Includes female sterilization, male sterilization, IUD, Pills or condom. CHC: Community health centre, PHC: Primary health centre. NA: Not applicable.

Figure 6.3
Source of Family Planning Among Current Users of Modern Contraceptive Methods



Note: Total percent may add more than 100.0 due to rounding

Arunachal Pradesh, DLHS-RCH, 2002-04

6.5 Problems with Current Use of Contraceptive Methods

Women who were using a modern contraceptive method were asked if they had experienced any problems related with the current methods they are using. Table 6.11 shows the percentage of current contraceptive users who reported specific health problems, treatment seeking behaviour and their satisfaction about the method. The analysis of the method specific problems reveals that 12 percent of the sterilized women have problem with the contraceptive methods in use. The most common problems experienced by sterilized women are weakness or inability to work (51 percent), white discharge (22 percent), dizziness (13 percent), body ache or backache (55 percent), cramps (5 percent), irregular periods (11 percent), nausea or vomiting (5 percent) and excessive bleeding (14 percent). With regard to the modern spacing methods, 7 percent each of women had problems in using Pills and IUD. The most common problems of Pill users were weakness/inability to work (51 percent), dizziness (30 percent), white discharge (11 percent), nausea or vomiting (18 percent), body ache or backache (29 percent) and irregular periods (23 percent).

Table 6.11 HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION			
Percentage of women informed about side effects, had side effects with the method by use of method, Arunachal Pradesh, 2002-04			
Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who were informed about all the available methods	55.5	NA	NA
Women who were informed about the side effects before adoption of the method	41.7	49.5	26.6
Women who had side effect/health problem due to use of contraceptive method	11.6	7.2	6.9
Number of current users	2,134	444	1,395
Type of health problems/side effects¹			
Weakness/inability to work	51.0	(30.8)	50.7
Body ache/ backache	55.0	(47.7)	28.8
Cramps	4.5	(2.6)	1.6
Weight gain	10.4	(13.2)	7.6
Dizziness	12.7	(13.2)	30.0
Nausea/vomiting	4.7	(5.3)	18.1
Breast tenderness	3.3	(5.3)	2.1
Irregular periods	10.5	(28.9)	23.1
Excessive bleeding	14.0	(31.6)	9.4
Spotting	4.3	(10.5)	0.5
White discharge	22.2	(7.9)	10.8
Other	0.9	(5.3)	0.0
Number of users with side effects	247	32	97
Note: ¹ Percentages may add to more than 100.0 because multiple problems could be recorded. () Based on less than 50 unweighted cases. NA- not applicable			

6.6 Treatment for Health Problems with Current Use of Contraception

The study of respondents who sought treatment for contraceptive related health problems reveals that 56 percent of the sterilized women sought treatment and 28 percent in the case of Pills. Regarding the satisfaction about the method, 91 percent of the sterilized women reported satisfaction with sterilization. In the case of spacing methods, 94 percent of women using Pills and 90 percent of women using IUD were satisfied with the respective methods.

Those women who had sought treatment for contraceptive use related problems, majority of them have taken treatment from Government hospitals/ dispensaries For female sterilization related health problems, 59 percent had taken treatment from Government hospitals/ dispensaries, 22 percent from private hospitals/ clinics., 11 percent from Indian System of Medicine health facilities and one percent got treatment from health visitors. Government hospitals/ dispensaries are the source of treatment for 46 percent of women who had health problem in using Pill.

Table 6.12 FOLLOW-UP VISIT AND SOUGHT TREATMENT FOR HEALTH PROBLEMS WITH CURRENT USE OF CONTRACEPTION			
Percentage of women who had follow-up visit, satisfied with current method, and sought treatment with side effect with the method by use of method, Arunachal Pradesh, 2002-04			
Health problems/side effect	Type of method		
	Female sterilizations	IUD/loop	Pill
Women who had follow up visit by health worker after adoption of method	7.2	5.6	3.8
Women who are satisfied with method of current use	90.9	90.0	94.1
Number of current users	2,134	444	1,395
Women who sought treatment for the health problem	54.7	(47.7)	28.3
Number of women with side effects	247	32	97
Source of treatments			
Government health facility			
Government hospital/dispensary	59.2	*	(45.8)
UHC/UHP/UFWC	0.3	*	(0.0)
CHC/Rural hospital	1.7	*	(0.0)
PHC	9.5	*	(25.0)
Sub-centre	8.5	*	(4.2)
Out reach/MCP clinic in village	0.3	*	(0.0)
Private health facility			
NGO/trust hospital clinic	2.5	*	(0.0)
Private hospital/clinic	22.2	*	(16.7)
ISM health facility ¹	10.8	*	(0.0)
Chemist/Medical shop	2.5	*	(8.3)
Home remedy	0.3	*	(4.2)
Other	1.0	*	(4.2)
Number of women with side effects	135	16	27
Note: ¹ Either government or Private. * Percentage not shown: Based on few cases. () Based on less than 50 unweighted cases.			

6.7 Advice to Non-Users and their Future Intention to Use Contraception

Information about non-users who were advised by the ANM/health worker to adopt contraceptives and their future intention to use by preferred method according to their background characteristics are presented in Table 6.13. In DLHS-RCH currently married women who were not using any method of contraception, were asked about advice given by ANM/health worker for adoption of any contraceptive method. It is evident that 6 percent of the women were advised by ANM/health worker to adopt any family planning method in Arunachal Pradesh. Among rural women, 6 percent were advised by ANM/health worker to adopt any method and it is higher than the urban women (7 percent) who were advised so.

Table 6.13 ADVICE ON CONTRACEPTIVE USE					
Percentage of current non-users* who were advised by the ANM/health worker to use contraception by suggested method according to place of residence and availability of health facility in the village, Arunachal Pradesh, 2002-04					
Advise/future intention to use	Total	Residence		Availability of health facility in the village ¹	
		Rural	Urban	No	Yes
Percentage of current non-users advised by ANM/health worker to use of contraceptive method	6.4	6.3	6.6	5.8	7.0
Number of non-users	6,880	5,118	1,761	2,856	2,263
Percent distribution of women who were advised by method					
Female sterilization	44.6	44.8	44.0	43.8	45.8
Male sterilization	11.9	12.5	10.0	13.3	11.7
IUD/loop	13.9	13.2	16.0	16.1	10.1
Pill	23.2	24.5	19.6	21.5	27.6
Condom/Nirodh	2.7	3.7	0.0	4.2	3.2
Rhythmic /periodic abstinence	2.1	0.1	7.6	0.1	0.0
Other	1.3	0.7	2.7	1.0	0.5
Missing	0.4	0.5	0.0	0.0	1.0
Total percent	100.0	100.0	100.0	100.0	100.0
Number of non-users	439	323	116	165	158

Note:* Exclude women in menopause or those who have undergone hysterectomy. ¹ Includes sub-centre, primary health centre, community health centre or referral hospital, government hospital, and government dispensary within the village.

The recommended contraceptive methods by ANM/health worker is dominated by female sterilization (48 percent) and Pill (21 percent). Only 15 percent were advised either to adopt IUD/loop and Condom/Nirodh (3 percent) as spacing methods. Male sterilization has been advised to 10 percent. This pattern of advice also emerges irrespective of residence and availability of health facility in the village.

6.7.1 Future Intentions

Among the non-users, 28 percent of women have expressed their intention to use any method of contraception in the future. The intention to use any method of contraception is higher in urban areas (30 percent) than in rural areas (27 percent).

Among the women who intended to use permanent methods of contraception, 61 percent preferred female sterilization whereas only two percent of the women preferred male sterilization. In case of temporary methods, the preferred methods by women are oral Pills (23 percent), rhythm/periodic abstinence (less than one percent), condoms (1 percent), withdrawal (less than one percent), IUD (8 percent) and other methods (5 percent) respectively.

Thirty-four percent of the husbands intended to use contraception in the future, among them 34 percent belong to rural areas and 36 from urban areas. Method wise choice in intention to use contraception is dominated female sterilization being reported by 70 percent, followed by Pills (9 percent), rhythm/periodic abstinence (2 percent), condom (4 percent) and withdrawal (less than one percent)

Table 6.14 FUTURE INTENTION TO USE						
Percentage of current non-users* who were intended to use contraception in future by preferred method according to place of residence, Arunachal Pradesh, 2002-04						
Future intention to use/method	Women			Husband		
	Total	Rural	Urban	Total	Rural	Urban
Percentage of respondents who intend to use contraceptive in future	28.4	27.1	32.1	34.2	33.7	35.9
Number of non-users	6,880	5,118	1,761	4,419	3,426	994
Percent distribution of non-user who were preferred to use family methods by preferred method						
Female sterilization	61.5	60.8	63.4	70.1	71.0	67.0
Male sterilization	2.1	2.1	2.1	3.1	2.2	6.2
IUD/copper-T/loop	7.8	7.8	7.6	5.0	4.7	6.0
Oral pills	22.1	23.5	18.7	8.7	7.7	11.9
Condom/Nirodh	0.9	0.7	1.5	3.6	3.7	3.1
Rhythm/periodic abstinence	0.3	0.4	0.1	2.3	2.2	2.5
Withdrawal	0.6	0.5	1.0	0.2	0.1	0.5
Other	4.4	4.0	5.3	2.5	2.8	1.6
Missing	0.3	0.3	0.2	4.5	5.5	1.2
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of non-users	1,950	1,385	565	1,507	1,152	356

Note:* Exclude women who are in menopause or those who have undergone hysterectomy.

6.7.2 Future Intention to Use Among Women by Number of Living Children

Currently married women who were not using any contraceptive method at the time of survey were asked about their intentions to use a method in the future. Those women who intended to use contraceptives in the future were further asked about preferred methods. This type of information aids the managers and programmers to identify the potential groups of future users and to provide the type of contraceptives that are likely to be in demand. Table 6.15 provides the information on intention to use contraception in future according to number of living children and residence background in Arunachal Pradesh. Among the current non-users, around 8 percent of the women intended to use contraception within the next twelve months. Only 5 percent of women wanted to use within one to two years whereas 15 percent reported their intention to use

contraceptives after two years. About 31 percent are not sure of their intention to use, where as 41 percent reported no intention to use. The intention of using contraception is high among the women who have two or more living children compared to the women who have either one or no living children. Around 39 percent of the women who have no living children reported that they are yet to decide about the use of contraceptives.

Table 6.15 FUTURE USE OF CONTRACEPTION BY NUMBER OF LIVING CHILDREN

Percent distribution of currently married women* who were not currently using any contraceptive method by intention to use in the future, according to number of living children and residence, Arunachal Pradesh, 2002-04

Intention to use in the future	Number of living children					Total
	0	1	2	3	4+	
Total						
Intends to use in next 12 months	1.7	3.8	8.9	11.9	12.6	8.2
One to two years	2.9	3.4	5.2	5.2	7.0	4.9
More than two years	13.6	23.9	16.4	12.0	9.5	15.3
Does not intend to use	38.9	33.5	36.7	41.2	44.4	38.9
Not yet decided	42.9	35.3	32.7	29.8	26.5	32.7
Missing	0.0	0.0	0.1	0.0	0.1	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	964	1,555	1,527	1,165	1,668	6,880
Rural						
Intends to use in next 12 months	1.5	3.4	8.5	11.2	12.7	7.9
One to two years	3.1	2.7	4.7	6.0	7.4	5.0
More than two years	12.0	22.9	15.0	11.2	9.1	14.1
Does not intend to use	39.3	35.3	38.8	40.9	44.3	39.9
Not yet decided	44.1	35.8	33.1	30.6	26.4	33.0
Missing	0.0	0.0	0.0	0.0	0.1	0.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	713	1,134	1,060	871	1,341	5,118
Urban						
Intends to use in next 12 months	2.4	5.0	10.0	14.0	12.3	8.8
One to two years	2.1	5.4	6.3	2.5	5.2	4.7
More than two years	18.0	26.6	19.6	14.4	10.9	18.5
Does not intend to use	37.7	28.8	31.9	41.9	44.7	36.0
Not yet decided	39.7	34.2	31.9	27.2	27.0	31.9
Missing	0.0	0.0	0.3	0.0	0.0	0.1
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	251	422	467	294	327	1,761

Note:* Exclude women who are in menopause or those who have undergone hysterectomy.

6.8 Reasons for Discontinuation and Non-Use of Contraception

Currently married non-pregnant women who were not using any contraceptive method at the time of survey were categorised as past users and never users according to their contraceptive experience. In DLHS-RCH, women who had discontinued contraceptive use were asked about the main reason for discontinuation. The survey also asked women who had never used

contraceptives about the main reason for not doing so. Table 6.16 shows the main reason for not using contraceptives among both the past never users and current non users. Among the past users, around 49 percent of the women mentioned that they discontinued the use because they had wanted child, method failed/became pregnant (5 percent), weakness/inability to work (13 percent), irregular periods (5 percent), method was inconvenient (3 percent) and other reasons (8 percent). For urban women 6 percent have reported method failure/become pregnant due to discontinuation. In urban areas, 13 percent of women reported as weakness/inability to work as reason for discontinuing the use and where as the same is 14 percent among rural women.

Table 6.16 REASONS FOR DISCONTINUATION OF CONTRACEPTION			
Percent distribution of women who were past users (current non-users) by reason for discontinuation of the contraceptive method according to place of residence, Arunachal Pradesh, 2002-04			
Reasons	Total	Place of residence	
		Rural	Urban
Reason for discontinuation			
Wanted child	48.6	52.4	40.4
Method failed/became pregnant	5.3	4.8	6.4
Supply not available	0.4	0.5	0.1
Difficult to get method	1.0	0.3	2.5
Weakness/inability to work	13.3	13.6	12.8
Body ache/ Backache	3.5	1.9	7.1
Cramps	0.1	0.0	0.5
Weight gain	1.4	1.5	1.2
Dizziness	0.9	1.3	0.2
Nausea/vomiting	0.5	0.3	0.9
Breast tenderness	2.4	2.5	2.3
Irregular periods	4.8	3.6	7.2
Excessive bleeding	4.8	5.4	3.6
Spotting	0.3	0.5	0.0
White discharge	0.9	1.4	0.0
Lack of pleasure	0.3	0.1	0.6
Method was inconvenient	3.1	2.9	3.5
Other	7.7	6.6	10.3
Missing	0.5	0.5	0.5
Total percent	100.0	100.0	100.0
Number of past users	909	623	286

6.8.1 Reasons for Not Using Contraceptive Methods

DLHS asked women and husbands who are currently not using any contraception and main reasons why they were not currently using a method. The reported main reasons for not using contraceptives are, difficult to become pregnant (7 percent), health does not permit (14 percent), lack of knowledge about family planning methods (23 percent), opposed to family planning (13 percent), against the religion (2 percent) and afraid of sterilization (4 percent). About 16 percent of the women reported other reasons for not using contraception. As far as rural-urban differentials are concerned, a little variation is observed in the reasons for not using any contraceptive.

Table 6.17 REASON FOR NOT USING CONTRACEPTIVE METHOD

Percentage of current non-users who were currently not using contraceptive method by reason according to place of residence, Arunachal Pradesh, 2002-04

Reason	Women			Husband*		
	Total	Rural	Urban	Total	Rural	Urban
Lack of Knowledge about FP method	22.7	23.7	19.9	30.6	31.8	26.9
Against the Religion	1.8	1.8	2.0	4.7	5.0	3.7
Opposed to family planning	13.2	14.2	10.5	2.8	2.4	4.0
Not like existing method	4.8	4.2	6.4	1.6	1.3	2.3
Afraid of sterilization	4.3	4.1	4.6	1.4	1.5	1.2
Can not work after sterilization	2.5	2.8	1.6	0.5	0.6	0.3
Worry about side effects	6.1	6.0	6.4	5.2	5.1	5.6
Costs too much	2.2	2.1	2.5	4.3	4.4	3.9
Health does not permit	13.6	12.2	17.2	18.0	18.0	18.0
Hard/inconvenient to get method	2.4	2.5	2.0	2.1	2.3	1.6
Inconvenient to use method	2.4	3.0	0.8	2.0	2.3	1.0
Difficult to become pregnant	7.4	7.2	8.1	7.4	7.1	8.1
Wife is pregnant	-	-	-	1.0	1.0	1.1
Other	15.8	15.1	17.5	16.2	14.9	20.1
Missing	0.9	1.1	0.4	2.2	2.3	2.0
Total percent	100.0	100.0	100.0	100.0	100.0	100.0
Number of current non-users	4,188	3,051	1,138	2,014	1,499	515

Note: ¹ Not applicable for women. * Excluding not decided cases on timing of next child.

6.9 Unmet Need for Family Planning Services

Unmet need for family planning is one of the indicators to assess the effectiveness of the family planning programme. Policy makers and family planning programme planners use this to know the demand for family planning services/supplies. Unmet need is defined in this report separately for limiting and spacing. Unmet need for spacing includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child, are also included in unmet need for spacing. The women who are not sure about the timing of the next child are also included in the unmet need for spacing. Unmet need for limiting includes the proportion of currently married women who are neither in menopause nor had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total unmet need refers to the totality of unmet for limiting and spacing. Table 6.18 provides the information about unmet need for limiting and spacing in Arunachal Pradesh by background characteristics.

The unmet need is high for women below 20 years, mainly for spacing rather than for limiting. Unmet need is also relatively high for women aged 20-24 years (24 percent and 13 percent) for both spacing and limiting. Among the older women of age 25-29 years, 19 percent have unmet need, and mostly for limiting. Among the women age 30 years and above, unmet need is for limiting (24 percent). The rural women and urban women unmet need of 35 percent each. The unmet need for family planning is higher (39 percent) among the non-literate women than among the women with 0-9 years of schooling (31 percent) and 10 or more years of

schooling (33 percent) women. Hindu women have lesser unmet need for family planning (34 percent) compared to the Muslim women (44 percent) or Christian women (37 percent) but the least is Buddhist women (31 percent). Unmet need for family planning is higher (37 percent) for Scheduled tribe followed by other backward class (34 percent), other caste and Scheduled caste

Table 6.18 UNMET NEED FOR FAMILY PLANNING SERVICES				
Percentage of currently married women with unmet need for family planning services by selected background characteristics, Arunachal Pradesh, 2002-04				
Background Characteristic	Unmet need for FP			Number of women
	Spacing ¹	Limiting ²	Total	
Age				
15-19	25.4	7.8	33.3	525
20-24	23.9	13.0	36.9	2,149
25-29	15.5	18.5	33.9	2,973
30-34	10.0	24.3	34.3	2,325
35-39	6.0	28.5	34.5	2,191
40-44	6.2	31.6	37.8	1,710
Residence				
Rural	13.9	21.2	35.1	8,644
Urban	11.5	23.7	35.2	3,230
Education				
Illiterate	13.2	25.3	38.5	5,918
0-9 @ years	13.6	17.7	31.3	4,034
10 years and above	12.8	19.9	32.7	1,920
Religion				
Hindu	9.5	24.9	34.3	4,601
Muslim	16.1	28.3	44.4	405
Christian	17.0	19.7	36.7	2,259
Buddhist	9.3	21.6	30.9	1,353
No Religion	15.2	29.2	44.3	205
Others	17.6	17.7	35.3	3,051
Caste/tribe#				
Scheduled caste	10.4	20.9	31.3	885
Scheduled tribe	16.3	20.8	37.1	6,976
Other backward class	9.4	24.6	34.0	811
Others	7.7	23.1	30.8	2,692
Number of living children				
0	11.5	8.0	19.5	1,134
1	25.1	10.5	35.5	2,135
2	13.2	22.0	35.1	2,817
3	9.6	26.3	35.9	2,461
4+	9.1	30.5	39.7	3,327
Standard of living Index				
Low	16.2	22.0	38.2	5,662
Medium	11.0	20.5	31.5	3,861
High	9.9	23.8	33.7	2,351
All women	13.3	21.9	35.1	11,874

Note: ¹ Unmet need for spacing includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and who want more children after two years or later and are currently not using any family planning method. The women who are not sure about whether and when to have next child are also included in unmet need for spacing. ² Unmet need for limiting includes the proportion of currently married women who are neither in menopause or had hysterectomy nor are currently pregnant and do not want any more children but are currently not using any family planning method. Total unmet need refers to unmet for limiting and spacing. @ Literate women with no years of schooling are also included. # The total figure may not add to N due to do not know and missing cases. Total includes 3 missing information on education were not shown separately.

(31 percent each) women.

Women in low standard of living have high (38 percent) unmet need than the women of medium (32 percent) and high standard of living (34 percent). Unmet need is much higher for the women with 4 or more living children (40 percent) than women with either no children (20 percent) or two or more children (35 percent). Among the women with no children or one child the unmet need is mainly for spacing, where as for women with two children or more unmet need is exclusively for limiting.

