



**COVERAGE EVALUATION SURVEY
REPORT
ASSAM
2012-13**

**CONDUCTED BY
REGIONAL RESOURCE CENTRE FOR NORTHEASTERN STATES
MINISTRY OF HEALTH & FAMILY WELFARE,
GOVERNMENT OF INDIA
GUWAHATI, ASSAM - 781022**

**SUPPORTED BY
NRHM - ASSAM**

PREFACE AND ACKNOWLEDGEMENTS

The “Coverage Evaluation Survey 2012-13” is a part of the continuous periodic Coverage Evaluation Survey, designed to conduct in all districts of Assam since 2007. Of the total twenty seven districts in the state, twenty five districts were covered by the study with the exclusion of two districts: Karbi Anglong and N.C.Hills districts, due to some unavoidable circumstances.

At the outset, I would like to express my special thanks of gratitude to the Mission Director, National Rural Health Mission (NRHM), Assam for entrusting the responsibility of undertaking the study.

I also appreciate the support extended by the Joint Director of Health Services and other functionaries of the District Programme Management Support Units (DPMSUs), the Sub Divisional Medical & Health Officers (SDM & HO) of the identified PHCs, the ANMs of the Sub Centres spread over in all the 25 surveyed districts of Assam.

My sincere thanks for all the officials of RRC-NE, who have been associated in some way or the other with the evaluation study, starting right from the preparing of schedules to the compilation of data, their interpretation and writing the report.

I am also thankful to the Supervisors and Field Investigators, without whom the study would have not been possible.

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Finally, special thanks to all the respondents who spared their valuable time and co-operated with the Field Investigators by providing the required information.

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ABBREVIATION

A	
ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWC	Anganwadi Centre
AWW	Anganwadi Worker
B	
BCC	Behaviour Change Communication
BCG	Bacillus of Calmette and Guerin
C	
CBO	Community Based Organization
CHC	Community Health centre
CHV	Community Health Volunteer
D	
DH	District Hospital
DPT	Diphtheria Pertusis Tetanus
E	
EC	Eligible Couples
EDD	Expected Date of Delivery
F	
FRU	First Referral Unit
FW	Family Welfare
G	
GNM	General Nurse Midwife
Gol	Government of India
H	
H&FW	Health and Family Welfare
HD	Home Delivery
HW	Health Worker
I	
ID	Institutional Delivery
IEC	Information Education and Communication
IFA	Iron Folic Acid
IMR	Infant Mortality Rate
J	
JSSK	Janani Shishu Suraksha karyakram
JSY	Janani Suraksha Jojana
K	
L	

LHV	Lady Health Visitor
M	
MMR	Maternal Mortality Ratio
MO	Medical Officer
N	
NFHS	National Family Health Survey
NGO	Non Government Organization
No.	Number
NPP	National Population Policy
NRHM	National Rural Health Mission
O	
OPD	Out Patient Department
OPV	Oral Polio Vaccine
P	
PC	Percentage
PH	Public Health
PHC	Primary Health Centre
PNC	Post Natal Check-up
Q	
R	
RCH	Reproductive and Child Health
RTI	Reproductive Tract Infection
S	
SC	Sub Centre
T	
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid

EXECUTIVE SUMMARY:

Maternal mortality is a very sensitive indicator. It indicates the healthcare system of a country and also indicates the prevailing socio-economic scenario. India contributes to 20 per cent of global maternal deaths. Around 56,000 women die every year in the country due to pregnancy or pregnancy related causes. Over the last decade, there has been a decline in maternal mortality ratio (MMR) from 301 (SRS 2001-2003) to 212 (SRS 2007- 09), yet the lifetime risk of death for a pregnant woman is one in seven. Despite the appreciable decline, the current MMR continues to be unacceptably high. Similarly, IMR has declined from 58 in 2005 to 42 per 1000 live births (SRS Bulletin) in 2013.

Under NRHM, there are a number of focused interventions for improving care of both the mother and the newborn, which include focus on improving access to skilled birth attendance and emergency obstetric care for all women in rural areas. On the demand side, JSY has led in overcoming many traditional barriers to institutional deliveries. This has led to an unprecedented surge in the proportion of institutional delivery even in the low performing states. Further, the 12th Five Year Plan aims to bring all women during pregnancy and childbirth into the institutional fold so that delivery care services of good quality can be provided to them at the time of delivery at zero expense as envisioned under the Janani Shishu Suraksha Karyakram (JSSK) programme

As a part of the periodic review of the maternal and child health performances of Assam, NRHM, Govt. of Assam had entrusted Regional Resource Centre of NE states to rank the district as per the maternal and child health performance for the year 2012-13. RRC NE had therefore taken up the coverage evaluation survey of Assam.

OBJECTIVE OF THE STUDY:

The main objective of the study is to:

- To assess the coverage of immunization of children
- To assess the availability and utilization of maternal health care services in Assam
- To find out, if any, improvement has taken place regarding immunization coverage and maternal health care services over the last Coverage Evaluation Survey (2011-12)

STUDY METHODOLOGY:

The study was taken up in twenty five districts of Assam, two of the districts, namely Karbi Anglong and N.C.Hills could not be taken up due to some unavoidable circumstances. The manpower involved for data collections were from Population Research Centre, and passed out students of Gauhati University, Dibrugarh University and Assam University. The time period of the study for undertaking preliminary work, field data collection, analysis of the data and report writing is Jan 2013 to Sept 2013.

All children aged 12-23 months and women who delivered during 12 months preceding the survey in the urban and rural areas in the state formed the two universes of the study.

30 cluster sampling technique was taken for the study. A total of 300 mothers and 300 children were taken and studied from each district by using a structured interview schedule for each category of respondent.

IMMUNIZATION SERVICES:

This study for immunization was captured amongst 7842 mothers who had child in the age group of 12-23 months. Overall full immunization coverage of children age 12-23 months in the state is 78.25 percent. This was found to be highest in Jorhat district (91%) followed by Dibrugarh (90%). The lowest full immunization was found in Karimganj district with 65.8%. Further, another 8% of the children were fully immunized but were above 1 years of age. When analysed districtwise, the percentage was seen to be highest in Dhubri district recording 12%. Steps need to be taken so as to immunize the children within 1 years of age. It is to be noted that a major section of the children 11.6% were only partially immunized and to add on the owe 2.1% of the children were not at all immunized making them susceptible for vaccine preventable diseases.

District-wise, it is observed that Golaghat, Jorhat and Lakhimpur were the three districts where children had at least received one type of vaccine during 12 to 23 years of age. On the other hand Karimganj had 6.31% of non coverage of children with any type of vaccination, followed by Darrang (5.32%) and Dhubri with 5%. Of the total children not being immunized at all, it was found that 39.2% of them reported of not having faith on immunization and around 29% of the survey respondents were not aware of the need of immunization.

It is found that overall the performance of full immunization coverage in the state is almost constant with a minimal increase of 0.3 % from 2011-12. District-wise it is found that there are 12 districts which recorded a rise in the immunization coverage, highest being in Chirang district (12.5%) but in another 13 districts, decline was seen, highest decline being in Hailakandi and Morigaon, each with around 7%.

Antigen wise vaccination showed lots of variation. 96.5% of the children in the age between 12 to 23 months received BCG immunization, whereas when it came to measles only 88.7% of them were covered. Therefore, significant dropouts of 7.8% can be seen from BCG to measles vaccine. As regards to the place of vaccination, majority of them received vaccination from Govt. sector, highest being in SC with 50.2%, followed by VHND/ outreach session (26.1%). Only 13.4% children received vaccination from PHC and 5.4% from other Govt. Hospitals.

MATERNAL HEALTH CARE SERVICES:

The mothers surveyed were majorly found to be Hindu (64.1%), followed by Muslims (32%) and 3% of them were Christians. In terms of education qualification, it was seen that 82.4% of the respondent's husband and 78.5% of the respondents had some level of educational qualification. In majority of the cases (24.4%), the occupation of the husband was found to be daily wage labourer, 22.3% of them had cultivation as their occupation. On the other hand majority of the mothers (86.9%) under the study were housewives. It is observed that 44.6% of the mothers had less than five members in the family, followed by 21.6% who had less than 8 members. Majority of the mothers (42.7%) taken up for the study were in the age group of 25-29, another 37.8% were in the age group of 20-24, followed by 10.1% in the age group of 30-34. It is also observed that 5.5% of the mothers were in the age group of 15-19 years, major contributors were Bongaigaon district, Hailakandi district and Dibrugarh district, which is a matter of concern. Further, overall 52.5% of the mothers had married at the age of 15-19 years, 36.5% of them married at the age of 20-24 years and 9.5% of them were in the age group of 30-34 years during their marriage.

The study shows that overall 97.2% of the mothers had registered for ANC. But of these, receiving of 4 ANC is reported by only 51% of mothers. The lowest 4 ANC is recorded (23.7% each) in Hailakandi and Morigaon. Further, the 3 ANC registration is lower than 50% in all districts, highest recorded is of Morigaon district, which is 45%

As compared to 2011-12, no major changes in ANC services has been recorded in 2012-13. There is only 1% and around 4% increase in 1 ANC and 2 ANC respectively during 2012-13 as compared to 2011-12. However, at the same period a decline of 4.2% was recorded in case of 3 and more ANC, which is of more importance.

The registration of ANC should be done as soon as the pregnancy is suspected. But the study shows that only around 61% had registered for ANC during 1st trimester. Dhubri recorded the lowest with 35.7%.

Regarding the place of registration for ANC, more than 50% of the mothers had their ANC registration at the SC (52.3%).

The study shows that more than 90% of the mothers reported that TT injection was given, BP check up was conducted and weight was taken during the ANC visits. Further, more than 80% of the mothers reported that they were provided with 100 IFA tablets, abdomen examination was done and blood was tested for anemia. On the other hand only 68.7% of the mothers reported that the urine sample was examined. Also, counselling to the mothers by the service providers needs to be improved as overall only below 70% of the mothers were counselled on ANC.

78.2% of the mothers have reported that they have delivered at the health facility. It is heartening to note that more than 90% of the mothers have reported institutional delivery in Kamrup Rural, Sivasagar Dibrugarh and Jorhat districts. Of the total institutional delivery overall 13.8% of the mothers reported to have undergone C-Section. Overall there is 5.1% increase of institutional delivery during 2012-13 from 2011-12. However, 48 hrs stay at the institution at the delivery is reported by only 44.4%. Necessary counselling should be given to the mothers so that they stay till 48hrs and beyond. Some of the districts like Dhubri and Goalpara recorded as low as 15.3% and 13.4% respectively.

Of the 22.8% of home delivery, only 2.1% were attended either by MO or by an ANM, who are considered to be skilled manpower, posing a threat/risk to the lives of remaining more than 90% of the mothers delivering at home. The major reason for home delivery cited is due to facility being too far (44.9%), followed by time constraint (35%), home delivery preference 28.8%, cost factor (20.7%) and TBA is available (15.5%).

ASHA is seen as a catalyst in improving the maternal health care services in Assam. It is found that 88% of the mothers who had received ANC registration got the information from the ASHA. It is heartening to note that in Chirang 100% mothers reported to have received the messages from ASHA. The study indicates that ASHAs have taken a leading role in accompanying the mothers to the health facilities for ANC as overall 81.1% of the mothers were accompanied by ASHAs for ANC. Further, 81.5% of mothers have reported of being accompanied by ASHA during delivery to the health facility. It is heartening to note that from some of the districts like Udalguri, Kokrajhar, Dhemaji, Golaghat and Dhubri more than 90% mothers reported of being accompanied by ASHAs.

In regards to JSY, the financial assistance provided was reported by 83.2% of the mothers. On the other hand, JSSK scheme is yet to gain momentum as it is seen that more than 58.9% of the mothers came to the hospital by their own arrangement. Ambulance/ 108/ Free Govt. Vehicle were used by only 35.5% of the mothers and only 2.7 got their money reimbursed from the government. Further in case of drop back facility 64.1% of the mothers reported to have made their own arrangement. Districtwise analysis also shows that in all the districts it was reported to be more than 50%.

Awareness on JSSK scheme also needs to be penetrated further to the beneficiaries as only 43.8% of mothers reported that they were aware about the JSSK scheme. Amongst the district it was reported highest in Kamrup Metro (71.7%) and lowest in Kokrajhar (26%). Of these majority of the mothers reported to have got the message on JSSK through ASHA. There were very few mothers (only 4.7%) who had reported of seeing signboard at the hospital. Further, the knowledge on various benefits provided under the JSSK was poor amongst the mothers. Only 73.7% of them knew about the provision of free medicine,, 34% of them knew about the free diet facility and the pick and drop back facility was known only to 29.8% and 25.3% respectively.

BACKGROUND OF THE STUDY:

Improving maternal health is one of the eight Millennium Development Goals. It is widely accepted that the use of maternal health services helps in reducing maternal morbidity and mortality. Every year, about 5.4 million children around the world die before the age of one and about 7.5 million die before the age of five. Two thirds of these deaths are preventable. The maternal mortality situation in India is very grave, as it accounts for over 56,000 women a year, which accounts for almost one fourth of world's maternal deaths.

Recognizing child and maternal health as a critical concern, the Government of India launched the National Rural Health Mission (NRHM) in 2005 in the country, with a special focus on 18 states identified as having poor outcome indicators. The idea behind the Mission is to provide universal access to equitable, affordable and quality health care through an integrated approach as well as to bring about institutional changes such as decentralization of the public health system; integration of organizational structures; community participation and ownership of assets; and convergence in services which co-determine health outcomes (e.g. food, nutrition, water and sanitation).

The NRHM was further extended for the 12th Five Year Plan period. The goals of NRHM in the 12th plan period states that efforts will be made to consolidate the gains and build on the successes of the Mission to provide accessible, affordable and quality universal health care, both preventive and curative, which would include all aspects of a clearly defined set of healthcare entitlements including preventive, primary and secondary health services.

Further, the goals of NRHM in the 12th five year plan targets of reducing MMR to less than 100 per 1 lac live birth, reducing IMR to less than 27 per 1000 live birth, reducing NMR to less than 18 per 1000 live birth and reducing TFR to 2.1.

INTRODUCTION

One of the key components of NRHM is the ASHA. The ASHAs are basically the community health workers identified at the village level. There is a provision of identifying one ASHA per villages/ hamlets/1000 population. They are the first port of call for any health related demand of the community. The major role of ASHA is to create health awareness amongst the community.

NRHM also emphasizes on having institutional delivery. It facilitates in strengthening of health infrastructure at various levels (SC/ PHC/ CHC/ SDH/DH) for conducting delivery at the health facilities in terms of providing additional manpower and providing various skill development and hands-on training to the service providers. NRHM also supports in augmenting the existing health infrastructure and construction of new health facilities, so as to provide round the clock services. Provision of ambulances at the health facilities for making possible the referral system, in case of emergency is also provided.

An integrated approach is developed by GoI under NRHM to address the reproductive, maternal, new born and adolescent health (RMNCH+A). The RMNCH+A approach essentially looks to address the major causes of mortality among women and children as well as the delays in accessing and utilizing the health care services. The coverage targets for key RMNCH+A interventions for 2017 are:

- Increase facilities equipped for perinatal care (designated as 'delivery point') by 100%.
- Increase proportion of all births in governmental and accredited private institutions at annual rate of 5.6% from the baseline of 61% (SRS 2010)
- Increase proportion of pregnant women receiving antenatal care at annual rate of 6% from the baseline 53 % (CES 2009).
- Increase proportion of mothers and newborns receiving post natal care at annual rate of 7.5% from the baseline 45% (CES, 2009).
- Increase proportion of deliveries conducted by skilled birth attendants at annual rate of 2% from the baseline of 76% (CES 2009)
- Increase exclusive breast feeding rates at annual rate of 9.6% from the baseline of 36% (CES 2009)

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- Reduce prevalence of under-five children who are underweight at annual rate of 5.5% from the baseline of 45% (NFHS 3)
- Increase coverage of three doses of combined diphtheria-tetanus-pertussis (12–23 months) at annual rate of 3.5% from the baseline of 7% (CES 2009)
- Increase ORS use in under-five children with diarrhoea at annual rate of 7.2% from the baseline of 43% (CES 2009)
- Reduce unmet need for family planning methods among eligible couples, married and unmarried, at annual rate of 8.8% from the baseline of 21% (DLHS 3)
- Increase met need for modern family planning methods among eligible couples at annual rate of 4.5% from the baseline of 47% (DLHS 3)
- Reduce anaemia in adolescent girls and boys (15–19 years) at annual rate of 6% from the baseline of 56% and 30%, respectively (NFHS 3)
- Decrease the proportion of total fertility contributed by adolescents (15–19 years) at annual rate of 3.8% per year from the baseline of 16% (NFHS 3)
- Raise child sex ratio in the 0–6 years age group at annual rate of 0.6% per year from the baseline of 914 (Census 2011)

Various schemes/ initiatives have been framed under NRHM for promoting institutional delivery at the public health facilities:

Janani Suraksha Yojana (JSY): JSY seeks to provide cash incentive to the mothers for delivering the babies at the public health facilities. It also provides cash incentive to the ASHAs who accompany them to health facilities for institutional delivery. There is also a provision of roping in the private health facilities by accrediting them for providing delivery services.

Janani Shishu Surakshya Karyakaram (JSSK): Launched in June 2011, Janani Shishu Suraksha Karyakaram (JSSK) is an initiative by the MOHFW under the National Rural Health Mission (NRHM) that envisages free and cashless services to all pregnant women including normal deliveries and caesarean operations and also treatment of sick children upto 1 years of age in all Government health institutions across the country. It invokes a new approach to health care, placing for the first time, utmost emphasis on entitlements and elimination of out of pocket expenses for both pregnant women and infants. It stipulates out that all

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expenses related to delivery in a public health institution would be borne entirely by the government and no user charges would be levied. Under this initiative, a pregnant woman would be entitled free transport from home to the government health facility, between facilities, in case she is referred on account of complications and also drop back home after 48 hours of delivery. The entitlements would also mean free drugs and consumables, free diagnostic, free blood whenever required and free diet to the woman during the period of stay in the health facility. Similar entitlements have been put in place for all sick new born, which has now been expanded till all infants.

Reporting forms the backbone of any programme. It helps to keep the track of the implementation of the programme and also to ascertain the achievement. The periodic coverage evaluation is essential because of the fact that appropriate, accurate and up to date information on maternal health and also immunization is readily available with the state. It also helps in identifying the problem areas if any for improving these services.

OBJECTIVE OF THE STUDY:

1.1 OBJECTIVES OF THE STUDY

The prime objective of the study was to rank the districts of Assam based on Immunization and Maternal Health Services. Ranking of the districts can be done by assessing the services provided to the pregnant women at different periods and vaccination of children. Therefore the overall objective of the study is as follows:

- i) To assess the immunization coverage of children in Assam
- ii) To assess the availability and utilization of maternal health care services in Assam
- iii) To find out, if any, improvement has taken place regarding immunization coverage and maternal health care services over the last Coverage Evaluation Survey (2011-12)

In order to achieve the above objectives, the study has the following specific objectives.

- i) To assess the immunization coverage of children aged group between 12 months to 23 months.
- ii) To assess antenatal, intra natal and post natal care coverage.
- iii) To assess the bottlenecks in utilization and delivery of the services.
- iv) To assess the knowledge about different schemes for the beneficiaries
- v) To find out association between various factors influencing the utilization of various services and to suggest corrective steps wherever possible to improve their health status.
- vi) To see, if improvement has been made over the last survey in respect of certain Maternal and Child Health indicators.

INTRODUCTION

1.2 STUDY AREA

The present study is a part of the continuous periodic Coverage Evaluation Survey, designed to conduct periodically in all the districts of Assam since 2007. It was carried out in twenty five districts out of twenty seven districts of Assam. The two districts namely, Karbi Anglong, and NC Hills could not be taken up for the study due unavoidable circumstances.

1.3 PERIOD OF STUDY

The study was conducted by Regional Resource Centre for North Eastern states, Ministry of Health & Family Welfare, Govt. of India, Guwahati - 22. The manpower involved for data collection were from Population Research Centre, and passed out students of Gauhati University, Dibrugarh University and Assam University

The preliminary work of the study like preparation of schedule, selection of clusters, briefing of the study to the supervisory staff and training of the investigators, etc. started from January'2013 to February'2013. Actual work in the field started from March'2013 and the field work completed on May'2013.

Analysis, tabulation, interpretation and report generation of the survey were done from June'2013 to September'2013.

1.4 METHODOLOGY, SAMPLING TECHNIQUE AND SAMPLE SIZE

a. Study Population:

All children aged 12-23 months and women who delivered during 12 months preceding the survey in the urban and rural areas in the state formed the two universes of the study.

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b. Sampling Technique

Considering the vastness of the population as well as of geographical area, sample survey technique was considered suitable for the present survey. Again out of various sampling techniques, cluster sampling technique is found appropriate for conducting health studies. This is because, in other sampling techniques the list of study units (sampling frame) is usually not available or difficult to prepare. Again in order to make the technique more efficient 30 clusters from each district is selected as per WHO guideline and from each cluster 10 mothers who delivered within last 12 months and 10 children in the age group of 12 + to 23 months were selected and studied. Thus a total of 300 mothers and 300 children were taken and studied from each district.

Selection of 30 clusters from each district and selection of 300 mothers and 300 children from each district would mean that design effect is taken as 3, which would definitely increase efficiency of the study and provide reliable data for assessment of immunization status of children as well as health of the mothers.

c. Survey instruments

For each of the above two respondent categories, separate structured interview schedules were prepared to gather the information required for the study:

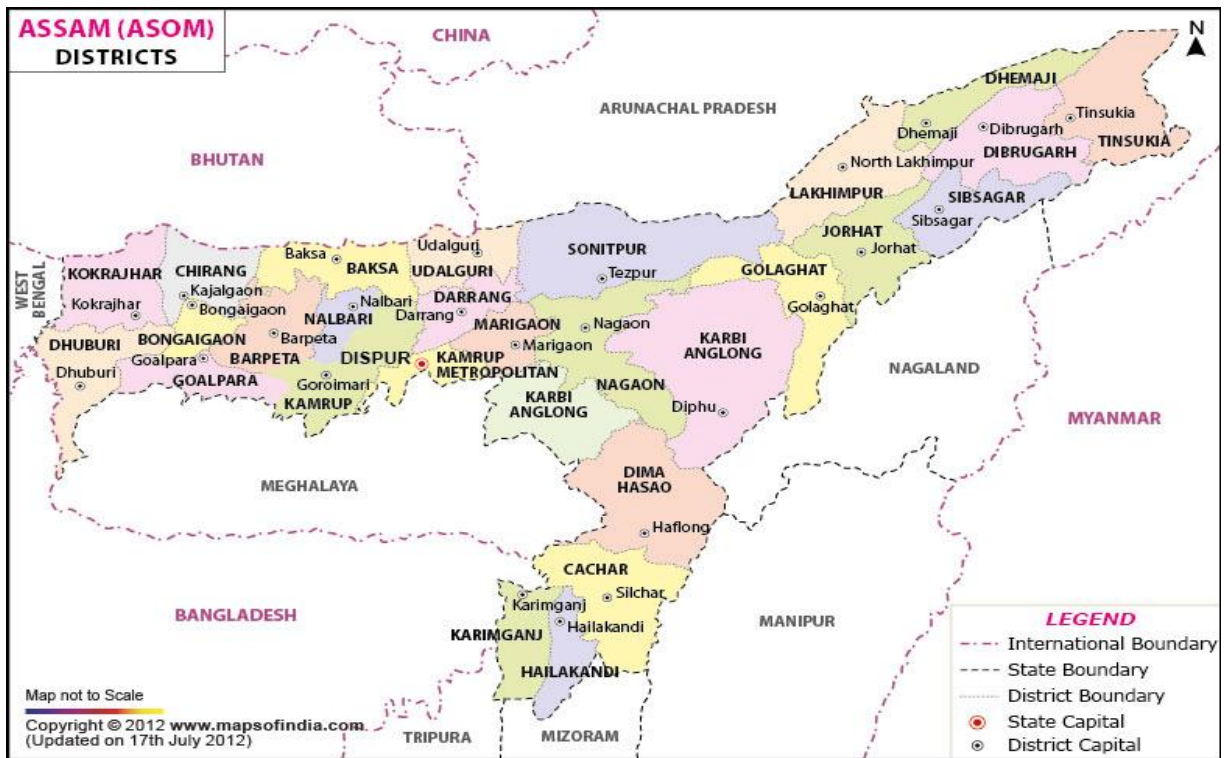
- i) Interview schedule for routine immunization coverage of children aged 12 to 23 months
- ii) Interview schedule for maternal care services of mothers who delivered during 12 months preceding the survey

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THE STATE PROFILE: ASSAM

Assam is a northeastern state of India with Dispur as its capital. Located south of the eastern Himalayas, Assam comprises the Brahmaputra and the Barak river valleys along with the Karbi Anglong and the North Cachar Hills with an area of 30,285 square miles (78,438 km²). Assam is surrounded by six of the other Seven Sister States: Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura and Meghalaya.

Map of Assam



1.5 DEMOGRAPHIC PROFILE OF ASSAM

As per 2011 census, the population of Assam is 31.2 million and is scattered across 27 districts and 26395 villages. Assam acquires 2.5 % of the total population of India as per census 2011. The sex ratio of all age group of Assam is 954 which are higher than the national. The decadal growth rate of Assam is 16.93.

The demographic profile of Assam is shown in the table below:

INTRODUCTION

	Census 2011 (Assam)	Census 2011 (India)
Total Population	3,12,05,576	1,21,05,69,573
Male Population	15954927 (51.18%)	62,31,21,843 (51.48%)
Female Population	15214345 (48.82%)	58,74,47,730 (48.42%)
Population Urban	4398542 (14 %)	37,71,06,125 (31.2%)
Population Rural	26807034 (86%)	83,34,63,448 (68.8%)
ST Population	22,31,321 (7.2%)	20,13,78,086 (16.6%)
SC Population	38,84,37 (12.4%)	10,42,81,034 (8.6%)
Population (0-6 yrs) – Total	4638130 (14.9%)	16,44,78,150 (13.6%)
Population (0-6 yrs) – Male	2363485 (14.8 %)	8,57,32,470 (13.8%)
Population (0-6 yrs) – Female	2274645 (14.9%)	7,87,45,680 (13.4%)
Sex Ratio	958	943
Decadal Growth Rate	16.93	17.64
Population density sq km	397	382
Literacy rate (total)	73.18	74.04
Literacy rate - Male	78.81	82.14
Literacy rate - Female	67.27	65.46

Source: Census 2011, Govt of India.

INTRODUCTION

1.6 HEALTH INDICATORS OF ASSAM

The health indicators of Assam are shown in the table below:

Sl. No.	Indicator	Assam
1	Maternal Mortality Ratio	347
2	Infant Mortality Rate	57
3	Crude Birth Rate	21.3
4	Crude Death Rate	7.1
5	Natural Growth Rate	14.2
6	Total Fertility Rate	2.4

Source: Annual Health Survey 2011-2012

1.7 PUBLIC HEALTH INFRASTRUCTURE

In order to cater to the healthcare needs of the people Govt. of Assam has the following numbers of Public health facilities:

Sl. No.	Type of Facilities	Assam
1	Medical College Hospital	6
2	District Hospital	24
3	Sub-Divisional Hospital	27
4	Community Health Centre	108
5	Primary Health Centre	938
6	Sub - Centre	4606

INTRODUCTION:

Immunization against childhood disease is one of the most cost effective public health interventions available and has saved the lives of millions of children in the past three decades. It also prevents many more millions from suffering debilitating illness and lifelong disability.

Immunization Programme has been an integral component of mother and child health services in India since adoption of the primary health care approach in 1978 being reinforced by the Declaration of Health Policy in 1983. Government of India (GoI) launched the Expanded Programme on Immunization in 1978 to protect children against diphtheria, pertussis, tetanus, and typhoid. Vaccination against polio through oral polio vaccine (OPV) was added to the programme in 1979-80 and BCG vaccination against tuberculosis was added in 1981-82. Vaccination against measles was included in 1985-86.

In 1985, the Universal Immunization Programme (UIP) was launched to protect all infants (0-12 months) against six serious but preventable diseases, namely, tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis, and measles. The objective of the programme was to fully vaccinate at least 85% of all infants of the age of one year. In subsequent years, the goal of UIP was raised to ensure 100% coverage of all eligible children with one dose of BCG, three doses of DPT and OPV, and one dose of measles vaccine. This programme was integrated with the Reproductive and Child Health (RCH) Programme in 1997. In addition to the ongoing routine immunization programme, the Pulse Polio Immunization (PPI) campaign was initiated in 1995 to eradicate poliomyelitis from the country. Since, 2005, the UIP is subsumed under the overall umbrella of National Rural Health Mission.

This study for immunization was captured amongst 7842 mothers who had child in the age group of 12-23 months. The study provides an insight on the details of various dosages of immunization received along with the places of vaccination and also on the reasons of non immunization.

IMMUNIZATION COVERAGE:

2.1 COVERAGE OF CHILDREN BY BCG & DPT VACCINES

BCG is the vaccine which is administered at birth or at the earliest or at the six weeks of birth alongwith 1st dose of DPT and OPV. The study has captured the coverage of children by BCG and DPT vaccine. Table 2.1 (a) shows that 96.5% of the children in the age between 12 to 23 months have received BCG immunization.