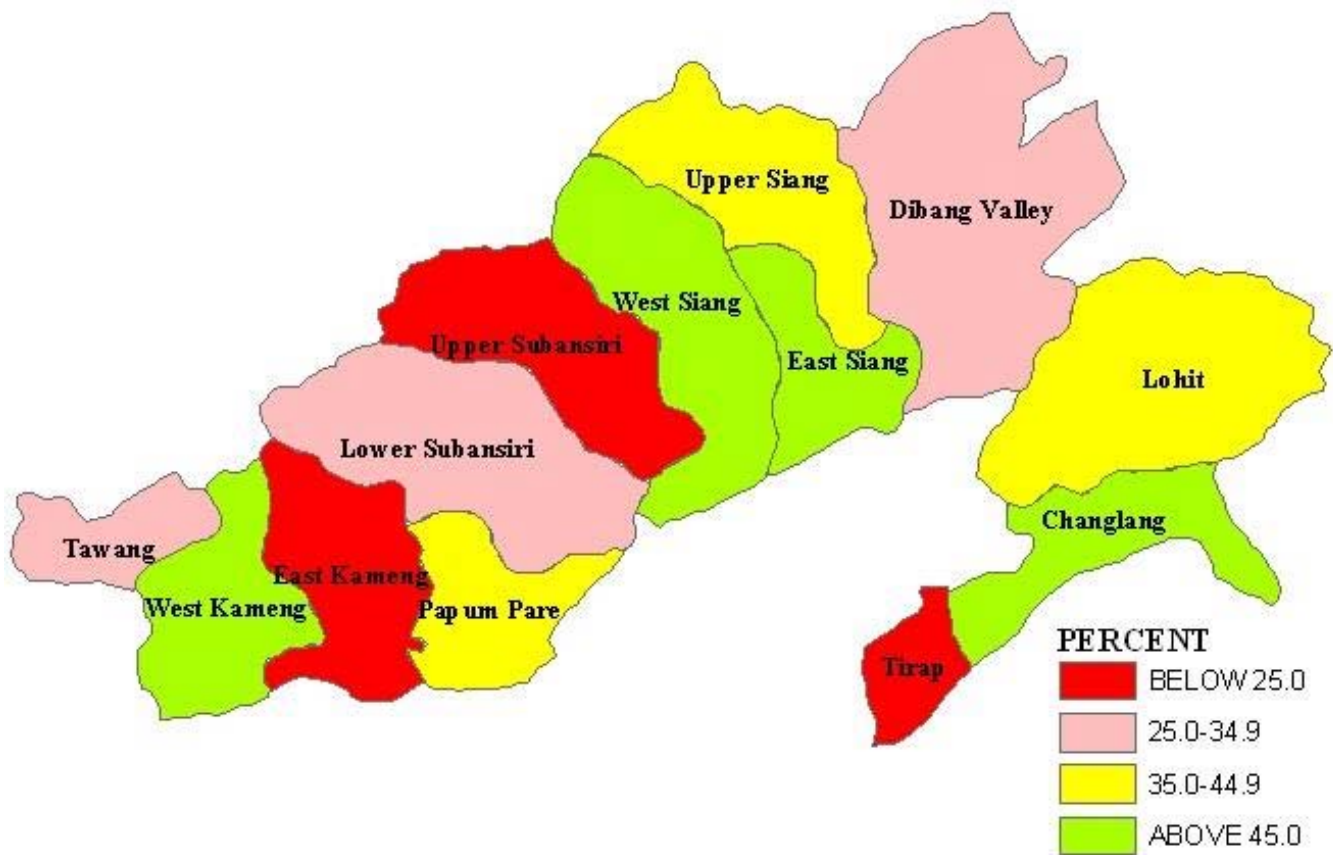
6.9.1 Unmet Need for Family Planning Services by Districts

Table 6.19 provides the information about unmet need for limiting, spacing and total by district. The unmet need for family planning services for state is 35 percent and it ranges from 21 percent in Changlang to 52 percent in Upper Subansiri. In 7, out of 13 districts unmet need for family planning is more than state average. Unmet need for limiting was found lowest in Changlang (14 percent) followed by West Siang (15 percent), East Siang and Upper Siang (17 percent each), West Kameng (19 percent) and highest in Dibang Valley (33 percent). Similarly, unmet need for spacing was lowest to 7 percent in West Kameng to 29 percent in West Subansiri. It may also observe that except West Siang district, in all the districts of Arunachal Pradesh unmet need for limiting was more than spacing.

Table 6.19 UNMET NEED BY DISTRICT			
Percentage of currently married women with unmet need by district, Arunachal Pradesh, 2002-04			
Districts	Unmet need for		
	Spacing	Limiting	Total
Changlang	7.7	13.8	21.4
Dibang Valley	12.1	32.8	45.0
East Kameng	11.6	27.6	39.2
East Siang	11.5	16.6	28.1
Lohit	12.4	29.6	42.0
Lower Subansiri	18.6	16.2	34.8
Papum Pare	10.0	20.7	30.7
Tawang	12.7	32.5	45.2
Tirap	17.4	33.3	50.7
Upper Siang	9.7	16.5	26.2
Upper Subansiri	28.6	23.5	52.1
West Kameng	7.1	18.8	25.8
West Siang	15.8	14.6	30.4
Arunachal Pradesh	13.3	21.9	35.1

MAP – 6

Current Use of Any Family Planning Method



CHAPTER VII

ACCESSIBILITY AND PERCEPTION ABOUT GOVERNMENT HEALTH FACILITIES

The government health facilities at all the levels provide various RCH services. Auxiliary Nurse Midwife (ANM), family planning worker or male health worker play a key role in delivering the services to the community. Health workers are expected to make regular visits to all the households in their assigned area. During these contacts, the health workers are supposed to monitor various aspects of the health of women and children, provide information related to health and family planning, counsel and motivate to adopt appropriate health and family planning practices, and deliver other selected services. These contacts are also important as they enhance the creditability of services and establish necessary rapport with the clients. In order to assess the extent of utilisation of government health facilities by all eligible women and to find out whether ANM/health workers reach the households for providing RCH services, a separate section in the women's questionnaire was canvassed to all the eligible women. This chapter deals with the accessibility and the opinion of women about the services provided by the government health workers. The quality of care offered by the government health programme as perceived by currently married women is also presented.

7.1 Home Visit by Health Workers

Table 7.1 shows the percentage of currently married women visited by health workers at home during the three months prior to the survey. Less than one percent of the women in Arunachal Pradesh reported that the health worker visited them at their residence at least once in last three months preceding the survey. Younger women seemed more likely to report a home visit than older women but in all three age groups the percentage of women who reported atleast one home visit was less than one percent. The percentage of women in Arunachal Pradesh receiving home visits is higher in rural areas (0.8 percent) than in urban areas (0.6 percent). Women who had completed 9 years of schooling, Hindu women, women belonging to scheduled caste and those with medium standard of living all reported 1 percent home visits. In the rest of the categories the reporting percentage was less than one percent. Home visits were less common for women residing in the villages with a health facility.

Women who reported home visit during three months preceding the survey were asked who visited their household during the past three months and whether they were satisfied with the kind of services/advice received, and the time spent by these health workers. Among women who received services at home, less than 1 percent received services. There were less rural-urban differentials by visit of households by health worker.

Table 7.1 HOME VISIT BY HEALTH WORKER		
Percentage of women who had home visit by health worker in the 3 months preceding the survey by selected background characteristics, Arunachal Pradesh, 2002-04		
Background characteristic	Percentage with home visit	Number of women
Age		
15-24	0.6	2,674
25-34	0.9	5,298
35-44	0.6	3,901
Residence		
Rural	0.8	8,644
Urban	0.6	3,230
Education		
Non-literate	0.6	5,918
0-9 years@	1.1	4,034
10 and above	0.6	1,920
Religion		
Hindu	0.7	405
Muslim	0.5	2,259
Christian	0.7	1,353
Buddhist	0.0	205
No religion	0.5	3,051
Other		
Caste/tribe#		
Scheduled caste	1.3	885
Scheduled tribe	0.7	6,976
Other backward class	0.5	811
Other	0.9	2,692
Standard of living index		
Low	0.6	5,662
Medium	1.0	3,861
High	0.7	2,351
Availability of health facility² in the village		
No	0.9	4,018
Yes	0.7	4,626
Total	0.7	11,874
Note: Total includes 3 cases with missing information on education were not shown separately. @ Literate women with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases. ² Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village.		

7.2 Home Visit by Health Workers by Districts

In all the districts in Arunachal Pradesh, health workers visited less than one percent of the women at home (Table 7.2) except in East Siang and Tirap which reported 2 percent.

Table 7.2 HOME VISIT BY HEALTH WORKER BY DISTRICT	
Percentage of women who had home visit by health worker in the 3 months preceding the survey by district, Arunachal Pradesh, 2002-04	
District	Percentage with home visit
Changlang	0.5
Dibang Valley	0.7
East Kameng	0.0
East Siang	1.5
Lohit	0.9
Lower Subansiri	0.5
Papum Pare	0.3
Tawang	0.3
Tirap	2.1
Upper Siang	0.4
Upper Subansiri	0.9
West Kameng	0.2
West Siang	0.5
Arunachal Pradesh	0.8

7.3 Matters Discussed during Home visits or Visits to Health Facilities

Women who were visited at home by a family planning worker, as well as those who visited government health facility or other health facility during the three months preceding the survey were asked about the different topics discussed with the workers during any of these visits. Table 7.3 shows the percentage of women who discussed the health and family planning or any health related matters to the health workers during home visits or visits to a health facility during the past three months. There are 48 pregnant woman or women with children born during the reference period, and other women includes 26 current users and 15 current non-users, who were visited by health workers at home.

The major focus of discussion during home visits was family planning (22 percent) and disease prevention (20 percent). In addition, discussions were also made on immunization and treatment of a health problem (16 percent each) and childcare (6 percent).

Table 7.3 MATTER DISCUSSED DURING CONTACT WITH A HEALTH WORKER				
Percentage of women who were visited by health worker in the three months preceding the survey, and percentage of women who visited health facility, and the percentage of women ¹ who discussed specific topics with the health worker, Arunachal Pradesh, 2002-04				
Topic discussed	Pregnant women or women with children after reference period ²	Other women		Total
		Current contraceptive users	Current nonusers	
During home visit				
Family planning	(22.0)	(47.6)	*	33.6
Breastfeeding	(2.0)	(9.5)	*	5.2
Supplementary feeding	(2.0)	(0.0)	*	1.0
Immunization	(16.0)	(9.5)	*	11.6
Nutrition	(6.0)	(14.3)	*	10.7
Diseases prevention	(20.0)	(28.6)	*	25.2
Treatment of health problem	(16.0)	(33.3)	*	26.2
Antenatal care	(4.0)	(9.5)	*	4.2
Delivery care	(4.0)	(4.8)	*	3.8
Postpartum care	(2.0)	(0.0)	*	0.9
Childcare	(6.0)	(19.0)	*	10.9
Sanitation / cleanliness	(4.0)	(14.3)	*	6.4
Oral rehydration	(0.0)	(4.8)	*	0.6
Other	(0.0)	(0.0)	*	0.0
Number of women	48	26	15	89
During visit to health facility				
Family planning	5.7	7.3	3.8	5.7
Breastfeeding	1.1	0.7	0.0	0.8
Supplementary feeding	0.6	0.2	0.5	0.4
Immunization	14.8	0.6	0.9	8.7
Nutrition	2.0	1.3	2.3	1.9
Diseases prevention	7.5	8.2	11.4	8.4
Treatment of health problem	30.5	64.3	60.4	44.4
Antenatal care	12.6	5.0	6.5	9.6
Delivery care	10.1	1.3	3.3	6.7
Postpartum care	2.7	0.6	0.1	1.7
Childcare	25.8	9.7	10.0	18.9
Sanitation / cleanliness	2.8	2.0	2.5	2.5
Oral rehydration	1.2	1.5	1.5	1.3
Other	6.7	12.6	10.9	8.9
Number of women	1,163	509	383	2,054
Note: Percentage add to more than 100.0 due to multiple responses. ¹ Women who visited private health facility are not included. () : Based on less than 50 unweighted cases. * Percentage not shown : Based on few cases.				
² Reference period for phase I, January 1 st 1999 and for phase II, January 1 st .2001				

The topic discussed most often during visits to health facility by women was treatment of health problems (44 percent), Childcare (19 percent), antenatal care (10 percent) and immunization and other (9 percent each). Only six percent women reported that they discussed family planning during the visit. During visit to health facility about 31 percent of the pregnant women or women with children born during reference period discussed on treatment of a health problem, 26 percent discussed about childcare, 15 percent discussed immunization and 12 percent discussed antenatal care. A few pregnant women or women with children born after reference period also discussed about delivery care, postpartum care, breastfeeding, nutrition, oral re-hydration and breastfeeding during visit to health facility. A

higher proportion of current users and non-users discussed on treatment of health problems, disease prevention, and other health related problems than pregnant women with children after reference period during visit to health facility in three months prior to survey.

7.4 Visit to Health Facility

Table 7.4 presents the percentage of currently married women who needed to visit health facility and visited the health facility by residence and availability of health facility in the village. Around 46 percent of women needed to visit health facility but did not visit in comparison with 20 percent of women who needed to visit health facility and visited in past three months of the survey. The proportion of such women was higher in urban areas (23 percent) than in rural areas (20 percent). Among them who visited any health facility, 53 percent of women reported that they had visited a government hospital/dispensary, (52 percent in rural areas and 57 percent in urban areas).

Table 7.4 VISIT TO HEALTH FACILITY					
Percentage of women who need to visit health facility and visited, and percent distribution of women visited health facility by type of health facility and according to place of residence and availability of health facilities in the village, Arunachal Pradesh, 2002-04					
Health facility	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Percentage of women who needed to visit health facility and not visited	46.2	48.4	40.4	48.1	48.7
Percentage of women who needed to visit health facility and visited	20.3	19.5	22.5	19.9	19.1
Number of women	11,874	8,644	3,230	4,626	4,018
Government health facility					
Hospital / CHC / FRU /RH	53.1	51.5	56.9	50.2	53.0
Dispensary	1.8	1.6	2.2	1.4	1.8
Primary health center	17.4	22.4	5.7	24.0	20.6
Sub-center	6.1	8.6	0.4	8.5	8.6
Private health facility					
Hospital	11.9	10.8	14.4	10.2	11.5
Dispensary	2.2	1.6	3.4	1.9	1.3
ISM ² hospital/dispensary	1.4	1.2	1.7	1.1	1.4
Other	6.2	2.3	15.3	2.6	1.9
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	2,410	1,684	726	918	766

Note: CHC: Community health center, FRU: First referral unit, RH: Referral Hospital. ¹ Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village. ² Either government or private health facility of Indian System of Medicine.

Only 12 percent of the women visited a private hospital/dispensary. 53 percent of those who visited a Government health facility, 53 percent visited a hospital/CHC/FRU/RH, 6 percent visited sub-centres, and 18 percent visited primary health centre and only two percent visited to government dispensary. One percent of the women reported that they visited Indian system of medicine hospital/ dispensary either government or private. There are not much differences in visit to any health facility according to availability of health facility in the village in the past three months of the survey.

7.5 Visit to Health Facility by Districts

Table 7.5 presents the percentage of currently married women who needed to visit health facility and visited the health facility by districts. Sixty-nine percent of currently married women in Lower Subansiri and 28 percent in Lohit, needed to visit a health facility, but they did not visit. Out of 13, in 11 districts i.e Changlang, Dibang Valley, East Kameng, East Siang, Lohit, Lower Subansiri, Tawang, Tirap, Upper Siang, Upper Subansiri, West Kameng and West Siang more than 70 percent of the women visited health facility for their health problems In Papum Pare only 58 percent of women visited health facility when needed. Among them who visited health facility. The state average for number of women who visited government health facility is higher (79 percent) than that of number of women visiting private health facility (15 percent).

Districts	Percentage of women who need to visit health facility, but not visited	Percentage of women who need to visit health facility and visited	Percentage of women who visited to	
			Government health facility	Private health facility
Changlang	54.9	21.2	82.0	18.0
Dibang Valley	63.3	13.4	93.9	6.1
East Kameng	67.6	9.2	70.1	29.9
East Siang	40.9	41.9	84.7	12.3
Lohit	28.4	16.0	90.0	10.0
Lower Subansiri	68.6	17.9	70.1	28.9
Papum Pare	43.8	31.5	58.2	18.8
Tawang	33.8	19.3	95.1	4.9
Tirap	16.3	21.0	93.2	6.1
Upper Siang	61.1	22.8	91.5	7.7
Upper Subansiri	64.4	7.8	81.5	17.1
West Kameng	37.4	15.0	90.6	9.4
West Siang	44.9	16.4	84.5	15.5
Arunachal Pradesh	46.2	20.3	79.0	14.8

7.6 Client's Perception of Quality of Government Health Services

Utilization of services is an essential indicator reflecting the quality of services. Better quality of services would have a higher utilization rate, which is very important from the policy point of view. Unless clients are satisfied with the services provided by the government, efforts made by the government will be wasted. In order to assess the utilization of government health facilities, a question was asked whether they had visited any health facility for their health problem during past three months to the survey. Those who visited the government health facility were asked their perceptions about quality of services, (personal manner like courtesy, respect, sensitivity, and friendliness of the physician and staff, technical skills and quality like thoroughness, carefulness, and competence and waiting time for receiving the services) and same is presented in Table 7.6. Women in general perceived that the quality of services, personal manner as well technical skills and quality of physician, ANM/nurse and other staff was good. Majority of the respondents perceived that personal manner (courtesy, respect, sensitivity, and friendliness) and technical skills (thoroughness, carefulness, and competence) of the physician, nurses and other staff were good, a few respondents mentioned that convenience of the health facility location (7 percent), personal manners of the physician (7 percent) and his technical skills(8 percent) was excellent.

Table 7.6 QUALITY OF GOVERNMENT HEALTH FACILITY			
Percentage of women who visited government health facility and rated quality and availability of services during most recent visit to a government health facility in the three months preceding the survey, Arunachal Pradesh , 2002-04			
Quality indicator	Poor	Good	Excellent
The convenience of the health facility location	40.3	52.8	6.9
Length ¹ of time spend towards waiting	42.2	54.3	3.5
Personal manner ² of the physician ⁵	16.0	76.6	7.4
The technical skills and quality ³ of the physician ⁵	13.5	78.7	7.9
Personal manner ² of nurse	14.8	82.0	3.2
The technical skills and quality ³ of nurse	13.8	83.4	2.8
Personal manner of other staff ⁵	11.9	86.1	1.9
The technical skills and quality of other ⁴ staff	12.1	85.8	2.2
The explanation of what was done to her	17.1	78.3	4.6
Medical, surgical and diagnostic equipment	22.6	72.9	4.5
General comfort	19.7	76.8	3.5

Note: ¹ Poor indicate long waiting time, good indicate average waiting time, and excellent indicate short waiting time. ² Courtesy, respect, sensitivity, friendliness. ³Thoroughness, carefulness, competence
⁴ Including paramedical staff. ⁵Includes hospital/community health center/ first referral unit/ referral hospital, dispensary, and primacy health center last visit made by women.

7.7 Reason for not visiting Government Health Centre

Women who visited the private health centre were asked the main reason for not visiting the government health centre and the results are presented in Table 7.7. Thirty-one percent of the currently married women reported poor quality of services as one of the reason for not visiting the government health centre for their health problems, as expected this reason is more reported by rural women (34 percent) than urban women (26 percent), and women from those village where health facilities are available (36 percent). About 15 percent reported non

availability of Doctors/health workers as a reason for not visiting a government health centre due to poor quality of service, 15 percent in rural area and 9 percent in urban area. Other reasons for not visiting government health centres were: time is not suited (12 percent), heavy rush (9 percent) and doctor/ health workers do not examine properly (13 percent).

Table 7.7 REASON FOR NOT PREFERRING GOVERNMENT HEALTH FACILITY					
Percent distribution of women who visited private health facility by reason for not visiting government health facility and according to residence and availability of health facilities in the village, Arunachal Pradesh, 2002-04					
Reason	Total	Residence		Availability of health facility ¹ in the village	
		Rural	Urban	No	Yes
Not conveniently located	6.1	8.7	1.9	7.9	9.6
Time is not suited	12.2	8.1	18.9	7.3	9.1
Poor quality of services	30.7	33.7	25.9	31.8	35.8
Heavy rush	9.1	8.7	9.6	12.4	4.7
Non/rare-availability of doctors/health workers	14.6	11.0	20.5	9.5	12.6
Doctors/health workers do not examine properly	12.9	15.4	9.0	19.6	10.7
Medicine not/rarely given or of bad quality	2.4	2.1	2.9	0.8	3.6
Doctors/paramedical staff does not behave properly	0.2	0.3	0.0	0.6	0.0
Services are charged	0.4	0.3	0.7	0.0	0.5
Referred by government doctor	8.9	10.5	6.1	9.0	12.2
Other	2.4	1.1	4.5	1.0	1.3
Total percent	100.0	100.0	100.0	100.0	100.0
Number of women	355	221	135	117	104

Note:¹ Includes sub-center, primary health center, Community health center or referral hospital, government hospital, and government dispensary within the village.

7.8 Family Planning Information and Advice Received

Women who are currently not using any contraceptive method were asked whether they were ever advised by ANM or family planning health worker to adopt family planning method and method advised during any of the contact. Seventeen percent of currently non-users said that they had advices or discussion on method of family planning with ANM or family planning health worker (Table 7.8). The most frequently discussed method was female sterilization (45 percent) and pills (23 percent). Only 3 percent of women received advices to adopt condom and 12 percent to adopt male sterilization as a contraceptive method. Discussions about traditional method, such as rhythm or withdrawal were rare. There is no much variation by types of residence in terms of family planning information and advice received.

7.9 Availability of Pills and Condom

To explore difficulties faced in the procurement of condoms and pills, current users of these methods were asked that they had been able to get their supply whenever needed. The results are presented in Table 7.9. Only 6 percent of condom users and 11 percent of pills users reported that they had a problem in getting these methods. A little higher proportion of urban women than rural women had problems in getting a supply of condom.