District wise variation in BCG vaccination was in the range of 90.7% to 100%. It is to be highlighted that all the districts had BCG vaccination above 90%. Two of the districts; Lakhimpur and Jorhat recorded 100%. Four districts; Sivasagar, Golaghat and Kamrup Metro and Kamrup Rural recorded 99% and more, whereas eleven districts recorded BCG vaccination of 95% and more. These districts are Baska, Bongaigaon, Cachar, Chirang, Dibrugarh, Goalpara, Kokrajhar, Nagaon, Nalbari, Sonitpur, and Udalguri. The remaining eight districts were below 95%.

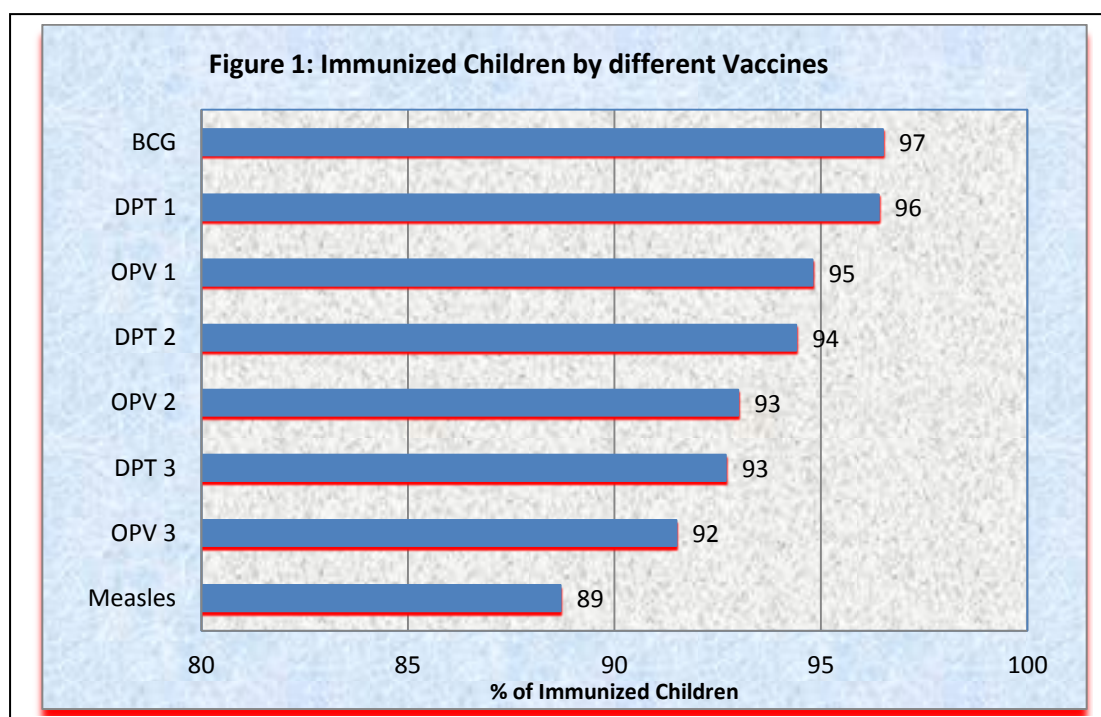
In regards to DPT coverage, it has been observed that DPT1 coverage in Assam is 96.4%, DPT 2 coverage is 94.4% and DPT3 is 92.7%. District-wise, it has been found that the coverage of DPT 1, DPT 2 and DPT3 is 95% and more in nine districts; Chirang, Dibrugarh, Golaghat, Jorhat, Kamrup Rural, Lakhimpur, Nalbari, Sivasagar and Udalguri. Further, eleven districts; Baksa, Darrang, Kokrajhar, Kamrup Metro, Nagaon, Morigaon, Bongaigaon, Dhemaji, Cachar, Sonitpur and Tinsukia recorded 90 % and above in DPT3 coverage. Karimganj district with 79.1 % was the district with lowest coverage in DPT 3 vaccine.

2.2 COVERAGE OF CHILDREN BY OPV & MEASLES VACCINES

Table 2.1 (b) depicts the coverage of children by OPV and measles vaccine. It shows that more than 90% of the children were covered by OPV1, OPV2 and OPV 3 vaccine, whereas when it came to measles only 88.7% of them were covered. Therefore, significant dropouts of 7.8% can be seen from BCG to measles vaccine.

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Immunization of children by various types of vaccine is also shown in the figure below:



Variations in the coverage were also found amongst the districts and also in the vaccine type. The coverage of children for OPV1 was found to be reported 95% and more in 14 districts, while in case of OPV2 it was found 95% and more in nine districts only. Further only six districts reported of covering 95% and more children for OPV3 dose. These six districts were Kamrup Rural, Lakhimpur, Dibrugarh, Jorhat, Golghat and Sivasagar.

The analysis also shows that six numbers of districts (Baksa, Hailakandi, Kamrup Metro, Goalpara, Kokrajhar and Karimganj) recorded more than 5% drop-out of children from OPV1 to OPV3, the highest being in Karimganj district which recorded 9.0% drop out.

In case of measles coverage amongst the districts, Sivasagar and Jorhat districts recorded the highest, each covering 97.33% of children, followed by Dibrugarh with 96.32 % coverage. It was less than 95% in all other districts, with Karimganj covering only 75.75% of children under the study.

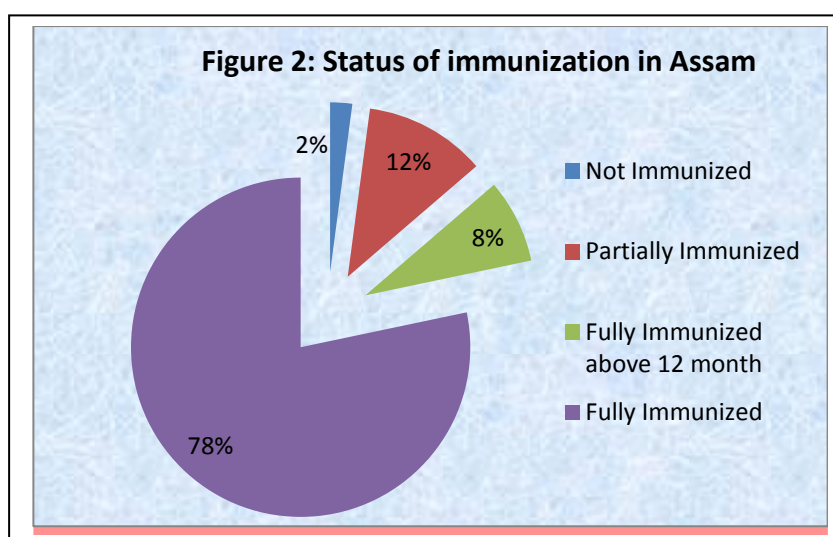
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Usually, three doses of OPV vaccines are given along with DPT vaccine and it is found that OPV coverage is more than DPT coverage. But, it is interesting to see from the figure 1 that there is 1.0% less coverage in case of all three doses of OPV vaccines to DPT vaccines. Further, when analysed districtwise it is found from table 2.1(a) and 2.1(b) that difference between three doses of OPV & DPT coverage is more than 1.0% in seven districts. These districts are Chirang, Hailakandi, Morigaon, Nagaon, Nalbari, Sivasagar and Udalguri. Further, out of these seven districts Chirang has recorded the highest difference between 3 doses of OPV and DPT.

2.3 FULL IMMUNIZATION

According to the primary immunization schedule, the child should be fully vaccinated by the time he/she is 12 months old. Full immunization includes one dose of BCG, three injections of DPT, three doses of polio and one injection of measles.

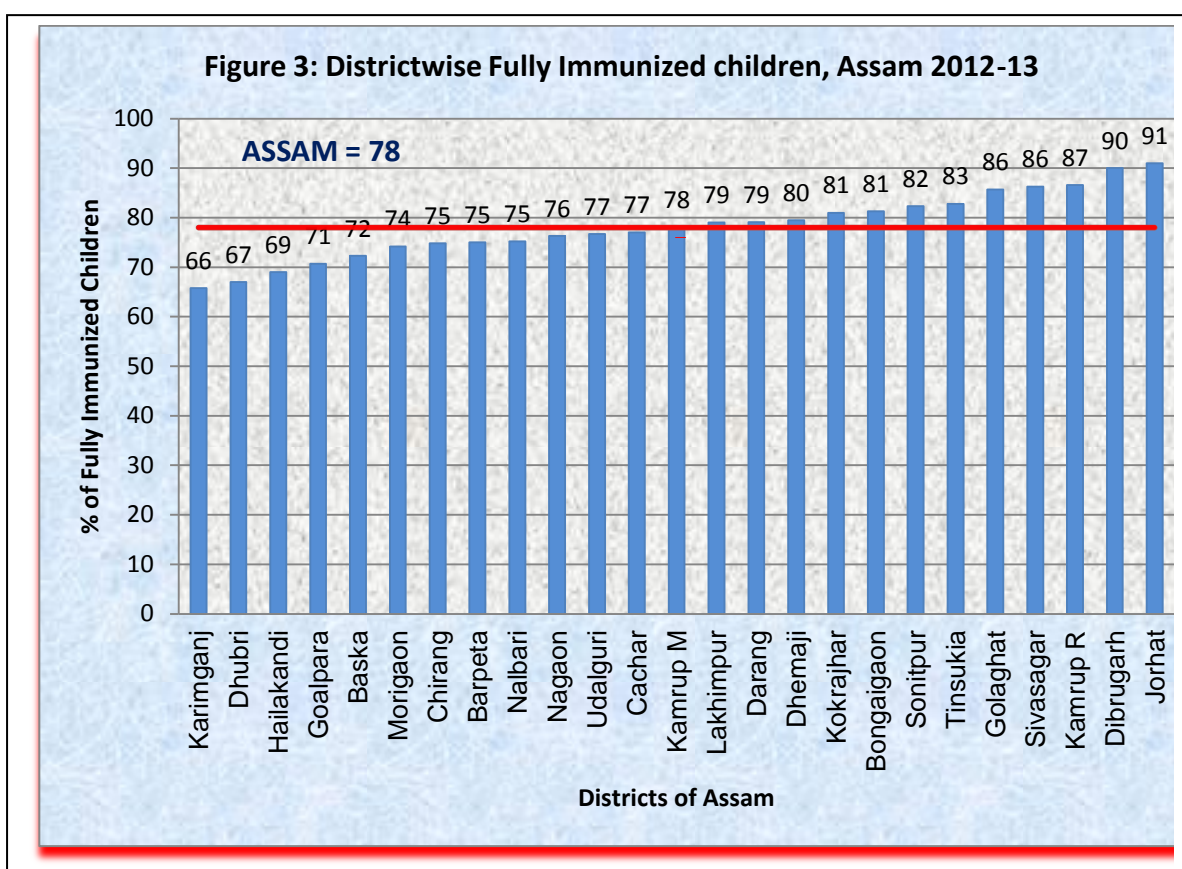
An analysis of the data shows that the proportion of children age 12-23 months receiving full immunization coverage in the state is 78.25 percent.



The study also shows that the coverage of immunization was highest in Jorhat district with 91%, followed by Dibrugarh with 90%. The lowest full immunization was found in Karimganj district with 65.8%. Two other districts Dhubri (67%) and Hailakandi (69%)

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had coverage of less than 70%. Thirteen districts, which is around 50% of the surveyed districts were in the range of 70-80% coverage.



It is also revealed from the table 2.2 that 8% of the children who were fully immunized were above 1 years of age. When analysed districtwise, the percentage was seen to be highest in Dhubri district recording 12%. Concentrated effort should be made by the respective districts to immunize the children within 1 years of age so that the vaccination becomes more effective.

Further, a major section of the children 11.6% were only partially immunized and to add on the owe 2.1% of the children were not at all immunized making them susceptible for vaccine preventable diseases.

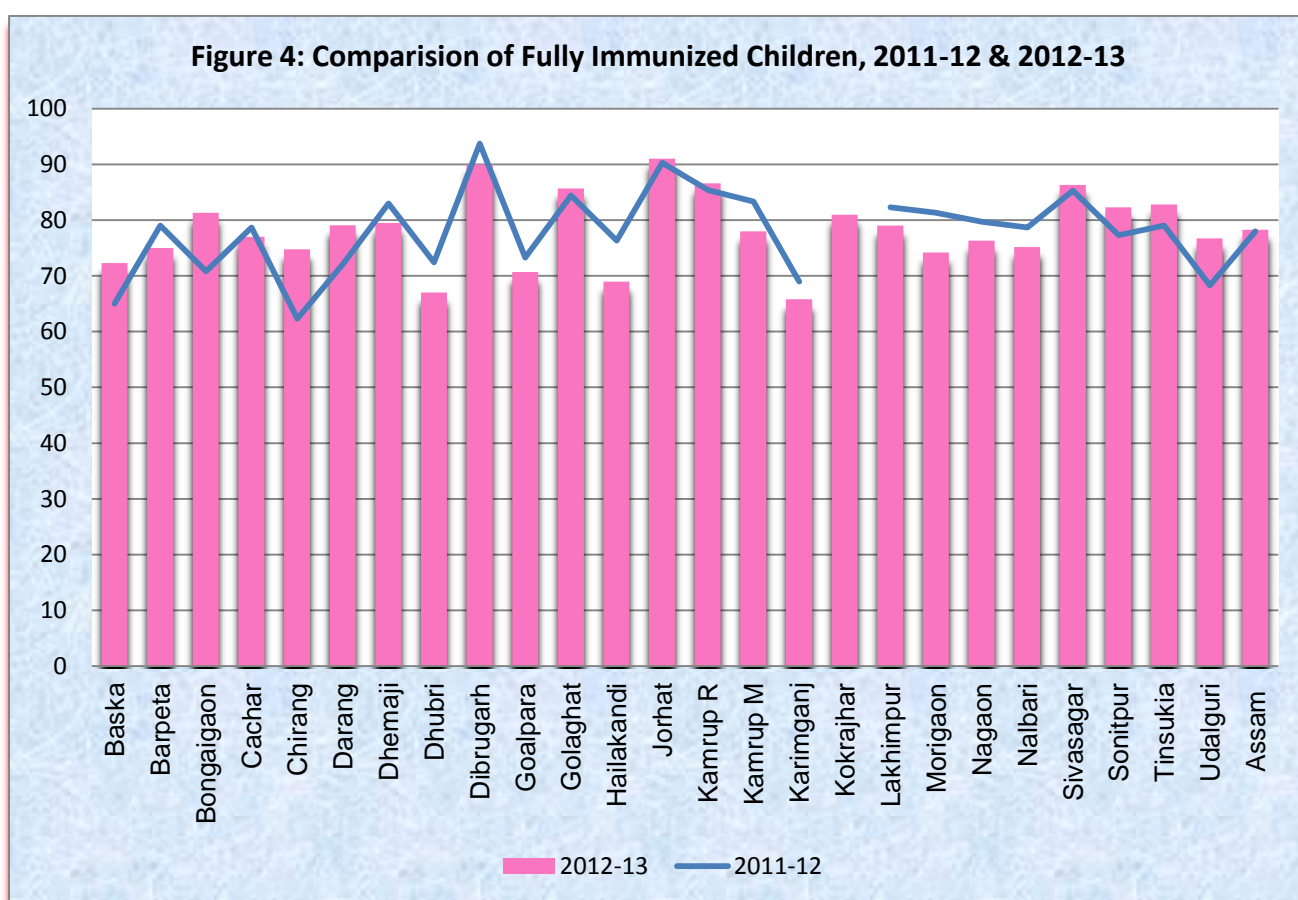
District-wise, it is observed that Golaghat, Jorhat and Lakhimpur were the three districts where children had at least received one type of vaccine during 12 to 23 month of age. On the other hand Karimganj had 6.31% of non coverage of children with any type of vaccination, followed by Darrang (5.32%) and Dhubri with 5%.

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2.4 IMMUNIZATION COVERAGE DURING 2011-12 AND 2012-13....A Comparison

The study also tried to analyze the performance of immunization coverage during 2011-12 and 2012-13. Table 2.3 shows that no significant improvement was seen in the immunization coverage during 2012-13 from 2011-12. It is to be mentioned that during 2011-12 Kokrajhar district was not covered under the study and hence comparison could not be derived for the district.

Overall the performance of full immunization coverage in the state is almost constant with a minimal increase of 0.3 % since 2011-12. However, there are large variations amongst the districts in their performances in last one year. It is seen that, 11 districts recorded a rise in the immunization coverage, highest being in Chirang district (12.5%), followed by Bongaigaon (10.5%), Udalguri (8.3%), Baksa (7.3%), Darrang (6.9%) and Sonitpur (5%). Other 5 districts namely, Jorhat, Sivasagar, Golaghat, Kamrup Rural and Tinsukia had less than 5% increase. Remaining 13 districts have shown a decline in their immunization performance during 2012-13 as compared to 2011-12. The highest decline was observed in Hailakandi and Morigaon districts, each with around 7%.



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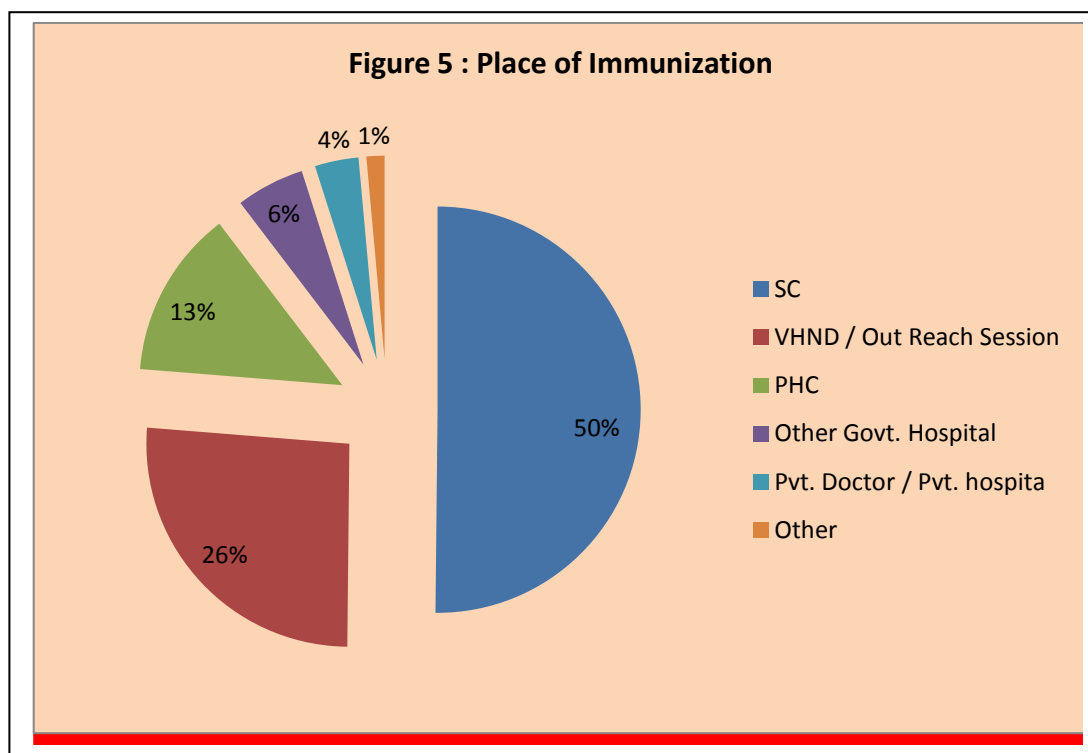
Further, the analysis shows that the percent of children not at all immunized has also increased from 1.6% to 2.1%, which is a major cause of concern. Except for seven districts (Darrang, Sonitpur, Kamrup Metro, Golaghat, Karimganj, Jorhat and Udalguri) all other districts have shown a rise in percent of children not at all immunized.

It is also observed that the partially immunized children have increased from 9.5% in 2011-12 to 11.6% in 2012-13, which is a cause of concern. The increase is recorded highest in Morigaon (10.05%), followed by Barpeta (8%), Nalbari (5.6%), Dhemaji (5.6%), Chirang (5.3%), Kamrup Metro (5.3%) and Lakhimpur (5%). Remaining 10 districts had less than 5% increase.

PLACE OF IMMUNIZATION

2.5 PLACE OF IMMUNIZATION

As regards to the place of vaccination (Table 2.4), most of the children (95%) received vaccination from Govt. sector. Again of the various Govt. sectors, majority of them received the vaccination from SC with 50.2%, followed by VHND/ outreach session (26.1%). Only 13.4% children received vaccination from PHC and 5.4% from other Govt. Hospitals.

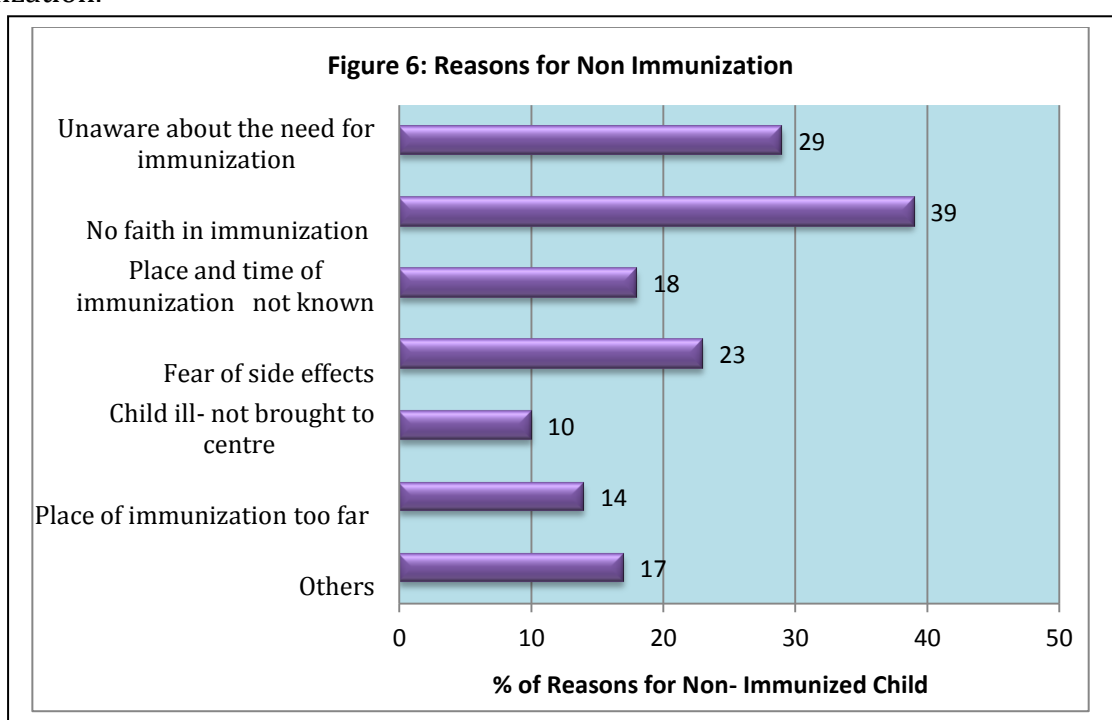


Variations have been noticed amongst the districts. It is to be noted that in five districts; Baksa, Dibrugarh, Nagaon, Nalbari and Udalguri more than 99% immunization was within the ambit of Govt. health facilities.

REASONS FOR NON IMMUNIZATION

2.6 NOT AT ALL IMMUNIZED

The study attempted to find out the reason of not immunizing the children at all (Table 2.5). Of the total number of 7482 children surveyed, 158 children were not being immunized at all. It was found that 39.2% of them reported of not having faith on immunization. Around 29% of the survey respondents were not aware of the need of immunization and 18.4% of them did not know about the place and time of immunization.



Taking into account the highest number of non immunized children in the district, there were slight variations in the reasons for not immunizing the child. Karimganj had the highest number of non-immunized children (19 Nos.) of which 63.2% responded that they had no faith in immunization. The second highest district with numbers of non-immunized children was Darrang (16 Nos.). In this district the major reasons for non immunization were place of immunization being too far (56.3%) and place and time of immunization not known (50.0%).

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2.7 PARTIALLY IMMUNIZED

As mentioned in the table 2.2, out of 7482 children studied in 25 districts, about 86% were fully immunized (including above 12 month fully immunized child) and 2.1 % were not immunized, the remaining children i.e. 868 (11.6%) children were partially immunized. The reasons for partial immunization were elicited from the mothers who were asked to point out the most important reason for failure to fully immunize their children against the target diseases.

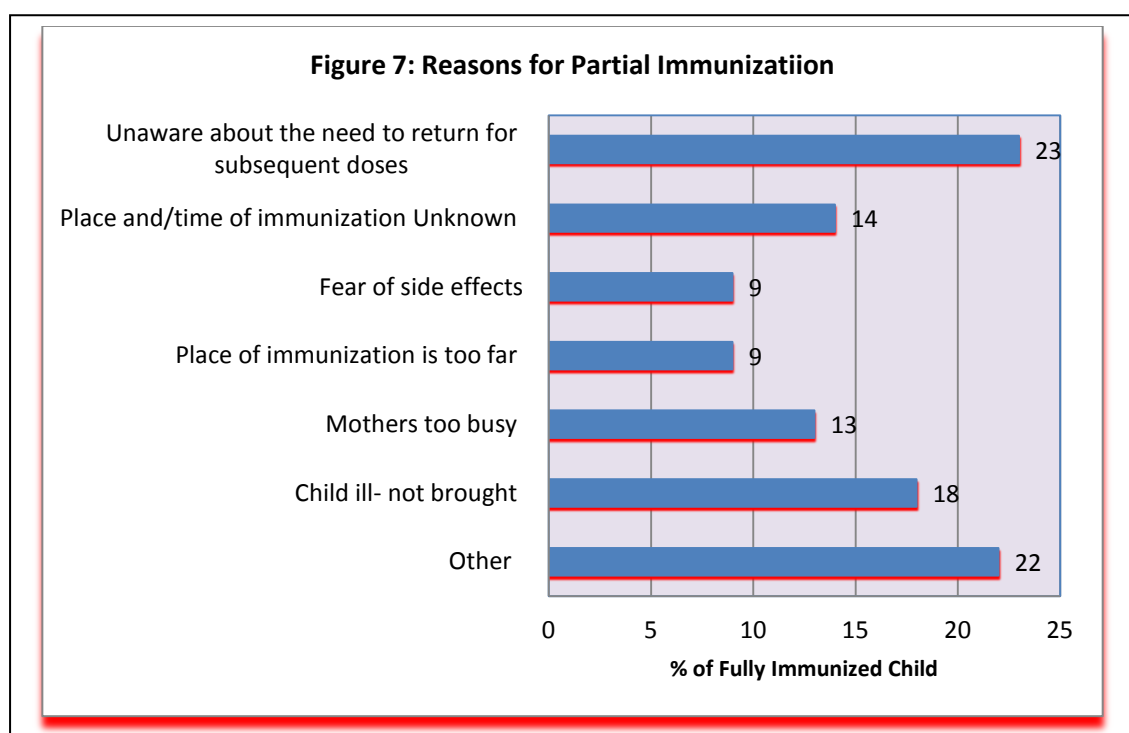


Figure 7 shows that the highest number of partial immunization is due to the fact that many mothers / guardians of the family were unaware about subsequent doses of immunization. This factor was found to be responsible for partial immunization more in Darrang and Sonitpur (table 2.6). Again 13.8% children were partially immunized because of place and time for immunization was not known to the mothers / guardians. It was found to be an important reason for partial immunization of children in Baska, Barpeta, Darang and Sonitpur districts.

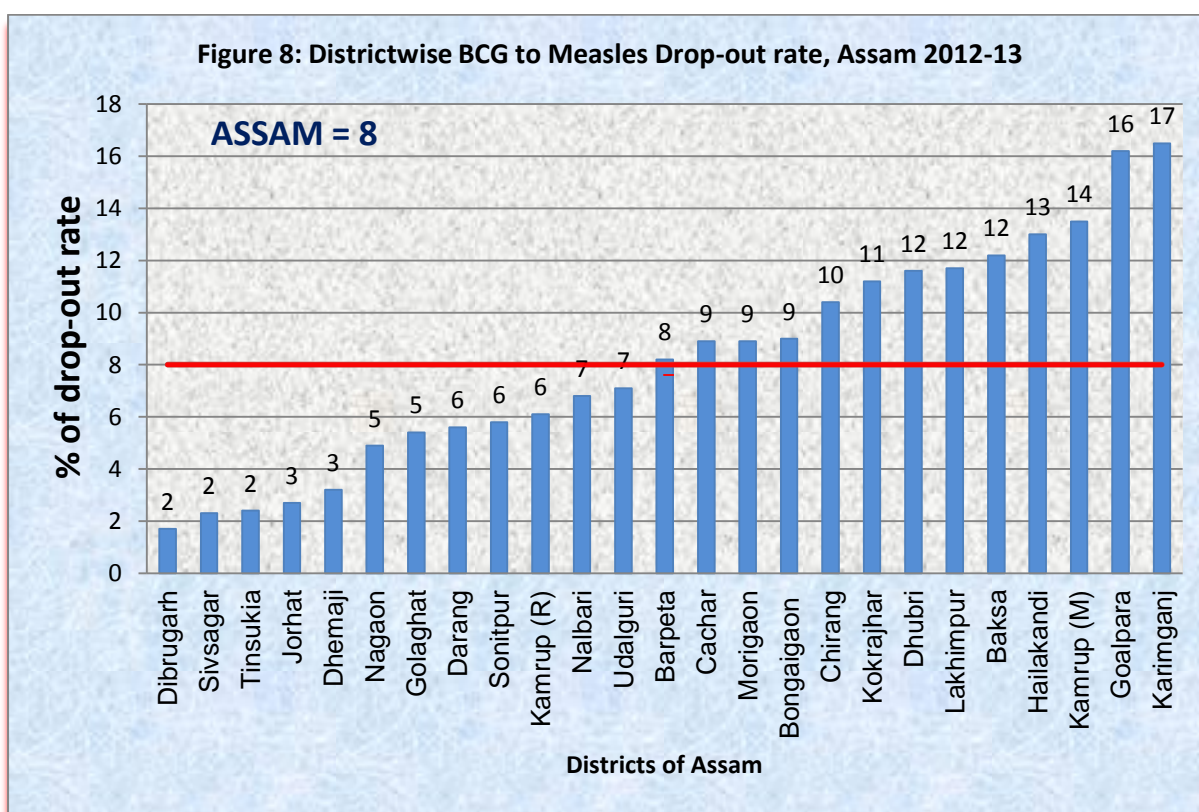
Further, 16.9% children were partially immunized due to the fact that parents of these children did not bring their child to the session site due to illness of the child. This reasons was recorded highest in Karimganj district (53.1%) followed by Kamrup Metro and Sonitpur.