Table 7.8 ADVISE TO ADOPT FAMILY PLANNING METHOD			
Percentage of current non-users who reported ever advised to adopt family planning method by method of family planning by ANM/health worker, according to residence, Arunachal Pradesh, 2002-04			
Advice/method	Total	Rural	Urban
Percentage of non-users who were advised to adopt family planning method	6.4	6.3	6.6
Number of women	6,876	5,116	1,759
Method			
Female sterilization	44.6	44.8	44.0
Male sterilization	11.9	12.5	10.0
IUD	13.9	13.2	16.0
Pills	23.2	24.5	19.6
Condom	2.7	3.7	0.0
Rhythm/periodic abstinence	2.1	0.1	7.6
Withdrawal	1.3	0.7	2.7
Other	0.4	0.5	0.0
Missing			
Total percent	100.0	100.0	100.0
Number of women	439	323	116

Table 7.9 AVAILABILITY OF REGULAR SUPPLY OF CONDOMS/PILLS		
Percentage of current condom or pill users who ever had a problem getting a supply of condoms/pills by residence, Arunachal Pradesh, 2002-04		
Method/residence	Percentage who had a problem getting supply	Number of users
Condom		
Rural	6.0	1,045
Urban	7.2	350
Total	6.3	1,395
Pills		
Rural	16.3	108
Urban	4.6	104
Total	10.6	212

7.10 Quality of Care of Family Planning Services

Several aspects of quality of care of family planning services were also investigated. Current user of a sterilization was asked whether the person or centre where sterilization had been performed, informed her about other alternative methods of family planning; and further it was asked whether she was told by a ANM or health worker about possible side effects of the modern method at the time she accepted the method; whether she received any follow-up care after accepting the method. Tables 7.10 and 7.11 present the results of this investigation.

Around 56 percent of sterilized women reported that ANM or health worker informed them about alternative methods that they could use (Table 7.10) before adopting sterilization.

Around 53 percent of sterilized women received such information by a ANM or health worker in the government health facilities compared to around 59 percent of women who were sterilized in private health facilities, and 95 percent of women were informed about alternative methods by others but not by a health worker working in government or private health sector in village at the time of accepting the sterilization..

Table 7.10 INFORMATION OF OTHER MODERN METHOD BEFORE STERILIZATION				
Percentage of current users of sterilization who were informed about other modern method by the source where they get sterilized, according to the source of sterilization and residence, Arunachal Pradesh, 2002-04				
Source of sterilization	Total	Rural	Urban	Number of users
Government health facility	53.1	52.0	55.7	1,803
Family planning or RCH camp/ village session	*	*	*	11
Private health facility	58.9	52.4	70.0	216
Other	91.0	90.4	91.2	122
Total	55.5	52.4	61.9	2,168
Note: Total includes 6, and 9 women who said that they sterilized at mobile clinic, and who do not know including missing information of place/source of sterilization, are not shown separately.				

Table 7.11 INFORMATION ON SIDE EFFECT AND FOLLOW-UP FOR CURRENT METHOD			
Percentage of current users of modern contraceptive methods who were told about side effects or other problems of current method by a health worker or ANM/Nurse at the time of accepting the method and percentage who received follow-up services after accepting the method by current method and according to place of residence, Arunachal Pradesh, 2002-04			
Information/follow-up	Total	Rural	Urban
Told about side effects			
Sterilization	41.7	41.1	43.0
Other modern method	30.2	29.6	31.5
Any modern method	36.1	35.4	37.7
Received follow-up			
Sterilization	7.1	7.2	7.0
Other modern method	4.1	3.8	4.9
Any modern method	5.6	5.5	6.1

Another important facet of informed contraceptive choice is being fully informed about any side effects and any other problems associated with the method. In Arunachal Pradesh, only 36 percent of users of any modern method were informed about possible side effects or health problems associated with their current method. Forty-one percent of acceptors of sterilization in rural area and 43 percent in urban area reported that they were informed about side effects. Among users of modern method other than sterilization, 30 percent of rural users and 32 percent of urban users were informed about side effects. It is clear from the result that ANM or health workers in Arunachal Pradesh are not providing sufficient information to couples who need to make an informed choice about contraceptive methods. The situation with respect to follow-up services is also not encouraging. Follow-up services among sterilization users are slightly higher than user of modern methods. About

seven percent of sterilization users in rural area and same in urban area reported that they received follow-up services by ANM or health worker. Only 4 percent of the users of other modern method received follow-up services. In all, only 6 percent of the users of any modern method in rural area and same in urban areas received follow-up services.

7.11 Quality of Care Indicators for Contraceptive Users by District

Table 7.12 shows inter-district variations in the percentage of users of sterilization who were told about alternative methods before adopting sterilization and about side effects or other problems related to the current method or users of modern contraceptive methods, and the percentage of users who received follow-up services.

Table 7.12 QUALITY OF CARE INDICATORS FOR CONTRACEPTIVE USERS BY DISTRICT						
Among currently married women who are current users of modern contraceptive methods, quality of care indicators related to the use of their current contraceptive method by district, Arunachal Pradesh, 2002-04						
District	Percentage informed about other methods before getting sterilization ¹	Percentage told about side effects or other problems with method ²		Percentage who received follow-up ²		Percentage non-user told ever had advised to adopt contraceptive method
		Sterilization	Other modern method	Sterilization	Other modern method	
Changlang	43.6	38.2	28.5	4.3	1.0	10.4
Dibang Valley	70.0	40.8	33.2	3.0	1.3	5.5
East Kameng	79.4	47.2	43.0	13.9	24.5	2.8
East Siang	24.8	18.1	21.2	2.4	7.3	3.4
Lohit	61.3	39.8	42.2	7.7	2.4	7.1
Lower Subansiri	83.6	55.1	35.4	11.2	5.6	8.0
Papum Pare	87.6	48.1	24.7	5.6	3.1	6.7
Tawang	1.6	24.7	59.9	3.3	3.7	7.3
Tirap	1.5	46.7	42.9	4.9	14.9	9.2
Upper Siang	24.5	24.5	24.3	3.1	1.2	4.2
Upper Subansiri	0.0	37.8	17.4	8.2	1.5	3.2
West Kameng	49.0	16.3	11.8	1.5	0.1	5.4
West Siang	67.7	56.6	42.0	14.8	8.8	6.5
Arunachal Pradesh	55.5	41.7	30.2	7.1	4.1	6.4

Note: ¹ At the time of accepting the current method. ² By a health worker or ANM/Nurse after accepting the current method.

The percentage of sterilization-users who were told about alternate method is lowest in Upper Subansiri (0 percent) but it is highest in Papum Pare Subansiri (88 percent). There are also large inter-district variations in the percentage of sterilization- users and users of modern contraceptive methods who were told about the possible side effect. In case of sterilization, the proportion varied from a low of 16 percent in West Kameng to a high of 57 percent in West Siang. For other modern contraceptive methods, 60 percent users in Tawang and a minimum of 12 percent of users in West Kameng were told about the side effects of the method. Follow-up services are slightly better for acceptors of sterilization than for other modern methods in most of the districts of Arunachal Pradesh. Table 7.12 also shows district wise variation in the percentage of currently non-users who were ever advised to adopt

contraceptive methods, which varies from a low 3 percent in East Kameng, East Siang and Upper Subansiri to a high of 10 percent in Changlang.

Overall, the quality of care for family planning and health services is far from satisfactory in many of the district of Arunachal Pradesh; almost all districts need to work much more to improve their health and family planning services, particularly services that are provided by the government sector.

7.12 Quality of Care of Maternal Health Care

Information on few other aspects of quality of care in terms of maternal care was also collected. Women with last live/still births during three years preceding the survey were asked whether the Doctor/ANM/health worker advised you to go to health facility for delivery when they were pregnant, and received any follow-up care after delivering the baby within 2 weeks of delivery and received follow care at least one visit within six weeks of delivery. The same information is presented in Table 7.13.

Table 7.13 ADVISED TO HAVE DELIVERY AT HEALTH FACILITY AND FOLLOW-UP SERVICES FOR POSTPARTUM CHECK-UP			
Percentage of women* who were advised to have delivery at health facility by doctor/ health worker and percentage who receive follow-up services within 2 weeks and within 6 weeks of delivery by ANM, according to residence, Arunachal Pradesh, 2002-04			
Advise/follow-up service	Total	Rural	Urban
Percentage of women who were advised to have delivery at health facility	25.5	21.0	40.2
Percentage of women who were visited within 2 weeks of delivery	2.9	2.1	5.3
Percentage of women who were visited at least once within 6 weeks of delivery	12.9	12.9	12.8
Number of women	5,165	3,943	1,222
Note:* Women who had their last live/still birth during three years preceding the survey			

About twenty-six percent of the women with last live/still births during three years preceding the survey reported that they were advised by doctor or health worker to have delivery in health facility. Women from urban areas (40 percent) were more likely than rural areas (21 percent) to get advised to deliver their child at health facility.

In district wise variation, the percentage varies from as low as 9 percent in Upper Subansiri to as high as 39 percent in Dibang Valley (Table 7.14). In five of the 13 districts, more than 30 percent women were advised for deliver their child in health facility.

Table 7.14 QUALITY OF CARE INDICATORS FOR MATERNAL CARE			
Among currently married women* who are given last live/still birth three years preceding the survey, quality of care indicators related to delivery care by district, Arunachal Pradesh, 2002-04			
District	Percentage of women		
	Advised to have delivery at health facility by doctor/ health worker	Visited within 2 weeks of delivery by ANM	Visited at least one within 6 weeks of delivery by ANM
Changlang	9.7	0.6	1.1
Dibang Valley	38.6	1.0	3.4
East Kameng	11.3	0.6	4.8
East Siang	15.2	2.9	3.0
Lohit	37.7	3.6	7.4
Lower Subansiri	20.2	2.3	2.6
Papum Pare	37.2	8.2	8.9
Tawang	24.4	2.4	2.4
Tirap	35.4	4.1	100.0
Upper Siang	12.4	0.4	0.7
Upper Subansiri	9.0	1.1	2.7
West Kameng	37.0	1.8	2.3
West Siang	22.5	1.4	3.1
Arunachal Pradesh	25.5	2.9	12.9

Note:* Women who had live birth/ still birth after 1.1.1999/2001

Three percent of the women reported that they were visited by an ANM within two weeks of delivery; such visit was only 2 percent in rural areas and 5 percent in urban areas. Only 13 percent of the women in rural area and same in urban areas received at least one follow-up service within six weeks of delivery. Not more than 8 percent women received postpartum check-up within 2 weeks of delivery in any district of Arunachal Pradesh, and the proportion of women who had at least one postpartum check-up within six weeks of delivery varied from a low of 0.7 percent in Upper Siang to high of 100 percent in Tirap (Table 7.14).

CHAPTER – VIII

REPRODUCTIVE HEALTH PROBLEMS AND AWARENESS OF RTIs/STIs AND HIV/AIDS

One of the important components of the Reproductive and Child Health Programme is to have a healthy sexual life without any fear of contracting disease. With this approach, the RCH programme places a lot of emphasis on promoting and encouraging healthy sexual behaviour among couples through various Information, Education and Communication (IEC) activities. Health workers are also expected to educate women and men about Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) and motivate those people with RTI/STI problems to seek medical help. The DLHS-RCH has made an attempt to collect information on awareness and prevalence of RTI/STI. Apart from this, information on knowledge of HIV/AIDS, source of information and ways of avoiding AIDS were also collected.

8.1 Awareness of RTI/STI

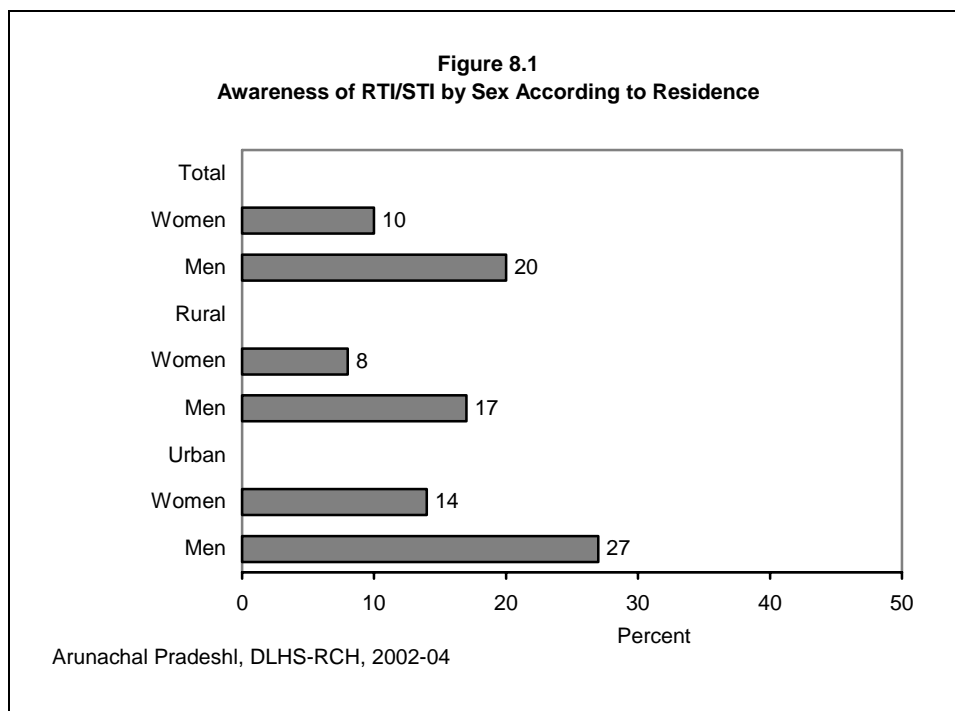
An attempt was made to assess whether couples were aware of RTI/STI. Currently married women and their husbands were asked about their awareness of RTI/STI and if they were aware, they were further questioned about the source of information and mode of transmission of the disease.

Table 8.1 shows the percentage of women aware of RTI/STI by background characteristics. About 10 percent of the women in Arunachal Pradesh were aware of RTI/STI. The proportion of women who were aware of RTI/STI is higher in urban areas (14 percent) than in rural areas (8 percent) as shown in Figure 8.1. Awareness of RTI/STI is lower among younger women, non-literate women, women from Muslim religion, scheduled caste women and women from households with a low standard of living. Awareness of RTI/STI increases from 4 percent among non-literate women to 26 percent among women who have completed 10 or more years of schooling. The standard of living index shows a positive relationship with awareness of RTI/STI, ranging from 4 percent among women with a low standard of living to 21 percent among women with a high standard of living.

Those women who had heard of RTI/STI were further asked about the source of information of RTI/STI, which is also presented in Table 8.1. About 43 percent of the women reported that they received information of RTI/STI from television and 51 percent from friends or relatives. Other sources of information of RTI/STI as reported by women were newspaper or books or magazines (40 percent), radio (17 percent), slogans or posters or pamphlets or wall hoardings (8 percent) and community meetings (9 percent). Only 22 percent of women received this information from doctors and 17 percent from health workers, and about 4 percent of the women reported that they had heard of RTI/STI from other sources.

Table 8.2 shows the percentage of husbands of currently married women who heard of RTI/STI by specific source of information according to some selected background characteristics. In Arunachal Pradesh, the percentage of men who heard of RTI/STI is higher than that of women (Figure 8.1). Almost 20 percent of the men had heard of RTI/STI. Men from

urban areas and men aged 25-34 years were relatively more aware of RTI/STI. Men who are non-literate and those belonging to scheduled castes are less likely to report awareness of RTI/STI. The level of awareness of RTI/STI increases with an increase in education level and standard of living. Only 5 percent of non-literate men were aware of RTI/STI as compared to 45 percent of men who had completed 10 or more years of schooling. About 10 percent of men from households with a low standard of living were aware of RTI/STI as compared to 40 percent of men with a high standard of living.



The television is the most prominent source of information about RTI/STI for men in Arunachal Pradesh. About 63 percent of men who knew about RTI/STI received information from television. Other important sources of information about RTI/STI are newspapers or books or magazines (44 percent), radio (37.9 percent), slogans or posters or pamphlets or wall hoardings (20 percent) and relatives or friends (38 percent). About 21 percent of the men received this information from a doctor, 6 percent from community meetings, 12 percent from health workers and 6 percent mentioned that they had received information about RTI/STI from school teachers. About 6 percent of the men reported that they had heard of RTI/STI from other sources. The television is the most important source of information of RTI/STI in all the groups. The 'television' is a bigger source of information of RTI/STI for men who are from urban areas than for those who come from rural areas. The differences in the knowledge of RTI/STI from television as a source of information by educational level and standard of living are quite visible. About 37 percent of non-literate men had heard of RTI/STI from television, which increased to 71 percent for men who have completed 10 or more years of schooling. Men from urban areas, non-literate men, Muslim men, men from other backward classes, men with a low standard of living and younger men are more prone to receive information from relatives or friends.

Table 8.1 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about RTI/STI and among women who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Arunachal Pradesh, 2002-04.

Background Characteristic	Percentage who have heard about RTI/STI	Number of Women	Among those who have heard about RTI/STI, percentage who received information from.										Number of women who have heard about RTI/STI	
			Radio	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others		
Age group (years)														
15-19	7.6	525	(14.6)	(24.4)	(24.4)	(2.4)	(22.0)	(9.8)	(2.4)	(12.2)	(63.4)	(4.9)	40	
20-24	8.2	2,149	20.7	41.0	35.3	4.8	21.5	23.0	4.4	12.9	47.9	5.7	177	
25-29	10.9	2,973	16.9	46.7	43.3	11.3	21.8	16.7	6.4	11.8	47.9	6.3	323	
30-34	11.4	2,325	14.2	36.9	37.4	5.4	22.1	17.9	5.7	6.1	51.1	3.8	264	
35-39	9.3	2,191	17.1	47.5	38.5	5.8	20.8	15.0	5.2	9.1	54.7	3.2	204	
40-44	8.2	1,710	18.8	46.0	44.9	10.2	27.5	13.2	3.0	3.8	50.9	1.2	141	
Residence														
Rural	7.9	8,644	15.6	34.3	31.1	7.0	19.6	19.8	5.6	10.4	55.0	2.9	685	
Urban	14.4	3,230	19.0	55.8	51.9	8.1	26.1	12.8	4.5	7.3	44.2	6.6	464	
Education														
Non-literate	4.1	5,918	11.5	21.4	16.3	1.8	17.4	20.4	1.4	11.9	68.6	4.8	242	
0-9@ years	10.2	4,034	14.3	37.9	32.5	4.3	18.7	18.4	2.6	9.9	51.5	1.9	411	
10 and above	25.8	1,920	21.9	57.9	56.7	12.9	27.5	14.0	9.2	7.3	41.0	6.3	495	
Religion														
Hindu	12.5	4,601	18.0	55.9	51.0	10.0	20.5	16.4	5.5	9.6	43.2	4.6	575	
Muslim	11.2	405	(12.2)	(48.8)	(39.0)	(2.4)	(9.8)	(7.3)	(4.9)	(12.2)	(56.1)	(17.1)	45	
Christian	7.3	2,259	18.3	25.2	21.8	4.3	24.6	16.1	2.6	6.0	53.6	3.6	166	
Buddhist	9.0	1,353	7.9	35.0	30.0	5.2	27.8	31.8	2.5	6.1	56.9	2.0	122	
No religion	4.4	205	*	*	*	*	*	*	*	*	*	*	9	
Other	7.6	3,051	19.3	25.9	28.1	5.2	24.5	12.3	7.0	11.5	63.0	4.2	232	
Caste/tribe[#]														
Scheduled caste	11.3	885	17.5	54.8	40.3	5.7	20.5	8.8	2.3	10.7	45.0	3.9	100	
Scheduled tribe	7.8	6,976	15.4	29.5	29.0	5.8	23.0	21.2	4.8	9.1	57.0	3.7	544	
Other backward class	13.1	811	13.3	49.2	43.5	14.8	25.1	17.0	6.4	15.0	45.0	6.3	106	
Other	14.1	2,692	20.1	58.1	53.7	8.3	21.2	13.4	6.1	7.0	43.4	5.2	379	
Standard of living index														
Low	4.2	5,662	18.6	12.1	11.3	2.3	15.1	19.0	2.2	9.9	73.1	5.0	236	
Medium	10.7	3,861	14.7	40.0	33.7	6.4	22.6	20.8	4.5	11.4	49.5	4.7	413	
High	21.3	2,351	18.0	60.1	57.5	10.8	25.3	12.8	7.1	7.0	41.0	3.9	500	
Total	9.7	11,874	16.9	43.0	39.5	7.5	22.2	16.9	5.2	9.2	50.6	4.4	1,149	

Note:# Total figure may not add to N due to do not know and missing cases.@ Literate women with no year of schooling are also included.

Total includes 1 missing information on women's education were not shown separately.* Percentage not shown: Based on few cases. () Based on less than 50 unweighted cases

Table 8.2 SOURCE OF KNOWLEDGE ABOUT RTI/STI AMONG MEN

Percentage of husband of eligible women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Arunachal Pradesh, 2002-04.

Background characteristic	Percentage who have heard about RTI/STI	Number of men	Among those who have heard about RTI/STI, percentage who received information from;										Number of men who have heard about RTI/STI	
			Radio	Television	Newspaper/ Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative / Friends	Others		
Age group (years)														
< 25	17.8	528	44.7	51.9	47.6	20.4	18.9	8.3	10.3	3.7	57.6	4.9	94	
25-34	21.4	2,803	35.4	59.0	44.7	17.8	19.1	12.0	3.5	6.2	39.6	6.8	600	
35-44	20.6	3,085	40.4	68.9	41.7	21.8	24.2	13.1	7.7	6.8	35.1	5.6	636	
45+	15.0	1,642	34.9	63.9	48.5	19.6	20.1	11.2	6.2	3.2	33.3	3.4	246	
Residence														
Rural	16.7	5,927	45.0	61.8	44.8	20.6	22.6	13.7	7.3	6.0	40.5	4.4	991	
Urban	27.4	2,131	25.9	65.9	43.2	18.6	19.2	9.4	3.8	5.6	33.4	7.8	584	
Education														
Non-literate	5.0	2,503	29.3	37.2	15.7	4.9	12.8	9.2	1.2	9.4	54.8	12.7	125	
0-9@ years	12.3	3,191	46.8	51.9	16.8	15.0	16.7	12.5	3.3	3.6	44.1	4.5	391	
10 and above	45.1	2,350	35.6	70.6	57.7	23.5	24.1	12.3	7.6	6.2	33.6	5.3	1,059	
Religion														
Hindu	23.1	3,109	31.8	70.3	43.3	18.9	18.9	10.9	5.5	5.1	35.0	4.9	718	
Muslim	19.5	247	(31.1)	(46.7)	(40.0)	(15.6)	(26.7)	(8.9)	(6.7)	(4.4)	(35.6)	(11.1)	48	
Christian	12.2	1,457	39.5	53.8	43.1	15.8	25.1	10.4	3.9	5.1	39.9	10.0	178	
Buddhist	17.9	1,050	40.9	67.6	46.8	35.3	35.6	21.2	12.2	9.6	57.2	3.0	188	
No religion	12.1	128	*	*	*	*	*	*	*	*	*	*	15	
Other	20.7	2,067	47.6	56.4	46.3	18.1	17.8	11.1	4.8	6.3	32.9	6.4	428	
Caste/tribe#														
Scheduled caste	20.7	589	28.1	67.6	34.2	14.6	17.1	10.4	4.4	6.0	45.2	5.5	122	
Scheduled tribe	16.5	4,805	42.9	57.7	45.1	19.6	22.1	13.2	6.0	6.8	38.3	7.4	795	
Other backward class	25.4	568	18.6	74.4	41.6	15.5	17.4	11.5	4.1	2.6	39.2	2.8	144	
Other	25.6	1,816	39.1	68.7	45.6	21.8	21.8	11.1	7.6	5.6	33.5	3.4	466	
Standard of living index														
Low	10.3	3,844	45.3	41.0	30.1	11.4	17.4	13.0	4.5	4.7	43.8	5.9	396	
Medium	21.0	2,622	38.6	67.0	36.8	19.7	21.3	10.7	5.9	5.2	39.5	5.9	550	
High	39.5	1,592	32.6	74.2	59.6	25.3	23.8	12.7	7.0	7.2	32.8	5.3	629	
Total	19.6	8,058	37.9	63.3	44.2	19.9	21.3	12.1	6.0	5.8	37.9	5.7	1,575	

Note: Table includes 75 cases of missing information on aware of RTI/STI. Total includes 14 cases with missing information on education are not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases. * Percentage not shown: Based on few cases.

8.1.1 Knowledge of Mode of Transmission of RTI/STI

Women who were aware of RTI/STI were asked about the mode of transmission. This is presented in Table 8.3. Among women who reported knowledge of RTI/STI, 37 percent of them did not know anything further about the mode of transmission of this disease. This proportion is relatively higher among rural women, young women, non-literate women, and women from Muslim religion, women from scheduled-tribes and women coming from households with low standard of living. About 36 percent of rural women do not know about the mode of transmission of RTI/STI compared to 39 percent of urban women. Lack of personal hygiene was mentioned by 23 percent of women and heterosexual intercourse by 50 percent of women as mode of transmission of RTI/STI. Only 14 percent of women reported homosexual intercourse and 2 percent reported other modes of transmission of RTI/STI.

Table 8.3 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG WOMEN						
Percentage of currently married women age 15-44 who have heard of RTI/STI, knowledge of mode of transmission by selected background characteristics, Arunachal Pradesh, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission					Number of women who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personal hygiene	Other	Do not know	
Age						
15-19	(9.8)	(51.2)	(17.1)	(0.0)	(45.0)	40
20-24	13.4	49.7	20.3	0.5	39.2	177
25-29	17.1	50.9	23.3	2.9	35.5	323
30-34	14.0	49.5	22.6	2.9	33.7	264
35-39	11.8	52.2	25.1	2.2	37.6	204
40-44	15.1	49.1	22.2	3.5	41.5	141
Residence						
Rural	14.9	49.8	26.2	1.7	35.8	685
Urban	13.6	51.4	17.1	3.4	38.9	464
Education						
Non-literate	9.9	36.0	13.0	1.8	53.9	242
0-9@ years	10.3	49.1	15.6	2.5	40.1	411
10 years and above	19.9	58.7	33.0	2.5	26.1	495
Religion						
Hindu	13.3	49.3	21.5	2.4	39.1	575
Muslim	(7.3)	(46.3)	(14.6)	(2.4)	(41.5)	45
Christian	20.0	50.5	25.6	2.6	27.7	166
Buddhist	11.1	57.1	34.0	1.7	36.5	122
Other	15.4	50.5	19.4	2.8	37.3	232
Caste/tribe#						
Scheduled caste	10.1	47.9	13.6	4.5	40.3	100
Scheduled tribe	15.0	51.1	23.2	2.7	35.8	544
Other backward class	12.7	35.6	25.4	2.4	48.0	106
Other	15.4	55.9	23.9	1.5	32.8	379
Standard of living index						
Low	12.3	45.2	14.4	1.8	44.4	236
Medium	12.3	47.9	17.2	1.5	41.0	413
High	17.0	55.0	30.8	3.4	30.3	500
Total	14.4	50.4	22.5	2.4	37.0	1,149

Note: # Total figure may not add to N due to do not know and missing cases Total includes 1 missing information on women's education were not shown separately. @ Literate women with no year of schooling are also included. () Based on less than 50 unweighted cases.

Table 8.4 presents the knowledge of mode of transmission of RTI/STI among men. Among men who had heard of RTI/STI, 25 percent of them mentioned that they did not know any thing about the mode of transmission of this disease. The percentage of men who did not know about the mode of transmission is higher among younger men, non-literate men, Muslim men, men from scheduled castes and men from households with a low standard of living. Among the men who knew the modes of transmission of RTI/STI, 65 percent mentioned heterosexual intercourse, 22 percent reported lack of personal hygiene, 20 percent mentioned homosexual intercourse and 5 percent reported other modes of transmission.

Table 8.4 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF RTI/STI AMONG MEN						
Percentage of husbands of currently married women who have heard of RTI/STI , knowledge of mode of transmission by selected background characteristics, Arunachal Pradesh, 2002-04						
Background characteristic	Percentage by knowledge of mode of transmission					Number of men who have heard of RTI/STI
	Homosexual intercourse	Heterosexual intercourse	Lack of personnel hygiene	Other	Do not know	
Age						
<25	14.8	60.6	11.3	3.8	26.9	94
25-34	18.3	64.1	19.6	6.4	25.5	600
35-44	21.5	65.7	24.2	3.3	24.9	636
45+	21.8	64.4	28.9	4.6	24.1	246
Residence						
Rural	20.8	64.3	22.6	4.2	24.6	991
Urban	18.5	65.0	22.2	5.6	26.0	584
Education						
Non-literate	21.1	39.8	13.2	2.9	45.6	125
0-9@ years	17.5	43.2	16.4	2.7	44.3	391
10 years and above	20.7	75.4	25.7	5.7	15.6	1,059
Religion						
Hindu	19.9	66.4	25.1	3.8	24.7	718
Muslim	(8.9)	(53.3)	(11.1)	(4.4)	(42.2)	48
Christian	17.5	61.9	27.8	5.0	24.1	178
Buddhist	32.7	80.2	30.1	1.9	11.9	188
Other	16.1	58.3	14.6	7.5	30.2	428
Caste/tribe#						
Scheduled caste	16.7	55.6	14.4	3.6	40.0	122
Scheduled tribe	20.1	63.6	19.7	5.5	24.0	795
Other backward class	17.0	63.2	26.7	1.3	26.6	144
Other	22.2	70.3	28.1	5.0	21.3	466
Standard of living index						
Low	18.0	45.9	17.1	4.3	41.5	396
Medium	21.6	61.4	19.8	5.8	26.3	550
High	19.7	79.1	28.0	4.1	13.8	629
Total	19.9	64.6	22.4	4.7	25.1	1,575

Note: @ Literate men with no years of schooling are also included. # Total figure may not add to N due to do not know and missing cases. Total includes 15 no religion cases were not shown separately. () Based on less than 50 unweighted cases.

8.2 Prevalence of RTI/STI

In DLHS-RCH, information was collected on the common symptoms of reproductive tract infections and sexually transmitted infections from women and their husbands, and information on menstruation related problems in the three months immediately preceding the survey.

The prevalence of reproductive tract infections and sexually transmitted infections is judged by their symptoms. All the respondents were told about symptoms of RTI/STI, and were asked whether they had any of them. In case of the presence of at least one symptom, they were further asked whether they sought treatment for such problems, and if they had sought treatment, details regarding the source of treatment were also recorded. The topic of RTI/STI is quite sensitive. The culture of silence prevents people from discussing such topics in front of others. In spite of intensive training of the investigators, the respondent might have hesitated in reporting the symptoms of RTI/STI. What gets reported in the survey though may not have given the exact prevalence, but may have given the lower limit for it.

Table 8.5 and Figure 8.2 show that almost half of the currently married women (35 percent) reported at least one reproductive health problem. The main problems reported by women were 'low backache' (21 percent), 'pain in lower abdomen' (12 percent), 'frequent / painful passage of urine' (8 percent), 'itching over vulva' (7 percent), 'swelling in the groin' (2 percent) and 'fever' (9 percent). Other symptoms of reproductive health problems reported by women were 'painful sexual intercourse (4 percent), 'involuntary escape of urine while coughing or sneezing' (4 percent), 'some mass coming out of vagina' (4 percent) and 'boils/ ulcers/ warts around vulva' (3 percent). Very few women reported 'bleeding after sexual intercourse' and 'swelling / lump in breast'. The prevalence of most of the reproductive health problems is more among rural than urban women.

Table 8.5 SYMPTOMS OF RTI/STI AMONG WOMEN			
Percentage of currently married women age 15-44 who reported any symptoms RTI/STI and specific symptoms during three months prior to survey, according to residence, Arunachal Pradesh, 2002-04			
Symptoms	Total	Residence	
		Rural	Urban
Percentage of women reported any RTI/STI symptoms	35.1	34.8	35.7
Symptoms			
Itching over vulva	7.1	6.8	7.8
Boils/ ulcers/ warts around vulva	2.9	2.8	3.1
Pain in lower abdomen not related to menses	12.0	12.0	12.1
Low backache	21.2	20.5	23.0
Pain during sexual intercourse	3.9	3.7	4.3
Bleeding after sexual intercourse	0.9	0.9	0.9
Swelling in the groin	1.8	1.8	1.7
Frequent / painful passage of urine	8.0	8.3	7.2
Fever	9.2	9.3	8.8
Some mass coming out of vagina	3.7	3.3	4.7
Any involuntary escape of urine while coughing or sneezing	4.1	4.5	3.2
Swelling / lump in breast	1.3	1.1	1.8
Number of women	11,874	8,644	3,230

Figure 8.2
Symptoms of RTI/STI among Women

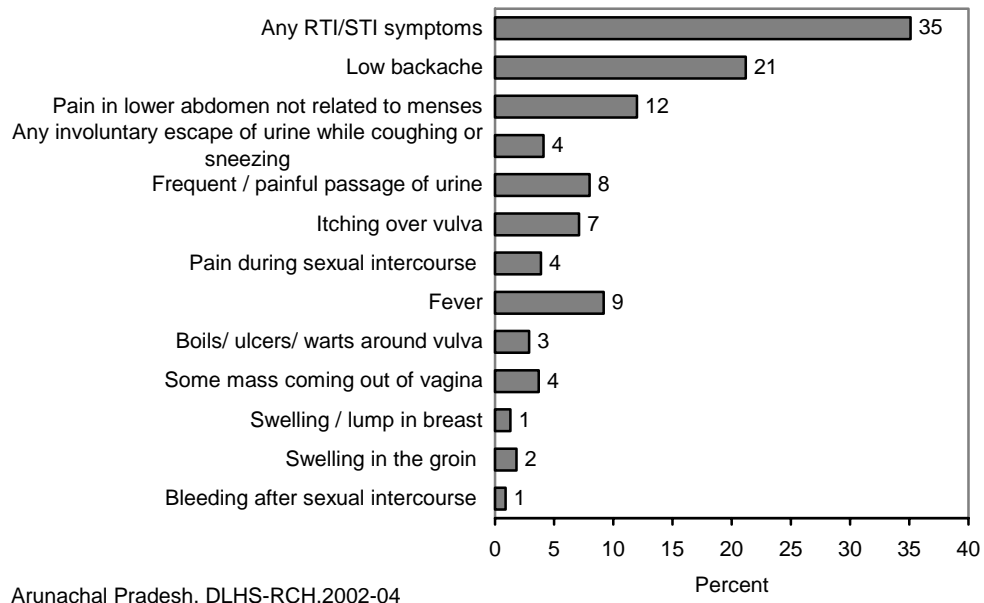


Figure 8.3
Symptoms of RTI/STI among Husbands

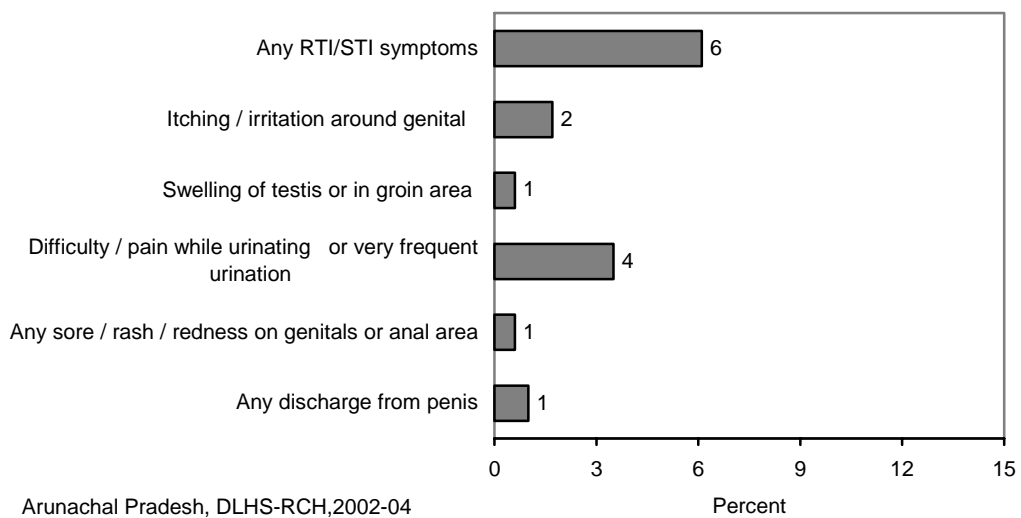


Table 8.6 and Figure 8.3 show the prevalence of reproductive health problems among husbands of currently married women. The prevalence of RTI/STI among men was judged by the reporting of symptoms. About 6 percent of men reported experiencing at least one symptom of reproductive health problem in the last three months preceding the survey. The prevalence of reproductive health problems is higher among rural men (6 percent) than among urban men (6 percent). The problems of reproductive health experienced by men are ‘difficulty / pain while urinating or very frequent urination (4 percent), ‘discharge from penis’ (1 percent), ‘itching / irritation around genitals’ (2 percent), ‘sore / rash / redness on genitals or anal area’ (1 percent) and ‘swelling of testes or in groin area’ (1 percent).

Table 8.6 SYMPTOMS OF RTI/STI AMONG MEN			
Percentage of husbands of currently married women who reported any symptoms RTI/STI and specific symptoms during three months prior to survey and sought treatment for RTI/STI by source of treatment, according to residence, Arunachal Pradesh, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of men reported any RTI/STI symptoms	6.1	6.3	5.5
Symptoms			
Any discharge from penis	1.0	0.9	1.1
Any sore / rash / redness on genitals or anal area	0.6	0.6	0.7
Difficulty / pain while urinating or very frequent urination	3.5	3.7	3.0
Swelling of testis or in groin area	0.6	0.6	0.3
Itching / irritation around genital	1.7	1.8	1.3
Number of men	8,058	5,927	2,131
Percentage of men sought treatment for any RTI/STI	36.3	31.7	50.9
Number of men ¹	488	371	117
Percentage sought treatment at health facility ²			
Government health facility ³			
Primary health centre	5.0	5.5	3.8
Sub centre	28.4	26.0	33.3
Private health facility ⁴			
ISM ⁵ facility	10.2	9.0	12.5
Chemist/ medical shop	7.4	10.2	1.7
Other	11.2	8.8	16.1
Percentage obtained treatment from ²			
Doctor	79.9	79.4	81.1
Male health worker	0.6	0.8	0.0
Traditional healer	2.5	0.7	6.0
Relative/friends	2.0	0.0	6.0
ISM practitioner	2.0	0.0	6.0
Home remedy	2.8	0.4	7.6
Chemist medical shop	10.0	11.0	8.1
Other	9.6	4.2	20.4
Number of men ⁶	177	118	59

Note: ¹ Based on men with any symptoms of RTI/STI. ² Percentage may add to more than 100.0 due to multiple responses and based on who sought treatment. ³ Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre. ⁴ Includes private hospital/ clinic, non-governmental / trust hospital/clinic. ⁵ Either government or private hospital/clinic of Indian system of medicine. ⁶ Based on who sought treatment for RTI/STI.

Among men who reported reproductive health problems, 36 percent of them sought treatment, which comprises of 51 percent of urban men and 32 percent of rural men. Among them only 75 percent visited a government health facility, including a primary health centre (5 percent) and sub-centre (28 percent) whereas 13 percent visited a private health facility. About 10 percent of men were treated by the Indian system of medicine, 7 percent obtained treatment from a chemist or medical shop and about 11 percent of the men reported that they were treated at other sources. A relatively higher proportion of men from urban areas utilised the government health facility, sub centre and Indian system of medicine facility. On the other hand, utilisation of the private health facility and chemist or medical shop for treatment is much higher among rural men than among urban men. A large proportion of men saw a doctor (80 percent), 81 percent in urban areas and 79 percent in rural areas. About 10 percent of the men went to a chemist male health worker and 3 percent of the men used home remedies. About 2 percent of the men were seen by relatives or friends, 3 percent by a traditional healer and 2 percent by an ISM practitioner. Another 10 percent of the men obtained treatment from other sources. The percentage of men who obtained treatment from traditional healers, chemists and home remedies is somewhat higher in rural areas than in urban areas.

The DLHS-RCH also collected information from currently married women on symptoms of RTIs, that is, on abnormal vaginal discharge, texture, colour and odour of discharge in the three months immediately preceding the survey. The prevalence of reproductive health problems among currently married women is estimated from women's experiences. Table 8.7 shows the asymptotic prevalence of vaginal discharge related problems among currently married women in Arunachal Pradesh during the three months preceding the survey according to residence. About 8.3 percent of the women reported problems related to vaginal discharge. The prevalence of vaginal discharge problem is relatively higher among rural women (8 percent) than among urban women (9 percent).

Among the women who had reported symptoms of vaginal discharge, 25 percent went for treatment, a higher percentage (33 percent) from urban areas compared to their rural counterparts (22 percent). A considerable proportion (29 percent) visited private health facilities followed by government health facility (70 percent). About 2 percent sought home remedy, 4 percent went to an ISM, 16 percent went to the Primary Health Centre and 3 percent of the women visited other places for treatment. The proportion of women who visited a private health facility is higher in urban areas (31 percent) than in rural areas (27 percent) and the proportion of women who visited a government health facility is marginally higher in rural areas (73 percent) than in urban areas (66 percent). A significantly high proportion (94 percent) of the women in the state of Arunachal Pradesh obtained treatment from doctors for their problems. Around 6 percent women were treated by ANM/Nurse/Midwife/LHV and 1 percent by other health professionals.

Table 8.7 ABNORMAL VAGINAL DISCHARGE			
Percentage of currently married women age 15-44 who reported had any abnormal vaginal discharge during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Arunachal Pradesh, 2002-04			
Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women reported abnormal vaginal discharge	8.3	8.0	9.1
Number of women	11,874	8,644	3,230
Percentage of women sought treatment for vaginal discharge ¹	25.0	21.5	33.4
Number of women	989	695	294
Percentage sought treatment at health facility²			
Government health facility ³	70.3	73.2	66.1
Primary health centre	15.9	19.4	10.6
Sub centre	2.8	4.6	0.0
Private health facility ⁴	28.5	26.8	31.1
ISM ⁵ facility	3.8	5.1	1.9
Home remedy	2.1	3.5	0.0
Other	3.0	0.6	6.5
Percent distribution of women who obtained treatment from²			
Doctor	93.7	94.7	92.1
ANM/nurse/midwife/LHV	5.6	4.8	6.7
Other health professionals ⁶	0.7	0.3	1.2
Other	0.1	0.2	0.0
Total percent	100.0	100.0	100.0
Number of women	248	150	98
Note: ¹ Based on women who reported having vaginal discharge. ² Based on women who sought treatment for vaginal discharge. ³ Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. ⁴ Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. ⁵ Either government or private hospital/clinic of Indian system of medicine, ⁶ Includes <i>dai</i> (trained or untrained), relative or friends and chemist/ medical shop.			

8.3 Menstruation Related Problems

Table 8.8 shows the percentage of women who had menstruation problems and who sought treatment during the three months preceding the survey. Table 8.8 shows that around 16 percent women in Arunachal Pradesh had menstruation problems and the figures are 17 percent and 14.3 percent in the rural and urban areas respectively. The main symptoms of menstrual problems that were reported by the women in Arunachal Pradesh were painful periods (64 percent), scanty bleeding (16 percent) and delayed periods (19 percent).