DROPOUTS

2.8 DROP OUT RATES OF DIFFERENT VACCINES

Although the immunization coverage has been increasing gradually in the state, but dropout is an obstacle to achieve the desired goal. Also, in order to achieve universal immunization it is important to track children so that all vaccines can be administered. An attempt was made to analyse at what stage the children dropped out and did not get all vaccines. The overall BCG-measles drop-out rate of the state was found to be 7.8 percent. It has also found that, OPV1 to OPV 3, DPT 1 to DPT3 and DPT1 to measles dropout rate were 3.5%, 3.8% and 8.0% respectively.

However there were variations amongst the districts. The highest drop-out of 17 percent from BCG to measles vaccine was recorded in Karimganj district, followed by 16% in Goalpara district, 14% in Kamrup Metro, 13% in Hailakandi, 12% each in Dhubri, Lakhimpur and Baksa, 11% in Kokrajhar and 10% in Chirang. All other districts had less than 10% drop out. It needs to be mentioned that Dibrugarh was the district with the lowest drop out percent with only 1.7%.

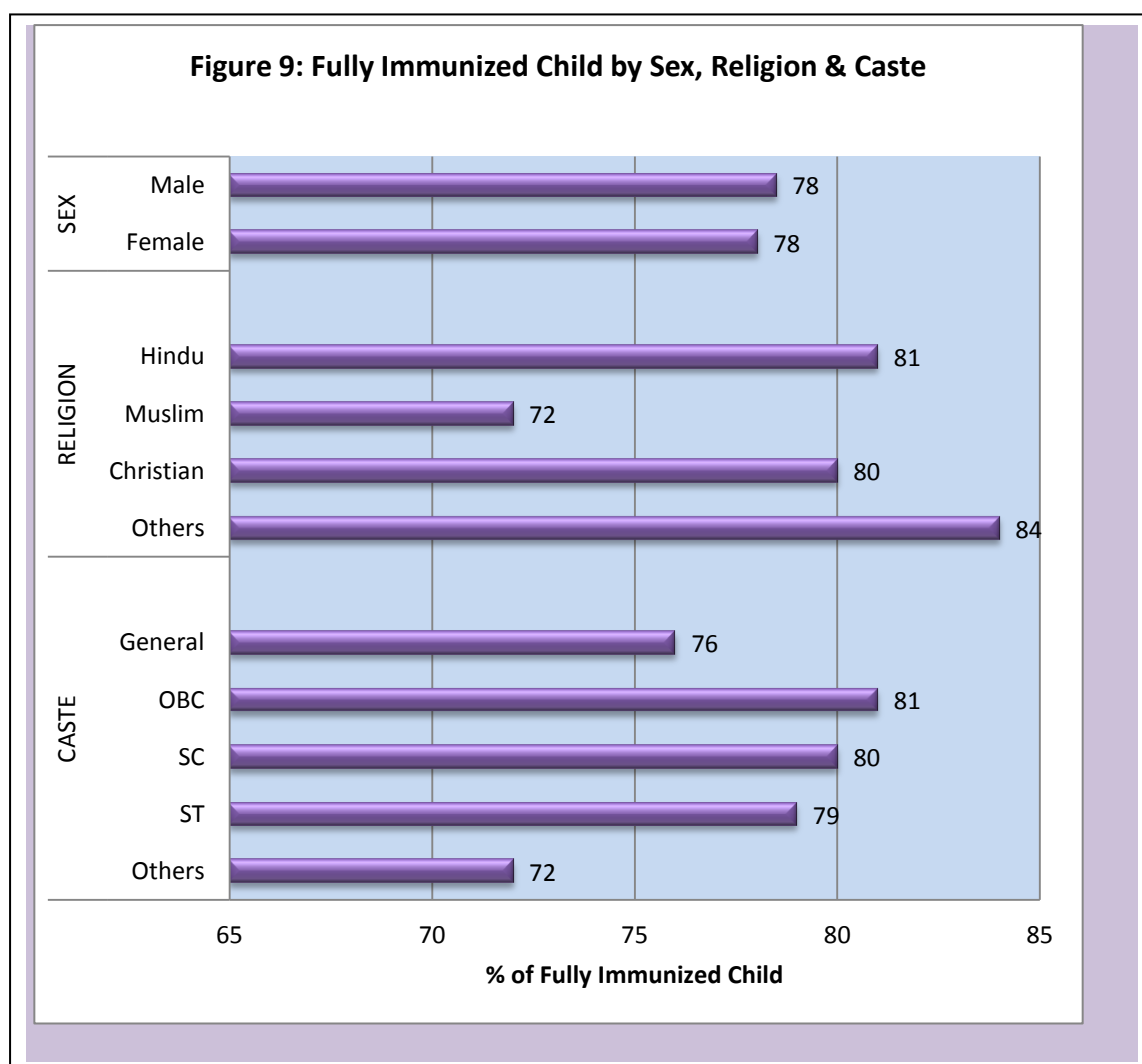


SOCIO DEMOGRAPHIC INFLUENCE

2.9 IMMUNIZATION STATUS BY SEX, RELIGION AND CASTE

The study also tried to find out the socio demographic influence on full immunization. In respect to full immunization coverage by sex, no significant difference was observed between the two sexes. However in some districts slight variation were observed but reasons of such slight variation was not due to favour or against a particular sex (Table 2.8).

The overall immunization status of the state by sex, religion and caste of the state is given in the figure below.



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It also shows distribution of immunization status of children by religion. Out of the total children studied, 4989 (66.7%) were Hindus, 2308 (30.8%) were Muslims 160 (2.1%) Christian and 25 (0.33%) were other religious children. Amongst the particular category of religion taken under the study 1.4% Hindu 3.7%, Muslim and 1.9% Christian children did not receive any vaccine. On the other hand, 80.9% Hindu, 72.3% Muslim and 80.0% Christian children were fully immunized.

Table 2.8 also shows that the percentage of partially immunized children was more among Muslim children than that of children belonging to Hindu and Christian religion.

In regards to distribution of immunization status of children by caste, it is found that out of the total children surveyed 3425 (45.8%) belonged to general caste, 1555 (20.8%) to OBC, 973 (13%) to SC and 13538 (18.1%) to STs and 176 (2.3%) to other castes which include MOBC etc.

The percentages of fully immunized children among General Caste, OBC, SCs and ST were 76.3%, 81.2%, 80.2% and 79.2% respectively. Therefore, no marked differences in case of immunization status of children by caste were noticed from the study. It may be mentioned here that children who belonged to Muslim religion were categorized as General caste.

Table 2.1(A) : District wise distribution of children aged 12 to 23 month by BCG & DPT vaccination

District	No. of Children	Coverage							
		BCG		DPT 1		DPT2		DPT3	
		No.	PC	No.	PC	No.	PC	No.	PC
Baksa	300	296	98.7	293	97.7	283	94.3	272	90.7
Barpeta	300	280	93.3	282	94.0	275	91.7	266	88.7
Bongaigaon	300	289	96.3	288	96.0	286	95.3	278	92.7
Cachar	300	292	97.3	291	97.0	284	94.7	281	93.7
Chirang	302	297	98.3	299	99.0	295	97.7	287	95.0
Darang	301	284	94.4	283	94.0	278	92.4	273	90.7
Dhemaji	303	284	93.7	283	93.4	282	93.1	282	93.1
Dhubri	300	276	92.0	269	89.7	260	86.7	257	85.7
Dibrugarh	299	293	98.0	297	99.3	297	99.3	296	99.0
Goalpara	300	291	97.0	281	93.7	272	90.7	259	86.3
Golaghat	300	299	99.7	299	99.7	295	98.3	293	97.7
Hailakandi	300	276	92.0	281	93.7	270	90.0	263	87.7
Jorhat	300	300	100.0	297	99.0	293	97.7	292	97.3
Kamrup (R)	299	297	99.3	292	97.7	290	97.0	289	96.7
Kamrup (M)	300	297	99.0	294	98.0	276	92.0	275	91.7
Karimganj	301	273	90.7	266	88.4	250	83.1	238	79.1
Kokrajhar	274	268	97.8	269	98.2	259	94.5	249	90.9
Lakhimpur	300	300	100.0	299	99.7	293	97.7	290	96.7
Morigaon	299	280	93.6	291	97.3	285	95.3	276	92.3
Nagaon	299	284	95.0	288	96.3	281	94.0	275	92.0
Nalbari	302	296	98.0	296	98.0	292	96.7	291	96.4
Sivsagar	300	299	99.7	299	99.7	299	99.7	296	98.7
Sonitpur	300	291	97.0	291	97.0	287	95.7	284	94.7
Tinsukia	303	287	94.7	290	95.7	287	94.7	287	94.7
Udalguri	300	294	98.0	295	98.3	291	97.0	287	95.7
ASSAM	7482	7223	96.5	7213	96.4	7060	94.4	6936	92.7

Table 2.1(b): District wise distribution of children aged 12 to 23 month by OPV& Measles vaccination

District	No. of Children	Coverage							
		OPV 1		OPV 2		OPV 3		Measles	
		No.	PC	No.	PC	No.	PC	No.	PC
Baksa	300	288	96.0	280	93.3	270	90.0	260	86.7
Barpeta	300	281	93.7	276	92.0	268	89.3	257	85.7
Bongaigaon	300	288	96.0	284	94.7	278	92.7	263	87.7
Cachar	300	288	96.0	280	93.3	278	92.7	266	88.7
Chirang	302	283	93.7	287	95.0	282	93.4	266	88.1
Darang	301	280	93.0	276	91.7	270	89.7	268	89.0
Dhemaji	303	283	93.4	282	93.1	282	93.1	275	90.8
Dhubri	300	245	81.7	242	80.7	241	80.3	244	81.3
Dibrugarh	299	297	99.3	296	99.0	290	97.0	288	96.3
Goalpara	300	278	92.7	266	88.7	259	86.3	244	81.3
Golaghat	300	298	99.3	295	98.3	293	97.7	283	94.3
Hailakandi	300	272	90.7	262	87.3	254	84.7	240	80.0
Jorhat	300	297	99.0	293	97.7	292	97.3	292	97.3
Kamrup (R)	299	292	97.7	289	96.7	289	96.7	279	93.3
Kamrup (M)	300	293	97.7	276	92.0	275	91.7	257	85.7
Karimganj	301	264	87.7	248	82.4	237	78.7	228	75.7
Kokrajhar	274	269	98.2	259	94.5	248	90.5	238	86.9
Lakhimpur	300	299	99.7	293	97.7	290	96.7	265	88.3
Morigaon	299	284	95.0	276	92.3	270	90.3	255	85.3
Nagaon	299	278	93.0	271	90.6	265	88.6	270	90.3
Nalbari	302	282	93.4	278	92.1	279	92.4	276	91.4
Sivsagar	300	294	98.0	295	98.3	293	97.7	292	97.3
Sonitpur	300	291	97.0	286	95.3	282	94.0	274	91.3
Tinsukia	303	281	92.7	286	94.4	281	92.7	280	92.4
Udalguri	300	285	95.0	286	95.3	279	93.0	273	91.0
ASSAM	7482	7090	94.8	6962	93.0	6845	91.5	6633	88.7

Table 2.2 : District wise distribution of children aged 12 to 23 month by Immunization status

District	No. of Children	Immunization Coverage							
		Not Immunized		Partially Immunized		Fully Immunized		Fully Immunized above 12 month	
		No.	PC	No.	PC	No.	PC	No.	PC
Baksa	300	3	1.0	49	16.3	217	72.3	31	10.3
Barpeta	300	14	4.7	36	12.0	225	75.0	25	8.3
Bongaigaon	300	10	3.3	30	10.0	244	81.3	16	5.3
Cachar	300	6	2.0	37	12.3	231	77.0	26	8.7
Chirang	302	3	1.0	58	19.2	226	74.8	15	5.0
Darang	301	16	5.3	20	6.6	238	79.1	27	9.0
Dhemaji	303	3	1.0	25	8.3	241	79.5	34	11.2
Dhubri	300	15	5.0	48	16.0	201	67.0	36	12.0
Dibrugarh	299	2	0.7	16	5.4	269	90.0	12	4.0
Goalpara	300	8	2.7	52	17.3	212	70.7	28	9.3
Golaghat	300		0.0	20	6.7	257	85.7	23	7.7
Hailakandi	300	13	4.3	58	19.3	207	69.0	22	7.3
Jorhat	300		0.0	9	3.0	273	91.0	18	6.0
Kamrup (R)	299	2	0.7	18	6.0	259	86.6	20	6.7
Kamrup (M)	300	2	0.7	44	14.7	234	78.0	20	6.7
Karimganj	301	19	6.3	64	21.3	198	65.8	20	6.6
Kokrajhar	274	3	1.1	35	12.8	222	81.0	14	5.1
Lakhimpur	300		0.0	35	11.7	237	79.0	28	9.3
Morigaon	299	4	1.3	46	15.4	222	74.2	27	9.0
Nagaon	299	9	3.0	40	13.4	228	76.3	22	7.4
Nalbari	302	5	1.7	34	11.3	227	75.2	36	11.9
Sivsagar	300	1	0.3	13	4.3	259	86.3	27	9.0
Sonitpur	300	9	3.0	19	6.3	247	82.3	25	8.3
Tinsukia	303	6	2.0	21	6.9	251	82.8	25	8.3
Udalguri	300	5	1.7	41	13.7	230	76.7	24	8.0
ASSAM	7482	158	2.1	868	11.6	5855	78.3	601	8.0

Table 2.3 District wise distribution of children aged 12 to 23 month by Immunization status, 2011-12 & 2012-13

Immunization status 2011-12 & 2012-13 (in %)										
Districts	No. of children		Not Immunized		Partially Immunized		Fully Immunized within 12 months		Fully Immunized after 12 months	
	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13
Baksa	300	300	1.7	1.0	14.7	16.3	65.0	72.3	18.7	10.3
Barpeta	300	300	2.0	4.7	4.0	12.0	79.0	75.0	15.0	8.3
Bongaigaon	301	300	2.3	3.3	8.3	10.0	70.8	81.3	18.6	5.3
Cachar	300	300	0.7	2.0	10.0	12.3	78.7	77.0	10.7	8.7
Chirang	300	302	3.0	1.0	13.7	19.2	62.3	74.8	21.0	5.0
Darang	301	301	4.0	5.3	16.6	6.6	72.1	79.1	7.3	9.0
Dhemaji	300	303	0.7	1.0	2.7	8.3	83.0	79.5	13.7	11.2
Dhubri	301	300	3.3	5.0	12.3	16.0	72.4	67.0	12.0	12.0
Dibrugarh	300	299	0.0	0.7	3.3	5.4	93.7	90.0	3.0	4.0
Goalpara	300	300	4.0	2.7	15.0	17.3	73.3	70.7	7.7	9.3
Golaghat	301	300	1.0	0.0	9.3	6.7	84.4	85.7	5.3	7.7
Hailakandi	300	300	0.7	4.3	16.3	19.3	76.3	69.0	6.7	7.3
Jorhat	300	300	0.3	0.0	3.7	3.0	90.3	91.0	5.7	6.0
Kamrup (R)	301	300	1.0	0.7	6.3	6.0	85.4	86.6	7.3	6.7
Kamrup (M)	300	299	1.7	0.7	9.3	14.7	83.3	78.0	5.7	6.7
Karimganj	300	301	2.7	6.3	23.0	21.3	69.0	65.8	5.3	6.6
Kokrajhar		274		1.1		12.8		81.0		5.1
Lakhimpur	300	300	0.3	0.0	6.7	11.7	82.3	79.0	10.7	9.3
Morigaon	300	299	0.7	1.3	5.3	15.4	81.3	74.2	12.7	9.0
Nagaon	300	299	2.0	3.0	8.7	13.4	79.7	76.3	9.7	7.4
Nalbari	300	302	2.3	1.7	5.7	11.3	78.7	75.2	13.3	11.9
Sivsagar	300	300	0.3	0.3	3.3	4.3	85.3	86.3	11.0	9.0
Sonitpur	300	300	1.0	3.0	10.3	6.3	77.3	82.3	11.3	8.3
Tinsukia	300	303	0.7	2.0	5.7	6.9	79.0	82.8	14.7	8.3
Udalguri	300	300	1.7	1.7	14.0	13.7	68.3	76.7	16.0	8.0
Assam	7205	7482	1.6	2.1	9.5	11.6	78.0	78.3	11.0	8.0

Table 2.4 District wise distributions of children aged 12 to 23 month by place of Immunization

District :	Place of Immunization												No. of Children Immunized
	SC		VHND / Out Reach Session		PHC		Other Govt. Hospital		Pvt. Doctor / Pvt. hospita		Other		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
Baksa	163	54.9	87	29.3	37	12.5	10	3.4					297
Barpeta	189	66.1	64	22.4	16	5.6	9	3.1	8	2.8			286
Bongaigaon	174	60.0	52	17.9	29	10.0	25	8.6	9	3.1	1	0.3	290
Cachar	104	35.4	83	28.2	46	15.6	37	12.6	19	6.5	5	1.7	294
Chirang	116	38.8	129	43.1	39	13.0	11	3.7	3	1.0	1	0.3	299
Darang	121	42.5	146	51.2	10	3.5	1	0.4	6	2.1	1	0.4	285
Dhemaji	137	45.7	109	36.3	43	14.3	2	0.7	3	1.0	6	2.0	300
Dhubri	179	62.8	71	24.9	20	7.0	2	0.7	6	2.1	7	2.5	285
Dibrugarh	188	63.3	26	8.8	74	24.9	4	1.3	2	0.7	3	1.0	297
Goalpara	195	66.8	27	9.2	26	8.9	30	10.3	7	2.4	7	2.4	292
Golaghat	68	22.7	153	51.0	50	16.7	10	3.3	16	5.3	3	1.0	300
Hailakandi	78	27.2	158	55.1	41	14.3	3	1.0	7	2.4			287
Jorhat	95	31.7	115	38.3	42	14.0	12	4.0	36	12.0			300
Kamrup (R)	153	51.5	52	17.5	70	23.6	2	0.7	12	4.0	8	2.7	297
Kamrup (M)	48	16.1	65	21.8	45	15.1	49	16.4	82	27.5	9	3.0	298
Karimganj	163	57.8	45	16.0	16	5.7	47	16.7	4	1.4	7	2.5	282
Kokrajhar	157	57.9	33	12.2	28	10.3	50	18.5	3	1.1			271
Lakhimpur	158	52.7	107	35.7	32	10.7			3	1.0			300
Morigaon	158	53.6	80	27.1	33	11.2	16	5.4	4	1.4	4	1.4	295
Nagaon	164	56.6	74	25.5	40	13.8	6	2.1	1	0.3	5	1.7	290
Nalbari	104	35.0	117	39.4	74	24.9			2	0.7	0	0.0	297
Sivsagar	183	61.2	21	7.0	74	24.7	1	0.3	11	3.7	9	3.0	299
Sonitpur	182	62.5	39	13.4	23	7.9	34	11.7	4	1.4	9	3.1	291
Tinsukia	182	61.3	40	13.5	36	12.1	34	11.4	5	1.7			297
Udalguri	215	72.9	19	6.4	35	11.9	4	1.4	2	0.7	20	6.8	295
ASSAM	3674	50.2	1912	26.1	979	13.4	399	5.4	255	3.5	105	1.4	7324

Table 2.5: District wise distribution of children by reasons for non immunization

District :	Reasons for Non Immunization of child														Child Not Immunized
	Unaware about the need for immunization		No faith in immunization		Place and time of immunization not known		Fear of side effects		Child ill- not brought to centre		Place of immunization too far		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
Baksa	5	35.7	6	42.9	5	35.7	1	7.1	4	28.6			4	28.6	14
Barpeta	3	100.0	2	66.7							1	33.3			3
Bongaigaon	3	30.0	1	10.0	4	40.0	1	10.0	1	10.0			2	20.0	10
Cachar			1	16.7	2	33.3	1	16.7	1	16.7			1	16.7	6
Chirang			3	100.0			1	33.3	1	33.3	2	66.7	1	33.3	3
Darang	7	43.8	2	12.5	8	50.0	2	12.5	1	6.3	9	56.3	9	56.3	16
Dhemaji	3	100.0	2	66.7							1	33.3			3
Dhubri	2	13.3	4	26.7			2	13.3	1	6.7	1	6.7	6	40.0	15
Dibrugarh			2	100.0											2
Goalpara	5	62.5	3	37.5			4	50.0	1	12.5					8
Golaghat															
Hailakandi	2	15.4	5	38.5	3	23.1	6	46.2							13
Jorhat															
Kamrup (R)	1	50.0					2	100.0							2
Kamrup (M)					2	100.0									2
Karimganj	3	15.8	12	63.2	3	15.8	6	31.6	3	15.8			1	5.3	19
Kokrajhar															3
Lakhimpur															
Morigaon			1	25.0					1	25.0	1	25.0			4
Nagaon	3	33.3	3	33.3	1	11.1	5	55.6					2	22.2	9
Nalbari	2	40.0	4	80.0			1	20.0	1	20.0	1	20.0	1	20.0	5
Sivsagar	1	100.0	1	100.0							1	100.0			1
Sonitpur	2	22.2	4	44.4			2	22.2			4	44.4			9
Tinsukia	1	16.7	4	66.7	1	16.7	2	33.3							6
Udalguri	3	60.0	2	40.0							1	20.0			5
Assam	46	29.1	62	39.2	29	18.4	36	22.8	15	9.5	22	13.9	27	17.1	158

Table 2.6: District wise distribution of children by reasons for partial immunization

District :	Reasons for Partial Immunization of child														Partially Immunized
	Unaware about the need to return for subsequent doses		Place and/time of immunization Unknown		Fear of side effects		Place of immunization is too far		Mothers too busy		Child ill- not brought		Other		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
Baksa	18	36.7	24	49.0	3	6.1	3	6.1	3	6.1	5	10.2	7	14.3	49
Barpeta	7	19.4	16	44.4	3	8.3	2	5.6	8	22.2	3	8.3	6	16.7	36
Bongaigaon	6	20.0	3	10.0	2	6.7	3	10.0	5	16.7	3	10.0	5	16.7	30
Cachar	4	10.8	1	2.7	3	8.1	4	10.8	6	16.2	8	21.6	7	18.9	37
Chirang	11	19.0	6	10.3	2	3.4	4	6.9	6	10.3	6	10.3	9	15.5	58
Darang	14	70.0	9	45.0	3	15.0	11	55.0	9	45.0	2	10.0	11	55.0	20
Dhemaji	2	8.0					2	8.0	7	28.0	3	12.0	6	24.0	25
Dhubri	10	20.8	3	6.3	6	12.5	7	14.6	6	12.5	4	8.3	11	22.9	48
Dibrugarh	3	18.8	3	18.8			3	18.8	8	50.0	3	18.8	5	31.3	16
Goalpara	9	17.3	3	5.8	5	9.6	5	9.6	9	17.3	7	13.5	14	26.9	52
Golaghat	7	35.0	3	15.0	3	15.0	6	30.0	9	45.0	3	15.0	5	25.0	20
Hailakandi	9	15.5	3	5.2	4	6.9	1	1.7	11	19.0	15	25.9	21	36.2	58
Jorhat	3	33.3	3	33.3	1	11.1			2	22.2			1	11.1	9
Kamrup (R)	9	20.5	1	2.3	2	4.5	1	2.3	3	6.8	4	9.1	5	11.4	44
Kamrup (M)	5	27.8			5	27.8	2	11.1	4	22.2	8	44.4	11	61.1	18
Karimganj	16	25.0	6	9.4	9	14.1	1	1.6	3	4.7	34	53.1	13	20.3	64
Kokrajhar															35
Lakhimpur	5	14.3	4	11.4	3	8.6	2	5.7	2	5.7	3	8.6	3	8.6	35
Morigaon	6	13.0	4	8.7	4	8.7	6	13.0	1	2.2	2	4.3	3	6.5	46
Nagaon	8	20.0	8	20.0	6	15.0	2	5.0	4	10.0	7	17.5	7	17.5	40
Nalbari	3	8.8			4	11.8	2	5.9	1	2.9	3	8.8	8	23.5	34
Sivsagar	3	23.1	3	23.1			3	23.1	1	7.7	3	23.1	4	30.8	13
Sonitpur	9	47.4	7	36.8	3	15.8	4	21.1	3	15.8	6	31.6	8	42.1	19
Tinsukia	8	38.1	3	14.3	1	4.8	2	9.5	2	9.5	4	19.0	5	23.8	21
Udalguri	16	39.0	7	17.1	3	7.3	2	4.9	1	2.4	11	26.8	14	34.1	41
Assam	191	22.0	120	13.8	75	8.6	78	9.0	114	13.1	147	16.9	189	21.8	868

Table 2.7: District wise distribution of Dropout Rate

District	No. of Children	Dropout Rate			
		BCG to Measles	DPT1 to Measles	OPV 1 to OPV 3	DPT 1 to DPT 3
Baksa	300	12.2	11.3	6.3	7.2
Barpeta	300	8.2	8.9	4.6	5.7
Bongaigaon	300	9.0	8.7	3.5	3.5
Cachar	300	8.9	8.6	3.5	3.4
Chirang	302	10.4	11.0	0.4	4.0
Darang	301	5.6	5.3	3.6	3.5
Dhemaji	303	3.2	2.8	0.4	0.4
Dhubri	300	11.6	9.3	1.6	4.5
Dibrugarh	299	1.7	3.0	2.4	0.3
Goalpara	300	16.2	13.2	6.8	7.8
Golaghat	300	5.4	5.4	1.7	2.0
Hailakandi	300	13.0	14.6	6.6	6.4
Jorhat	300	2.7	1.7	1.7	1.7
Kamrup (R)	299	6.1	4.5	1.0	1.0
Kamrup (M)	300	13.5	12.6	6.1	6.5
Karimganj	301	16.5	14.3	10.2	10.5
Kokrajhar	274	11.2	11.5	7.8	7.4
Lakhimpur	300	11.7	11.4	3.0	3.0
Morigaon	299	8.9	12.4	4.9	5.2
Nagaon	299	4.9	6.3	4.7	4.5
Nalbari	302	6.8	6.8	1.1	1.7
Sivsagar	300	2.3	2.3	0.3	1.0
Sonitpur	300	5.8	5.8	3.1	2.4
Tinsukia	303	2.4	3.4	0.0	1.0
Udalguri	300	7.1	7.5	2.1	2.7
ASSAM	7482	8.2	8.0	3.5	3.8

Table 2.8: District wise distribution of Immunization Status by Sex, Religion and Caste

Type	Category	No. of Children	Immunization Coverage							
			Not Immunized		Partially Immunized		Fully Immunized		Fully Immunized above 12 month	
			No.	PC	No.	PC	No.	PC	No.	PC
Sex of the baby	Male	3850	83	2.2	454	11.8	3004	78.0	309	8.0
	Female	3632	75	2.1	414	11.4	2851	78.5	292	8.0
Religion of the baby	Hindu	4989	70	1.4	496	9.9	4038	80.9	385	7.7
	Muslim	2308	85	3.7	350	15.2	1668	72.3	205	8.9
	Christian	160	3	1.9	21	13.1	128	80.0	8	5.0
	Others	25		0.0	1	4.0	21	84.0	3	12.0
Caste of the baby	General	3425	89	2.6	426	12.4	2614	76.3	296	8.6
	OBC	1555	24	1.5	175	11.3	1263	81.2	93	6.0
	SC	973	16	1.6	94	9.7	780	80.2	83	8.5
	ST	1353	27	2.0	150	11.1	1071	79.2	105	7.8
	Others	176	2	1.1	23	13.1	127	72.2	24	13.6
Total		7482	158	2.1	868	11.6	5855	78.3	601	8.0

INTRODUCTION:

Reducing maternal and child mortality are among the most important goals of the National Rural Health Mission. Huge and strategic investments are being made by Government of India to achieve these goals. At various global platforms, India has reaffirmed its commitment to make every effort towards achieving the Millennium Development Goals 4 and 5.