Table 8.8 MENSTRUATION RELATED PROBLEMS

Percentage of currently married women age 15-44 who had any menstruation related problem during three months prior to survey and percentage who sought treatment and source of treatment according to residence, Arunachal Pradesh, 2002-04

Symptoms and treatment	Total	Residence	
		Rural	Urban
Percentage of women with any menstruation related problem	15.9	16.5	14.3
Number of women	9,066	6,442	2,624
Symptoms¹			
No period	6.9	7.6	5.0
Painful period	63.7	66.1	56.8
Frequent or short period	15.9	17.2	12.1
Delayed period	19.4	20.6	16.1
Prolonged bleeding	9.0	9.3	8.2
Excessive bleeding	23.1	20.8	29.6
Continuous bleeding	5.2	5.3	4.8
Scanty bleeding	15.6	16.5	13.0
Inter-menstrual bleeding	4.3	4.9	2.3
Percentage of women sought treatment who had any menstruation related problems	26.8	22.2	39.9
Number of women	1,439	1,064	376
Percentage sought treatment at health facility ⁶			
Government health facility ²			
Primary health centre	67.9	69.3	65.6
Sub centre	9.1	7.8	11.1
	2.0	3.2	0.0
Private health facility ³			
ISM ⁴ facility	27.6	24.5	32.5
Other	7.1	7.8	6.0
	1.1	1.2	0.9
Percentage of women obtained treatment from⁶			
Doctor	94.3	93.5	95.5
ANM/nurse/midwife/LHV	1.8	1.5	2.4
Other health professionals ⁵	5.7	6.7	4.0
Other	3.0	4.2	1.0
Number of women	386	236	150
Note: ¹ Based on women who reported any menstruated related problems. ² Includes Government municipal hospital, dispensary, UHC/ UHP /UWFC, CHC/ rural hospital, Primary health centre, sub-centre and out reach/ MCP clinic in village. ³ Includes private hospital/ clinic, non-governmental / trust hospital/clinic, chemist/ medical shop. ⁴ Either government or private hospital/clinic of Indian system of medicine, ⁵ Includes dai (trained or untrained), relative or friends and chemist/ medical shop. ⁶ Multiple responses. Total includes 24 missing information on any menstrual problem were not shown separately.			

The prevalence of painful periods is more among rural women as compared to scanty bleeding and delayed periods which were prevalent more among urban women. Among the women who had menstrual problems, about 27 percent sought treatment in the state and the figures for urban and rural areas are 40 percent and 22 percent respectively. The private health facility and government health facility are the main sources of treatment for menstrual problems. Around 28

percent of women sought treatment at a private health facility and 68 percent sought treatment at a government health facility. About 7 percent of the women sought treatment at an ISM facility. Most of the women went to a doctor for treatment (94 percent). The figures for urban and rural areas are 96 and 94 percent respectively.

8.4 Prevalence of RTIs/STIs by District

Table 8.9 presents the prevalence of RTIs/STIs among currently married women and their husbands by districts. The percentage of women who reported any symptoms of RTIs/STIs is lowest in West Siang (13 percent) and highest in Dibang Valley (47 percent). The problems related to abnormal vaginal discharge ranges from 2 percent in East Kameng to 17 percent in West Siang. In comparison to women, fewer men from all districts of Arunachal Pradesh reported symptoms of RTIs/STIs. Men from Dibang Valley, East Siang, Lohit, Tawang, Tirap, West Kameng, (1 - 5 percent) reported the lowest prevalence of symptoms of RTIs/STIs and men from East Kameng (10 percent) reported the highest prevalence.

The percentage of women who have sought treatment for RTIs (abnormal vaginal discharge) ranges from 8 percent in East Kameng to 41 percent in Papum Pare and for men who have sought treatment; it ranges from 4 percent in Dibang Valley to 52 percent in Tirap.

Table 8.9 REPRODUCTIVE HEALTH CARE INDICATORS BY DISTRICT					
Percentage of currently married women and their husbands who reported reproductive health problems and percentage who sought treatment for the problems by district, Arunachal Pradesh, 2002-04					
District	Percentage of women			Percentage of men	
	With any symptoms of RTI/STI	Reported any abnormal vaginal discharge	Sought treatment for abnormal vaginal discharge	With any symptoms of RTI/STI	Sought treatment for RTI/STI problems
Changlang	39.1	11.8	25.7	8.5	42.0
Dibang Valley	47.0	2.3	(23.1)	2.7	(4.0)
East Kameng	20.4	2.2	(7.5)	9.7	16.4
East Siang	46.7	6.4	19.0	3.6	39.1
Lohit	38.9	9.2	31.3	4.6	38.5
Lower Subansiri	14.3	7.0	15.9	7.5	13.7
Papum Pare	45.7	7.7	40.7	9.4	28.9
Tawang	29.2	1.8	(40.4)	0.8	(28.2)
Tirap	35.7	13.3	20.9	4.5	(51.7)
Upper Siang	43.8	10.2	22.1	7.6	42.0
Upper Subansiri	43.4	6.6	16.5	8.0	43.5
West Kameng	38.1	5.0	17.9	1.3	(40.0)
West Siang	13.1	16.5	19.1	8.3	50.3
Arunachal Pradesh	35.1	8.3	25.0	6.1	36.3

Note: Based on less number of cases

8.5 HIV/AIDS

Acquired Immune Deficiency Syndrome (AIDS) is an illness caused by the Human Immune Virus (HIV), which weakens the immune system and leads to death through secondary infection

such as tuberculosis or pneumonia. The virus is generally transmitted through sexual contact, through the placenta of HIV-infected women to their children or through contact with contaminated needles (injections) or blood. Prevalence of HIV and AIDS has been on the rise for more than a decade in India and has reached alarming proportions in recent years. To prevent HIV transmission, the government has been making various efforts.

DLHS-RCH has collected information on the general state of awareness of HIV/AIDS, its transmission, its prevention and common misconceptions about HIV/AIDS. All the currently married women in the age group 15-44 years and their husbands were first asked if they had ever heard of an illness called HIV/AIDS. Respondents who had heard of HIV/AIDS were further asked about their source of information, mode of transmission and correct knowledge of HIV/AIDS transfusion.

8.5.1 Knowledge of HIV/AIDS

Table 8.10 shows the percentage of women who had heard about HIV/AIDS by some selected background characteristics. About 48 percent of currently married women in Uttaranchal have heard of HIV/AIDS, which is higher than RCH Round – I. In Round-I only 36 percent of currently married women were aware of HIV/AIDS.

Knowledge of HIV/AIDS is much lower among rural women, non-literate women, Muslim women, women from scheduled castes, women from households with a low standard of living and younger women. About 72 percent of urban women had heard about HIV/AIDS compared to only 56 percent of rural women. Knowledge of HIV/AIDS steadily increased with increase in educational level and household standard of living. Only two-fifth of the non-literate women (40 percent) had heard of HIV/AIDS as against 93 percent of women who had completed 10 or more years of schooling. Similarly, a little more than women two-fifth (42 percent) with a low standard of living had heard of HIV/AIDS as against 88 percent of women with a high standard of living. Young women below the age of 20 years have the least knowledge of HIV/AIDS as compared to women from other age groups. Muslim women (52 percent) were less aware of HIV/AIDS compared to Hindu women (64 percent) Christian women (57 percent) and Buddhist (65 percent). Women from 'other caste' category were more knowledgeable about HIV/AIDS (67 percent) than women belonging to other backward classes (67 percent), scheduled-tribes (58 percent) and scheduled castes (57 percent).

The government has been using mass media such as television, radio and newspapers extensively to increase awareness among the general public about HIV/AIDS and its prevention. Table 8.10 shows the percentage of currently married women who were aware of HIV/AIDS from different sources. The most prominent source of information about HIV/AIDS is television. About 62 percent of women reported that television was their source of information about HIV/AIDS, followed by newspapers, books or magazines (15 percent), radio (31 percent), slogans or pamphlets or posters or wall hoardings (13 percent) and relatives or friends (60 percent). About 14 percent of the women reported that a doctor had informed them about HIV/AIDS and 15 percent of the women received information of HIV/AIDS from a health worker. A comparatively high proportion of rural women received information about HIV/AIDS from the radio, health worker, community meetings and relatives or friends.

Table 8.10 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG WOMEN

Percentage of currently married women age 15 - 44 who have heard about HIV/AIDS and among women who have heard about HIV/AIDS, percentage who received information from specific sources by selected background characteristics, Arunachal Pradesh, 2002-04.

Background characteristic	Percentage who have heard about HIV/AIDS	Number of Women	Among those who have heard about HIV/AIDS, percentage who received information from.										Number of women who have heard about HIV/AIDS
			Radio	Television	Newspaper / Books/ Magazines	Slogan/ Pamphlets/ Posters/ Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/ Friends	Others	
Age group (years)													
15-19	52.9	525	29.8	56.2	10.5	8.7	10.2	5.9	5.3	8.0	66.4	1.9	278
20-24	62.2	2,149	26.9	59.7	10.4	13.2	12.7	14.0	4.4	9.2	63.9	2.0	1,336
25-29	64.9	2,973	31.1	63.9	15.7	11.5	14.1	14.0	3.1	8.4	58.8	2.1	1,929
30-34	62.0	2,325	30.6	62.9	18.8	13.9	14.4	15.2	3.4	9.0	57.8	2.5	1,441
35-39	58.3	2,191	34.3	63.9	13.8	12.3	15.2	16.9	4.3	7.5	58.5	2.1	1,277
40-44	52.4	1,710	32.5	62.2	14.8	13.4	13.2	14.7	3.0	11.1	57.1	1.2	896
Residence													
Rural	55.9	8,644	35.5	52.8	11.6	11.5	13.9	15.9	3.9	8.6	64.0	1.8	4,832
Urban	72.0	3,230	21.3	82.3	21.1	14.8	13.6	11.7	3.2	9.4	50.5	2.5	2,325
Education													
Non-literate	39.8	5,918	29.7	43.5	3.2	6.2	12.0	14.8	2.6	8.9	65.7	2.1	2,356
0-9@ years	74.7	4,034	31.1	62.0	8.2	10.5	11.4	13.2	2.7	8.3	59.5	1.6	3,013
10 and above	93.1	1,920	32.2	88.0	40.8	24.5	20.4	16.5	6.7	9.7	51.7	2.8	1,786
Religion													
Hindu	64.4	4,601	23.8	76.7	18.8	13.4	13.7	15.9	4.0	8.4	50.5	1.8	2,963
Muslim	52.5	405	26.7	68.7	12.4	4.9	8.3	13.2	5.5	11.8	57.7	2.2	212
Christian	57.3	2,259	41.7	50.4	8.8	11.2	10.7	11.0	2.8	7.6	65.3	2.3	1,295
Buddhist	65.2	1,353	24.0	58.3	11.7	12.7	21.5	24.1	2.9	11.5	64.0	1.9	882
No Religion	47.2	205	28.7	55.1	15.7	5.7	18.1	23.1	1.4	11.4	73.2	2.3	97
Other	56.0	3,051	39.4	48.4	13.7	13.4	12.9	9.6	4.1	8.7	68.2	2.3	1,708
Caste/tribe#													
Scheduled caste	56.7	885	26.3	74.7	11.2	12.3	10.1	10.5	4.0	12.8	44.1	2.2	502
Scheduled tribe	58.2	6,976	36.1	51.3	11.8	11.9	14.8	14.5	3.6	8.6	67.6	2.2	4,062
Other backward class	67.2	811	21.3	80.7	18.9	16.6	15.0	17.7	5.4	14.7	48.3	2.3	545
Other	66.6	2,692	24.6	78.5	22.5	14.0	13.0	15.4	3.5	6.5	50.6	1.6	1,791
Standard of living index													
Low	42.2	5,662	39.4	30.1	4.2	7.0	11.9	14.4	3.1	7.7	70.9	2.1	2,390
Medium	69.8	3,861	25.6	71.1	11.9	11.2	12.2	13.9	3.3	9.3	57.4	2.0	2,694
High	88.2	2,351	28.1	88.3	30.5	20.7	18.2	15.5	4.9	9.6	49.5	2.0	2,073
Total	60.3	11,874	30.9	62.4	14.7	12.6	13.8	14.5	3.7	8.8	59.6	2.0	7,157

Note: Total includes 1 cases missing information on education were not shown separately. # Total figure may not add to N due to do not know and missing cases

@ Literate women with no year of schooling are also included.

Table 8.11 SOURCE OF KNOWLEDGE ABOUT HIV/AIDS AMONG MEN

Percentage of husbands of currently married women who have heard about RTI/STI and among men who have heard about RTI/STI, percentage who received information from specific sources by selected background characteristics, Arunachal Pradesh, 2002-04.

Background Characteristic	Percentage who have heard about HIV/AIDS	Number of men	Among those who have heard about HIV/AIDS, percentage who received information from										Number of men who have heard about HIV/AIDS	
			Radio	Television	Newspaper/Books/Magazines	Slogan/Pamphlets/Posters/Wall Hoardings	Doctor	Health worker	School teacher	Community Meeting	Relative/Friends	Others		
Age group (years)														
< 25	74.9	528	38.0	59.4	28.9	24.1	16.7	16.1	8.4	7.0	56.6	2.3	396	
25-34	76.8	2,803	42.3	65.2	32.6	23.8	17.2	13.1	4.9	8.7	51.1	3.9	2,153	
35-44	72.9	3,085	45.5	66.5	29.5	24.4	17.9	14.0	5.2	9.2	48.8	3.8	2,249	
45+	59.6	1,642	45.3	64.0	28.0	21.5	15.4	10.7	2.9	6.3	42.0	3.0	979	
Residence														
Rural	67.4	5,927	47.6	58.1	27.0	22.8	17.8	14.2	5.7	9.3	52.8	3.1	3,997	
Urban	83.5	2,131	35.1	80.9	37.9	25.7	15.6	11.1	3.0	6.2	40.7	4.7	1,780	
Education														
Non-literate	45.0	2,503	41.8	41.5	4.6	6.9	11.6	11.0	1.9	8.6	58.8	3.2	1,127	
0-9@ years	75.9	3,191	39.2	59.7	15.3	20.9	14.5	11.6	3.7	7.0	52.7	3.0	2,423	
10 and above	94.8	2,350	49.7	82.9	59.7	35.2	22.8	16.2	7.7	9.6	40.1	4.5	2,227	
Religion														
Hindu	75.0	3,109	36.8	75.6	34.3	23.7	16.6	13.1	5.2	7.9	44.2	3.5	2,332	
Muslim	76.9	247	35.9	52.7	22.3	18.2	15.8	7.9	1.2	8.1	61.1	3.2	190	
Christian	65.6	1,457	41.6	54.6	28.2	19.0	12.3	7.8	2.6	9.8	53.2	5.3	957	
Buddhist	70.8	1,050	49.0	62.4	24.7	25.4	23.0	20.4	8.7	7.2	56.1	2.0	744	
No religion	62.3	128	34.3	55.3	26.3	17.6	14.9	10.6	0.7	4.2	62.4	6.2	80	
Other	71.3	2,067	55.1	58.8	29.7	26.8	18.4	14.4	4.7	8.9	48.2	3.4	1,474	
Caste/tribe#														
Scheduled caste	74.9	589	40.0	77.3	31.9	28.3	19.1	15.5	8.8	10.4	45.8	2.4	441	
Scheduled tribe	69.5	4,805	47.2	58.3	28.8	22.7	17.4	13.9	4.1	8.1	51.9	4.0	3,340	
Other backward class	77.5	568	31.7	76.1	33.0	22.5	12.4	11.9	3.6	9.8	36.8	3.3	440	
Other	74.8	1,816	41.8	75.2	34.1	26.6	18.8	12.2	6.5	7.6	45.3	3.0	1,359	
Standard of living index														
Low	59.4	3,844	46.8	39.9	16.2	16.4	14.3	12.4	2.8	7.3	57.3	2.5	2,283	
Medium	79.2	2,622	40.9	76.7	29.6	24.8	16.6	12.4	5.5	8.8	47.0	4.2	2,078	
High	89.0	1,592	43.2	88.8	54.2	33.7	22.4	16.0	7.4	9.3	38.8	4.4	1,416	
Total	71.7	8,058	43.8	65.1	30.3	23.7	17.1	13.3	4.9	8.3	49.0	3.6	5,777	

Note: Table includes 33 cases with missing information on aware of HIV/AIDS. Total includes 14 cases of missing information on education are not shown separately. @ Literate men with no year of schooling are also included. # Total figure may not add to N due to don't and missing cases.

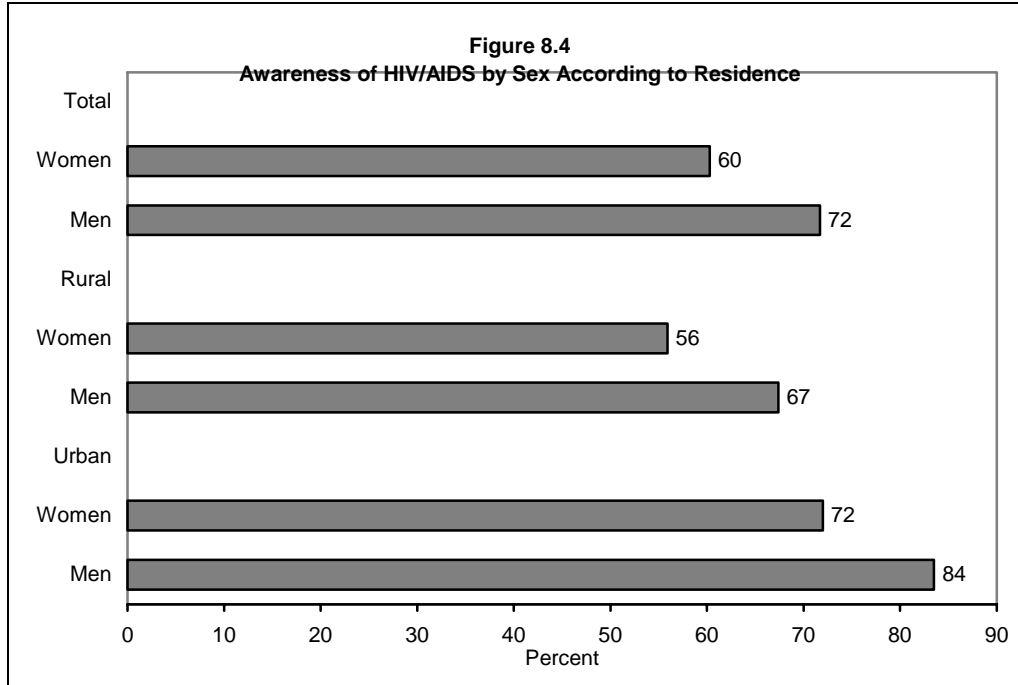


Table 8.11 shows the percentage of husbands of currently married women who had heard about HIV/AIDS. In Arunachal Pradesh, the proportion of men who had heard about HIV/AIDS is much higher than that of women. About 72 percent of men had heard of HIV/AIDS as compared to 60 percent of women (Figure 8.4).

About 88 percent of urban men had heard about HIV/AIDS as compared to only 67 percent of rural men. Knowledge of HIV/AIDS varies by men's age, and it is higher for the age group 25-34 years. Awareness of HIV/AIDS is much lower among non-literate men, Muslim men, men from scheduled castes and men who belong to households with a low standard of living. A similar trend is observed in the case of women. About 45 percent of non-literate men had heard of HIV/AIDS and it increased up to 76 percent for literate men and up to 95 percent of men who had completed 10 or more years of schooling. Awareness of HIV/AIDS is also positively related to standard of living.

Table 8.11 also shows the percentage of husbands of currently married women who were aware of HIV/AIDS by different sources. As reported by the men of Arunachal Pradesh, the most prominent source of information of HIV/AIDS was television (65 percent) followed by newspapers, books or magazines (30 percent). Other important sources of information of HIV/AIDS are the radio (44 percent), slogans or pamphlets or posters or wall hoardings (24 percent) and relatives or friends (49 percent). About 17 percent of men reported that a doctor had informed them about HIV/AIDS and 13 percent men had received information of HIV/AIDS from a health worker.

About 8 percent reported that they were informed through community meetings and 5 percent received such information from a school teacher. Comparatively, a higher proportion of rural men received information about HIV/AIDS from the radio, health worker and school teacher than urban men. The information on awareness of HIV/AIDS through mass media such as television and newspapers or books or magazines was received more by older men (aged 45 and above), urban men, men with at least 10 years of schooling and men from households with a high standard of living. On the other hand, relatives or friends were the main source of information for young men below age 25, non-literate men, Muslim men, scheduled caste men and men from households with a low standard of living.

8.5.2 Knowledge of Mode of Transmission about HIV/AIDS

Women who were aware of HIV/AIDS were asked about the mode of transmission and this is presented in Table 8.12. Among women who reported awareness of HIV/AIDS, 33 percent of them did not know about the mode of transmission.

Table 8.12 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG WOMEN								
Percentage currently married women age 15-44 who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Arunachal Pradesh, 2002-04								
Background characteristic	Percentage by knowledge of mode of transmission							Number of women who have heard of HIV/AIDS
	Homo sexual intercourse	Hetero sexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	
Age								
15-19	14.8	51.9	21.6	10.0	14.9	1.1	40.8	278
20-24	15.3	55.0	28.6	14.0	24.5	2.9	35.6	1,336
25-29	19.2	59.1	32.0	16.6	24.1	3.8	29.6	1,929
30-34	20.3	56.8	30.8	16.5	26.4	3.6	31.8	1,441
35-39	18.6	58.7	33.3	14.4	26.6	2.4	30.7	1,277
40-44	14.9	54.1	30.4	15.4	24.0	3.4	35.8	896
Residence								
Rural	18.4	55.0	26.9	13.4	21.7	2.5	35.0	4,832
Urban	16.7	60.8	38.9	19.3	31.0	4.6	27.4	2,325
Education								
Non-literate	12.4	42.2	15.6	9.7	12.6	2.6	47.5	2,356
0-9@ years	16.7	57.0	27.1	12.3	20.3	2.6	32.9	3,013
10 years and above	27.1	76.2	57.0	27.6	48.1	4.9	12.3	1,786
Religion								
Hindu	18.2	58.7	34.2	16.0	27.1	2.9	29.5	2,963
Muslim	19.5	57.0	29.7	11.6	22.7	6.2	33.9	212
Christian	14.2	50.6	24.2	15.1	18.7	2.6	39.7	1,295
Buddhist	19.2	65.2	33.2	14.9	28.1	2.6	26.0	882
No religion	23.1	70.7	21.3	17.7	24.1	0.0	20.1	97
Other	18.8	53.5	29.1	14.7	23.6	4.2	36.3	1,708
Caste/tribe#								
Scheduled caste	16.7	50.9	33.0	17.8	26.8	3.9	35.4	502
Scheduled tribe	16.7	53.9	27.4	14.8	21.9	3.1	36.1	4,062
Other backward class	16.0	60.3	36.4	15.8	29.1	2.6	28.9	545
Other	22.4	65.8	37.4	16.3	29.8	3.4	23.6	1,791
Standard of living index								
Low	13.5	45.2	18.4	9.1	14.1	2.4	45.3	2,390
Medium	17.3	56.0	26.7	13.9	21.3	2.9	33.5	2,694
High	23.6	71.5	50.3	24.3	41.5	4.5	16.7	2,073
Total	17.9	56.9	30.8	15.3	24.7	3.2	32.5	7,157

Note: Total includes 1 cases missing information on education were not shown separately. @ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases.

The proportion of women not knowing about the mode of transmission of HIV/AIDS is higher among rural women, younger women, non-literate women, Muslim women, women from scheduled castes and women with a low standard of living. About 35 percent of the rural women do not know about the mode of transmission of HIV/AIDS compared to 27.4 percent of urban women.

Among women who reported different ways of transmission of HIV/AIDS, a large proportion (57 percent) mentioned heterosexual intercourse as a mode of transmission. All the socio-economic groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by women were transmission through needles or blades or skin punctures (31 percent), transfusion of infected blood (25 percent), mother to child, if pregnancy occurs during a stage of HIV (15 percent); about 18 percent of the women mentioned that homosexual intercourse could also be a mode of transmission. Only 3 percent women stated that there were other ways of transmission of HIV/AIDS.

Table 8.13 SOURCE OF KNOWLEDGE ABOUT MODE OF TRANSMISSION OF HIV/AIDS AMONG MEN								
Percentage of husbands of currently married women who have heard of HIV/AIDS, knowledge of mode of transmission by selected background characteristics, Arunachal Pradesh, 2002-04								
Background characteristic	Percentage by knowledge of mode of transmission							Number of men who have heard of HIV/AIDS
	Homo-sexual intercourse	Hetero-sexual intercourse	Needles/ blade/ skin puncture	Mother to child	Transfusion of infected blood	Other	Do not know	
Age								
<25	16.8	68.8	32.6	7.4	28.4	3.4	20.9	396
25-34	18.6	73.7	38.9	11.7	34.4	4.0	17.7	2,153
35-44	21.7	71.9	41.4	13.7	33.8	3.8	19.6	2,249
45+	20.4	72.4	36.0	11.0	28.8	2.6	18.5	979
Residence								
Rural	18.5	71.9	37.7	12.0	32.1	3.2	20.4	3,997
Urban	23.3	73.6	41.6	12.3	34.3	4.7	15.2	1,780
Education								
Non-literate	14.6	56.1	14.2	5.9	10.3	2.6	35.4	1,127
0-9@ years	15.6	69.6	29.2	6.2	26.3	2.3	22.9	2,423
10 years and above	27.5	83.8	62.0	21.6	51.3	5.6	5.9	2,227
Religion								
Hindu	21.1	72.4	41.1	12.6	33.1	3.4	18.2	2,332
Muslim	13.7	76.6	28.1	6.1	22.4	3.1	14.8	190
Christian	16.3	72.9	34.6	11.1	29.4	3.3	19.7	957
Buddhist	30.9	78.0	42.2	16.1	34.3	3.6	12.5	744
No religion	8.1	69.1	36.5	8.2	27.9	1.9	28.0	80
Other	16.6	69.0	38.1	10.8	35.4	4.4	22.3	1,474
Caste/tribe#								
Scheduled caste	22.5	74.3	35.8	8.7	30.6	4.9	17.8	441
Scheduled tribe	19.0	71.3	36.8	11.1	30.9	3.8	20.0	3,340
Other backward class	25.5	68.1	40.6	12.0	30.1	2.5	19.1	440
Other	21.4	75.7	46.8	16.3	41.2	3.5	16.1	1,359
Standard of living index								
Low	16.2	62.6	24.8	7.1	21.4	2.6	28.8	2,283
Medium	20.7	76.2	38.5	10.6	32.5	3.7	15.0	2,078
High	24.9	82.7	62.3	22.2	51.7	5.3	8.1	1,416
Total	20.0	72.4	38.9	12.1	32.8	3.6	18.8	5,777

Note: @ Literate men with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases. () Based on less than 50 unweighted cases.

Table 8.13 presents the knowledge about mode of transmission of HIV/AIDS among men. About 19 percent of the men who had heard about HIV/AIDS mentioned that they do not know the mode of transmission. The percentage of men not knowing the mode of transmission is higher among younger men, rural men, non-literate men, Muslim men, men from scheduled-castes and men from households with a low standard of living. Among those who reported ways of transmission of HIV/AIDS, 72.4 percent mentioned heterosexual intercourse as a mode of transmission. All the groups reported that heterosexual intercourse was the main mode of transmission of HIV/AIDS. Other modes reported by men are transmission through needle or blade or skin puncture (39 percent), transfusion of infected blood (33 percent), mother to child, if pregnancy occurs during a stage of HIV (12 percent), and about 20 percent of men mentioned that homosexual intercourse could also be a mode of transmission of HIV/AIDS. Only 4 percent men stated that there were other ways of transmission of HIV/AIDS.

8.5.3 How to avoid HIV/AIDS

All the respondents, male and female, were asked about how to prevent HIV/AIDS. The percentage of women who said that HIV/AIDS could be avoided by various ways has been presented in Table 8.14 by some selected background characteristics.

Among women who reported about awareness of HIV/AIDS, about 39 percent of them did not know how to avoid being infected by HIV/AIDS. This percentage is higher among rural women than among urban women. The percentage of women who did not know of any way to avoid infection decreases with increasing levels of education and household standard of living. About 55 percent of non-literate women reported that they did not know of any way to avoid infection as compared to 15 percent of women who had completed ten or more years of schooling. Similarly, 55 percent of women with low a standard of living stated that they did not know of any way to avoid infection as compared to 19 percent of women with a high standard of living. The percentage of women who did not know ways to avoid infection is also higher among Muslim women, scheduled-caste women and younger women.

Among women who mentioned ways to avoid HIV/AIDS, a higher proportion of women (47 percent) said that “sex with only one partner” is the main way to avoid it. Other ways mentioned by women to prevent HIV/AIDS were ‘sterilizing needles and syringes before injecting’ (30 percent), ‘checking blood prior to transfusion’ (27 percent), ‘using condoms correctly during each sexual intercourse’ (34 percent) and 10 percent of the women reported that pregnancy should be avoided if couples were infected with HIV/AIDS. All the specific ways reported by women to avoid becoming infected with HIV/AIDS are proportionally higher in urban areas, among Sikh women, among women who belong to ‘other castes’ category, among women with a high level of education and among women with a high standard of living.

Table 8.15 shows the percentage of men who reported that HIV/AIDS could be avoided by some selected background characteristics. Among men who are aware of HIV/AIDS, 24 percent of them did not know of any method to avoid infection compared to 39 percent women in the state.

Table 8.14 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG WOMEN

Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women reported HIV/AIDS can be avoided in specific ways by selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Percentage reported HIV/AIDS can be avoided by:							Number of women
	Sex With Only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other	Do not know To avoid HIV/AIDS	
Age								
15-19	43.0	29.3	17.9	22.3	7.3	2.4	44.8	278
20-24	44.4	32.8	24.5	27.0	9.0	2.9	39.8	1,336
25-29	48.3	36.4	27.6	31.7	11.5	3.8	37.4	1,929
30-34	48.8	33.1	27.9	28.3	11.0	4.2	39.6	1,441
35-39	48.8	35.3	28.9	32.4	10.0	2.6	36.1	1,277
40-44	45.0	31.0	26.0	32.8	10.9	2.1	41.5	896
Residence								
Rural	44.0	29.7	23.2	27.2	8.4	2.7	42.7	4,832
Urban	53.7	42.5	34.1	35.9	14.7	4.3	30.9	2,325
Education								
Non-literate	35.0	18.1	14.2	16.8	5.3	2.3	54.9	2,356
0-9@ years	45.9	30.3	22.0	26.8	8.0	2.1	40.7	3,013
10 years and above	65.4	60.8	51.3	53.0	21.3	6.3	14.7	1,786
Religion								
Hindu	49.3	37.6	29.9	33.6	11.5	3.6	34.3	2,963
Muslim	45.5	31.2	22.9	30.2	8.5	3.2	41.7	212
Christian	41.7	25.4	22.7	25.0	8.6	2.2	46.9	1,295
Buddhist	55.5	40.8	28.6	35.1	12.3	3.9	30.8	882
No Religion	53.2	29.4	25.9	21.9	8.9	4.2	28.7	97
Other	43.0	30.8	23.9	25.6	9.3	3.0	45.0	1,708
Caste/tribe#								
Scheduled caste	38.7	33.0	28.1	31.6	11.4	3.9	42.9	502
Scheduled tribe	45.3	29.8	23.5	26.4	9.8	3.1	43.5	4,062
Other backward class	56.6	42.8	31.4	35.7	11.1	4.8	30.9	545
Other	51.8	41.9	32.8	37.2	11.8	2.7	28.4	1,791
Standard of living index								
Low	35.7	20.2	13.5	17.8	5.3	2.0	55.2	2,390
Medium	45.6	31.1	24.8	27.1	8.3	2.7	39.5	2,694
High	62.3	53.4	44.5	48.0	19.1	5.3	19.2	2,073
Total	47.1	33.9	26.7	30.0	10.4	3.2	38.9	7,157

Note: Total includes 1 cases missing information on education were not shown separately. @ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases.

In Arunachal Pradesh a higher proportion of men (63 percent) reported that 'sex with only one partner' is the way to avoid HIV/AIDS and this was the most commonly reported way to avoid HIV/AIDS in all the groups. Other ways mentioned by men to prevent HIV/AIDS are 'using condoms correctly during each sexual intercourse' (52 percent), 'sterilizing needles and syringes before injecting' (34 percent) and 'checking blood prior to transfusion' (35 percent). All the specific ways reported by men to avoid being infected with HIV/AIDS are proportionally higher in urban areas than in rural areas, among Hindu men, among men who belong to 'other caste' category, among men with a high level of education and among men with a high standard of living.

Table 8.15 KNOWLEDGE ABOUT AVOIDANCE OF HIV/AIDS AMONG MEN

Among husbands of currently married women who have heard about HIV/AIDS, the percentage of men reported HIV/AIDS can be avoided in specific ways by selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Percentage reported HIV/AIDS can be avoided by						Do not know to avoid HIV/AIDS	Number of men
	Sex with only one partner	Using condoms correctly during each sexual intercourse	Checking blood prior to transfusion	Sterilizing needles and syringes for injection	Avoiding pregnancy when having HIV/AIDS	Other		
Age								
<25	58.3	45.2	29.8	30.4	8.0	4.7	27.2	396
25-34	64.3	54.6	35.8	33.1	10.1	4.2	21.5	2,153
35-44	62.5	53.1	36.2	36.3	10.8	5.2	24.1	2,249
45+	65.0	47.0	31.9	31.7	10.2	4.4	24.1	979
Residence								
Rural	63.0	50.0	34.3	32.7	10.0	3.6	25.1	3,997
Urban	64.1	56.7	36.3	36.7	10.8	6.9	19.3	1,780
Education								
Non-literate	48.1	31.4	13.5	13.0	6.6	4.6	42.1	1,127
0-9@ years	60.5	45.9	26.0	25.4	5.3	3.1	27.7	2,423
10 years and above	74.1	69.2	55.4	53.7	17.4	6.3	9.1	2,227
Religion								
Hindu	62.8	52.7	35.9	34.7	10.4	4.4	22.7	2,332
Muslim	66.3	52.1	21.4	24.5	7.3	3.0	20.9	190
Christian	59.7	49.8	31.5	28.8	8.6	3.4	24.7	957
Buddhist	74.7	58.0	40.7	38.6	16.2	7.0	17.5	744
No religion	64.5	43.6	27.1	30.7	4.4	3.9	27.5	80
Other	60.3	50.0	34.8	35.0	8.8	4.9	26.4	1,474
Caste/tribe#								
Scheduled caste	57.7	55.0	33.4	29.1	10.1	6.2	22.4	441
Scheduled tribe	61.2	50.2	33.5	32.8	9.2	4.7	25.3	3,340
Other backward class	61.3	53.3	33.0	31.3	12.4	5.6	24.9	440
Other	70.3	55.3	42.1	41.1	13.1	3.9	18.8	1,359
Standard of living index								
Low	54.5	40.3	23.2	22.4	7.3	4.4	33.9	2,283
Medium	66.1	53.9	34.7	33.1	9.6	4.0	20.7	2,078
High	73.5	68.4	54.2	53.5	15.9	5.9	10.2	1,416
Total	63.3	52.1	34.9	33.9	10.2	4.7	23.3	5,777

Note: @ Literate men with no year of schooling are also included. # Total number may not add to N due to don't know and missing cases.

8.5.4 Misconception about HIV/AIDS

People generally have misconceptions about the ways of transmission of HIV/AIDS, such as 'shaking hands with a person having AIDS', hugging and kissing them, sharing their clothes or sharing eating utensils, stepping on urine/stool, through insect bites, for example, being bitten by mosquitoes, fleas and bedbugs. All these questions were asked to the respondents who had heard of HIV/AIDS.

Table 8.16 shows the percentage of women with misconceptions about spreading HIV/AIDS through specific ways by selected background characteristics. About 23 percent women in report that being bitten by mosquitoes, fleas or bedbugs is a way of getting HIV/AIDS infection and this percentage is higher in urban areas (21 percent) than in rural areas (25

percent). Non-literate women, women from households with a high standard of living, Muslim women and women from scheduled tribes mentioned this method of transmission more often. Other misconceptions about the spreading of HIV/AIDS were 'sharing eating utensils' (16 percent), 'kissing' (19 percent), 'stepping on urine/stool' (14 percent), 'sharing clothes' (17 percent), 'hugging' (11 percent), and 'shaking hands' (10 percent). Most of these misconceptions are reported by a higher proportion of urban women, Muslim women, non-literate women and women with a high standard of living.

Table 8.16 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG WOMEN								
Among currently married women age 15-44 who have heard about HIV/AIDS, the percentage of women having misconception about the transmission of HIV/AIDS by selected background characteristics, Arunachal Pradesh, 2002-04								
Background characteristic	Percentage having misconception about the transmission of HIV/AIDS							Number of women
	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito, flea, or bedbugs biting	
Residence								
Rural	12.2	13.3	20.5	18.4	17.1	15.2	24.5	4,832
Urban	6.7	7.5	15.0	12.4	12.6	12.5	20.5	2,325
Education								
Non-literate	13.2	13.8	20.1	18.3	17.0	13.8	23.1	2,356
0-9@ years	11.0	12.4	20.9	18.0	17.3	15.9	23.9	3,013
10 years and above	5.8	6.7	13.2	11.3	11.0	12.1	22.2	1,786
Religion								
Hindu	8.2	8.3	15.8	14.1	13.9	11.5	18.9	2,963
Muslim	9.8	10.8	14.3	10.4	13.0	12.9	19.1	212
Christian	15.9	19.4	28.7	22.7	21.4	18.4	27.2	1,295
Buddhist	10.9	9.8	13.5	16.0	14.3	14.1	22.3	882
No Religion	10.1	13.7	26.5	23.5	19.6	14.4	31.3	97
Other	9.9	11.7	19.0	16.4	15.1	16.3	28.2	1,708
Caste/tribe#								
Scheduled caste	9.8	11.1	15.0	14.0	14.8	12.3	23.1	502
Scheduled tribe	11.8	13.5	22.1	19.2	17.4	16.4	27.0	4,062
Other backward class	6.6	6.8	13.3	10.6	10.1	10.5	19.3	545
Other	9.6	9.0	15.3	14.0	14.2	12.0	17.1	1,791
Standard of living index								
Low	12.5	14.8	22.2	20.6	18.4	15.2	23.5	2,390
Medium	11.0	11.9	19.3	16.3	16.8	15.2	23.2	2,694
High	7.1	7.0	13.9	11.9	10.9	12.0	22.9	2,073
Total	10.4	11.4	18.7	16.5	15.6	14.3	23.2	7,157

Note: Total includes 1 cases missing information on education were not shown separately. @ Literate women with no year of schooling are also included. # Total figure may not add to N due to do not know and missing cases

Table 8.17 presents the percentage of men with misconceptions about the spreading of HIV/AIDS through specific ways by selected background characteristics. Again, just like the women, men in most of the groups reported that HIV/AIDS is transmitted through the biting of mosquitoes, fleas or bedbugs. About 24 percent of the men felt so. The percentage who reported that HIV/AIDS could be transmitted through the biting of mosquitoes or fleas or bedbugs was much higher among urban men (20 percent) than among rural men (27 percent). Literate men who have completed nine years of schooling, men from households with a low standard of living, Muslim men, and scheduled caste men are of the impression that HIV/AIDS spreads when one is bitten by mosquitoes, fleas or bedbugs. Other misconceptions about the ways of spreading of HIV/AIDS are 'kissing' (20 percent), 'sharing eating utensils' (12 percent), 'sharing

clothes' (13.4percent), 'stepping on urine/stool' (12 percent), 'hugging' (10 percent), and 'shaking hands' (8 percent). All the misconceptions reported by men are relatively higher than those reported by women. The percentage of most of these misconceptions is also higher among scheduled caste men, Muslim men, non-literate men, men with a low standard of living and among men from rural areas.

Table 8.17 MISCONCEPTION ABOUT TRANSMISSION OF HIV/AIDS AMONG MEN								
Among husbands currently married women who have heard about HIV/AIDS, the percentage of men having misconception about the transmission of HIV/AIDS by selected background characteristics, Arunachal Pradesh, 2002-04								
Background characteristic	Percentage having misconception about the transmission of HIV/AIDS							Number of men
	Shaking hands	Hugging	Kissing	Sharing clothes	Sharing eating utensils	Stepping on Urine / stool	Mosquito, flea, or bedbugs biting	
Residence								
Rural	8.9	10.6	20.8	14.6	13.2	13.5	26.5	3,997
Urban	6.5	7.2	16.8	10.9	10.4	10.1	19.7	1,780
Education								
Non-literate	8.4	9.7	19.3	14.5	14.1	10.8	21.9	1,127
0-9@ years	10.1	12.3	23.1	16.9	15.8	16.5	29.4	2,423
10 years and above	6.0	6.5	15.8	9.1	7.7	8.9	20.1	2,227
Religion								
Hindu	7.4	7.9	17.7	11.1	11.2	10.5	21.3	2,332
Muslim	6.3	8.0	20.1	16.1	18.8	11.8	17.1	190
Christian	5.6	7.9	19.6	15.6	13.6	10.2	26.2	957
Buddhist	7.2	8.2	13.4	8.3	10.1	11.6	20.2	744
No religion	4.8	7.0	21.0	10.5	10.8	11.5	31.4	80
Other	12.0	14.1	25.4	18.1	13.7	17.5	30.7	1,474
Caste/tribe#								
Scheduled caste	6.3	8.0	16.9	12.7	13.4	11.6	29.8	441
Scheduled tribe	8.7	10.4	20.6	14.7	12.6	13.6	26.4	3,340
Other backward class	5.7	8.5	21.9	12.6	14.3	11.8	19.8	440
Other	9.2	8.8	17.1	11.7	10.6	10.5	20.2	1,359
Standard of living index								
Low	9.7	11.6	23.7	17.5	15.8	16.7	27.5	2,283
Medium	8.6	9.9	18.9	12.8	11.8	10.4	25.6	2,078
High	5.1	5.6	13.8	8.0	7.6	8.6	17.6	1,416
Total	8.2	9.5	19.5	13.4	12.4	12.4	24.4	5,777

Note: @ Literate men with no year of schooling are also included. # Total number may not add to N due to don't know and missing cases.

8.5.5 Knowledge of Curability of HIV/AIDS

Table 8.18 shows the percentage distribution of currently married women and their husbands who have heard about HIV/AIDS by knowledge of curability of the same, according to some selected background characteristics. Around 15 percent women and 13 percent men have the notion that HIV/AIDS is curable, whereas 51 percent women and 55 percent men replied that the disease is not curable. About 15 percent women and 32 percent men do not have any idea regarding the curability of the disease. It can be safely asserted from the figures that both men and women of urban areas, having high level of education, belonging to Hindu religion and other castes and those from households of high standard of living are showing better performance as far as the knowledge of curability of HIV/AIDS is concerned.