Under NRHM, there are a number of focused interventions for improving the availability and accessibility of maternal health care services to rural women to ensure safe motherhood. The maternal care services include antenatal care, delivery care and post natal care.

On the demand side is the JSY, where cash benefit is given to the mothers for institutional delivery.

Janani Shishu Suraksha Karyakram (JSSK) is another initiative under the overall umbrella of NRHM that aims to reduce out-of-pocket expenses related to maternal and newborn care. The scheme implemented across the country entitles all pregnant women delivering in public health institutions to absolutely free and no expense delivery, including caesarean section. Similar entitlements are in place for all sick newborn (first 30 days of life) accessing public health institutions for treatment.

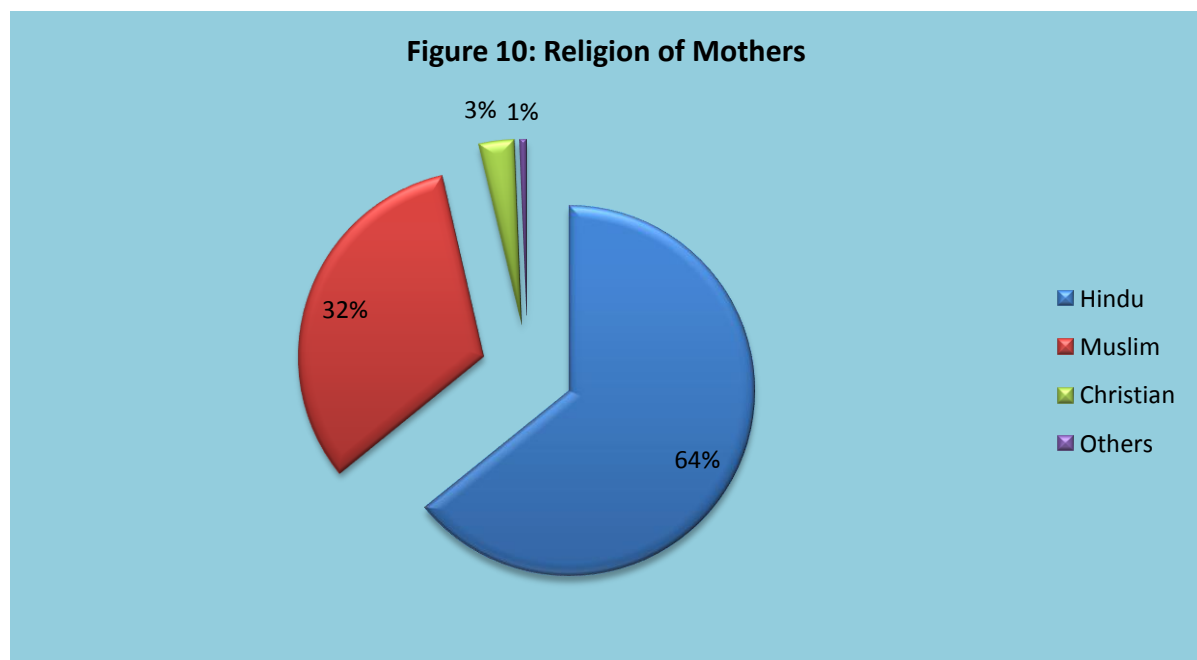
In the present survey all women who delivered during 12 months preceding the survey in the sampled household were asked about the details of antenatal, natal and post natal care. In addition they were also asked about JSY and JSSK benefits.

BACKGROUND PROFILE OF THE RESPONDENTS:

This chapter elucidates the background profile of the respondents. A total of 7483 mothers who delivered during the last one year preceding the survey period were taken up for the study.

3.1.1 RELIGION & CASTE

Assam being predominantly Hindu dominating state, the survey respondents were also found to be 64.1% Hindu (Table 3.1.1).



Slight variations were found amongst the districts. More than 60% of respondent were found to be Hindu in 13 districts, whereas in 4 districts more than 60% of the respondent were Muslims.

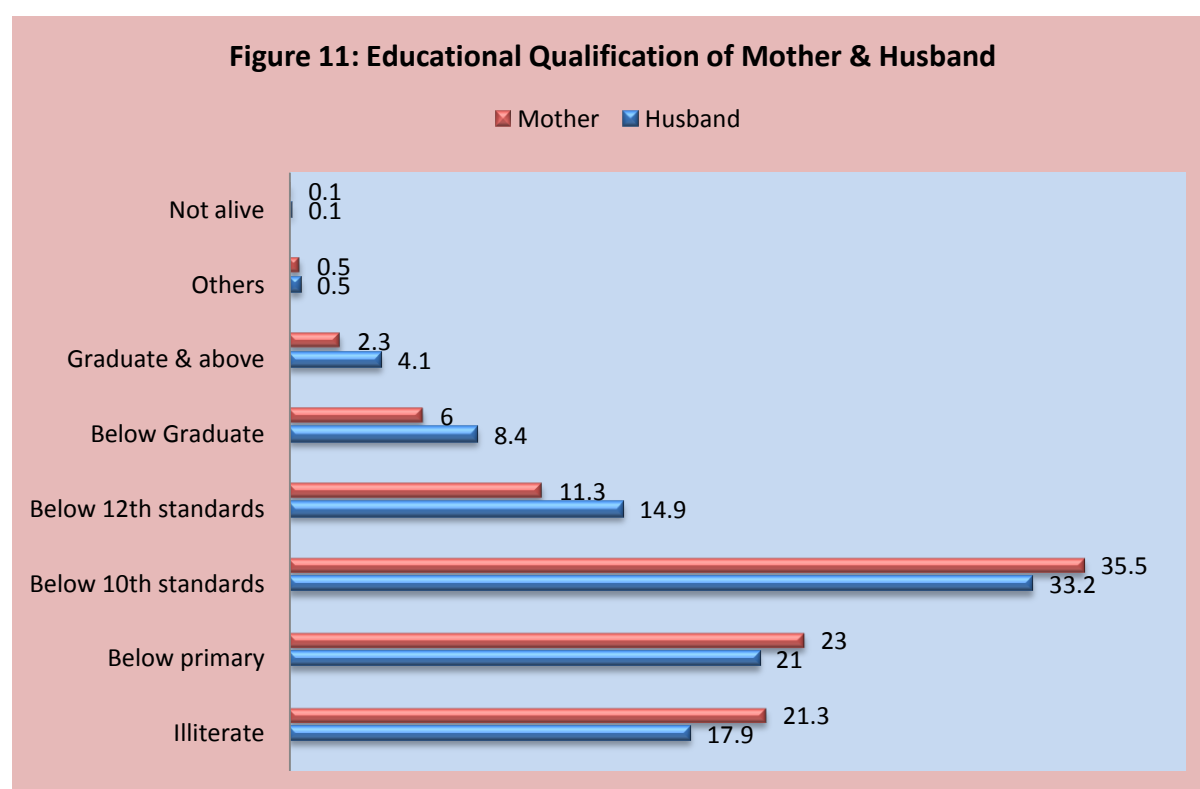
Table 3.1.2 shows that overall more than 40% of the mothers surveyed were of general category. It was followed by OBC which comprised of 20%, ST comprised of 16.5% and ST only 13.5%. When analysed district-wise, it was found that fifty percent of the districts had more than 40% of general category mothers.

MATERNAL HEALTH CARE SERVICES

3.1.2 EDUCATION

Education plays a major role in promoting the health care delivery services. The study captured the education level of the both the husband of the respondents (Table 3.1.3) as well as the respondent themselves (Table 3.1.4).

The overall educational qualification of the state is depicted below:



A total of around 82.4% of the respondent's husband had some level of educational qualification, the highest proportion being below the 10th level (30.0%), followed by below primary level (20%), and 14.9% comprised of below 12th class. There were only 8.4% of them who were below graduate. Major chunks of the respondent's husband (17.6%) were still illiterate. There was slight variation in the case of educational qualification of the mothers. 78.5% of the respondents had some level of educational qualification, majority of them being below 10th pass (31.2%), below primary (22%) and below 12th (11.3%). Only 6% of them below graduate and 2.3% of them were graduate and above. In this case 21.5% were illiterate.

MATERNAL HEALTH CARE SERVICES

3.1.3 OCCUPATION

The mothers were asked about their occupation as well as the occupation of their husbands. In majority of the cases (24.4%), the occupation of the husband was found to be daily wage labourer, 22.3% of them had cultivation as their occupation, followed by agriculture (12.7%), 7.1% of them were engaged in private sector and 6.2% were in government sector (Table 3.1.5).

On the other hand (Table 3.1.6) it is seen that majority of the mothers (86.9%) were housewives. Of the remaining 14.1 % of mothers who were engaged in some occupation, it is seen that 5.9% of them were daily wage labourers and 2.8% were cultivators.

3.1.4 FAMILY SIZE

Table 3.1.7 reflects the family size of the mothers. It is observed that 44.6% of the mothers had less than five members in the family, followed by 21.6% who had less than 8 members and 17.3% of them had less than 6 members. More than 10 members in the family were found in 7.1% of the mothers. District-wise variation is seen in the family size. More than 50% of the mothers were found to have less than 5 members in the family in the districts like Kamrup Metro (62%), Jorhat (60.7%), Kokrajhar (58.4%), Golaghat (57.7 %), Nalbari (51.3%), Darrang (48.3%) and Barpeta (47.5%)

3.1.5 AGE OF THE MOTHERS & AGE AT MARRIAGE

Majority of the mothers (42.7%) taken up for the study were in the age group of 25-29 (table 3.1.8). 37.8% were in the age group of 20-24, followed by 10.1% in the age group of 30-34. It is also observed that 5.5% of the mothers were in the age group of 15-19 years, major contributors were Bongaigaon district, Hailakandi district and Dibrugarh district, which is a matter of concern.

Age at marriage is seen to be an important indicator contributing towards maternal morbidity and mortality. Table 3.1.9 shows mother's age at marriage. Overall 52.5% of the mothers had married at the age of 15-19, 36.5% of them married at the age of 20-24 and 9.5% of them were in the age group of 30-34 during their marriage.

ANTENATAL CARE

Effective antenatal care (ANC) can improve the health of the mother and give her a chance to deliver a healthy baby. Regular monitoring during pregnancy can help to detect complications at an early age before they become life threatening emergencies. However, one must realize that even with the most effective screening tools currently available, one cannot predict which women will develop pregnancy related complications. Hence, every pregnant woman needs special care.

To monitor the progress of foetal growth and to ascertain the well-being of the mother, the antenatal care package is available through the public health system, delivered both at community outreach and health facility level. Timely identification of complications enables service providers to make timely referrals to health facilities equipped to provide emergency obstetric and newborn care.

Antenatal care services include provision of at least four antenatal care visits, iron folic acids tablets, two injections of tetanus toxoid, detection and treatment of anemia and management of high risk pregnancies.

3.2.1 ANC REGISTRATION & NUMBER OF ANC

Every woman should at least make 4 visits for ANC, including the first visit/registration at the facility or any home visit by ANM / LHV. These are sufficient, and for pregnancies without complications, studies have shown that additional visits do not improve the maternal or perinatal outcome.

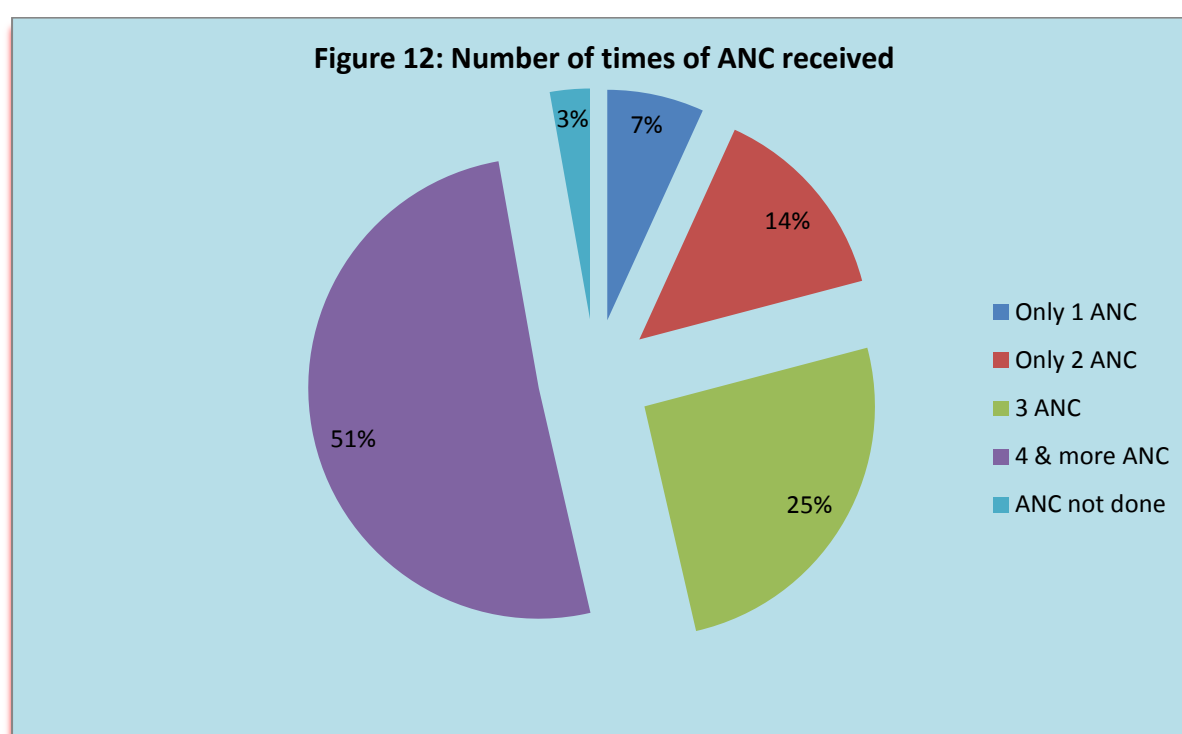
The first visit is recommended as soon as the pregnancy is suspected. The second visit should be scheduled between 4th and 6th month (around 26 weeks). The third one should be planned in the 8th month (around 32 weeks), and the fourth one in the 9th month (36 to 40 weeks).

MATERNAL HEALTH CARE SERVICES

It is to be mentioned that, in the present study, the number of ANC visit at any time related to pregnancy is consider as one visit irrespective of the period of gestation.

Table 3.2.1 (A) shows the status of ANC registration. When analyzed it is seen that overall 97.2% of the mothers had registered for ANC. It is to be noted that 2.8% of the mothers have not received any ANC, which is a matter of concern. There are variations amongst the districts. From Sivasagar district 100% of the mothers reported for ANC registration, 99% and above ANC registration was reported from Kamrup Metro, Golaghat and Jorhat districts.

Although, overall ANC registration was 97.2%, but the number of times of receiving ANC by a single mother is not very encouraging. Receiving of 4 ANC is reported by only 51% of mothers.



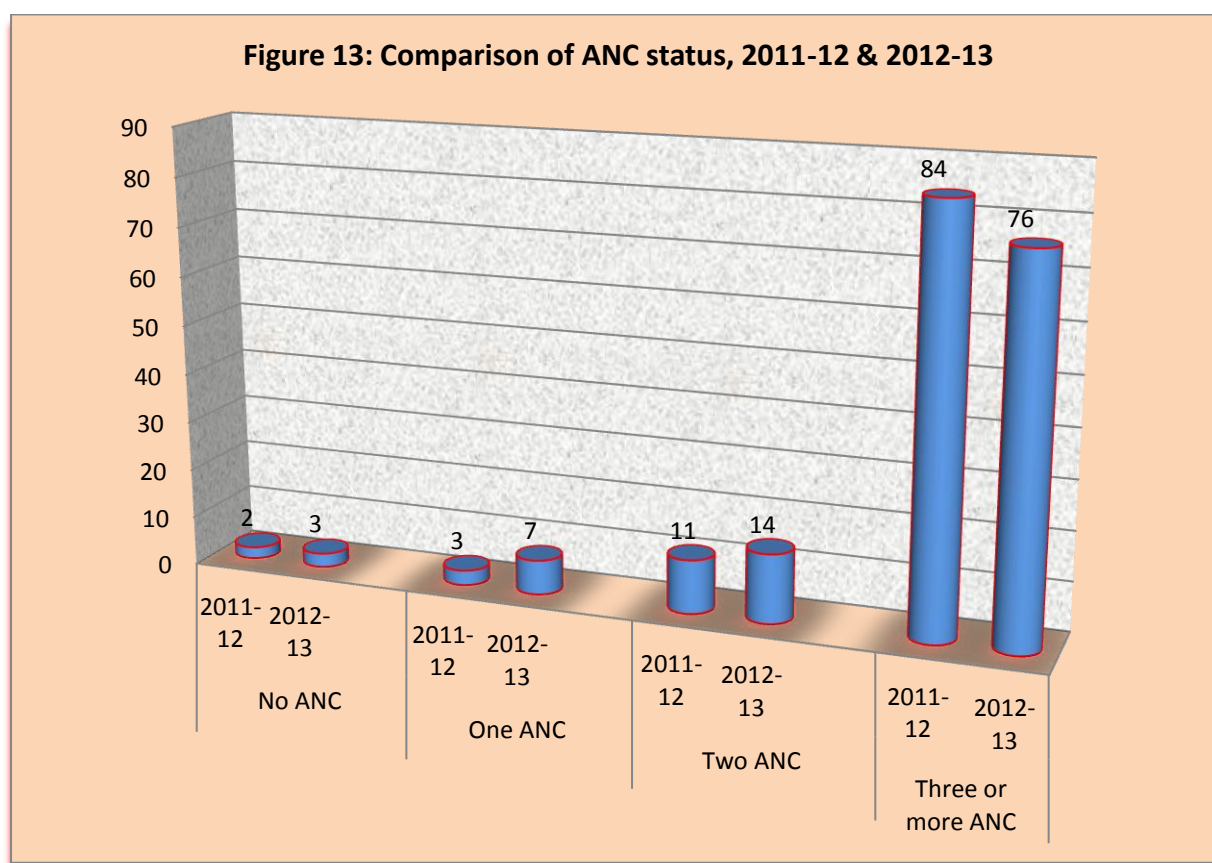
There are lots of variations amongst the districts. The mothers who had received 4 or more ANC is more than 70% in Jorhat (76.7%) and Kamrup Metro (72%). It is in the range of 60%-70% in Goalpara (68.3%), Sonitpur (67.9%), Nalbari (67.7%), Dhubri (66.1%), and Golaghat (63.7%). The lowest (23.7%) is recorded in Hailakandi and Morigaon. The 3 ANC registration is lower than 50% in all districts, highest recorded is of Morigaon district, which is 45%.

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3.2.2 ANC STATUS IN 2011-12 & 2012-13

The study has attempted to show a comparisons of ANC received during 2011-12 and 2012-13. It is to be mentioned that during the survey conducted in 2011-12, record of 4 and more ANC was not taken; therefore, the comparison here is made for 1 ANC, 2ANC and 3 and more ANC (Table 3.2.1(B)).

It is seen that there has not been major changes recorded during these one year. There has been a 1% and around 4% increase in 1 ANC and 2 ANC respectively during 2012-13 as compared to 2011-12. At the same period a decline of 4.2% was recorded in case of 3 and more ANC, which is of more importance.



District-wise analysis shows that except for Nagaon (8%), Goalpara (2%), Kamrup Metro (2%) and Bongaigaon (0.7%), there is no increase in 3 and more ANC during 2012-13. On the contrary, the analysis shows a major decrease in districts like Hailakandi (21.7%), Tinsukia (21.5%), Dhemaji (18.6%), Lakhimpur (16%), Dibrugarh (14%), Karimganj (12%), Cachar (11.9%), Kamrup Rural (7.9%) and Sivasagar

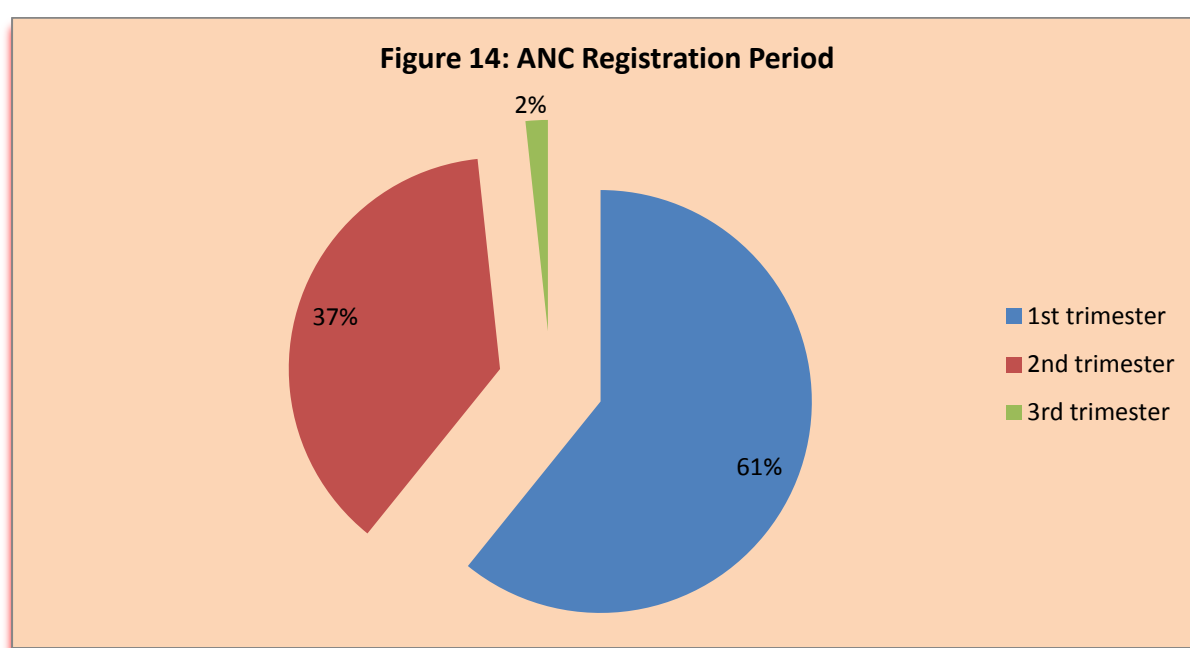
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(10.2%). In case of other districts, there is below 5% decrease. The districts which had a major decrease in 3 and more ANC had shown an increase in the 2 ANC (Hailakandi -20% increase, Tinsukia - 15.5% increase, Dhemaji - 12% increase and Dibrugarh - 10.3% increase). In case of 1 ANC, seven districts have shown an increase of more than 5 % namely; Udalguri-11.7%, Chirang -8.3%, Sonitpur and Lakhimpur - 6.7% each, Bongaigaon - 5.6%, Nalbari - 5.4 % and Karimganj - 5.3%). Districts like Baksa, Hailakandi, Lakhimpur, Cachar, Dhemaji, Tinsukia, Dhubri and Dibrugarh showed that there was an increase of 2% and more of mothers not registered for ANC.

3.2.3 PERIOD OF ANC REGISTRATION:

Women are encouraged to register with health functionaries as soon as their pregnancy is confirmed in order to receive antenatal care services and advice. Early registration is required to assess the health status of the mother and obtain baseline information on blood pressure (BP), weight, haemoglobin, etc and screen for complications early and manage them appropriately by referral as and when required. Early registration also helps to recall the date of last menstrual period (LMP) to calculate EDD.

Therefore the study also attempted to find out the period of 1st ANC registration (Table : 3.2.2). It is found that at the state level around 61% had registered for ANC during 1st trimester. The state needs to frame suitable strategies so as to bring all the mothers to register themselves as soon as the pregnancy is confirmed.



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Again district-wise there are lots of variations. More than 80% registration during 1st trimester is reported by mothers from two districts; Golaghat (80.5%) and Dibrugarh (80.3%). Goalpara, Nalbari, Kokrajhar and Jorhat were in the range from 70% to 80%. On the other hand Morigaon, Darrang, Sivasagar, Lakhimpur and Dhubri recorded less than 50% registration during 1st trimester, the lowest being Dhubri (35.7%). At the same time, registration during 2nd trimester was recorded more than 50% in Dhubri (62.2%), Lakhimpur (55.2%), Sivasagar (52.5%) and Darrang (51.4%). It is to be mentioned that these four districts had the lowest proportion of mothers who registered during 1st trimester. In case of registration during 3rd trimester, the highest proportion was found in Bongaigaon district (4.4%), followed by Morigaon (3.8%), and Lakhimpur and Tinsukia, each recorded 3.1%. All other districts recorded below 3% registration during 3rd trimester.

3.2.4 SOURCE OF INFORMATION FOR ANC:

Table 3.2.3 reveals that ASHAs have played a major role in spreading the messages of ANC services. Overall in the state it is recorded that 88% of the mothers who had received ANC registration got the information from the ASHA. The contribution of public health personnel like ANM and Doctor from public health facilities is almost negligible. When analysed district wise, it is observed that in many of the districts the ASHA are very active in spreading the message. It is heartening to note the role of ASHA in districts like Chirang is very encouraging, with a record of 100% mothers reported to receive the messages from ASHA. Districts like Goalpara, Dhubri, Kokrajhar, Darrang, Sivasagar, Dhemaji, Kamrup Rural, Lakhimpur, Bongaigaon, Baksa, Udalguri and Morigaon recorded that more than 90% of the mothers received the information for ANC from the ASHAs.

3.2.5 PLACE OF ANC REGISTRATION:

The ANC registration can be done at all the government health facilities (SC/PHC/SDH/CHC/DH/Medical Colleges) and also at the community level during VHNDs. Many of them also registered themselves at the private health facilities. Generally it is seen that at the rural areas, the mothers can differentiate between the

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private and government health facilities. But amongst the various levels of government hospitals (SC/PHC/CHC/SD/DH), some of the mothers find it difficult to actually differentiate the level of health facility. Therefore, there might be some biasness on the reported figures for the place of ANC registration at the various government health facilities.

From the table 3.2.4, it can be inferred that more than 50% of the mothers had their ANC registration at the SC (52.3%), another 20.6% of the mothers reported that they had registered at the PHC/CHC level and 10% at VHND. Registration at SDH/DH was recorded to be 5%. Registration at other facilities like private health facilities, other government hospitals etc. recorded below 5%.

Lots of variations were observed amongst the districts. It may be noted that 80% and more registration at SCs were recorded at Goalpara (87.4%), Dhubri (83.6%), Chirang (83.1%) and Kamrup Rural (80%). The lowest registration at SC was from Kamrup Metro with only 19.9%. This may be due to the fact that Kamrup Metro has got lots of private health facilities and also a Medical College. It can also be inferred from the table that highest proportion of mothers registered at private facilities and other government facilities is in case of Kamrup Metro. The table further reveals that to some extent the VHNDs also has contributed in ANC registration. Jorhat with 30.9% recorded highest proportion of registration at VHND, followed by Baksa (26.1%), Hailakandi (21.7%), Dhemaji (21.5%) and Golaghat (20.5%). All others have reported below 20% registration at VHND, the lowest being Chirang with 1.4%.

3.2.6 PLACE OF ANC RECEIVED DURING LAST PREGNANCY:

As already mentioned, antenatal care can be done at different level of government health facilities, VHNDs and even at private clinics. It is also quite natural that many pregnant mothers from rural areas go to the SC for 1st or 2nd check up but later on they prefer to visit the facilities where doctors are available. The study has tried to capture the common place for all ANC visits. Therefore the place of ANC received may be more than one place.

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Table 3.2.5 shows the distribution of mothers by place of ANC received. It shows that 59.5% mothers received ANC in SC followed by CHC/PHC (41.4%) and VHND (22.3%). Private health institutions accounted 8.4% of the ANCs provided. From the analysis, it is apparent that the VHND plays an important role in regarding ANC of the pregnant mothers, which has significantly improved the coverage of ANC.

It has been noted that the present study showed certain changes in relation to ANC received over the last coverage survey. The percentage of mothers, who received ANC in Private health institutions, has gone up from 6.0% in 2011-12 to 8.4% in 2012-13.

3.2.7 QUALITY CHECK OF ANC PROVIDED

The effectiveness of antenatal checkups in ensuring safe motherhood depends on the services provided and examination undertaken during the antenatal checkups. The important services to be provided during antenatal checkups are: TT injection, 100 IFA tablets, BP check up, weight, abdomen examination, urine sample and blood sample for anemia detection. Taking this into consideration, the study has taken up an effort to analyse the services provided to the mothers who have received ANC.

Table 3.2.6 (A) shows that more than 90% of the mothers reported that TT injection was given, BP check up was done and weight was taken during the ANC visits. Further, more than 80% of the mothers reported that they were provided with 100 IFA tablets, abdomen examination was done and blood was tested for anemia. On the other hand only 68.7% of the mothers reported that the urine sample was examined.

Amongst the districts there are large variations in receiving different components of antenatal care. TT injection is reported by more than 90% in all the districts except for Nagaon, Baksa and Barpeta which reported 89.7%, 89.5% and 88.4% respectively. Similarly, in case of BP check up also the services provided seems to be good as it is more than 90% in all the districts except four districts (Lakhimpur-89.7%, Hailakandi-88.5%, Dibrugarh-88.1% and Sivasagar-82.5%). But in case of receiving 100 IFA tablets there are wide range of variations amongst the districts. Only two districts (Chirang-92.6% and Golaghat (92.3%)) have reported more than 90%. On the other hand, 80-90% of the mothers of eleven districts (Sonitpur, Baksa, Barpeta, Sivasagar,

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Tinsukia, Darrang, Udalguri, Hailakandi, Bongaigaon, Kamrup Rural and Kokrajhar) reported of receiving 100 IFA tablets. In the remaining districts it was reported in the range of 69.5 to 79.9%. Abdomen examination was reported more than 90% in ten districts (Baksa-99.3%, Sonitpur-99.3%, Darrang-97.6%, Golaghat-96.6%, Nagaon - 96.2%, Kamrup Metro-94.9%, Kamrup Rural-93.6%, Goalpara- 93.2%, Dhubri-92.3% and Jorhat-90.3%). In the remaining districts it ranged from 60-80% except for Karimganj district in which it was reported only 48.3%.

Lots of variations were also seen in urine examination and blood test for anemia. In both the service provisions, the highest proportion of mothers receiving this service was reported from Jorhat district (98.7% in case of urine test and 98% in case of anemia detection). In case of anemia detection mothers of 21 districts reported to receive the service in the range of 70% - 90%, whereas in case of urine detection it was reported in 11 districts.

3.2.8 HEALTH EDUCATION TO THE MOTHERS

Universal access to full antenatal packages also should include counselling to the mothers. Table 3.2.6 (B), captures the data on health education received by the mothers during the antenatal check up, focusing mainly on dangers signs of pregnancy, expected date of delivery, availability of nearby health facility for delivery and advice on nutrition. It shows that the counselling to the mothers by the service providers needs to be improved as overall only below 70% of the mothers were counselled on ANC. 67.7% of the mothers were told about EDD, 65.2% of them were told about the danger sign of pregnancy, only 50% of them were told about the nearby health facility and advice on nutrition was as low as 48.6%. From the table it is inferred that in case of education received by the mothers on danger signs and pregnancy and expected date of delivery, the data is almost similar districtwise. It is found to be more than 70 % each in Morigaon, Jorhat, Kamrup Rural, Golaghat, Kamrup Metro, Sonitpur, Sivasagar, Dibrugarh and Dhemaji. The lowest in both the cases is Karimganj, which is below 50%. Further, the data on details provided to the mothers on nearby health facility and nutrition is poor. In both the cases the maximum is recorded below 70%.

3.2.9 REASONS FOR NO ANC

The study also has captured the data on reasons for no ANC (Table 3.2.7). It is seen that of the 208 mothers who had not gone for ANC, the highest numbers of mothers (56 Nos.) reported that they do not feel the necessary of ANC, followed by lack of knowledge about the services (42 Nos.), facility is far (39 Nos.), financial problem (34 Nos.), around 20 Nos. reported that they did not go for ANC due to family tradition and no one to accompany for ANC.

3.2.10 ROLE OF ASHA DURING ANC

One of the main role of ASHA is to provide awareness to the mothers on ANC, which is found to be quiet satisfactory as has already been detailed out at table 3.2.3 .

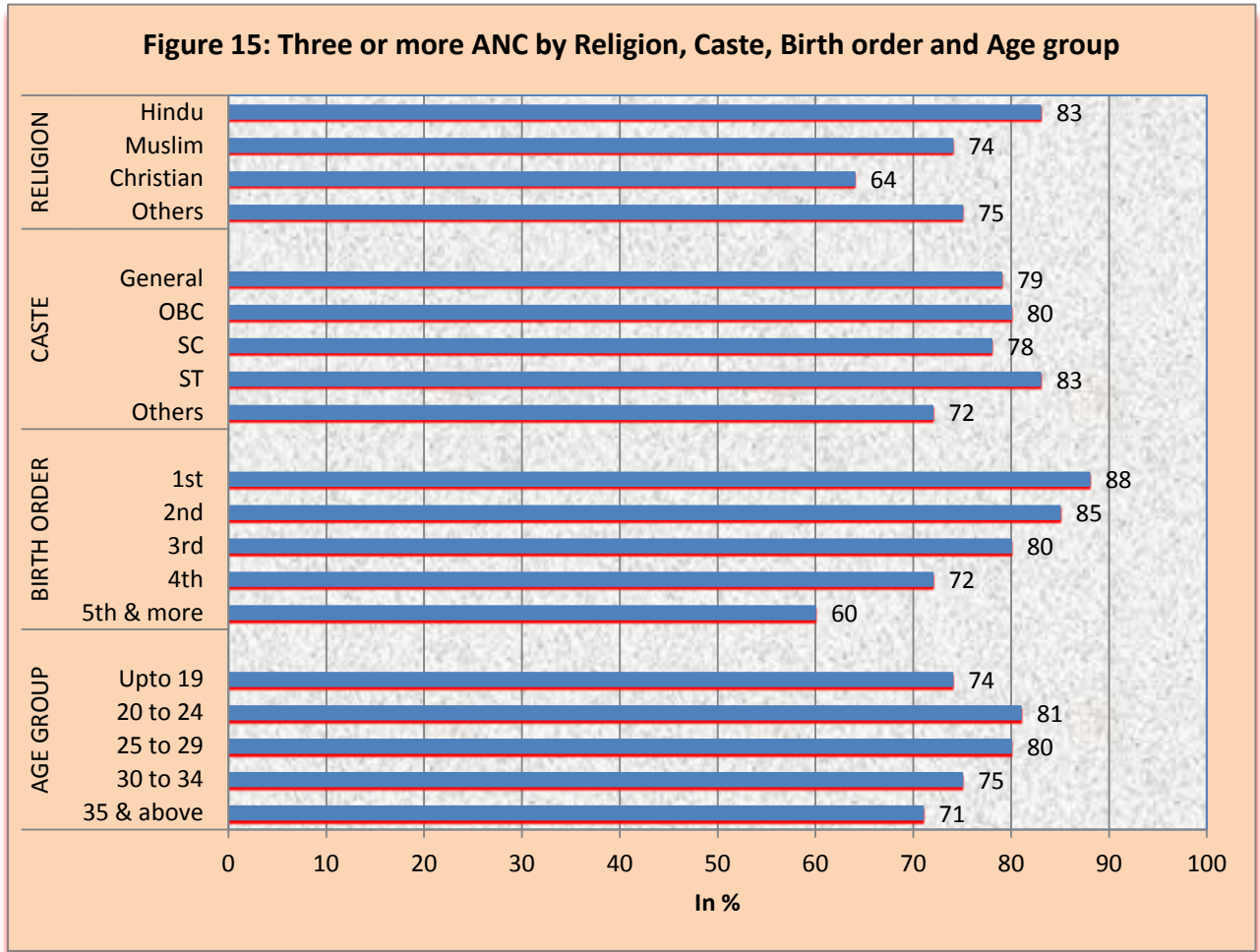
Further, the study also indicates that ASHAs have taken a leading role in accompanying the mothers to the health facilities for ANC. Table 3.2.11 shows that overall 81.1% of the mothers were accompanied by ASHAs for ANC. In Tinsukia, Barpeta, Dhemaji, Lakhimpur, more than 90% of the mothers reported that they were accompanied by ASHAs. The lowest performance of ASHA on accompanying pregnant mothers was reported in Kamrup Metro, only 20.5%. It is due to the fact that only two blocks of Kamrup Metro has got ASHA, others being urban areas.

3.2.11 NUMBERS OF ANC BY RELIGION, CASTE, BIRTH ORDER AND AGE

Generally it is seen that religion, caste, birth order and age group have some influence on the number of ANC received by the mothers. Therefore, the study has tried to analyze it. Table 3.2.1(C) shows distribution of mother by religion, caste, birth order, age group and number of ANC received. A lot of variations were found out in case of birth order and ANC received. However, there is no significant variation among caste regarding number of ANC received.

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It reveals that 83% Hindu mothers and 74% Muslim mothers received at least three ante natal checkups, during their last pregnancy. The table further shows that 64% Christian mothers received 3 or more ANC. From the figure, it is clear that as the birth order increases the numbers of ANC received decreases. But, it is important fact that as birth order increases the complication related to pregnancy also increases.

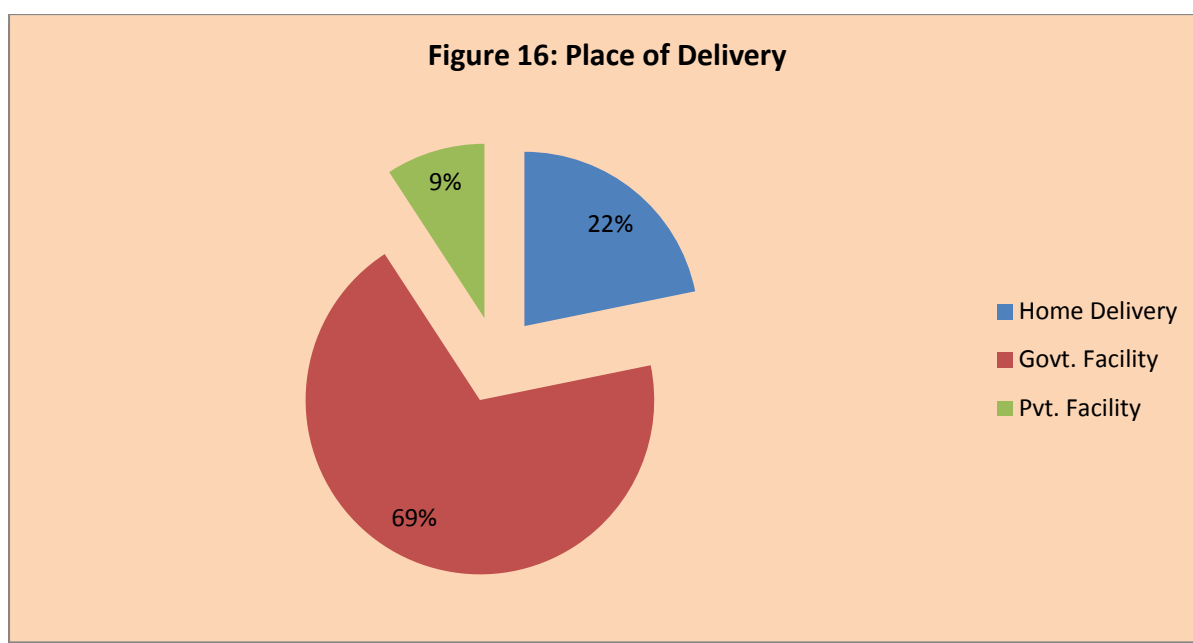


INTRA AND POSTNATAL CARE:

An important thrust of the NRHM programme is to promote institutional deliveries or to conduct home deliveries under hygienic conditions and under the supervision of skilled health personnel. Women, who delivered during 12 months preceding the survey, were asked about the place of delivery, the person who assisted the delivery, and the nature of the delivery.

3.3.1 PLACE OF DELIVERY

Table 3.3.1 (A) shows the distribution of mothers by place of delivery. 78.2% of the mothers have reported that they have delivered at the health facility.

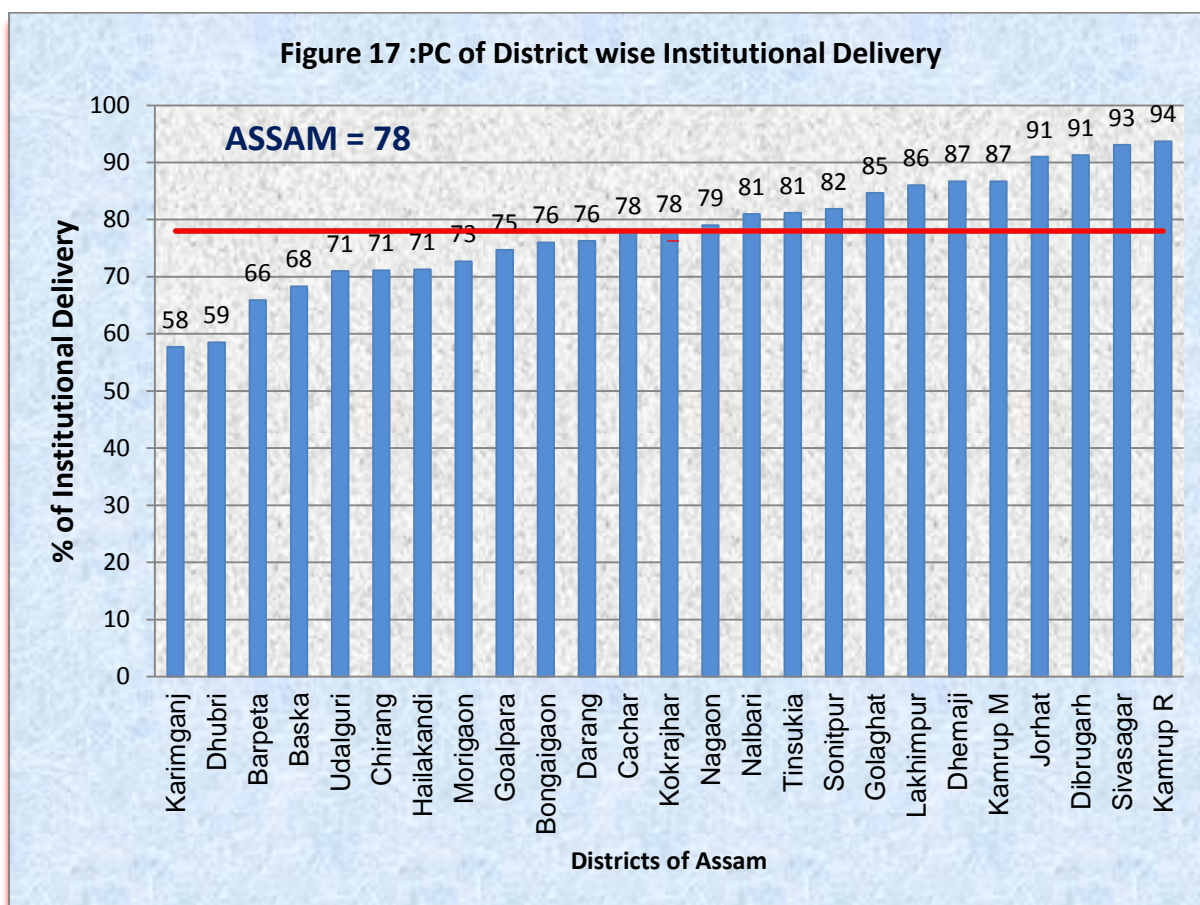


It is heartening to note that more than 90% of the mothers have reported institutional delivery in Kamrup Rural, Sivasagar, Dibrugarh and Jorhat districts. 80-90% of the mothers reported having institutional delivery in Dhemaji, Kamrup Metro, Lakhimpur, Golaghat, Tinsukia and Nalbari whereas in Nagaon, Kokrajhar, Cachar, Darrang, Bongaigaon, Goalpara, Morigaon, Hailakandi, Chirang and Udalguri it was reported by 70-80% of the mothers. In the remaining four districts it was less than 60% institutional delivery, lowest being in Karimganj, only 57.7%.

It needs to be mentioned that under NRHM continuous support is being provided by GoI to the state in terms of strengthening the Govt. Health facilities so as to ensure delivery

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services at the health facilities including the SCs. Therefore, the study has further analyzed the place of institutional delivery so as to find out the utilization of these health facilities for delivery services.



Again it needs to be mentioned that the place of delivery like SC, SD, SHC, MPHC, PHC and CHC could not be properly differentiated by the mothers. However, the mothers can identify District Hospital, Medical College Hospital and Private Hospital, which is quite different from other facilities.

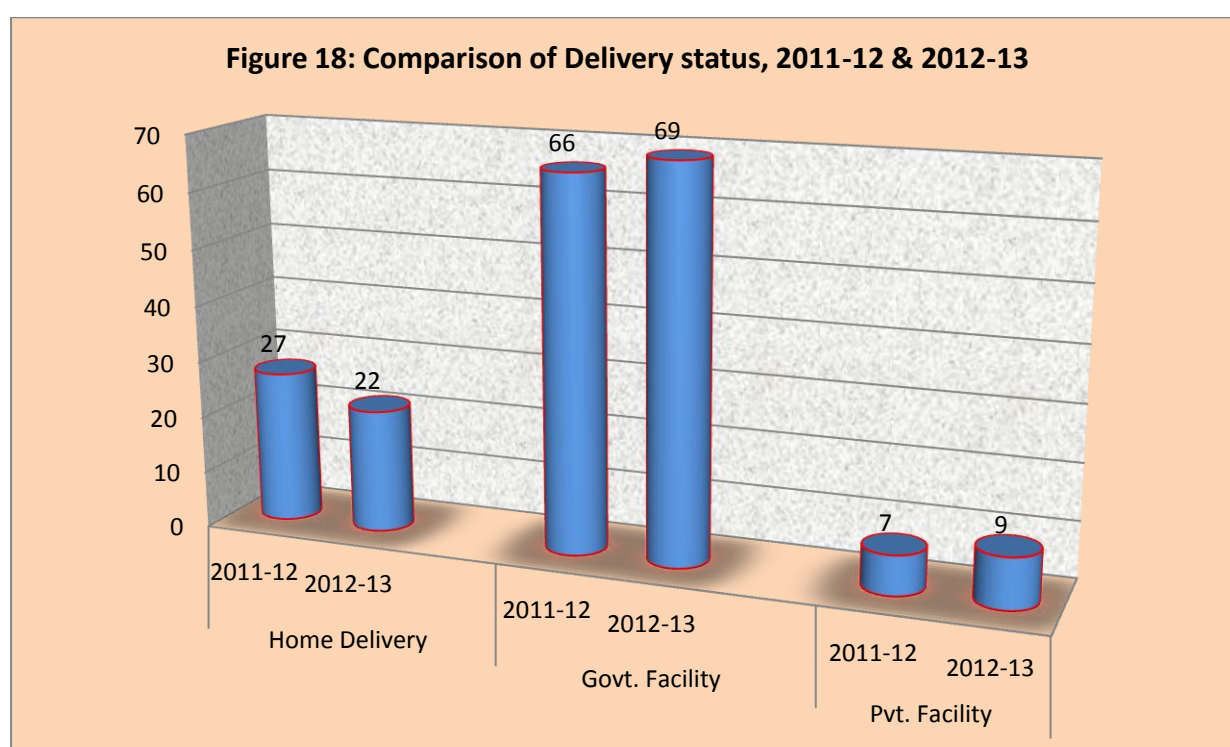
Table 3.3.1(B) shows that 37.3% of mothers have reported to have delivered at CHC/SDH/ DH, making it the most preferred choice. Deliveries at other places like SD/MPHC/SHC, Medical College Hospital and Pvt. Hospitals is reported to be in the range of 10-20%, except for PHCs (24.1%) and SCs where it was reported only 3.1%. Further district-wise analysis shows that there are lots of differences amongst the districts. 5-10 % of mothers have reported to deliver at the SC in only eight numbers of districts

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(Chirang, Bongaigaon, Cachar, Dhubri, Tinsukia, Kokrajhar, Darrang and Barpeta), highest being in Bongaigaon, which recorded 9.6%. On the other hand districts like Golaghat, Kamrup Metro, Nalbari, Sivasagar and Sonitpur have no deliveries conducted at SCs. More than 50% of the mothers reported to have delivered at the CHC/ SDH / DH at Dhemaji (59.2%), Nagaon (54.4%), Morigaon (54.1%), Baksa (54.1%) and Udalguri (51.2%). In case of delivery at the PHC, Chirang district was highest with 37.9% mothers reported to have conducted delivery at the PHC whereas Karimganj district is lowest with only 11%. Delivery at SD/MPHC/SHC was reported highest in Nalbari district (24.3%).

3.3.2 PLACE OF DELIVERY IN 2011-12 & 2012-13

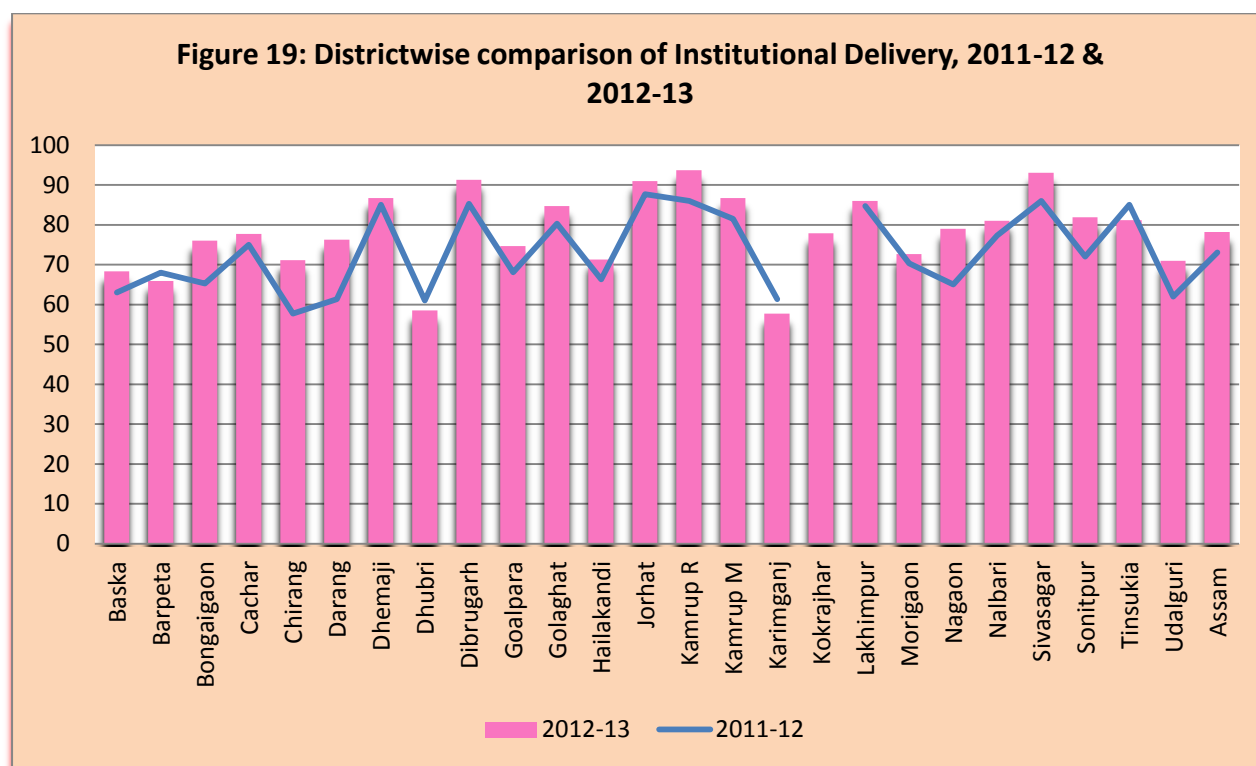
The study also attempted to compare institutional delivery during 2011-12 and 2012-13. It is seen from table 3.3.1 (c) that overall there is 5.1% increase of institutional delivery during 2012-13 from 2011-12.



District wise analysis shows that there are 10% to 15 % increases in institutional delivery in four districts, Darrang, Nagaon, Chirang and Bongaigaon. On other hand

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there was slight decrease in institutional delivery of four districts namely; Barpeta (2.1%), Dhubri (2.5%), Karimganj (3.6%) and Tinsukia (3.8%).



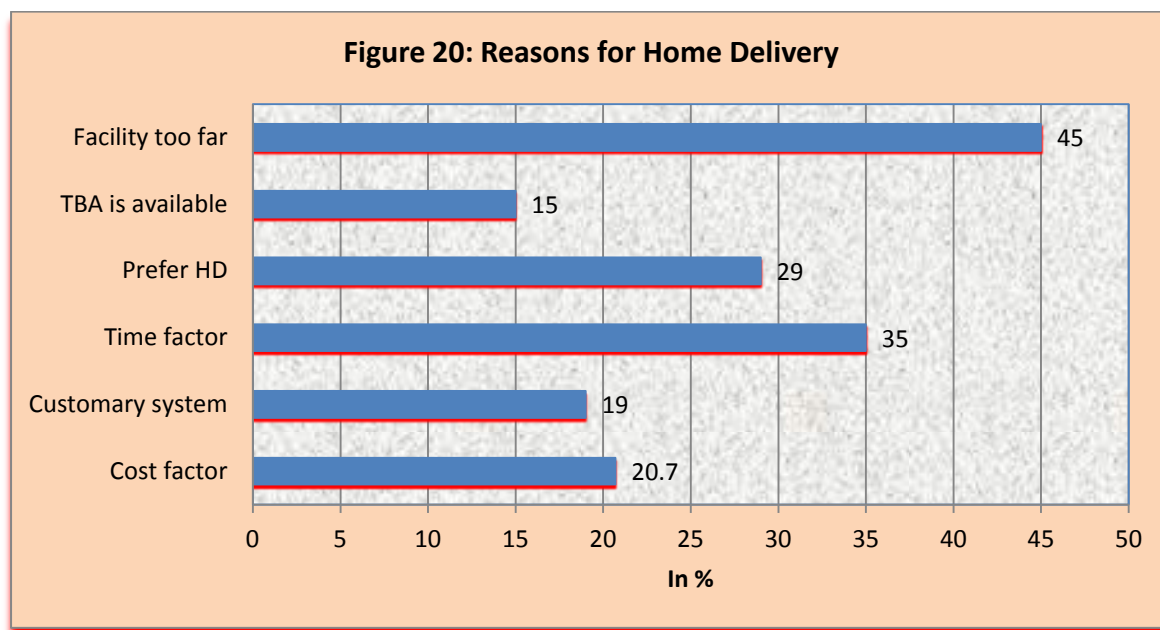
3.3.3 PERSONS CONDUCTING HOME DELIVERY

Although there was an increase in institutional delivery in the state during 2012-13, but still 21.8% deliveries are conducted at home. However, evidences indicate that reduction of maternal and infant mortality and morbidity can be accelerated if women are provided skilled care during pregnancy and child birth. Therefore, it becomes imperative to gather information on who conducts the delivery. Table 3.3.2 gives the details on persons conducting delivery at home. It is reported that only a minimal proportion of mothers (2.1%) who delivered at home are attended either by MO or by an ANM, who are considered to be skilled manpower, posing a threat/risk to the lives of remaining more than 90% of the mothers delivering at home.

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3.3.4 REASONS FOR HOME DELIVERY

The major reason for home delivery as depicted in table 3.3.3 is due to facility being too far (44.9%), followed by time constraint (35%), home delivery preference 28.8%, cost factor (20.7%) and TBA is available (15.5%)



3.3.5 TYPE OF DELIVERIES AT THE FACILITY

Further table 3.3.4 shows that out of the total institutional delivery overall 13.8% of the mothers reported to have undergone C-Section. From the district wise analysis, it is seen that the lowest proportions of mothers reported to have undergone C-Section in Goalpara district with 3.7% and the highest is recorded in Dibrugarh district with 29.3%.

3.3.6 MOTHERS STAYING AT THE FACILITY AFTER DELIVERY

Most obstetric complications and maternal deaths occur during delivery and in the first 48 hours after childbirth. Therefore, it becomes imperative for the mothers to stay at the facility for a minimum of 48 hours. The forty-eight hours stay at the health facility should be promoted for the well-being and survival of the mother and the newborn. As per the table 3.3.5, it can be inferred that mothers staying for 48 hours and above is only

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44.4%. Necessary counselling should be given to the mothers so that they stay till 48hrs and beyond. Districtwise analysis also shows that mothers from only 10 districts have reported staying at health facility for more than 48 Hours (Hailakandi - 68.7%, Karimganj - 63.6%, Jorhat - 58.2%, Golaghat - 57.5%, Kamrup Metro & Rural- 56.2% each, Dibrugarh - 55.8%, Cachar - 53.4%, Sivasagar - 52.1% and Sonitpur - 50.6%). Some of the districts like Dhubri and Goalpara were as low as 15.3% and 13.4% respectively.

3.3.7 ROLE OF ASHA IN DELIVERY

ASHAs in the state of Assam are very vibrant. It can be seen from table 3.6 that 81.5% of mothers have reported of being accompanied by ASHA during delivery to the health facility. It is heartening to note that from some of the districts like Udalguri, Kokrajhar, Dhemaji, Golaghat and Dhubri reported more than 90%.