Table 8.18 KNOWLEDGE OF CURABILITY ABOUT HIV/AIDS

Among currently married women and their husband, who have heard about HIV/AIDS, Percent distribution of respondents by knowledge of curability about HIV/AIDS, according to some selected background characteristics, Arunachal Pradesh, 2002-04

Background characteristic	Percent distribution of women			Number of women	Percent distribution of men			Number of men
	Yes	No	Do not know		Yes	No	Do not know	
Residence								
Rural	13.6	49.7	36.6	4,832	12.5	53.7	33.6	3,997
Urban	16.3	53.9	29.8	2,325	14.1	57.5	28.0	1,780
Education								
Non-literate	11.1	43.1	45.7	2,356	8.1	41.9	49.5	1,127
0-9@ years	14.5	50.3	35.3	3,013	13.4	46.7	39.6	2,423
10 years and above	19.1	63.0	18.0	1,786	14.9	70.4	14.6	2,227
Religion								
Hindu	19.3	48.3	32.4	2,963	15.7	52.7	31.5	2,332
Muslim	17.5	48.6	33.9	212	22.8	44.3	32.4	190
Christian	10.1	55.8	34.2	1,295	8.3	54.1	37.4	957
Buddhist	10.8	54.2	35.0	882	10.1	57.9	32.1	744
No religion	14.5	58.0	27.4	97	14.5	55.9	29.6	80
Other	11.1	50.7	38.2	1,708	11.8	58.8	28.9	1,474
Caste/tribe#								
Scheduled caste	18.9	49.9	31.1	502	16.9	47.0	35.1	441
Scheduled tribe	12.0	51.6	36.4	4,062	11.2	55.4	33.1	3,340
Other backward class	16.7	50.8	32.5	545	16.1	54.1	29.7	440
Other	18.3	51.3	30.4	1,791	15.0	57.7	27.3	1,359
Standard of living index								
Low	11.0	44.0	45.0	2,390	11.7	47.2	40.8	2,283
Medium	15.5	49.9	34.6	2,694	13.3	54.3	32.2	2,078
High	17.3	60.8	21.9	2,073	14.4	68.2	17.0	1,416
Total	14.5	51.1	34.4	7,157	13.0	54.9	31.9	5,777

Note: Table includes and 1 women of missing information on knowledge of curability of HIV/AIDS. @ Literate persons with no year of schooling are also included. # Total number may not add to N due to don't know and missing cases.

8.6 Awareness of RTI/STI and HIV/AIDS by Districts

Table 8.19 shows the district-wise percentage distribution of currently married women and their husbands who are aware of RTI/STI and HIV/AIDS.

According to DLHS, 10 percent and 60 percent of women were aware of RTI/STI and HIV/AIDS respectively and the corresponding figures for husbands of eligible women are 19.6 percent and 72 percent respectively. The awareness of RTI/STI and HIV/AIDS among men is higher than that among women by 10 and 11 percentage points.

In all the districts, men are more aware of RTI/STI and HIV/AIDS than women except in Lohit where slightly more percentage of women are aware of RTI/STI than men. The highest level of awareness about RTI/STI among women was reported in Lohit (16 percent), followed by Dibang Valley (16 percent) and the lowest in East Kameng (34 percent). Among men, the highest level of awareness of RTI/STI was reported in East Kameng (65 percent), followed by UpperSubansiri (28 percent) and West Kameng (27 percent) and the lowest in Lohit (10 percent).

The proportion of husbands of eligible women for currently married women ages 15-44 who are aware of HIV/AIDS in the districts of state Arunachal Pradesh are also presented Table 8.19. Among women the awareness about HIV/AIDS ranges from the highest of 87 percent in East Siang to the lowest of 36 percent in West Siang. With the exception of West Siang, East Kameng and Upper Subansiri in every district a minimum of half of women reported awareness of HIV/AIDS. A high level of awareness of HIV/AIDS among men exceeding 70 percent was reported in all the districts except East Kameng, Lohit, Lower Subansiri, Upper Subansiri and West Siang .

Table 8.19 AWARENESS OF RTI/STI AND HIV/AIDS BY DISTRICT				
Percentage of currently married women and their husbands aware of RTI/STI and HIV/AIDS by district, Arunachal Pradesh, 2002-04				
District	Percentage of women		Percentage of men	
	Aware of RTI/STI	Aware of HIV/AIDS	Aware of RTI/STI	Aware of HIV/AIDS
Changlang	9.1	66.0	25.3	72.5
Dibang Valley	15.5	67.7	12.4	80.7
East Kameng	3.9	39.0	14.7	65.3
East Siang	14.3	87.4	33.6	92.9
Lohit	16.4	56.0	10.2	58.3
Lower Subansiri	8.0	62.6	14.9	63.6
Papum Pare	9.1	69.6	19.1	85.3
Tawang	9.6	75.1	19.4	86.1
Tirap	7.0	57.2	14.7	70.8
Upper Siang	8.6	58.4	15.9	74.8
Upper Subansiri	10.0	48.9	28.2	59.6
West Kameng	8.3	66.1	26.9	70.8
West Siang	6.5	35.5	21.8	67.7
Arunachal Pradesh	9.7	60.3	19.6	71.7

APPENDIX-A

Sampling Error Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need and institutional delivery, antenatal coverage etc. estimated from DLHS-RCH can be assessed in terms of stability of the estimated indicators as measured by the standard errors. Standard errors reflect only the appropriateness and suitability of sampling design adopted for RCH survey. However, the accuracy of estimated programme indicator are also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and is inherent in large scale surveys. The estimation producers of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of a programme indicators is design as

$$r = \frac{\sum_h \sum_j \sum_i w_{hji} y_{hji}}{\sum_h \sum_j \sum_i w_{hji} x_{hji}} = \frac{y}{x} \dots\dots\dots (1)$$

where the cell (h, j, i) stands for ith observational unit in jth primary sampling unit (PSU) in hth stratum, basically rural-urban areas of a district are taken as strata. W_{hij} is the sampling weight of (h, j, i)th cell inflated by response rates. The variables y and x denote the main and the auxiliary characteristics required for computation of proportion or ratios.

The equation for estimation of variance of programme indicator (r) is obtained after Taylor series linearisation as

$$\text{var} (r) = \frac{1}{x^2} [\text{var} (y) + r^2 \text{var} (x) - 2 r \text{cov} (y, x)] \dots\dots\dots (2)$$

$$\text{var} (y) = \sum_h \frac{n_h}{n_h - 1} [\sum_j \sum_i (w_{hji} y_{hji})^2 - \frac{\left(\sum_j \sum_i w_{hji} y_{hji} \right)^2}{n_h}] \dots\dots\dots (3)$$

$$\text{cov} (y , x) = \sum_h \frac{n_h}{n_h - 1} [\sum_j \sum_i w_{hji}^2 y_{hji} x_{hji} - \frac{(\sum_j \sum_i w_{hji} y_{hji})(\sum_j \sum_i w_{hji} x_{hji})}{n_h}] \dots\dots\dots (4)$$

and n_h is the number of sampled PSUs representing rural or urban areas of a district/state.

List of Selected Programme Variables for Sampling Errors, RCH 2002-04

Variable	Estimate	Base Population
CPR (Any Method)	Proportion	Currently married women age 15-44 years
Unmet Need	Proportion	Currently married women age 15-44 years
Any ANC	Proportion	Last live/still births in the past three years
ANC3+	Proportion	Last live/still births in the past three years
Institutional Delivery	Proportion	Last live/still births in the past three years
Safe Delivery	Proportion	Last live/still births in the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23 months
BO3+	Proportion	Currently married women age 15-44 years with births in past three years

Sampling errors, Arunachal Pradesh, 2002-04								
Variables	Estimate (R)	Sampling error (SE)	Number of cases		Design Effect	Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted			R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)								
Total	0.388	0.006	11,874	11,874	1.857	1.6	0.376	0.400
Rural	0.373	0.007	8,644	8,644	1.918	1.9	0.359	0.387
Urban	0.430	0.011	3,230	3,230	1.696	2.6	0.408	0.452
Unmet Need (Currently Married Women age 15-44)								
Total	0.351	0.006	11,874	11,873	1.782	1.7	0.340	0.363
Rural	0.351	0.007	8,644	8,644	1.853	2.0	0.338	0.365
Urban	0.352	0.011	3,230	3,229	1.591	3.0	0.331	0.372
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.586	0.009	5,206	5,165	1.816	1.6	0.567	0.604
Rural	0.536	0.011	3,955	3,943	1.864	2.0	0.514	0.557
Urban	0.747	0.015	1,251	1,222	1.556	2.1	0.717	0.777
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.409	0.009	5,206	5,165	1.815	2.3	0.391	0.427
Rural	0.350	0.010	3,955	3,942	1.861	3.0	0.329	0.370
Urban	0.599	0.018	1,251	1,223	1.630	3.0	0.564	0.634
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.348	0.009	5,206	5,165	1.798	2.6	0.331	0.366
Rural	0.270	0.010	3,955	3,943	1.804	3.5	0.252	0.289
Urban	0.600	0.018	1,251	1,222	1.594	2.9	0.565	0.634
Safe Delivery (last live/still birth of past 3 years)								
Total	0.377	0.009	5,206	5,165	1.788	2.4	0.360	0.395
Rural	0.301	0.010	3,955	3,943	1.787	3.3	0.282	0.321
Urban	0.623	0.017	1,251	1,222	1.588	2.8	0.588	0.657
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.567	0.017	1,646	1,602	1.859	2.9	0.534	0.600
Rural	0.518	0.019	1,256	1,238	1.885	3.7	0.480	0.556
Urban	0.734	0.028	390	364	1.601	3.9	0.678	0.790
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.381	0.016	1,646	1,602	1.682	4.1	0.351	0.411
Rural	0.350	0.017	1,256	1,238	1.677	5.0	0.315	0.384
Urban	0.487	0.032	390	364	1.613	6.6	0.424	0.551
Birth order 3+ (birth in last three years)								
Total	0.488	0.009	5,378	5,353	1.780	1.9	0.470	0.505
Rural	0.510	0.011	4,085	4,105	1.845	2.1	0.489	0.531
Urban	0.413	0.017	1,293	1,248	1.545	4.2	0.379	0.447

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
Changlang	0.575	0.019	877	876	3.3	0.538	0.613
Diabang Valley	0.301	0.016	1,018	1,018	5.3	0.270	0.332
East Kameng	0.161	0.016	829	829	9.9	0.130	0.192
East Siang	0.472	0.019	1,011	1,010	4.0	0.435	0.508
Lohit	0.397	0.017	1,048	1,048	4.3	0.364	0.431
Lower Subansiri	0.250	0.016	919	919	6.4	0.218	0.282
Papum Pare	0.429	0.022	847	849	5.1	0.385	0.473
Tawang	0.319	0.018	869	869	5.6	0.284	0.354
Tirap	0.238	0.016	835	834	6.7	0.206	0.269
Upper Siang	0.414	0.019	936	936	4.6	0.377	0.450
Upper Subansiri	0.224	0.015	875	875	6.7	0.195	0.253
West Khamang	0.541	0.027	963	963	5.0	0.488	0.593
West Siang	0.509	0.019	847	844	3.7	0.472	0.547

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Unmet Need (Currently Married Women age 15-44)							
Changlang	0.214	0.016	877	876	7.5	0.183	0.245
Diabang Valley	0.450	0.017	1,018	1,018	3.8	0.416	0.484
East Kameng	0.392	0.021	829	829	5.4	0.351	0.432
East Siang	0.281	0.016	1,011	1,010	5.7	0.250	0.313
Lohit	0.420	0.017	1,048	1,048	4.0	0.386	0.454
Lower Subansiri	0.348	0.018	919	919	5.2	0.313	0.383
Papum Pare	0.307	0.023	847	849	7.5	0.262	0.351
Tawang	0.452	0.019	869	869	4.2	0.415	0.489
Tirap	0.507	0.019	835	834	3.7	0.469	0.545
Upper Siang	0.262	0.016	936	936	6.1	0.231	0.293
Upper Subansiri	0.521	0.018	875	875	3.5	0.486	0.556
West Khamang	0.258	0.022	963	963	8.5	0.215	0.302
West Siang	0.304	0.018	847	843	5.9	0.270	0.339

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Any Antenatal Check up (last live/still birth of past 3 years)							
Changlang	0.631	0.030	341	343	4.8	0.572	0.689
Diabang Valley	0.593	0.027	417	413	4.6	0.540	0.646
East Kameng	0.294	0.031	330	326	10.5	0.233	0.356
East Siang	0.629	0.026	424	410	4.1	0.579	0.680
Lohit	0.771	0.023	432	433	3.0	0.726	0.816
Lower Subansiri	0.481	0.025	510	507	5.2	0.432	0.531
Papum Pare	0.639	0.036	346	339	5.6	0.569	0.709
Tawang	0.455	0.028	373	341	6.2	0.401	0.510
Tirap	0.642	0.028	380	373	4.4	0.587	0.698
Upper Siang	0.399	0.027	432	395	6.8	0.346	0.452
Upper Subansiri	0.387	0.025	424	414	6.5	0.338	0.436
West Khamang	0.569	0.042	426	427	7.4	0.486	0.652
West Siang	0.717	0.026	371	374	3.6	0.667	0.768

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received 3+ Antenatal Check up (last live/still birth of past 3 years)							
Changlang	0.443	0.031	341	344	7.0	0.382	0.504
Diabang Valley	0.406	0.027	417	412	6.7	0.354	0.459
East Kameng	0.172	0.028	330	326	16.3	0.117	0.226
East Siang	0.478	0.028	424	409	5.9	0.423	0.532
Lohit	0.537	0.027	432	432	5.0	0.484	0.590
Lower Subansiri	0.304	0.022	510	506	7.2	0.261	0.348
Papum Pare	0.458	0.036	346	339	7.9	0.388	0.528
Tawang	0.215	0.022	373	341	10.2	0.171	0.258
Tirap	0.513	0.029	380	372	5.7	0.456	0.570
Upper Siang	0.196	0.022	432	394	11.2	0.153	0.239
Upper Subansiri	0.186	0.020	424	415	10.8	0.147	0.225
West Khamang	0.394	0.040	426	427	10.2	0.316	0.472
West Siang	0.576	0.029	371	374	5.0	0.520	0.632

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Institutional Delivery (last live/still birth of past 3 years)							
Changlang	0.387	0.030	341	343	7.8	0.327	0.447
Diabang Valley	0.388	0.027	417	413	7.0	0.335	0.440
East Kameng	0.380	0.033	330	324	8.7	0.314	0.445
East Siang	0.318	0.025	424	409	7.9	0.269	0.367
Lohit	0.412	0.027	432	433	6.6	0.360	0.465
Lower Subansiri	0.258	0.021	510	507	8.1	0.218	0.299
Papum Pare	0.456	0.035	346	338	7.7	0.386	0.525
Tawang	0.198	0.023	373	343	11.6	0.153	0.242
Tirap	0.396	0.028	380	374	7.1	0.341	0.451
Upper Siang	0.157	0.021	432	395	13.4	0.116	0.197
Upper Subansiri	0.254	0.022	424	413	8.7	0.210	0.297
West Khamang	0.256	0.036	426	427	14.1	0.186	0.327
West Siang	0.407	0.028	371	375	6.9	0.351	0.463

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Safe Delivery (last live/still birth of past 3 years)							
Changlang	0.409	0.031	341	343	7.6	0.349	0.469
Diabang Valley	0.419	0.027	417	413	6.4	0.365	0.472
East Kameng	0.417	0.034	330	326	8.2	0.352	0.483
East Siang	0.365	0.026	424	409	7.1	0.313	0.416
Lohit	0.438	0.027	432	434	6.2	0.385	0.491
Lower Subansiri	0.295	0.022	510	507	7.5	0.253	0.338
Papum Pare	0.465	0.036	346	339	7.7	0.395	0.535
Tawang	0.222	0.024	373	343	10.8	0.175	0.268
Tirap	0.448	0.029	380	374	6.5	0.392	0.505
Upper Siang	0.177	0.022	432	395	12.4	0.134	0.219
Upper Subansiri	0.276	0.023	424	414	8.3	0.231	0.321
West Khamang	0.287	0.037	426	426	12.9	0.215	0.358
West Siang	0.435	0.029	371	373	6.7	0.379	0.492

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
Changlang	0.623	0.054	97	98	8.6	0.518	0.728
Dibang Valley	0.601	0.044	155	156	7.2	0.516	0.686
East Kameng	0.405	0.065	83	85	16.1	0.277	0.533
East Siang	0.555	0.050	109	103	9.0	0.457	0.652
Lohit	0.647	0.046	127	127	7.2	0.556	0.737
Lower Subansiri	0.400	0.042	154	161	10.4	0.318	0.482
Papum Pare	0.568	0.066	89	77	11.7	0.438	0.698
Tawang	0.735	0.043	115	114	5.9	0.650	0.820
Tirap	0.694	0.049	103	98	7.1	0.597	0.791
Upper Siang	0.266	0.041	137	117	15.6	0.185	0.347
Upper Subansiri	0.540	0.043	142	143	7.9	0.456	0.623
West Kameng	0.620	0.075	138	150	12.1	0.473	0.767
West Siang	0.748	0.046	101	105	6.1	0.658	0.837

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
Changlang	0.623	0.054	97	98	8.6	0.518	0.728
Dibang Valley	0.601	0.044	155	156	7.2	0.516	0.686
East Kameng	0.405	0.065	83	85	16.1	0.277	0.533
East Siang	0.555	0.050	109	103	9.0	0.457	0.652
Lohit	0.647	0.046	127	127	7.2	0.556	0.737
Lower Subansiri	0.400	0.042	154	161	10.4	0.318	0.482
Papum Pare	0.568	0.066	89	77	11.7	0.438	0.698
Tawang	0.735	0.043	115	114	5.9	0.650	0.820
Tirap	0.694	0.049	103	98	7.1	0.597	0.791
Upper Siang	0.266	0.041	137	117	15.6	0.185	0.347
Upper Subansiri	0.540	0.043	142	143	7.9	0.456	0.623
West Kameng	0.620	0.075	138	150	12.1	0.473	0.767
West Siang	0.748	0.046	101	105	6.1	0.658	0.837

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Birth order 3+ (birth in last three years)							
Changlang	0.430	0.031	332	328	7.2	0.368	0.491
Diabang Valley	0.478	0.026	447	446	5.4	0.427	0.530
East Kameng	0.502	0.034	320	321	6.8	0.435	0.569
East Siang	0.478	0.027	456	431	5.6	0.426	0.530
Lohit	0.445	0.026	460	458	5.8	0.394	0.496
Lower Subansiri	0.636	0.023	549	551	3.6	0.590	0.682
Papum Pare	0.450	0.036	355	346	8.0	0.378	0.521
Tawang	0.421	0.028	360	330	6.7	0.366	0.476
Tirap	0.457	0.029	376	373	6.3	0.400	0.514
Upper Siang	0.657	0.026	433	394	4.0	0.605	0.708
Upper Subansiri	0.583	0.024	459	454	4.1	0.536	0.631
West Khamang	0.377	0.038	425	407	10.1	0.302	0.452
West Siang	0.454	0.028	406	418	6.2	0.400	0.508

APPENDIX B

DLHS-RCH STAFF, ARUNACHAL PRADESH

DRS , NEW DELHI

Mr G.V.L. Narasimha.Rao
(Project Director)
Mr. Aariz Qureshi
(Field Officer)

Team Supervisors
Mr.Bipin Mishra

Mr. S.K. Bose
(Project Coordinator)
Mr.Parimal Kumar Singh
(Field Manger)

Field Editors
Ms.Roopa Das

Health Investigators

Mr.Veer Vikaram
Mr.Israr Ahemed Saifi
Mr.Vijai

Mr.Ravi Prakash
Mr.Pradeep Mazumdar
Mr.Mani Shankar Gosh

Interviewers

Mr.Locha Doll
Mr. Licha Ashok
Mr.Tachho

Ms.Arsifi Iqbal
Ms.Sarita
Ms.Rupali

Household listing Supervisors

Mr. Jai Prakesh Singh
Mr.V.K Mishra

Mr. Janmijai Updhaya
Mr Sashi Kant Darshan

Household Listers and Mappers

Mr. Arif Hussain
Mr. Prashant

Mr.Rajesh Mishra
Mr Basant Mishra

Office Editors

Mr. Bipin Mishra
Mr. Roshan Pandey

Mr.Sailesh Kumar
Mr. Bholu Prasad

Data Entry Operators

Mr. Ashok Tanwar
Mr. Bipul Jain

Mr. Brateen Das
Mr. Manoj Kumar

International Institute for Population Sciences, Mumbai

Project Coordinators

Dr. F. Ram
Dr. B. Paswan
Dr. L. Ladu Singh

Senior Research Officers

Mr. Rajiv Ranjan
Mr. K. C. Lakhara
Mr. Nizamuddin Khan

Research Officers

Mr. M. Nagavara Prasad
Mr. Akash N. Wankhede
Mr. Uttam J Sonkamble
Ms. Jigna Thacker
Mr. Ashok Kumar
Ms. Baishali Goswami
Ms. Sancheeta Ghosh
Ms. Kirti Mishra
Ms. Sucharita Pujari
Ms. Preeti Chauhan
Mrs. Santhi N.S.
Ms. Sanjeeta Gupta
Ms. Reshmi R.S.
Ms. Rinki Shah
Mr. Arnendu Kumar Jha
Mr. Atanu Ghosh
Mr. Manas Pradhan

Mr. Suhas Narkhede
Mr. Pramod Kumar Gupta
Mr. Bipul Hazarika
Dr. Manoj Alagarajan
Dr. Kalyan Saha
Dr. N Anbazhaham
Dr. Saithya Susaman
Mr. Manoj Kumar
Mr. Dibya L Mohanta
Mr. Mohan Tiwari
Mr. Battala Madhusudana
Mr. Bardanwala S.I.
Mr. Jiten Kumar Singh
Mr. Manoranjan Barik
Mr. Laxmi Prasad Sonwani
Mr. Nimakwala M. I.
Mr. Ananta Basudev Sahu

Accounts and Administrative staff

Mr. Sunil Adavede (Sr. Accountant)
Mr. Jeba Kumar (Data Entry Operator)
Ms. Pratima P. Zore (Data Entry Operator)
Ms. Preeti S. Kharat (Data Entry Operator)
Ms. Sayali Shivalkar (Data Entry Operator)

Mrs. Seema V. Zagade (Office Assistant)
Mrs. Deepa J. Nair (Office Assistant)
Mr. Chandra D. Singh (Office Boy)
Mr. Ravindra P. Gawade (Office Boy)
Mr. Sanjay P. Kadam (Office Boy)

LIST OF CONTRIBUTORS

Mr.G.V.L.Narasimha Rao, Managing Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Dr.P.P.Talwar, Chair Person, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Dr.S.K. Bose, Chief Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi - 110029

Dr.M.Vijay Kumar, Executive Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Mr. M.Aariz Qureshi, Research Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi - 110029

Dr. F.Ram, Professor & Head, Department of fertility Studies, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Dr. B. Paswan, Reader, Department of Population Policy and Programme, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Dr. L. Ladu Singh, Professor & Head, Department of Mathematical Demography and Statistic, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Mr.Uttam J. Sonkamble, Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Mr. Protap Mukherjee, Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

APPENDIX -C

**QUESTIONNAIRES
HOUSEHOLD
WOMEN
HUSBAND
VILLAGE**

NOTES

APPENDIX-A

Sampling Error Estimation

The accuracy of programme indicators such as contraceptive prevalence rate, unmet need and institutional delivery, antenatal coverage etc. estimated from DLHS-RCH can be assessed in terms of stability of the estimated indicators as measured by the standard errors. Standard errors reflect only the appropriateness and suitability of sampling design adopted for RCH survey. However, the accuracy of estimated programme indicator are also affected to a great extent by non-sampling errors arising from lack of proper operationalisation and non-response cases, and is inherent in large scale surveys. The estimation producers of District Level Reproductive & Child Health survey takes into consideration design appropriateness and non-response rates. DLHS-RCH estimator of a programme indicators is design as

$$r = \frac{\sum_h \sum_j \sum_i w_{hji} y_{hji}}{\sum_h \sum_j \sum_i w_{hji} x_{hji}} = \frac{y}{x} \dots\dots\dots (1)$$

where the cell (h, j, i) stands for ith observational unit in jth primary sampling unit (PSU) in hth stratum, basically rural-urban areas of a district are taken as strata. W_{hij} is the sampling weight of (h, j, i)th cell inflated by response rates. The variables y and x denote the main and the auxiliary characteristics required for computation of proportion or ratios.