3.3.8: JSY BENEFITS

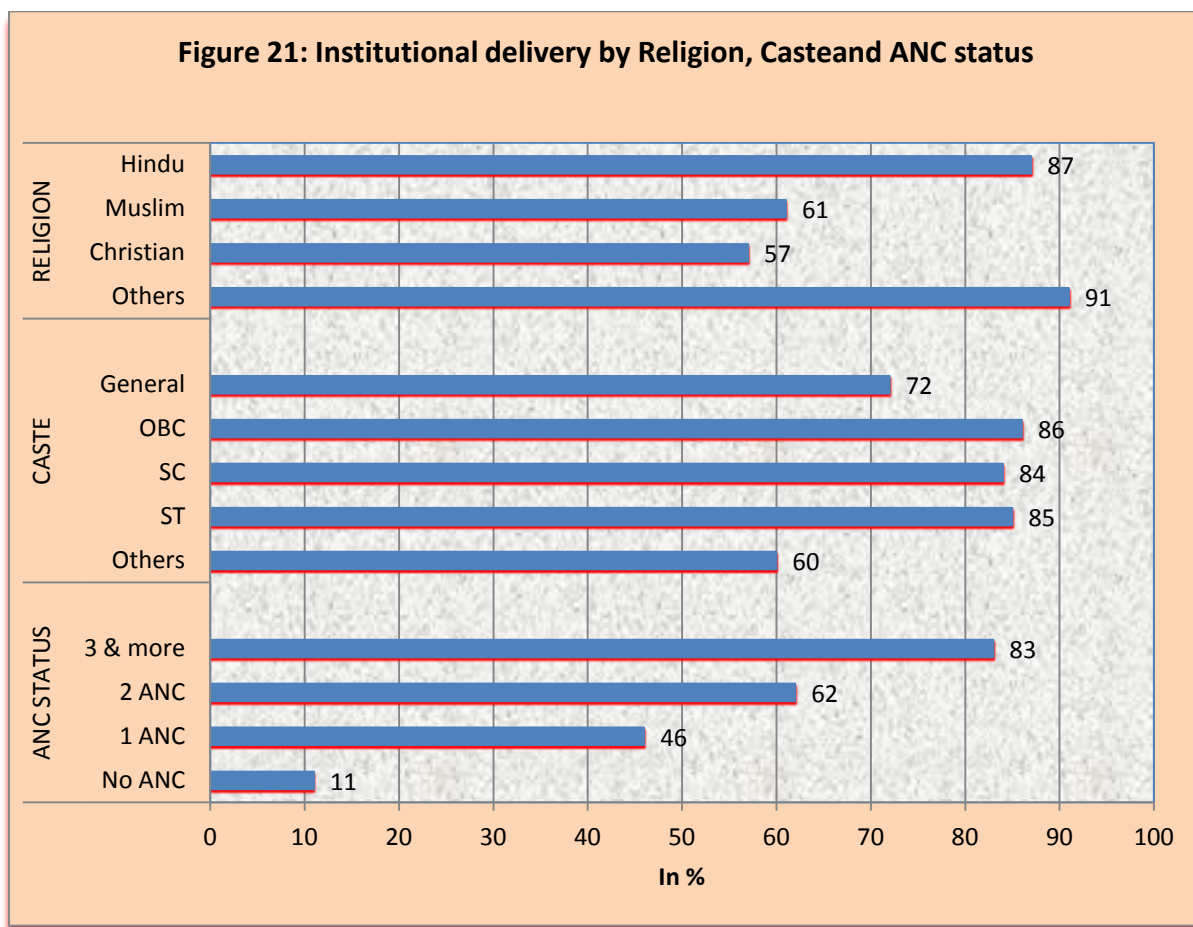
In order to motivate women to deliver at health facilities, Janani Suraksha Yojana (JSY) was launched as a scheme with the provision of conditional cash transfer to a pregnant woman for institutional care during delivery and the immediate postpartum period. Table 3.3.10 shows that, JSY financial assistance was provided to 83.2% of the mothers. It is seen that in Kamrup Metro the mothers reported to have received financial assistance is less, only 46%. This may be due to the eligibility criteria.

3.3.9: INSTITUTIONAL DELIVERY BY RELIGION, CASTE AND NUMBER OF ANC RECEIVED

The figure 21 depicts the distribution of mothers by place of institutional delivery to religion, caste and number of ANC received. It is tabulated in table no 3.3.1 (D). The table shows that percentage of institutional delivery in case of Hindu mothers was 87%, in case of Muslim mothers it was 61% and it was 57% in case of Christian mothers. Similarly for general caste institutional delivery was 72 %, for OBC, SC and ST mother it

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was 86%, 54%, and 85% respectively. Therefore, it can be concluded that there is no significant difference observed for place of delivery by religion and caste.



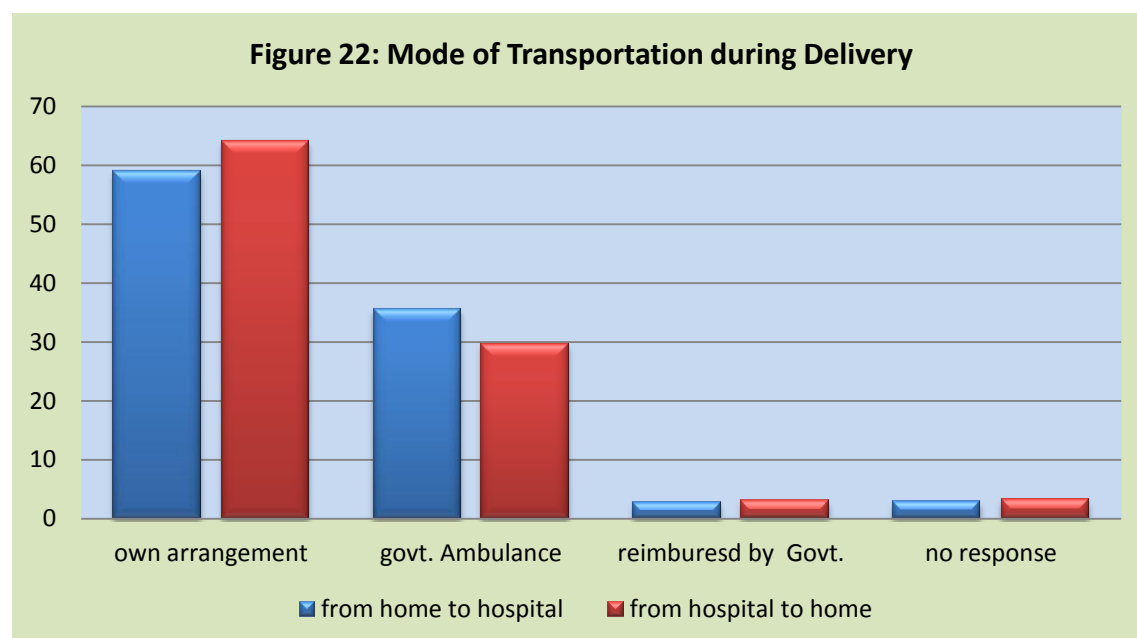
Further, generally it is found that a correlation exists between numbers of ANC received and the place of delivery. As numbers of ANC received increases, the number of institutional delivery also increases. The same positive correlation is also been observed in the study. The figure reflects that 83% of the mothers who conducted delivery at facility were those who had received 3 or more numbers of ANC. On the other hand, out of 208 mothers who did not avail any ANC services, only one mother delivered at facility.

JSSK BENEFITS:

Free assured transport (ambulance service) from home to health facility, inter-facility transfer in case of referral and drop back is an entitlement under JSSK to the pregnant mothers. Therefore, the study also took the details from the respondents regarding the mode of transportation during the delivery.

3.4.1 REFFERAL TRANSPORT FACILITY

Although the JSSK scheme is being implemented in the state but the data extracted from the study reveals that it is yet to gain its momentum. It is seen that more than 58.9% of the mothers came to the hospital by their own arrangement. Ambulance/ 108/ Free Govt. Vehicle were used by only 35.5% of the mothers and only 2.7 got their money reimbursed from the government.



Districtwise analysis shows that the more than 50 % of the mothers from districts like Dhubri, Goalpara, Golaghat and Jorhat only reported to have utilized the Govt.

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Ambulance/108 services for reaching the hospitals. From the remaining 22 districts more than 50% of the mothers reported that they made their own arrangement for going to the hospital.

The picture seems much glisten in utilization of drop back facility by the mothers as 64.1% of the mothers have reported that they made their own arrangement for drop back. Districtwise analysis also shows that in all the districts it was reported to be more than 50%

3.4.2 AWARENESS ON JSSK

The study also captured the data on awareness about JSSK. Table 3.3.11 shows that the information on JSSK needs to be penetrated further to the beneficiaries as only 43.8% of mothers reported that they were aware about the JSSK scheme. Amongst the district it was reported highest in Kamrup Metro (71.7%) and lowest in Kokrajhar (26%).

The messages on JSSK were percolated to the beneficiaries mostly through the ASHAs as can be seen from table 3.3.12. Signboard at the hospitals was reported by only 4.7% of the mothers.

Further, when the mothers were asked about the various benefits under JSSK, it was seen that 73.7% of them knew about the provision of free medicine, and 34% of them knew about the free diet facility. The pick and drop back facility was known only to 29.8% and 25.3% respectively.

Taking these study figures into account, the state should plan for vigorous IEC/BCC activities so as to make the mothers aware about the various entitlements under JSSK.

Table 3.1.1: District wise distribution of mothers according to religion

District :	Religion								Total Mothers surveyed
	Hindu		Muslim		Christian		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	256	85.3	37	12.3	6	2.0	1	0.3	300
BARPETA	91	30.4	207	69.2		0.0	1	0.3	299
BONGAIGAON	156	52.0	143	47.7	1	0.3	0	0.0	300
CACHAR	161	53.5	137	45.5		0.0	3	1.0	301
CHIRANG	160	53.2	94	31.2	46	15.3	1	0.3	301
DARRANG	97	32.3	203	67.7		0.0	0	0.0	300
DHEMAJI	291	97.0	2	0.7	1	0.3	6	2.0	300
DHUBRI	89	29.6	211	70.1		0.0	1	0.3	301
DIBRUGARH	271	90.3	23	7.7	1	0.3	5	1.7	300
GOALPARA	140	46.7	157	52.3	3	1.0	0	0.0	300
GOLAGHAT	277	92.3	21	7.0	1	0.3	1	0.3	300
HAILAKANDI	120	40.0	180	60.0		0.0	0	0.0	300
JORHAT	277	92.3	23	7.7		0.0	0	0.0	300
KAMRUP R	202	67.3	96	32.0	1	0.3	1	0.3	300
KAMRUP M	219	73.0	80	26.7		0.0	1	0.3	300
KARIMGANJ	122	40.7	166	55.3	10	3.3	2	0.7	300
KOKRAJHAR	169	60.1	88	31.3	24	8.5	0	0.0	281
LAKHIMPUR	257	85.7	35	11.7	8	2.7	0	0.0	300
MORIGAON	114	38.0	182	60.7	2	0.7	2	0.7	300
NAGAON	167	55.7	131	43.7	1	0.3	1	0.3	300
NALBARI	199	66.3	96	32.0		0.0	5	1.7	300
SIVSAGAR	270	89.1	19	6.3	3	1.0	11	3.6	303
SONITPUR	259	86.6	25	8.4	14	4.7	1	0.3	299
TINSUKIA	260	87.2	26	8.7	10	3.4	2	0.7	298
UDALGURI	176	58.7	30	10.0	92	30.7	2	0.7	300
Assam	4800	64.1	2412	32.2	224	3.0	47	0.6	7483

Table 3.1.2: District wise distribution of mothers by caste

District :	Caste										Total Mothers surveyed
	General		OBC		SC		ST		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	72	24.0	31	10.3	65	21.7	121	40.3	11	3.7	300
BARPETA	268	89.6	15	5.0	4	1.3	11	3.7	1	0.3	299
BONGAIGAON	159	53.0	109	36.3	31	10.3	1	0.3	0	0.0	300
CACHAR	190	63.1	55	18.3	49	16.3	6	2.0	1	0.3	301
CHIRANG	96	31.9	21	7.0	48	15.9	134	44.5	2	0.7	301
DARRANG	261	87.0	22	7.3	15	5.0	1	0.3	1	0.3	300
DHEMAJI	14	4.7	55	18.3	39	13.0	165	55.0	27	9.0	300
DHUBRI	210	69.8	72	23.9	18	6.0		0.0	1	0.3	301
DIBRUGARH	43	14.3	89	29.7	76	25.3	41	13.7	51	17.0	300
GOALPARA	162	54.0	22	7.3	23	7.7	93	31.0	0	0.0	300
GOLAGHAT	54	18.0	199	66.3	19	6.3	26	8.7	2	0.7	300
HAILAKANDI	151	50.3	31	10.3	18	6.0	4	1.3	96	32.0	300
JORHAT	105	35.0	148	49.3	10	3.3	32	10.7	5	1.7	300
KAMRUP R	195	65.0	30	10.0	39	13.0	35	11.7	1	0.3	300
KAMRUP M	217	72.3	32	10.7	28	9.3	23	7.7	0	0.0	300
KARIMGANJ	226	75.3	11	3.7	44	14.7	11	3.7	8	2.7	300
KOKRAJHAR	94	33.5	67	23.8	12	4.3	88	31.3	20	7.1	281
LAKHIMPUR	29	9.7	87	29.0	17	5.7	85	28.3	82	27.3	300
MORIGAON	211	70.3	10	3.3	37	12.3	42	14.0	0	0.0	300
NAGAON	156	52.0	28	9.3	71	23.7	42	14.0	3	1.0	300
NALBARI	146	48.7	1	0.3	36	12.0	26	8.7	91	30.3	300
SIVSAGAR	18	5.9	90	29.7	58	19.1	65	21.5	72	23.8	303
SONITPUR	90	30.1	56	18.7	99	33.1	53	17.7	1	0.3	299
TINSUKIA	45	15.1	100	33.6	116	38.9	29	9.7	8	2.7	298
UDALGURI	46	15.3	117	39.0	36	12.0	99	33.0	2	0.7	300
Assam	3258	43.5	1498	20.0	1008	13.5	1233	16.5	486	6.5	7483

Table 3.1.3: District wise distribution of husband's by educational level

District :	Educational Level of the Husband																Total Numbers
	Illiterate		Below primary		Below 10th standards		Below 12th standards		Below Graduate		Graduate & above		Others		If not alive		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	46	15.3	68	22.7	109	36.3	37	12.3	18	6.0	22	7.3	0	0.0		0.0	300
BARPETA	22	7.4	73	24.4	83	27.8	79	26.4	22	7.4	19	6.4	0	0.0	1	0.3	299
BONGAIGAON	72	24.0	27	9.0	111	37.0	51	17.0	15	5.0	22	7.3	2	0.7		0.0	300
CACHAR	49	16.3	82	27.2	93	30.9	33	11.0	19	6.3	25	8.3	0	0.0		0.0	301
CHIRANG	101	33.6	36	12.0	104	34.6	30	10.0	11	3.7	19	6.3	0	0.0		0.0	301
DARRANG	81	27.0	63	21.0	85	28.3	24	8.0	23	7.7	23	7.7	1	0.3		0.0	300
DHEMAJI	67	22.3	46	15.3	78	26.0	45	15.0	32	10.7	32	10.7	0	0.0		0.0	300
DHUBRI	95	31.6	36	12.0	88	29.2	61	20.3	7	2.3	13	4.3	1	0.3		0.0	301
DIBRUGARH	15	5.0	80	26.7	85	28.3	51	17.0	30	10.0	38	12.7	0	0.0	1	0.3	300
GOALPARA	74	24.7	22	7.3	101	33.7	75	25.0	6	2.0	22	7.3	0	0.0		0.0	300
GOLAGHAT	8	2.7	73	24.3	75	25.0	62	20.7	49	16.3	33	11.0	0	0.0		0.0	300
HAILAKANDI	68	22.7	84	28.0	70	23.3	30	10.0	28	9.3	17	5.7	3	1.0		0.0	300
JORHAT	9	3.0	58	19.3	46	15.3	65	21.7	90	30.0	32	10.7	0	0.0		0.0	300
KAMRUP R	30	10.0	73	24.3	70	23.3	46	15.3	39	13.0	39	13.0	3	1.0		0.0	300
KAMRUP M	9	3.0	97	32.3	85	28.3	31	10.3	30	10.0	46	15.3	1	0.3	1	0.3	300
KARIMGANJ	29	9.7	126	42.0	86	28.7	38	12.7	9	3.0	12	4.0	0	0.0		0.0	300
KOKRAJHAR	59	21.0	66	23.5	89	31.7	41	14.6	12	4.3	10	3.6	4	1.4		0.0	281
LAKHIMPUR	51	17.0	67	22.3	83	27.7	48	16.0	28	9.3	23	7.7	0	0.0		0.0	300
MORIGAON	96	32.0	55	18.3	96	32.0	16	5.3	17	5.7	19	6.3	0	0.0	1	0.3	300
NAGAON	50	16.7	64	21.3	118	39.3	23	7.7	21	7.0	24	8.0	0	0.0		0.0	300
NALBARI	46	15.3	40	13.3	46	15.3	70	23.3	40	13.3	44	14.7	14	4.7		0.0	300
SIVSAGAR	20	6.6	26	8.6	84	27.7	100	33.0	40	13.2	32	10.6	1	0.3		0.0	303
SONITPUR	79	26.4	40	13.4	117	39.1	17	5.7	20	6.7	25	8.4	1	0.3		0.0	299
TINSUKIA	63	21.1	59	19.8	109	36.6	24	8.1	10	3.4	27	9.1	4	1.3	2	0.7	298
UDALGURI	77	25.7	44	14.7	137	45.7	16	5.3	10	3.3	14	4.7	0	0.0	2	0.7	300
Assam	1316	17.6	1505	20.1	2248	30.0	1113	14.9	626	8.4	632	8.4	35	0.5	8	0.1	7483

Table 3.1.4: District wise distribution of mother's by educational level

District :	Educational Level of the Mother																Total Numbers
	Illiterate		Below primary		Below 10th standards		Below 12th standards		Below Graduate		Graduate & above		Others		If not alive		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	68	22.7	62	20.7	117	39.0	25	8.3	15	5.0	13	4.3	0	0.0		0.0	300
BARPETA	23	7.7	117	39.1	69	23.1	50	16.7	24	8.0	15	5.0	1	0.3		0.0	299
BONGAIGAON	76	25.3	32	10.7	118	39.3	43	14.3	13	4.3	16	5.3	2	0.7		0.0	300
CACHAR	58	19.3	73	24.3	101	33.6	29	9.6	12	4.0	26	8.6	1	0.3	1	0.3	301
CHIRANG	90	29.9	67	22.3	98	32.6	19	6.3	13	4.3	13	4.3	0	0.0	1	0.3	301
DARRANG	85	28.3	54	18.0	86	28.7	39	13.0	14	4.7	21	7.0	1	0.3		0.0	300
DHEMAJI	89	29.7	42	14.0	68	22.7	43	14.3	26	8.7	32	10.7	0	0.0		0.0	300
DHUBRI	103	34.2	77	25.6	85	28.2	21	7.0	3	1.0	11	3.7	1	0.3		0.0	301
DIBRUGARH	69	23.0	56	18.7	76	25.3	37	12.3	26	8.7	36	12.0	0	0.0		0.0	300
GOALPARA	85	28.3	103	34.3	86	28.7	12	4.0	2	0.7	12	4.0	0	0.0		0.0	300
GOLAGHAT	22	7.3	91	30.3	63	21.0	66	22.0	33	11.0	25	8.3	0	0.0		0.0	300
HAILAKANDI	41	13.7	86	28.7	89	29.7	42	14.0	25	8.3	16	5.3	1	0.3		0.0	300
JORHAT	18	6.0	62	20.7	67	22.3	79	26.3	37	12.3	36	12.0	0	0.0	1	0.3	300
KAMRUP R	49	16.3	82	27.3	72	24.0	38	12.7	26	8.7	31	10.3	1	0.3	1	0.3	300
KAMRUP M	37	12.3	78	26.0	104	34.7	26	8.7	17	5.7	38	12.7	0	0.0		0.0	300
KARIMGANJ	68	22.7	100	33.3	86	28.7	26	8.7	6	2.0	13	4.3	0	0.0	1	0.3	300
KOKRAJHAR	74	26.3	61	21.7	88	31.3	22	7.8	9	3.2	22	7.8	5	1.8		0.0	281
LAKHIMPUR	82	27.3	47	15.7	87	29.0	35	11.7	26	8.7	23	7.7	0	0.0		0.0	300
MORIGAON	58	19.3	61	20.3	135	45.0	10	3.3	21	7.0	15	5.0	0	0.0		0.0	300
NAGAON	52	17.3	50	16.7	140	46.7	22	7.3	15	5.0	20	6.7	0	0.0	1	0.3	300
NALBARI	51	17.0	80	26.7	68	22.7	39	13.0	19	6.3	27	9.0	16	5.3		0.0	300
SIVSAGAR	32	10.6	53	17.5	94	31.0	59	19.5	29	9.6	34	11.2	2	0.7		0.0	303
SONITPUR	94	31.4	30	10.0	124	41.5	19	6.4	26	8.7	5	1.7	1	0.3		0.0	299
TINSUKIA	100	33.6	46	15.4	93	31.2	24	8.1	8	2.7	23	7.7	3	1.0	1	0.3	298
UDALGURI	88	29.3	33	11.0	123	41.0	23	7.7	7	2.3	26	8.7	0	0.0		0.0	300
Assam	1612	21.5	1643	22.0	2337	31.2	848	11.3	452	6.0	549	7.3	35	0.5	7	0.1	7483

Table 3.1.5: District wise distribution of mothers by occupation of the husband

District :	Occupation of the Husband																Total Numbers
	Govt. Service		Pvt. Service		Business		Cultivation		Agricultural Worker		Industrial Worker		Daily Wage Labour		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	14	4.7	17	5.7	40	13.3	46	15.3	77	25.7	11	3.7	91	30.3	4	1.3	300
BARPETA	13	4.4	25	8.4	78	26.2	70	23.5	58	19.5	6	2.0	48	16.1	0	0.0	298
BONGAIGAON	35	11.7	31	10.3	60	20.0	40	13.3	45	15.0	14	4.7	68	22.7	7	2.3	300
CACHAR	20	6.6	26	8.6	92	30.6	29	9.6	14	4.7	25	8.3	82	27.2	13	4.3	301
CHIRANG	20	6.6	10	3.3	70	23.3	89	29.6	28	9.3	10	3.3	71	23.6	3	1.0	301
DARRANG	10	3.3	12	4.0	48	16.0	67	22.3	76	25.3	2	0.7	81	27.0	4	1.3	300
DHEMAJI	12	4.0	9	3.0	48	16.0	144	48.0	31	10.3	13	4.3	40	13.3	3	1.0	300
DHUBRI	15	5.0	3	1.0	73	24.3	100	33.2	66	21.9	14	4.7	22	7.3	8	2.7	301
DIBRUGARH	13	4.3	19	6.4	38	12.7	87	29.1	26	8.7	49	16.4	59	19.7	8	2.7	299
GOALPARA	13	4.3	5	1.7	52	17.3	76	25.3	68	22.7	21	7.0	53	17.7	12	4.0	300
GOLAGHAT	13	4.3	14	4.7	61	20.3	76	25.3	46	15.3	40	13.3	49	16.3	1	0.3	300
HAILAKANDI	26	8.7	47	15.7	35	11.7	42	14.0	35	11.7	20	6.7	78	26.0	17	5.7	300
JORHAT	26	8.7	32	10.7	66	22.0	33	11.0	49	16.3	16	5.3	78	26.0	0	0.0	300
KAMRUP R	14	4.7	34	11.3	83	27.7	64	21.3	42	14.0	3	1.0	52	17.3	8	2.7	300
KAMRUP M	21	7.0	36	12.0	95	31.8	17	5.7	13	4.3	44	14.7	69	23.1	4	1.3	299
KARIMGANJ	16	5.3	20	6.7	36	12.0	63	21.0	27	9.0	25	8.3	106	35.3	7	2.3	300
KOKRAJHAR	23	8.2	8	2.8	45	16.0	81	28.8	23	8.2	11	3.9	85	30.2	5	1.8	281
LAKHIMPUR	18	6.0	20	6.7	41	13.7	80	26.7	40	13.3	7	2.3	93	31.0	1	0.3	300
MORIGAON	19	6.4	22	7.4	38	12.7	47	15.7	55	18.4		0.0	114	38.1	4	1.3	299
NAGAON	26	8.7	33	11.0	57	19.0	67	22.3	34	11.3	1	0.3	82	27.3	0	0.0	300
NALBARI	30	10.0	30	10.0	60	20.0	69	23.0	12	4.0	10	3.3	74	24.7	15	5.0	300
SIVSAGAR	18	5.9	12	4.0	38	12.5	98	32.3	26	8.6	80	26.4	22	7.3	9	3.0	303
SONITPUR	14	4.7	29	9.7	76	25.4	62	20.7	3	1.0	3	1.0	110	36.8	2	0.7	299
TINSUKIA	18	6.1	25	8.4	40	13.5	20	6.8	48	16.2	57	19.3	76	25.7	12	4.1	296
UDALGURI	15	5.0	11	3.7	41	13.8	103	34.6	6	2.0	2	0.7	118	39.6	2	0.7	298
Assam	462	6.2	530	7.1	1411	18.9	1670	22.3	948	12.7	484	6.5	1821	24.4	149	2.0	7475

Table 3.1.6: District wise distribution of mothers by occupation

District :	Occupation of the Mother														Total Mothers surveyed
	House wife		Govt. Service		Pvt. Service		Business		Cultivation		Daily Labour		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	273	91.0	3	1.0				0.0			2	0.7	22	7.3	300
BARPETA	234	78.3	5	1.7	3	1.0	2	0.7	22	7.4	20	6.7	13	4.3	299
BONGAIGAON	283	94.3	4	1.3	4	1.3		0.0	5	1.7	0	0.0	4	1.3	300
CACHAR	267	89.0	5	1.7	3	1.0	1	0.3			20	6.7	4	1.3	300
CHIRANG	274	91.3	2	0.7					22	7.3	2	0.7	0	0.0	300
DARRANG	279	93.0	3	1.0	1	0.3					3	1.0	14	4.7	300
DHEMAJI	268	89.3	6	2.0	2	0.7	2	0.7	7	2.3	10	3.3	5	1.7	300
DHUBRI	288	95.7					2	0.7	1	0.3	4	1.3	6	2.0	301
DIBRUGARH	218	72.7	2	0.7	1	0.3	4	1.3	43	14.3	31	10.3	1	0.3	300
GOALPARA	294	98.0			1	0.3		0.0	2	0.7	3	1.0	0	0.0	300
GOLAGHAT	197	65.7	1	0.3					15	5.0	78	26.0	9	3.0	300
HAILAKANDI	279	93.0	4	1.3	1	0.3		0.0			9	3.0	7	2.3	300
JORHAT	227	75.9			2	0.7	1	0.3	15	5.0	44	14.7	10	3.3	299
KAMRUP R	284	95.0	5	1.7	1	0.3	2	0.7			2	0.7	5	1.7	299
KAMRUP M	269	89.7	3	1.0	5	1.7	4	1.3			5	1.7	14	4.7	300
KARIMGANJ	287	96.0	3	1.0	1	0.3	1	0.3			4	1.3	3	1.0	299
KOKRAJHAR	268	95.4	4	1.4					1	0.4	3	1.1	5	1.8	281
LAKHIMPUR	273	91.0	8	2.7	5	1.7	1	0.3	1	0.3	6	2.0	6	2.0	300
MORIGAON	286	95.3	1	0.3	2	0.7	2	0.7	3	1.0	4	1.3	2	0.7	300
NAGAON	270	90.3	7	2.3	5	1.7	1	0.3	3	1.0	9	3.0	4	1.3	299
NALBARI	233	77.7						0.0	31	10.3	14	4.7	22	7.3	300
SIVSAGAR	188	62.0	2	0.7	4	1.3	4	1.3	40	13.2	57	18.8	8	2.6	303
SONITPUR	253	84.6	4	1.3	2	0.7					35	11.7	5	1.7	299
TINSUKIA	244	82.2	4	1.3	2	0.7			1	0.3	45	15.2	1	0.3	297
UDALGURI	257	85.7	3	1.0					1	0.3	33	11.0	6	2.0	300
Assam	6493	86.9	79	1.1	45	0.6	27	0.4	213	2.8	443	5.9	176	2.4	7476

Table 3.1.7: District wise distribution of mothers by family size

District :	Number of Family Members										Total Numbers
	< 5		< 6		< 8		< 10		10 & above		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	132	44.0	62	20.7	74	24.7	26	8.7	6	2.0	300
BARPETA	142	47.5	60	20.1	65	21.7	15	5.0	17	5.7	299
BONGAIGAON	122	40.7	49	16.3	68	22.7	40	13.3	21	7.0	300
CACHAR	108	35.9	67	22.3	60	19.9	41	13.6	25	8.3	301
CHIRANG	131	43.5	51	16.9	75	24.9	24	8.0	20	6.6	301
DARRANG	145	48.3	59	19.7	49	16.3	22	7.3	25	8.3	300
DHEMAJI	125	41.7	57	19.0	57	19.0	30	10.0	31	10.3	300
DHUBRI	134	44.5	57	18.9	37	12.3	32	10.6	41	13.6	301
DIBRUGARH	105	35.0	52	17.3	89	29.7	33	11.0	21	7.0	300
GOALPARA	139	46.3	43	14.3	44	14.7	32	10.7	42	14.0	300
GOLAGHAT	173	57.7	55	18.3	38	12.7	29	9.7	5	1.7	300
HAILAKANDI	120	40.0	39	13.0	56	18.7	36	12.0	49	16.3	300
JORHAT	182	60.7	54	18.0	45	15.0	17	5.7	2	0.7	300
KAMRUP R	121	40.3	64	21.3	64	21.3	34	11.3	17	5.7	300
KAMRUP M	186	62.0	45	15.0	42	14.0	17	5.7	10	3.3	300
KARIMGANJ	100	33.3	55	18.3	69	23.0	40	13.3	36	12.0	300
KOKRAJHAR	164	58.4	37	13.2	43	15.3	27	9.6	10	3.6	281
LAKHIMPUR	112	37.3	44	14.7	90	30.0	32	10.7	22	7.3	300
MORIGAON	147	49.0	54	18.0	56	18.7	25	8.3	18	6.0	300
NAGAON	160	53.3	40	13.3	64	21.3	15	5.0	21	7.0	300
NALBARI	154	51.3	53	17.7	49	16.3	25	8.3	19	6.3	300
SIVSAGAR	147	48.5	41	13.5	81	26.7	25	8.3	9	3.0	303
SONITPUR	109	36.5	69	23.1	81	27.1	23	7.7	17	5.7	299
TINSUKIA	75	25.2	46	15.4	100	33.6	44	14.8	33	11.1	298
UDALGURI	104	34.7	44	14.7	120	40.0	19	6.3	13	4.3	300
Assam	3337	44.6	1297	17.3	1616	21.6	703	9.4	530	7.1	7483

Table 3.1.8: District wise distribution of mothers by current age

District :	Age Group										Total Mothers surveyed
	15 - 19		20 - 24		25 - 29		30 - 34		35 & above		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	4	1.3	137	45.7	123	41.0	27	9.0	9	3.0	300
BARPETA	24	8.0	120	40.1	121	40.5	23	7.7	11	3.7	299
BONGAIGAON	46	15.3	108	36.0	119	39.7	22	7.3	5	1.7	300
CACHAR	10	3.3	86	28.6	152	50.5	33	11.0	20	6.6	301
CHIRANG	18	6.0	105	34.9	102	33.9	37	12.3	39	13.0	301
DARRANG	23	7.7	141	47.0	110	36.7	22	7.3	4	1.3	300
DHEMAJI	14	4.7	146	48.7	113	37.7	23	7.7	4	1.3	300
DHUBRI	27	9.0	128	42.5	95	31.6	33	11.0	18	6.0	301
DIBRUGARH	33	11.0	104	34.7	134	44.7	21	7.0	8	2.7	300
GOALPARA	12	4.0	125	41.7	105	35.0	25	8.3	33	11.0	300
GOLAGHAT	10	3.3	119	39.7	135	45.0	29	9.7	7	2.3	300
HAILAKANDI	33	11.0	110	36.7	108	36.0	34	11.3	15	5.0	300
JORHAT	15	5.0	140	46.7	126	42.0	17	5.7	2	0.7	300
KAMRUP R	6	2.0	96	32.0	149	49.7	37	12.3	12	4.0	300
KAMRUP M	8	2.7	104	34.7	135	45.0	40	13.3	13	4.3	300
KARIMGANJ	15	5.0	89	29.7	126	42.0	47	15.7	23	7.7	300
KOKRAJHAR	21	7.5	101	35.9	114	40.6	40	14.2	5	1.8	281
LAKHIMPUR	12	4.0	147	49.0	119	39.7	18	6.0	4	1.3	300
MORIGAON	14	4.7	129	43.0	112	37.3	32	10.7	13	4.3	300
NAGAON	16	5.3	123	41.0	123	41.0	28	9.3	10	3.3	300
NALBARI	4	1.3	72	24.0	187	62.3	24	8.0	13	4.3	300
SIVSAGAR	14	4.6	65	21.5	201	66.3	17	5.6	6	2.0	303
SONITPUR	12	4.0	116	38.8	123	41.1	42	14.0	6	2.0	299
TINSUKIA	13	4.4	112	37.6	131	44.0	25	8.4	17	5.7	298
UDALGURI	10	3.3	102	34.0	129	43.0	57	19.0	2	0.7	300
Assam	414	5.5	2825	37.8	3192	42.7	753	10.1	299	4.0	7483

Table 3.1.9: District wise distribution of mothers by age at marriage

District :	Mother's age at marriage								Total Mothers surveyed
	15 - 19		20 - 24		25 - 29		30 & above		
	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	152	50.7	133	44.3	14	4.7	1	0.3	300
BARPETA	152	50.8	108	36.1	33	11.0	6	2.0	299
BONGAIGAON	210	70.0	59	19.7	31	10.3		0.0	300
CACHAR	163	54.2	117	38.9	17	5.6	4	1.3	301
CHIRANG	132	43.9	109	36.2	55	18.3	5	1.7	301
DARRANG	225	75.0	64	21.3	11	3.7		0.0	300
DHEMAJI	162	54.0	116	38.7	20	6.7	2	0.7	300
DHUBRI	173	57.5	84	27.9	41	13.6	3	1.0	301
DIBRUGARH	134	44.7	126	42.0	32	10.7	8	2.7	300
GOALPARA	179	59.7	77	25.7	15	5.0	29	9.7	300
GOLAGHAT	152	50.7	124	41.3	24	8.0		0.0	300
HAILAKANDI	151	50.3	118	39.3	27	9.0	4	1.3	300
JORHAT	139	46.3	136	45.3	25	8.3		0.0	300
KAMRUP R	140	46.7	112	37.3	39	13.0	9	3.0	300
KAMRUP M	155	51.7	96	32.0	44	14.7	5	1.7	300
KARIMGANJ	154	51.3	105	35.0	35	11.7	6	2.0	300
KOKRAJHAR	156	55.5	106	37.7	18	6.4	1	0.4	281
LAKHIMPUR	133	44.3	142	47.3	24	8.0	1	0.3	300
MORIGAON	231	77.0	58	19.3	11	3.7		0.0	300
NAGAON	195	65.0	83	27.7	21	7.0	1	0.3	300
NALBARI	56	18.7	192	64.0	39	13.0	13	4.3	300
SIVSAGAR	62	20.5	159	52.5	80	26.4	2	0.7	303
SONITPUR	166	55.5	116	38.8	16	5.4	1	0.3	299
TINSUKIA	168	56.4	93	31.2	28	9.4	9	3.0	298
UDALGURI	190	63.3	95	31.7	14	4.7	1	0.3	300
Assam	3930	52.5	2728	36.5	714	9.5	111	1.5	7483

Table 3.2.1 (A): District wise distribution of mothers by number of ANC received during last pregnancy

District :	Number of ANC received										Total Numbers
	1		2		3		4 & More		ANC Not Received		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	17	5.7	37	12.3	113	37.7	120	40.0	13	4.3	300
BARPETA	18	6.0	42	14.0	69	23.1	155	51.8	15	5.0	299
BONGAIGAON	34	11.3	56	18.7	110	36.7	94	31.3	6	2.0	300
CACHAR	22	7.3	66	21.9	113	37.5	89	29.6	11	3.7	301
CHIRANG	31	10.3	51	16.9	74	24.6	140	46.5	5	1.7	301
DARRANG	15	5.0	42	14.0	75	25.0	154	51.3	14	4.7	300
DHEMAJI	16	5.3	47	15.7	112	37.3	118	39.3	7	2.3	300
DHUBRI	20	6.6	31	10.3	36	12.0	199	66.1	15	5.0	301
DIBRUGARH	9	3.0	36	12.0	100	33.3	149	49.7	6	2.0	300
GOALPARA	30	10.0	34	11.3	25	8.3	205	68.3	6	2.0	300
GOLAGHAT	16	5.3	27	9.0	63	21.0	191	63.7	3	1.0	300
HAILAKANDI	15	5.0	85	28.3	115	38.3	71	23.7	14	4.7	300
JORHAT	15	5.0	26	8.7	27	9.0	230	76.7	2	0.7	300
KAMRUP	11	3.7	37	12.3	84	28.0	163	54.3	5	1.7	300
KAMRUP METRO	10	3.3	21	7.0	50	16.7	216	72.0	3	1.0	300
KARIMGANJ	28	9.3	50	16.7	117	39.0	91	30.3	14	4.7	300
KOKRAJHAR	22	7.8	35	12.5	96	34.2	117	41.6	11	3.9	281
LAKHIMPUR	26	8.7	26	8.7	73	24.3	165	55.0	10	3.3	300
MORIGAON	8	2.7	78	26.0	135	45.0	71	23.7	8	2.7	300
NAGAON	32	10.7	41	13.7	70	23.3	148	49.3	9	3.0	300
NALBARI	23	7.7	38	12.7	31	10.3	203	67.7	5	1.7	300
SIVSAGAR	5	1.7	36	11.9	85	28.1	177	58.4		0.0	303
SONITPUR	23	7.7	20	6.7	48	16.1	203	67.9	5	1.7	299
TINSUKIA	17	5.7	64	21.5	55	18.5	153	51.3	9	3.0	298
UDALGURI	48	16.0	31	10.3	33	11.0	176	58.7	12	4.0	300
Assam	511	6.8	1057	14.1	1909	25.5	3798	50.8	208	2.8	7483

Table 3.2.1(B): District wise distribution of mothers by ANC status, 2011 & 2013

Districts	Number of ANC received 2011 & 2013								Total Sample 2011-12	Total Sample 2012-13
	1		2		3 & more		ANC Not Received			
	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13		
BAKSA	2.3	5.7	13.3	12.3	83.7	77.7	0.7	4.3	300	300
BARPETA	1.7	6.0	11.7	14.0	83.3	74.9	3.3	5.0	300	299
BONGAIGAON	5.7	11.3	20.3	18.7	68.7	68.0	5.3	2.0	300	300
CACHAR	4.3	7.3	15.3	21.9	79.0	67.1	1.3	3.7	300	301
CHIRANG	2.0	10.3	21.0	16.9	73.0	71.1	4.0	1.7	300	301
DARRANG	1.7	5.0	10.7	14.0	78.0	76.3	9.7	4.7	300	300
DHEMAJI	1.0	5.3	3.7	15.7	95.3	76.7	0.0	2.3	300	300
DHUBRI	2.0	6.6	8.0	10.3	87.0	78.1	3.0	5.0	300	301
DIBRUGARH	1.3	3.0	1.7	12.0	97.0	83.0	0.0	2.0	300	300
GOALPARA	7.0	10.0	12.0	11.3	74.8	76.7	6.3	2.0	301	300
GOLAGHAT	2.0	5.3	4.0	9.0	93.3	84.7	0.7	1.0	300	300
HAILAKANDI	6.7	5.0	8.3	28.3	83.7	62.0	1.3	4.7	300	300
JORHAT	1.0	5.0	4.7	8.7	94.0	85.7	0.3	0.7	300	300
KAMRUP R	0.0	3.7	7.1	12.3	92.9	82.3	0.0	1.7	297	300
KAMRUP M	3.7	3.3	7.3	7.0	86.7	88.7	2.3	1.0	301	300
KARIMGANJ	4.0	9.3	11.7	16.7	81.3	69.3	3.0	4.7	300	300
KOKRAJHAR		7.8		12.5		75.8		3.9		281
LAKHIMPUR	2.0	8.7	2.3	8.7	95.3	79.3	0.3	3.3	300	300
MORIGAON	6.3	2.7	20.7	26.0	70.7	68.7	2.3	2.7	300	300
NAGAON	6.3	10.7	25.3	13.7	64.7	72.7	3.7	3.0	300	300
NALBARI	2.3	7.7	17.0	12.7	80.3	78.0	0.3	1.7	300	300
SIVSAGAR	0.3	1.7	3.0	11.9	96.7	86.5	0.0	0.0	300	303
SONITPUR	1.0	7.7	10.0	6.7	87.7	83.9	1.3	1.7	300	299
TINSUKIA	2.0	5.7	6.0	21.5	91.3	69.8	0.7	3.0	300	298
UDALGURI	4.3	16.0	17.3	10.3	74.3	69.7	4.0	4.0	300	300
Assam	3.0	6.8	10.9	14.1	83.9	76.3	2.3	2.8	7199	7483

Table 3.2.1(C): District wise distribution of mothers who received 3 or more ANC by Religion, Caste, Order of Birth & Age Group

Type	Category	No. of PW	3 or more ANC by PW	
			No.	PC
RELIGION	Hindu	4800	3984	83
	Muslim	2412	1785	74
	Christian	224	143	64
	Others	47	35	75
CASTE	General	3258	2574	79
	OBC	1498	1198	80
	SC	1008	786	78
	ST	1233	1023	83
	Others	486	350	72
BIRTH ORDER	1st	3442	3029	88
	2nd	2544	2162	85
	3rd	876	701	80
	4th	419	302	72
	5th & more	202	121	60
AGE GROUP	Upto 19	414	306	74
	20 to 24	2825	2288	81
	25 to 29	3192	2554	80
	30 to 34	753	565	75
	35 & above	299	212	71

Table 3.2.2: District wise distribution of mothers by registration of 1st ANC

District :	ANC received during						Mothers registered for ANC
	1st Trimester		2nd Trimester		3rd Trimester		
	No.	PC	No.	PC	No.	PC	
BAKSA	167	58.2	113	39.4	7	2.4	287
BARPETA	161	56.7	121	42.6	2	0.7	284
BONGAIGAON	149	50.7	132	44.9	13	4.4	294
CACHAR	186	64.1	101	34.8	3	1.0	290
CHIRANG	149	50.3	141	47.6	6	2.0	296
DARRANG	135	47.2	147	51.4	4	1.4	286
DHEMAJI	201	68.6	87	29.7	5	1.7	293
DHUBRI	102	35.7	178	62.2	6	2.1	286
DIBRUGARH	236	80.3	54	18.4	4	1.4	294
GOALPARA	232	78.9	54	18.4	8	2.7	294
GOLAGHAT	239	80.5	57	19.2	1	0.3	297
HAILAKANDI	185	64.7	98	34.3	3	1.0	286
JORHAT	213	71.5	80	26.8	5	1.7	298
KAMRUP R	203	68.8	88	29.8	4	1.4	295
KAMRUP M	176	59.3	116	39.1	5	1.7	297
KARIMGANJ	155	54.2	129	45.1	2	0.7	286
KOKRAJHAR	199	73.7	69	25.6	2	0.7	270
LAKHIMPUR	121	41.7	160	55.2	9	3.1	290
MORIGAON	142	48.6	139	47.6	11	3.8	292
NAGAON	179	61.5	108	37.1	4	1.4	291
NALBARI	228	77.3	65	22.0	2	0.7	295
SIVSAGAR	143	47.2	159	52.5	1	0.3	303
SONITPUR	181	61.6	112	38.1	1	0.3	294
TINSUKIA	175	60.6	105	36.3	9	3.1	289
UDALGURI	169	58.7	114	39.6	5	1.7	288
Assam	4426	60.8	2727	37.5	122	1.7	7275

3.2.3: District wise distribution of mothers by source of information for ANC

District :	Source of information about ANC																Mothers registered for ANC
	ASHA		ANM		Public Facility Doctor		AWW		Pvt Doctor		SELF		Family members		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	265	92.3	19	6.6							3	1.0					287
BARPETA	245	86.3	7	2.5	1	0.4		0.0	2	0.7	10	3.5	19	6.7			284
BONGAIGAON	272	92.5	1	0.3	1	0.3	2	0.7	2	0.7	16	5.4		0.0			294
CACHAR	213	73.4	4	1.4	7	2.4	1	0.3	8	2.8	32	11.0	21	7.2	4	1.4	290
CHIRANG	296	100.0															296
DARRANG	281	98.3	3	1.0							2	0.7					286
DHEMAJI	277	94.5	2	0.7	2	0.7					11	3.8	1	0.3			293
DHUBRI	283	99.0		0.0	1	0.3	2	0.7									286
DIBRUGARH	257	87.4	15	5.1			1	0.3	5	1.7	15	5.1	1	0.3			294
GOALPARA	293	99.7						0.0			1	0.3					294
GOLAGHAT	206	69.4	9	3.0			3	1.0			75	25.3	4	1.3			297
HAILAKANDI	207	72.4	1	0.3					6	2.1	47	16.4	24	8.4	1	0.3	286
JORHAT	227	76.2	18	6.0			2	0.7			47	15.8	4	1.3			298
KAMRUP	278	94.2	3	1.0	4	1.4	2	0.7	4	1.4	3	1.0	1	0.3			295
KAMRUP																	
METRO	225	75.8	1	0.3				0.0	4	1.3	42	14.1	25	8.4			297
KARIMGANJ	214	74.8	8	2.8	8	2.8	7	2.4	2	0.7	30	10.5	16	5.6	1	0.3	286
KOKRAJHAR	267	98.9		0.0			2	0.7			1	0.4					270
LAKHIMPUR	269	92.8	11	3.8	1	0.3					8	2.8	1	0.3			290
MORIGAON	263	90.1	7	2.4	1	0.3	3	1.0			7	2.4	10	3.4	1	0.3	292
NAGAON	248	85.2	8	2.7	3	1.0	11	3.8	1	0.3	10	3.4	7	2.4	3	1.0	291
NALBARI	255	86.4	15	5.1	2	0.7	1	0.3					22	7.5			295
SIVSAGAR	290	95.7	11	3.6	1	0.3	1	0.3									303
SONITPUR	259	88.1	9	3.1	2	0.7	10	3.4			10	3.4	1	0.3	3	1.0	294
TINSUKIA	249	86.2	1	0.3	5	1.7	3	1.0	1	0.3	26	9.0	4	1.4			289
UDALGURI	264	91.7	7	2.4	2	0.7	8	2.8			7	2.4					288
Assam	6403	88.0	160	2.2	41	0.6	59	0.8	35	0.5	403	5.5	161	2.2	13	0.2	7275

3.2.4: District wise distribution of mothers by place of registration for ANC

District :	Place of Registration for ANC														Mothers registered for ANC
	During VHND		SC		PHC / CHC		SDH / DH		Other Govt facilities		Private		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	75	26.1	157	54.7	38	13.2	3	1.0	3	1.0		0.0	11	3.8	287
BARPETA	54	19.0	126	44.4	78	27.5	11	3.9	13	4.6	2	0.7	0	0.0	284
BONGAIGAON	45	15.3	159	54.1	48	16.3	9	3.1	11	3.7	7	2.4	15	5.1	294
CACHAR	19	6.6	116	40.0	70	24.1	7	2.4	30	10.3	16	5.5	32	11.0	290
CHIRANG	4	1.4	246	83.1	16	5.4	29	9.8	1	0.3		0.0	0	0.0	296
DARRANG	35	12.2	187	65.4	49	17.1	11	3.8	2	0.7	2	0.7	0	0.0	286
DHEMAJI	63	21.5	139	47.4	55	18.8	20	6.8		0.0	7	2.4	9	3.1	293
DHUBRI	12	4.2	239	83.6	21	7.3	6	2.1	8	2.8		0.0	0	0.0	286
DIBRUGARH	10	3.4	142	48.3	78	26.5	20	6.8	16	5.4	16	5.4	12	4.1	294
GOALPARA	5	1.7	257	87.4	14	4.8	10	3.4	7	2.4	1	0.3	0	0.0	294
GOLAGHAT	61	20.5	124	41.8	58	19.5	12	4.0	18	6.1	16	5.4	8	2.7	297
HAILAKANDI	62	21.7	61	21.3	79	27.6	31	10.8	16	5.6	23	8.0	14	4.9	286
JORHAT	92	30.9	129	43.3	54	18.1	4	1.3	14	4.7	1	0.3	4	1.3	298
KAMRUP R	6	2.0	236	80.0	37	12.5	4	1.4	1	0.3	3	1.0	8	2.7	295
KAMRUP M	36	12.1	59	19.9	73	24.6	11	3.7	62	20.9	41	13.8	15	5.1	297
KARIMGANJ	11	3.8	86	30.1	45	15.7	29	10.1	44	15.4	28	9.8	43	15.0	286
KOKRAJHAR	35	13.0	191	70.7	33	12.2	4	1.5	1	0.4	6	2.2	0	0.0	270
LAKHIMPUR	17	5.9	180	62.1	71	24.5	11	3.8		0.0	7	2.4	4	1.4	290
MORIGAON	16	5.5	136	46.6	76	26.0	24	8.2	21	7.2	1	0.3	18	6.2	292
NAGAON	12	4.1	96	33.0	111	38.1	31	10.7	13	4.5	21	7.2	7	2.4	291
NALBARI	35	11.9	77	26.1	98	33.2	52	17.6	2	0.7	11	3.7	20	6.8	295
SIVSAGAR	9	3.0	194	64.0	57	18.8		0.0		0.0	24	7.9	19	6.3	303
SONITPUR	21	7.1	127	43.2	100	34.0	12	4.1	1	0.3	5	1.7	28	9.5	294
TINSUKIA	18	6.2	182	63.0	55	19.0	16	5.5	1	0.3	16	5.5	1	0.3	289
UDALGURI	28	9.7	159	55.2	84	29.2		0.0	8	2.8	6	2.1	3	1.0	288
Assam	781	10.7	3805	52.3	1498	20.6	367	5.0	293	4.0	260	3.6	271	3.7	7275

Table 3.2.5: District wise distribution of mothers by Place of ANC received

District :	Place of ANC																Mothers registered for ANC
	During VHND		At home by ANM		SC		PHC/CHC		SDH/DH		Other Govt. Facilities		Private		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	97	33.8	1	0.3	205	71.4	191	66.6	10	3.5	2	0.7	7	2.4	12	4.2	287
BARPETA	51	18.0	8	2.8	169	59.5	133	46.8	14	4.9			15	5.3		0.0	284
BONGAIGAON	48	16.3	2	0.7	143	48.6	63	21.4	19	6.5	9	3.1	26	8.8	19	6.5	294
CACHAR	26	9.0	4	1.4	109	37.6	77	26.6	5	1.7	32	11.0	47	16.2	18	6.2	290
CHIRANG	29	9.8	1	0.3	248	83.8	21	7.1	32	10.8		0.0	11	3.7		0.0	296
DARRANG	97	33.9	2	0.7	252	88.1	111	38.8	49	17.1	2	0.7	13	4.5	1	0.3	286
DHEMAJI	45	15.4	6	2.0	119	40.6	118	40.3	30	10.2	1	0.3	15	5.1	2	0.7	293
DHUBRI	86	30.1	1	0.3	245	85.7	31	10.8	30	10.5	7	2.4	13	4.5		0.0	286
DIBRUGARH	33	11.2	18	6.1	201	68.4	153	52.0	28	9.5	6	2.0	24	8.2	6	2.0	294
GOALPARA	124	42.2	1	0.3	265	90.0	55	18.7	20	6.8	18	6.1	26	8.8		0.0	294
GOLAGHAT	223	75.1	11	3.7	189	63.6	148	49.8	14	4.7	52	17.5	18	6.1	1	0.3	297
HAILAKANDI	70	24.5	1	0.3	61	21.3	94	32.9	32	11.2	19	6.6	47	16.4	15	5.2	286
JORHAT	251	84.2	15	5.0	211	70.8	93	31.2	20	6.7	37	12.4	48	16.1		0.0	298
KAMRUP R	40	13.6	20	6.8	241	81.7	225	76.3	7	2.4	20	6.8	24	8.1	6	2.0	295
KAMRUP M	56	18.9	1	0.3	84	28.3	127	42.8	9	3.0	152	51.2	67	22.6	19	6.4	297
KARIMGANJ	36	12.6	1	0.3	77	26.9	16	5.6	15	5.2	92	32.2	36	12.6	40	14.0	286
KOKRAJHAR	86	31.9	1	0.4	192	71.1	36	13.3	15	5.6			17	6.3	2	0.7	270
LAKHIMPUR	11	3.8	4	1.4	174	60.0	109	37.6	11	3.8			15	5.2	7	2.4	290
MORIGAON	18	6.2	13	4.5	140	47.9	203	69.5	19	6.5	19	6.5	18	6.2	10	3.4	292
NAGAON	14	4.8	4	1.4	111	38.1	202	69.4	45	15.5	15	5.2	15	5.2	1	0.3	291
NALBARI	53	18.0	2	0.7	83	28.1	91	30.8	50	16.9	1	0.3	12	4.1	20	6.8	295
SIVSAGAR	53	17.5	12	4.0	249	82.2	235	77.6	22	7.3		0.0	38	12.5	44	14.5	303
SONITPUR	12	4.1	8	2.7	183	62.2	234	79.6	48	16.3	5	1.7	22	7.5	40	13.6	294
TINSUKIA	16	5.5	3	1.0	184	63.7	55	19.0	36	12.5	3	1.0	22	7.6		0.0	289
UDALGURI	46	16.0	1	0.3	191	66.3	193	67.0	43	14.9	13	4.5	17	5.9	37	12.8	288
Assam	1621	22.3	141	1.9	4326	59.5	3014	41.4	623	8.6	505	6.9	613	8.4	300	4.1	7275

Table 3.2.6 (A): District wise distribution of mothers according various services provided & examinations undergone during ANC

District :	Services provided during ANC														Mothers registered for ANC
	Giving TT injection		Giving 100 IFA Tablets		BP Check up		Weight Taken		Urine Sample Examined		Abdomen Examined		Blood sample for checking anemia		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	257	89.5	246	85.7	285	99.3	278	96.9	241	84.0	285	99.3	214	74.6	287
BARPETA	251	88.4	242	85.2	281	98.9	237	83.5	143	50.4	205	72.2	222	78.2	284
BONGAIGAON	279	94.9	236	80.3	291	99.0	278	94.6	194	66.0	223	75.9	212	72.1	294
CACHAR	279	96.2	216	74.5	278	95.9	241	83.1	145	50.0	244	84.1	219	75.5	290
CHIRANG	276	93.2	274	92.6	281	94.9	284	95.9	227	76.7	179	60.5	222	75.0	296
DARRANG	276	96.5	234	81.8	282	98.6	282	98.6	226	79.0	279	97.6	206	72.0	286
DHEMAJI	278	94.9	234	79.9	277	94.5	256	87.4	224	76.5	262	89.4	186	63.5	293
DHUBRI	273	95.5	226	79.0	281	98.3	274	95.8	167	58.4	264	92.3	267	93.4	286
DIBRUGARH	284	96.6	234	79.6	259	88.1	252	85.7	205	69.7	239	81.3	229	77.9	294
GOALPARA	284	96.6	219	74.5	279	94.9	280	95.2	119	40.5	274	93.2	254	86.4	294
GOLAGHAT	292	98.3	274	92.3	293	98.7	297	100.0	275	92.6	287	96.6	290	97.6	297
HAILAKANDI	269	94.1	230	80.4	253	88.5	236	82.5	261	91.3	198	69.2	236	82.5	286
JORHAT	284	95.3	219	73.5	291	97.7	293	98.3	294	98.7	269	90.3	292	98.0	298
KAMRUP R	281	95.3	236	80.0	294	99.7	287	97.3	248	84.1	276	93.6	269	91.2	295
KAMRUP M	286	96.3	223	75.1	296	99.7	296	99.7	273	91.9	282	94.9	291	98.0	297
KARIMGANJ	272	95.1	213	74.5	273	95.5	225	78.7	141	49.3	138	48.3	187	65.4	286
KOKRAJHAR	261	96.7	216	80.0	269	99.6	252	93.3	179	66.3	189	70.0	175	64.8	270
LAKHIMPUR	274	94.5	219	75.5	260	89.7	262	90.3	164	56.6	215	74.1	244	84.1	290
MORIGAON	283	96.9	203	69.5	272	93.2	279	95.5	155	53.1	261	89.4	258	88.4	292
NAGAON	261	89.7	209	71.8	287	98.6	279	95.9	152	52.2	280	96.2	221	75.9	291
NALBARI	269	91.2	234	79.3	278	94.2	286	96.9	203	68.8	244	82.7	227	76.9	295
SIVSAGAR	284	93.7	256	84.5	250	82.5	217	71.6	218	71.9	217	71.6	247	81.5	303
SONITPUR	276	93.9	262	89.1	287	97.6	286	97.3	210	71.4	292	99.3	242	82.3	294
TINSUKIA	279	96.5	241	83.4	273	94.5	273	94.5	196	67.8	244	84.4	219	75.8	289
UDALGURI	268	93.1	234	81.3	281	97.6	284	98.6	137	47.6	224	77.8	205	71.2	288
Assam	6876	94.5	5830	80.1	6951	95.5	6714	92.3	4997	68.7	6070	83.4	5834	80.2	7275

Table 3.2.6(B): District wise distribution of mothers by health education & advice received

District :	Examinations & Health Education Received								Mothers registered for ANC
	Told about danger sign of pregnancy		Told about expected date of delivery		To deliver nearby facility		Advised about proper nutrition		
	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	185	64.5	193	67.2	162	56.4	142	49.5	287
BARPETA	164	57.7	170	59.9	141	49.6	117	41.2	284
BONGAIGAON	174	59.2	182	61.9	149	50.7	149	50.7	294
CACHAR	192	66.2	200	69.0	169	58.3	145	50.0	290
CHIRANG	164	55.4	172	58.1	141	47.6	139	47.0	296
DARRANG	183	64.0	191	66.8	142	49.7	158	55.2	286
DHEMAJI	208	71.0	216	73.7	166	56.7	162	55.3	293
DHUBRI	174	60.8	182	63.6	151	52.8	149	52.1	286
DIBRUGARH	209	71.1	213	72.4	174	59.2	145	49.3	294
GOALPARA	174	59.2	182	61.9	151	51.4	149	50.7	294
GOLAGHAT	219	73.7	227	76.4	156	52.5	194	65.3	297
HAILAKANDI	149	52.1	157	54.9	126	44.1	124	43.4	286
JORHAT	229	76.8	233	78.2	115	38.6	141	47.3	298
KAMRUP R	224	75.9	232	78.6	144	48.8	143	48.5	295
KAMRUP M	216	72.7	224	75.4	101	34.0	121	40.7	297
KARIMGANJ	132	46.2	140	49.0	109	38.1	107	37.4	286
KOKRAJHAR	162	60.0	170	63.0	139	51.5	137	50.7	270
LAKHIMPUR	169	58.3	177	61.0	146	50.3	144	49.7	290
MORIGAON	261	89.4	269	92.1	148	50.7	121	41.4	292
NAGAON	186	63.9	197	67.7	163	56.0	164	56.4	291
NALBARI	189	64.1	197	66.8	166	56.3	122	41.4	295
SIVSAGAR	217	71.6	225	74.3	144	47.5	136	44.9	303
SONITPUR	212	72.1	212	72.1	136	46.3	156	53.1	294
TINSUKIA	184	63.7	192	66.4	161	55.7	131	45.3	289
UDALGURI	165	57.3	173	60.1	142	49.3	140	48.6	288
Assam	4741	65.2	4926	67.7	3642	50.1	3536	48.6	7275