The equation for estimation of variance of programme indicator (r) is obtained after Taylor series linearisation as

$$\text{var} (r) = \frac{1}{x^2} [\text{var} (y) + r^2 \text{var} (x) - 2 r \text{cov} (y, x)] \dots\dots\dots (2)$$

$$\text{var} (y) = \sum_h \frac{n_h}{n_h - 1} [\sum_j \sum_i (w_{hji} y_{hji})^2 - \frac{\left(\sum_j \sum_i w_{hji} y_{hji} \right)^2}{n_h}] \dots\dots\dots (3)$$

$$\text{cov} (y , x) = \sum_h \frac{n_h}{n_h - 1} [\sum_j \sum_i w_{hji}^2 y_{hji} x_{hji} - \frac{(\sum_j \sum_i w_{hji} y_{hji})(\sum_j \sum_i w_{hji} x_{hji})}{n_h}] \dots\dots\dots (4)$$

and n_h is the number of sampled PSUs representing rural or urban areas of a district/state.

List of Selected Programme Variables for Sampling Errors, RCH 2002-04

Variable	Estimate	Base Population
CPR (Any Method)	Proportion	Currently married women age 15-44 years
Unmet Need	Proportion	Currently married women age 15-44 years
Any ANC	Proportion	Last live/still births in the past three years
ANC3+	Proportion	Last live/still births in the past three years
Institutional Delivery	Proportion	Last live/still births in the past three years
Safe Delivery	Proportion	Last live/still births in the past three years
BCG	Proportion	Children age 12-23 months
Measles	Proportion	Children age 12-23 months
BO3+	Proportion	Currently married women age 15-44 years with births in past three years

Sampling errors, Arunachal Pradesh, 2002-04								
Variables	Estimate (R)	Sampling error (SE)	Number of cases		Design Effect	Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted			R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)								
Total	0.388	0.006	11,874	11,874	1.857	1.6	0.376	0.400
Rural	0.373	0.007	8,644	8,644	1.918	1.9	0.359	0.387
Urban	0.430	0.011	3,230	3,230	1.696	2.6	0.408	0.452
Unmet Need (Currently Married Women age 15-44)								
Total	0.351	0.006	11,874	11,873	1.782	1.7	0.340	0.363
Rural	0.351	0.007	8,644	8,644	1.853	2.0	0.338	0.365
Urban	0.352	0.011	3,230	3,229	1.591	3.0	0.331	0.372
Received Any Antenatal Check up (last live/still birth of past 3 years)								
Total	0.586	0.009	5,206	5,165	1.816	1.6	0.567	0.604
Rural	0.536	0.011	3,955	3,943	1.864	2.0	0.514	0.557
Urban	0.747	0.015	1,251	1,222	1.556	2.1	0.717	0.777
Received 3+ Antenatal Check up (last live/still birth of past 3 years)								
Total	0.409	0.009	5,206	5,165	1.815	2.3	0.391	0.427
Rural	0.350	0.010	3,955	3,942	1.861	3.0	0.329	0.370
Urban	0.599	0.018	1,251	1,223	1.630	3.0	0.564	0.634
Institutional Delivery (last live/still birth of past 3 years)								
Total	0.348	0.009	5,206	5,165	1.798	2.6	0.331	0.366
Rural	0.270	0.010	3,955	3,943	1.804	3.5	0.252	0.289
Urban	0.600	0.018	1,251	1,222	1.594	2.9	0.565	0.634
Safe Delivery (last live/still birth of past 3 years)								
Total	0.377	0.009	5,206	5,165	1.788	2.4	0.360	0.395
Rural	0.301	0.010	3,955	3,943	1.787	3.3	0.282	0.321
Urban	0.623	0.017	1,251	1,222	1.588	2.8	0.588	0.657
Received BCG Vaccination (last and last but one living children, age 12-23 months)								
Total	0.567	0.017	1,646	1,602	1.859	2.9	0.534	0.600
Rural	0.518	0.019	1,256	1,238	1.885	3.7	0.480	0.556
Urban	0.734	0.028	390	364	1.601	3.9	0.678	0.790
Received Measles (last and last but one living children, age 12-23 months)								
Total	0.381	0.016	1,646	1,602	1.682	4.1	0.351	0.411
Rural	0.350	0.017	1,256	1,238	1.677	5.0	0.315	0.384
Urban	0.487	0.032	390	364	1.613	6.6	0.424	0.551
Birth order 3+ (birth in last three years)								
Total	0.488	0.009	5,378	5,353	1.780	1.9	0.470	0.505
Rural	0.510	0.011	4,085	4,105	1.845	2.1	0.489	0.531
Urban	0.413	0.017	1,293	1,248	1.545	4.2	0.379	0.447

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Contraceptive Prevalence Rate (Currently Married Women age 15-44)							
Changlang	0.575	0.019	877	876	3.3	0.538	0.613
Diabang Valley	0.301	0.016	1,018	1,018	5.3	0.270	0.332
East Kameng	0.161	0.016	829	829	9.9	0.130	0.192
East Siang	0.472	0.019	1,011	1,010	4.0	0.435	0.508
Lohit	0.397	0.017	1,048	1,048	4.3	0.364	0.431
Lower Subansiri	0.250	0.016	919	919	6.4	0.218	0.282
Papum Pare	0.429	0.022	847	849	5.1	0.385	0.473
Tawang	0.319	0.018	869	869	5.6	0.284	0.354
Tirap	0.238	0.016	835	834	6.7	0.206	0.269
Upper Siang	0.414	0.019	936	936	4.6	0.377	0.450
Upper Subansiri	0.224	0.015	875	875	6.7	0.195	0.253
West Khamang	0.541	0.027	963	963	5.0	0.488	0.593
West Siang	0.509	0.019	847	844	3.7	0.472	0.547

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Unmet Need (Currently Married Women age 15-44)							
Changlang	0.214	0.016	877	876	7.5	0.183	0.245
Diabang Valley	0.450	0.017	1,018	1,018	3.8	0.416	0.484
East Kameng	0.392	0.021	829	829	5.4	0.351	0.432
East Siang	0.281	0.016	1,011	1,010	5.7	0.250	0.313
Lohit	0.420	0.017	1,048	1,048	4.0	0.386	0.454
Lower Subansiri	0.348	0.018	919	919	5.2	0.313	0.383
Papum Pare	0.307	0.023	847	849	7.5	0.262	0.351
Tawang	0.452	0.019	869	869	4.2	0.415	0.489
Tirap	0.507	0.019	835	834	3.7	0.469	0.545
Upper Siang	0.262	0.016	936	936	6.1	0.231	0.293
Upper Subansiri	0.521	0.018	875	875	3.5	0.486	0.556
West Khamang	0.258	0.022	963	963	8.5	0.215	0.302
West Siang	0.304	0.018	847	843	5.9	0.270	0.339

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Any Antenatal Check up (last live/still birth of past 3 years)							
Changlang	0.631	0.030	341	343	4.8	0.572	0.689
Diabang Valley	0.593	0.027	417	413	4.6	0.540	0.646
East Kameng	0.294	0.031	330	326	10.5	0.233	0.356
East Siang	0.629	0.026	424	410	4.1	0.579	0.680
Lohit	0.771	0.023	432	433	3.0	0.726	0.816
Lower Subansiri	0.481	0.025	510	507	5.2	0.432	0.531
Papum Pare	0.639	0.036	346	339	5.6	0.569	0.709
Tawang	0.455	0.028	373	341	6.2	0.401	0.510
Tirap	0.642	0.028	380	373	4.4	0.587	0.698
Upper Siang	0.399	0.027	432	395	6.8	0.346	0.452
Upper Subansiri	0.387	0.025	424	414	6.5	0.338	0.436
West Khamang	0.569	0.042	426	427	7.4	0.486	0.652
West Siang	0.717	0.026	371	374	3.6	0.667	0.768

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received 3+ Antenatal Check up (last live/still birth of past 3 years)							
Changlang	0.443	0.031	341	344	7.0	0.382	0.504
Diabang Valley	0.406	0.027	417	412	6.7	0.354	0.459
East Kameng	0.172	0.028	330	326	16.3	0.117	0.226
East Siang	0.478	0.028	424	409	5.9	0.423	0.532
Lohit	0.537	0.027	432	432	5.0	0.484	0.590
Lower Subansiri	0.304	0.022	510	506	7.2	0.261	0.348
Papum Pare	0.458	0.036	346	339	7.9	0.388	0.528
Tawang	0.215	0.022	373	341	10.2	0.171	0.258
Tirap	0.513	0.029	380	372	5.7	0.456	0.570
Upper Siang	0.196	0.022	432	394	11.2	0.153	0.239
Upper Subansiri	0.186	0.020	424	415	10.8	0.147	0.225
West Khamang	0.394	0.040	426	427	10.2	0.316	0.472
West Siang	0.576	0.029	371	374	5.0	0.520	0.632

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Institutional Delivery (last live/still birth of past 3 years)							
Changlang	0.387	0.030	341	343	7.8	0.327	0.447
Diabang Valley	0.388	0.027	417	413	7.0	0.335	0.440
East Kameng	0.380	0.033	330	324	8.7	0.314	0.445
East Siang	0.318	0.025	424	409	7.9	0.269	0.367
Lohit	0.412	0.027	432	433	6.6	0.360	0.465
Lower Subansiri	0.258	0.021	510	507	8.1	0.218	0.299
Papum Pare	0.456	0.035	346	338	7.7	0.386	0.525
Tawang	0.198	0.023	373	343	11.6	0.153	0.242
Tirap	0.396	0.028	380	374	7.1	0.341	0.451
Upper Siang	0.157	0.021	432	395	13.4	0.116	0.197
Upper Subansiri	0.254	0.022	424	413	8.7	0.210	0.297
West Khamang	0.256	0.036	426	427	14.1	0.186	0.327
West Siang	0.407	0.028	371	375	6.9	0.351	0.463

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Safe Delivery (last live/still birth of past 3 years)							
Changlang	0.409	0.031	341	343	7.6	0.349	0.469
Diabang Valley	0.419	0.027	417	413	6.4	0.365	0.472
East Kameng	0.417	0.034	330	326	8.2	0.352	0.483
East Siang	0.365	0.026	424	409	7.1	0.313	0.416
Lohit	0.438	0.027	432	434	6.2	0.385	0.491
Lower Subansiri	0.295	0.022	510	507	7.5	0.253	0.338
Papum Pare	0.465	0.036	346	339	7.7	0.395	0.535
Tawang	0.222	0.024	373	343	10.8	0.175	0.268
Tirap	0.448	0.029	380	374	6.5	0.392	0.505
Upper Siang	0.177	0.022	432	395	12.4	0.134	0.219
Upper Subansiri	0.276	0.023	424	414	8.3	0.231	0.321
West Khamang	0.287	0.037	426	426	12.9	0.215	0.358
West Siang	0.435	0.029	371	373	6.7	0.379	0.492

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received BCG Vaccination (last and last but one living children, age 12-23 months)							
Changlang	0.623	0.054	97	98	8.6	0.518	0.728
Dibang Valley	0.601	0.044	155	156	7.2	0.516	0.686
East Kameng	0.405	0.065	83	85	16.1	0.277	0.533
East Siang	0.555	0.050	109	103	9.0	0.457	0.652
Lohit	0.647	0.046	127	127	7.2	0.556	0.737
Lower Subansiri	0.400	0.042	154	161	10.4	0.318	0.482
Papum Pare	0.568	0.066	89	77	11.7	0.438	0.698
Tawang	0.735	0.043	115	114	5.9	0.650	0.820
Tirap	0.694	0.049	103	98	7.1	0.597	0.791
Upper Siang	0.266	0.041	137	117	15.6	0.185	0.347
Upper Subansiri	0.540	0.043	142	143	7.9	0.456	0.623
West Kameng	0.620	0.075	138	150	12.1	0.473	0.767
West Siang	0.748	0.046	101	105	6.1	0.658	0.837

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Received Measles (last and last but one living children, age 12-23 months)							
Changlang	0.623	0.054	97	98	8.6	0.518	0.728
Dibang Valley	0.601	0.044	155	156	7.2	0.516	0.686
East Kameng	0.405	0.065	83	85	16.1	0.277	0.533
East Siang	0.555	0.050	109	103	9.0	0.457	0.652
Lohit	0.647	0.046	127	127	7.2	0.556	0.737
Lower Subansiri	0.400	0.042	154	161	10.4	0.318	0.482
Papum Pare	0.568	0.066	89	77	11.7	0.438	0.698
Tawang	0.735	0.043	115	114	5.9	0.650	0.820
Tirap	0.694	0.049	103	98	7.1	0.597	0.791
Upper Siang	0.266	0.041	137	117	15.6	0.185	0.347
Upper Subansiri	0.540	0.043	142	143	7.9	0.456	0.623
West Kameng	0.620	0.075	138	150	12.1	0.473	0.767
West Siang	0.748	0.046	101	105	6.1	0.658	0.837

Sampling errors, Arunachal Pradesh, 2002-04							
District	Estimate (R)	Sampling error (SE)	Number of cases		Relative Error (%)	95% Conf. Interval	
			Unweighted	Weighted		R-1.96 SE	R+1.96 SE
Birth order 3+ (birth in last three years)							
Changlang	0.430	0.031	332	328	7.2	0.368	0.491
Diabang Valley	0.478	0.026	447	446	5.4	0.427	0.530
East Kameng	0.502	0.034	320	321	6.8	0.435	0.569
East Siang	0.478	0.027	456	431	5.6	0.426	0.530
Lohit	0.445	0.026	460	458	5.8	0.394	0.496
Lower Subansiri	0.636	0.023	549	551	3.6	0.590	0.682
Papum Pare	0.450	0.036	355	346	8.0	0.378	0.521
Tawang	0.421	0.028	360	330	6.7	0.366	0.476
Tirap	0.457	0.029	376	373	6.3	0.400	0.514
Upper Siang	0.657	0.026	433	394	4.0	0.605	0.708
Upper Subansiri	0.583	0.024	459	454	4.1	0.536	0.631
West Khamang	0.377	0.038	425	407	10.1	0.302	0.452
West Siang	0.454	0.028	406	418	6.2	0.400	0.508

APPENDIX B

DLHS-RCH STAFF, ARUNACHAL PRADESH

DRS, NEW DELHI

Mr G.V.L. Narasimha.Rao
(Project Director)
Mr. Aariz Qureshi
(Field Officer)

Team Supervisors
Mr.Bipin Mishra

Mr. S.K. Bose
(Project Coordinator)
Mr.Parimal Kumar Singh
(Field Manger)

Field Editors
Ms.Roopa Das

Health Investigators

Mr.Veer Vikaram
Mr.Israr Ahemed Saifi
Mr.Vijai

Mr.Ravi Prakash
Mr.Pradeep Mazumdar
Mr.Mani Shankar Gosh

Interviewers

Mr.Locha Doll
Mr. Licha Ashok
Mr.Tachho

Ms.Arsifi Iqbal
Ms.Sarita
Ms.Rupali

Household listing Supervisors

Mr. Jai Prakesh Singh
Mr.V.K Mishra

Mr. Janmijai Updhaya
Mr Sashi Kant Darshan

Household Listers and Mappers

Mr. Arif Hussain
Mr. Prashant

Mr.Rajesh Mishra
Mr Basant Mishra

Office Editors

Mr. Bipin Mishra
Mr. Roshan Pandey

Mr.Sailesh Kumar
Mr. Bholu Prasad

Data Entry Operators

Mr. Ashok Tanwar
Mr. Bipul Jain

Mr. Brateen Das
Mr. Manoj Kumar

International Institute for Population Sciences, Mumbai

Project Coordinators

Dr. F. Ram
Dr. B. Paswan
Dr. L. Ladu Singh

Senior Research Officers

Mr. Rajiv Ranjan
Mr. K. C. Lakhara
Mr. Nizamuddin Khan

Research Officers

Mr. M. Nagavara Prasad
Mr. Akash N. Wankhede
Mr. Uttam J Sonkamble
Ms. Jigna Thacker
Mr. Ashok Kumar
Ms. Baishali Goswami
Ms. Sancheeta Ghosh
Ms. Kirti Mishra
Ms. Sucharita Pujari
Ms. Preeti Chauhan
Mrs. Santhi N.S.
Ms. Sanjeeta Gupta
Ms. Reshmi R.S.
Ms. Rinki Shah
Mr. Arnendu Kumar Jha
Mr. Atanu Ghosh
Mr. Manas Pradhan

Mr. Suhas Narkhede
Mr. Pramod Kumar Gupta
Mr. Bipul Hazarika
Dr. Manoj Alagarajan
Dr. Kalyan Saha
Dr. N Anbazhaham
Dr. Saithya Susaman
Mr. Manoj Kumar
Mr. Dibya L Mohanta
Mr. Mohan Tiwari
Mr. Battala Madhusudana
Mr. Bardanwala S.I.
Mr. Jiten Kumar Singh
Mr. Manoranjan Barik
Mr. Laxmi Prasad Sonwani
Mr. Nimakwala M. I.
Mr. Ananta Basudev Sahu

Accounts and Administrative staff

Mr. Sunil Adavede (Sr. Accountant)
Mr. Jeba Kumar (Data Entry Operator)
Ms. Pratima P. Zore (Data Entry Operator)
Ms. Preeti S. Kharat (Data Entry Operator)
Ms. Sayali Shivalkar (Data Entry Operator)

Mrs. Seema V. Zagade (Office Assistant)
Mrs. Deepa J. Nair (Office Assistant)
Mr. Chandra D. Singh (Office Boy)
Mr. Ravindra P. Gawade (Office Boy)
Mr. Sanjay P. Kadam (Office Boy)

LIST OF CONTRIBUTORS

Mr.G.V.L.Narasimha Rao, Managing Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Dr.P.P.Talwar, Chair Person, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Dr.S.K. Bose, Chief Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi - 110029

Dr.M.Vijay Kumar, Executive Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi – 110029

Mr. M.Aariz Qureshi, Research Director, Development & Research Services Pvt.Ltd., Safdarjung Enclave, New Delhi - 110029

Dr. F.Ram, Professor & Head, Department of fertility Studies, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Dr. B. Paswan, Reader, Department of Population Policy and Programme, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Dr. L. Ladu Singh, Professor & Head, Department of Mathematical Demography and Statistic, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Mr.Uttam J. Sonkamble, Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

Mr. Protap Mukherjee, Research Officer, DLHS-RCH, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai – 400088

APPENDIX -C

**QUESTIONNAIRES
HOUSEHOLD
WOMEN
HUSBAND
VILLAGE**

To be attached in the final Report

NOTES