Table 3.2.7: District wise distribution of mothers by reasons for no ANC

Districts	Reasons for Non ANC							ANC Not Done
	Do not feel necessary	Lack of knowledge about services	Family tradition	Facility is very far	Financial problem	No one to accompany for ANC	Others	
	No.	No.	No.	No.	No.	No.	No.	
BAKSA	2	4	3	4	2	1	2	13
BARPETA	6	2	4	2	2	2		15
BONGAIGAON	3	1	1	2	1			6
CACHAR	2	1	1	2	1	1	3	11
CHIRANG	2	3	1	2			1	5
DARRANG	7	6		2	3	2	1	14
DHEMAJI	1	2		3	2			7
DHUBRI	3	2	4	4	4	1		15
DIBRUGARH	1			2	3			6
GOALPARA		1	2	2	1	1	1	6
GOLAGHAT	2				1			3
HAILAKANDI	2		3	6	4	1	1	14
JORHAT	1	1						2
KAMRUP R								5
KAMRUP M	2	2	1	1		1		3
KARIMGANJ	4	2	3			3		14
KOKRAJHAR	2	2	1	1			6	11
LAKHIMPUR	1	2		2		3	2	10
MORIGAON	2	3		1	1		1	8
NAGAON	4	3				3	1	9
NALBARI	1	1			2	2		5
SIVSAGAR								
SONITPUR	2	2			1			5
TINSUKIA	2	1			3	1	2	9
UDALGURI	4	1		3	3	1		12
Assam	56	42	24	39	34	23	21	208

Table 3.2.8: District wise distribution of mothers accompanying by ASHA during ANC

Districts	ASHA Accompanying during ANC		Total Numbers
	No.	PC	
BAKSA	252	87.8	287
BARPETA	267	94.0	284
BONGAIGAON	235	79.9	294
CACHAR	246	84.8	290
CHIRANG	249	84.1	296
DARRANG	212	74.1	286
DHEMAJI	272	92.8	293
DHUBRI	239	83.6	286
DIBRUGARH	238	81.0	294
GOALPARA	196	66.7	294
GOLAGHAT	222	74.7	297
HAILAKANDI	231	80.8	286
JORHAT	266	89.3	298
KAMRUP R	243	82.4	295
KAMRUP M	61	20.5	297
KARIMGANJ	188	69.6	270
KOKRAJHAR	223	78.0	286
LAKHIMPUR	281	96.9	290
MORIGAON	242	82.9	292
NAGAON	246	84.5	291
NALBARI	239	81.0	295
SIVSAGAR	261	86.1	303
SONITPUR	261	88.8	294
TINSUKIA	286	99.0	289
UDALGURI	247	85.8	288
Assam	5903	81.1	7275

Table 3.3.1(A): District wise distributions of mothers by place of delivery

District :	Place of Last Delivery				Total Mothers surveyed
	Home Delivery		Institutional Delivery		
	No.	PC	No.	PC	
BAKSA	95	31.7	205	68.3	300
BARPETA	102	34.1	197	65.9	299
BONGAIGAON	72	24.0	228	76.0	300
CACHAR	67	22.3	234	77.7	301
CHIRANG	87	28.9	214	71.1	301
DARRANG	71	23.7	229	76.3	300
DHEMAJI	40	13.3	260	86.7	300
DHUBRI	125	41.5	176	58.5	301
DIBRUGARH	26	8.7	274	91.3	300
GOALPARA	76	25.3	224	74.7	300
GOLAGHAT	46	15.3	254	84.7	300
HAILAKANDI	86	28.7	214	71.3	300
JORHAT	27	9.0	273	91.0	300
KAMRUP R	19	6.3	281	93.7	300
KAMRUP M	40	13.3	260	86.7	300
KARIMGANJ	127	42.3	173	57.7	300
KOKRAJHAR	62	22.1	219	77.9	281
LAKHIMPUR	42	14.0	258	86.0	300
MORIGAON	82	27.3	218	72.7	300
NAGAON	63	21.0	237	79.0	300
NALBARI	57	19.0	243	81.0	300
SIVSAGAR	21	6.9	282	93.1	303
SONITPUR	54	18.1	245	81.9	299
TINSUKIA	56	18.8	242	81.2	298
UDALGURI	87	29.0	213	71.0	300
Assam	1630	21.8	5853	78.2	7483

Table 3.3.1(B): District wise distributions of mothers by place of institutional delivery

District :	Place of Institutional Delivery												Total ID
	SC		SD/MPHC/SHC		PHC		CHC/SDH/DH		Medical College Hospital		Private Hospital		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	3	1.5	4	2.0	60	29.3	111	54.1	14	6.8	13	6.3	205
BARPETA	10	5.1	12	6.1	66	33.5	72	36.5	20	10.2	17	8.6	197
BONGAIGAON	22	9.6	34	14.9	73	32.0	73	32.0	7	3.1	19	8.3	228
CACHAR	21	9.0	21	9.0	55	23.5	50	21.4	66	28.2	21	9.0	234
CHIRANG	13	6.1	18	8.4	81	37.9	81	37.9	1	0.5	20	9.3	214
DARRANG	13	5.7	53	23.1	78	34.1	54	23.6	14	6.1	17	7.4	229
DHEMAJI	5	1.9	41	15.8	42	16.2	154	59.2	2	0.8	16	6.2	260
DHUBRI	15	8.5	27	15.3	32	18.2	64	36.4	16	9.1	22	12.5	176
DIBRUGARH	10	3.6	9	3.3	32	11.7	88	32.1	88	32.1	47	17.2	274
GOALPARA	10	4.5	35	15.6	40	17.9	108	48.2	21	9.4	10	4.5	224
GOLAGHAT			63	24.8	75	29.5	78	30.7	19	7.5	19	7.5	254
HAILAKANDI	7	3.3	24	11.2	52	24.3	85	39.7	18	8.4	28	13.1	214
JORHAT	1	0.4	21	7.7	69	25.3	48	17.6	96	35.2	38	13.9	273
KAMRUP R	1	0.4	1	0.4	34	12.1	140	49.8	66	23.5	39	13.9	281
KAMRUP M			20	7.7	45	17.3	38	14.6	88	33.8	69	26.5	260
KARIMGANJ	4	2.3	38	22.0	19	11.0	50	28.9	26	15.0	36	20.8	173
KOKRAJHAR	13	5.9	43	19.6	66	30.1	86	39.3		0.0	11	5.0	219
LAKHIMPUR	7	2.7	44	17.1	74	28.7	108	41.9	8	3.1	17	6.6	258
MORIGAON	4	1.8	12	5.5	57	26.1	118	54.1	5	2.3	22	10.1	218
NAGAON	2	0.8	37	15.6	37	15.6	129	54.4	8	3.4	24	10.1	237
NALBARI			59	24.3	69	28.4	72	29.6	17	7.0	26	10.7	243
SIVSAGAR			19	6.7	84	29.8	95	33.7	28	9.9	56	19.9	282
SONITPUR			47	19.2	54	22.0	93	38.0	7	2.9	44	18.0	245
TINSUKIA	18	7.4	48	19.8	56	23.1	78	32.2	5	2.1	37	15.3	242
UDALGURI	3	1.4	18	8.5	58	27.2	109	51.2	5	2.3	20	9.4	213
Assam	182	3.1	748	12.8	1408	24.1	2182	37.3	645	11.0	688	11.8	5853

Table 3.3.1(C): District wise distributions of mothers by place of delivery, 2011-12 & 2012-13

Districts	Place of Delivery							
	Home Delivery		Institutional Delivery					
			Total		(Govt. Facility)		(Pvt. Facility)	
	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13	2011-12	2012-13
BAKSA	37.0	31.7	63.0	68.3	57.7	64.0	5.33	4.3
BARPETA	32.0	34.1	68.0	65.9	65.7	60.2	2.33	5.7
BONGAIGAON	34.7	24.0	65.3	76.0	61.7	69.7	3.67	6.3
CACHAR	25.0	22.3	75.0	77.7	68.3	70.7	6.67	7.0
CHIRANG	42.3	28.9	57.7	71.1	53.0	64.5	4.67	6.6
DARRANG	38.7	23.7	61.3	76.3	60.0	70.6	1.33	5.7
DHEMAJI	15.0	13.3	85.0	86.7	80.3	81.4	4.67	5.3
DHUBRI	39.0	41.5	61.0	58.5	60.3	51.2	0.67	7.3
DIBRUGARH	14.7	8.7	85.3	91.3	74.7	75.6	10.7	15.7
GOALPARA	31.9	25.3	68.1	74.7	64.1	71.4	3.99	3.3
GOLAGHAT	19.7	15.3	80.3	84.7	68.7	78.4	11.7	6.3
HAILAKANDI	33.7	28.7	66.3	71.3	62.7	62.0	3.67	9.3
JORHAT	12.3	9.0	87.7	91.0	78.3	78.3	9.33	12.7
KAMRUP R	14.0	6.3	86.0	93.7	76.7	80.7	9.3	13.0
KAMRUP M	18.5	13.3	81.5	86.7	58.6	63.7	22.9	23.0
KARIMGANJ	38.7	42.3	61.3	57.7	55.3	45.7	6	12.0
KOKRAJHAR		22.1		77.9		74.0		3.9
LAKHIMPUR	15.3	14.0	84.7	86.0	81.7	80.3	3	5.7
MORIGAON	29.7	27.3	70.3	72.7	67.3	65.4	3	7.3
NAGAON	35.0	21.0	65.0	79.0	59.3	71.0	5.67	8.0
NALBARI	22.7	19.0	77.3	81.0	61.3	72.3	16	8.7
SIVSAGAR	14.0	6.9	86.0	93.1	75.7	74.6	10.3	18.5
SONITPUR	28.0	18.1	72.0	81.9	65.3	67.2	6.67	14.7
TINSUKIA	15.0	18.8	85.0	81.2	77.3	68.8	7.67	12.4
UDALGURI	38.0	29.0	62.0	71.0	55.0	64.3	7	6.7
Assam	26.9	21.8	73.1	78.2	66.2	69.0	7	9.2

Table 3.3.1(D): Institutional Delivery by Region, Caste and ANC received

Type	Category	No. of PW	Institutional Delivery	
			No.	PC
RELIGION	Hindu	4800	4176	87
	Muslim	2412	1471	61
	Christian	224	128	57
	Others	47	43	91
CASTE	General	3258	2346	72
	OBC	1498	1288	86
	SC	1008	847	84
	ST	1233	1048	85
	Others	486	292	60
ANC STATUS	No ANC	208	1	11
	1 ANC	511	21	46
	2 ANC	1057	38	62
	3 & more	5707	69	83

Table 3.3.2: District wise distribution of persons conducting Home Delivery

District :	Persons conducting Home Delivery												Total Home Delivery
	Doctor		ANM		Dai/ TBA		Relatives		Others		No Response		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA					1	1.1	30	31.6			64	67.4	95
BARPETA			6	5.9	54	52.9	28	27.5			14	13.7	102
BONGAIGAON	2	2.8			38	52.8	23	31.9	1	1.4	8	11.1	72
CACHAR	1	1.5	5	7.5	41	61.2	18	26.9	2	3.0			67
CHIRANG					76	87.4	8	9.2	1	1.1	2	2.3	87
DARRANG					18	25.4	43	60.6			10	14.1	71
DHEMAJI					14	35.0	22	55.0	1	2.5	3	7.5	40
DHUBRI					110	88.0	2	1.6	8	6.4	5	4.0	125
DIBRUGARH	2	7.7			13	50.0	7	26.9	1	3.8	3	11.5	26
GOALPARA					45	59.2	29	38.2	1	1.3	1	1.3	76
GOLAGHAT							46	100.0					46
HAILAKANDI			3	3.5	68	79.1	10	11.6	4	4.7	1	1.2	86
JORHAT					2	7.4	25	92.6					27
KAMRUP R	1	5.3			3	15.8	3	15.8	4	21.1	8	42.1	19
KAMRUP M	1	2.5			2	5.0	36	90.0			1	2.5	40
KARIMGANJ	2	1.6			60	47.2	55	43.3	3	2.4	7	5.5	127
KOKRAJHAR					53	85.5	9	14.5					62
LAKHIMPUR					33	78.6	8	19.0			1	2.4	42
MORIGAON	3	3.7	2	2.4	61	74.4	13	15.9	1	1.2	2	2.4	82
NAGAON	3	4.8	2	3.2	42	66.7	8	12.7			8	12.7	63
NALBARI					45	78.9	12	21.1					57
SIVSAGAR	1	4.8			16	76.2	4	19.0					21
SONITPUR					43	79.6	8	14.8			3	5.6	54
TINSUKIA					42	75.0	14	25.0					56
UDALGURI					49	56.3	36	41.4			2	2.3	87
Assam	16	1.0	18	1.1	933	57.2	497	30.5	27	1.7	139	8.5	1630

Table 3.3.3: District wise distributions of reasons for Home Delivery

Districts	Reasons for Home Delivery														Total Home Delivery
	Facility is too far/ Transportation problem		Prefer HD		TBA is available		Due to time factor		Customary system		Cost factor		Others		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
Baksa	36	37.9	25	26.3	7	7.4	43	45.3	22	23.2	16	16.8	1	1.1	95
Barpeta	46	45.1	35	34.3	14	13.7	29	28.4	18	17.6	16	15.7	3	2.9	102
Bongaigaon	19	26.4	8	11.1	13	18.1	16	22.2	31	43.1	10	13.9	2	2.8	72
Cachar	31	46.3	20	29.9	16	23.9	32	47.8	11	16.4	6	9.0	7	10.4	67
Chirang	29	33.3	18	20.7	19	21.8	46	52.9	32	36.8	16	18.4	3	3.4	87
Darang	26	36.6	15	21.1	8	11.3	32	45.1	19	26.8	18	25.4			71
Dhemaji	15	37.5	4	10.0	3	7.5	19	47.5	3	7.5	11	27.5	1		40
Dhubri	86	68.8	64	51.2	19	15.2	16	12.8	26	20.8	34	27.2	3		125
Dibrugarh	13	50.0	2	7.7	3	11.5	22	84.6	1	3.8	10	38.5	2		26
Goalpara	42	55.3	31	40.8	33	43.4	23	30.3	16	21.1	8	10.5	7	9.2	76
Golaghat	21	45.7	13	28.3	12	26.1	32	69.6	3	6.5	13	28.3	2	4.3	46
Hailakandi	43	50.0	32	37.2	21	24.4	24	27.9	4	4.7	17	19.8	6	7.0	86
Jorhat	13	48.1	2	7.4	6	22.2	13	48.1	3	11.1	11	40.7	2	7.4	27
Kamrup (R)	14	73.7	3	15.8	2	10.5	16	84.2	3	15.8	10	52.6	1	5.3	19
Kamrup (M)	3	7.5	7	17.5	3	7.5	6	15.0	2	5.0	14	35.0		0.0	40
Karimganj	39	30.7	29	22.8	5	3.9	32	25.2	32	25.2	22	17.3	6	4.7	127
Kokrajhar	18	29.0	7	11.3	2	3.2	26	41.9	9	14.5	9	14.5		0.0	62
Lakhimpur	21	50.0	10	23.8	4	9.5	3	7.1	2	4.8	11	26.2		0.0	42
Morigaon	46	56.1	31	37.8	1	1.2	34	41.5	17	20.7	11	13.4	3	3.7	82
Nagaon	42	66.7	31	49.2	24	38.1	23	36.5	29	46.0	13	20.6	3	4.8	63
Nalbari	41	71.9	30	52.6	10	17.5	17	29.8	10	17.5	22	38.6	2	3.5	57
Sivsagar	9	42.9	4	19.0	6	28.6	9	42.9	1	4.8	13	61.9		0.0	21
Sonitpur	24	44.4	13	24.1	11	20.4	26	48.1	3	5.6	7	13.0		0.0	54
Tinsukia	13	23.2	4	7.1	2	3.6	14	25.0	1	1.8	6	10.7	8	14.3	56
Udalguri	42	48.3	31	35.6	9	10.3	18	20.7	11	12.6	13	14.9	5	5.7	87
Assam	732	44.9	469	28.8	253	15.5	571	35.0	309	19.0	337	20.7	67	4.1	1630

Table 3.3.3(A): District wise distributions of mothers by mode of transportation to hospital

District :	Mode of Transportation from Home to Hospital								Total Institutional Delivery
	Own arrangement		Ambulance / 108 / Free Govt Vehicle		Othe Vehicle paid by Govt		No Response		
	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	141	68.8	59	28.8	2	1.0	3	1.5	205
BARPETA	102	51.8	88	44.7	2	1.0	5	2.5	197
BONGAIGAON	130	57.0	92	40.4		0.0	6	2.6	228
CACHAR	178	76.1	39	16.7		0.0	17	7.3	234
CHIRANG	121	56.5	82	38.3	10	4.7	1	0.5	214
DARRANG	116	50.7	96	41.9	7	3.1	10	4.4	229
DHEMAJI	212	81.5	35	13.5	3	1.2	10	3.8	260
DHUBRI	55	31.3	102	58.0	7	4.0	12	6.8	176
DIBRUGARH	148	54.0	90	32.8	35	12.8	1	0.4	274
GOALPARA	70	31.3	143	63.8	9	4.0	2	0.9	224
GOLAGHAT	50	19.7	200	78.7	2	0.8	2	0.8	254
HAILAKANDI	164	76.6	37	17.3	1	0.5	12	5.6	214
JORHAT	40	14.7	222	81.3	5	1.8	6	2.2	273
KAMRUP R	171	60.9	91	32.4	1	0.4	18	6.4	281
KAMRUP M	215	82.7	42	16.2		0.0	3	1.2	260
KARIMGANJ	154	89.0	15	8.7		0.0	4	2.3	173
KOKRAJHAR	126	57.5	86	39.3		0.0	7	3.2	219
LAKHIMPUR	192	74.4	53	20.5		0.0	13	5.0	258
MORIGAON	153	70.2	65	29.8		0.0	0	0.0	218
NAGAON	146	61.6	84	35.4		0.0	7	3.0	237
NALBARI	135	55.6	62	25.5	36	14.8	10	4.1	243
SIVSAGAR	162	57.4	83	29.4	37	13.1	0	0.0	282
SONITPUR	190	77.6	53	21.6		0.0	2	0.8	245
TINSUKIA	139	57.4	91	37.6		0.0	12	5.0	242
UDALGURI	137	64.3	69	32.4		0.0	7	3.3	213
Assam	3447	58.9	2079	35.5	157	2.7	170	2.9	5853

Table 3.3.3(B): District wise distributions of mothers by mode of transportation to hospital to home

District :	Mode of Transportation from Home to Hospital								Total Institutional Delivery
	Own arrangement		Ambulance / 108 / Free Govt Vehicle		Othe Vehicle paid by Govt		No Response		
	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	151	73.7	49	23.9	2	1.0	3	1.5	205
BARPETA	109	55.3	77	39.1	2	1.0	9	4.6	197
BONGAIGAON	130	57.0	82	36.0	10	4.4	6	2.6	228
CACHAR	178	76.1	39	16.7			17	7.3	234
CHIRANG	121	56.5	82	38.3	10	4.7	1	0.5	214
DARRANG	116	50.7	96	41.9	7	3.1	10	4.4	229
DHEMAJI	212	81.5	35	13.5	3	1.2	10	3.8	260
DHUBRI	75	42.6	82	46.6	7	4.0	12	6.8	176
DIBRUGARH	148	54.0	90	32.8	35	12.8	1	0.4	274
GOALPARA	123	54.9	73	32.6	9	4.0	19	8.5	224
GOLAGHAT	136	53.5	101	39.8	12	4.7	5	2.0	254
HAILAKANDI	164	76.6	37	17.3	1	0.5	12	5.6	214
JORHAT	176	64.5	88	32.2	5	1.8	4	1.5	273
KAMRUP R	171	60.9	91	32.4	1	0.4	18	6.4	281
KAMRUP M	215	82.7	42	16.2			3	1.2	260
KARIMGANJ	144	83.2	26	15.0			3	1.7	173
KOKRAJHAR	126	57.5	86	39.3			7	3.2	219
LAKHIMPUR	192	74.4	53	20.5			13	5.0	258
MORIGAON	153	70.2	65	29.8					218
NAGAON	146	61.6	84	35.4			7	3.0	237
NALBARI	135	55.6	62	25.5	36	14.8	10	4.1	243
SIVSAGAR	162	57.4	83	29.4	37	13.1			282
SONITPUR	190	77.6	53	21.6			2	0.8	245
TINSUKIA	139	57.4	91	37.6			12	5.0	242
UDALGURI	137	64.3	69	32.4			7	3.3	213
Assam	3749	64.1	1736	29.7	177	3.0	191	3.3	5853

Table 3.3.4: District wise distributions of mothers by type of delivery

District :	Type of Delivery						Total Numbers
	Normal		Caesarian		No response		
	No.	PC	No.	PC	No.	PC	
BAKSA	240	80.0	26	8.7	34	11.3	300
BARPETA	185	61.9	30	10.0	84	28.1	299
BONGAIGAON	187	62.3	38	12.7	75	25.0	300
CACHAR	195	64.8	41	13.6	65	21.6	301
CHIRANG	188	62.5	28	9.3	85	28.2	301
DARRANG	200	66.7	27	9.0	73	24.3	300
DHEMAJI	225	75.0	33	11.0	42	14.0	300
DHUBRI	186	61.8	31	10.3	84	27.9	301
DIBRUGARH	186	62.0	88	29.3	26	8.7	300
GOALPARA	212	70.7	11	3.7	77	25.7	300
GOLAGHAT	221	73.7	30	10.0	49	16.3	300
HAILAKANDI	161	53.7	53	17.7	86	28.7	300
JORHAT	195	65.0	77	25.7	28	9.3	300
KAMRUP R	209	69.7	70	23.3	21	7.0	300
KAMRUP M	183	61.0	77	25.7	40	13.3	300
KARIMGANJ	188	62.7	35	11.7	77	25.7	300
KOKRAJHAR	185	65.8	28	10.0	68	24.2	281
LAKHIMPUR	189	63.0	68	22.7	43	14.3	300
MORIGAON	201	67.0	25	8.3	74	24.7	300
NAGAON	210	70.0	26	8.7	64	21.3	300
NALBARI	210	70.0	33	11.0	57	19.0	300
SIVSAGAR	245	80.9	36	11.9	22	7.3	303
SONITPUR	202	67.6	42	14.0	55	18.4	299
TINSUKIA	183	61.4	58	19.5	57	19.1	298
UDALGURI	184	61.3	24	8.0	92	30.7	300
Assam	4970	66.4	1035	13.8	1478	19.8	7483

Table 3.3.5: District wise distributions of mothers by staying at the facility after delivery

District :	Mothers staying at the facility after delivery										Total Institutional Delivery
	Less than 12 hours		12 – 24 hours		24 – 48 hours		more than 48 hours		No Response		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	2	1.0	38	18.5	59	28.8	91	44.4	15	7.3	205
BARPETA	16	8.1	58	29.4	42	21.3	66	33.5	15	7.6	197
BONGAIGAON	22	9.6	46	20.2	55	24.1	97	42.5	8	3.5	228
CACHAR	33	14.1	35	15.0	37	15.8	125	53.4	4	1.7	234
CHIRANG	4	1.9	74	34.6	52	24.3	82	38.3	2	0.9	214
DARRANG	5	2.2	42	18.3	64	27.9	114	49.8	4	1.7	229
DHEMAJI	26	10.0	74	28.5	55	21.2	86	33.1	19	7.3	260
DHUBRI	10	5.7	79	44.9	57	32.4	27	15.3	3	1.7	176
DIBRUGARH	14	5.1	49	17.9	37	13.5	153	55.8	21	7.7	274
GOALPARA	10	4.5	91	40.6	90	40.2	30	13.4	3	1.3	224
GOLAGHAT		0.0	15	5.9	89	35.0	146	57.5	4	1.6	254
HAILAKANDI	12	5.6	20	9.3	30	14.0	147	68.7	5	2.3	214
JORHAT		0.0	45	16.5	55	20.1	159	58.2	14	5.1	273
KAMRUP R	10	3.6	41	14.6	64	22.8	158	56.2	8	2.8	281
KAMRUP M		0.0	46	17.7	54	20.8	146	56.2	14	5.4	260
KARIMGANJ	8	4.6	19	11.0	30	17.3	110	63.6	6	3.5	173
KOKRAJHAR	25	11.4	80	36.5	40	18.3	69	31.5	5	2.3	219
LAKHIMPUR	19	7.4	57	22.1	59	22.9	95	36.8	28	10.9	258
MORIGAON	13	6.0	80	36.7	49	22.5	56	25.7	20	9.2	218
NAGAON	52	21.9	53	22.4	50	21.1	75	31.6	7	3.0	237
NALBARI	5	2.1	6	2.5	110	45.3	113	46.5	9	3.7	243
SIVSAGAR	1	0.4	48	17.0	76	27.0	147	52.1	10	3.5	282
SONITPUR	9	3.7	45	18.4	66	26.9	124	50.6	1	0.4	245
TINSUKIA	35	14.5	64	26.4	33	13.6	100	41.3	10	4.1	242
UDALGURI	11	5.2	54	25.4	48	22.5	83	39.0	17	8.0	213
Assam	342	5.8	1259	21.5	1401	23.9	2599	44.4	252	4.3	5853

Table 3.6.: District wise distribution of mothers according to ASHA accompanying during delivery

District :	ASHA accompanying during Institutional delivery		Total Institutional Delivery
	No.	PC	
BAKSA	176	85.9	205
BARPETA	162	82.2	197
BONGAIGAON	200	87.7	228
CACHAR	168	71.8	234
CHIRANG	186	86.9	214
DARRANG	179	78.2	229
DHEMAJI	236	90.8	260
DHUBRI	159	90.3	176
DIBRUGARH	198	72.3	274
GOALPARA	201	89.7	224
GOLAGHAT	230	90.6	254
HAILAKANDI	112	52.3	214
JORHAT	226	82.8	273
KAMRUP R	194	69.0	281
KAMRUP M	82	31.5	260
KARIMGANJ	108	62.4	173
KOKRAJHAR	199	90.9	219
LAKHIMPUR	216	83.7	258
MORIGAON	190	87.2	218
NAGAON	205	86.5	237
NALBARI	205	84.4	243
SIVSAGAR	245	86.9	282
SONITPUR	198	80.8	245
TINSUKIA	172	71.1	242
UDALGURI	196	92.0	213
Assam	4773	81.5	5853

Table 3.3.7: District wise distributions of mothers by referred to higher facility

District :	Referred to a higher health facility		Total Institutional Delivery
	No.	PC	
BAKSA	21	10.2	205
BARPETA	28	14.2	197
BONGAIGAON	16	7.0	228
CACHAR	27	11.5	234
CHIRANG	25	11.7	214
DARRANG	29	12.7	229
DHEMAJI	24	9.2	260
DHUBRI	12	6.8	176
DIBRUGARH	67	24.5	274
GOALPARA	14	6.3	224
GOLAGHAT	36	14.2	254
HAILAKANDI	22	10.3	214
JORHAT	23	8.4	273
KAMRUP R	27	9.6	281
KAMRUP M	18	6.9	260
KARIMGANJ	18	10.4	173
KOKRAJHAR	19	8.7	219
LAKHIMPUR	38	14.7	258
MORIGAON	11	5.0	218
NAGAON	16	6.8	237
NALBARI	26	10.7	243
SIVSAGAR	60	21.3	282
SONITPUR	23	9.4	245
TINSUKIA	44	18.2	242
UDALGURI	25	11.7	213
Assam	669	11.4	5853

Table 3.3.8: District wise distributions of mothers by type of facility where referred

District :	Type of facility where the beneficiaries referred												Total referred cases
	PHC		CHC/SDH		DH		MEDICAL		PVT		OTHER		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA			2	9.5	10	47.6	8	38.1	1	4.8			21
BARPETA	1	3.6	6	21.4	9	32.1	7	25.0	5	17.9		0.0	28
BONGAIGAON	1	6.3		0.0	9	56.3		0.0	4	25.0	2	12.5	16
CACHAR		0.0		0.0		0.0	22	81.5	5	18.5		0.0	27
CHIRANG	1	4.0	7	28.0	6	24.0	1	4.0	8	32.0	2	8.0	25
DARRANG		0.0	7	24.1	11	37.9	9	31.0	2	6.9		0.0	29
DHEMAJI	5	20.8	1	4.2	17	70.8		0.0	1	4.2		0.0	24
DHUBRI		0.0		0.0	11	91.7		0.0	1	8.3		0.0	12
DIBRUGARH	27	40.3	11	16.4	1	1.5	20	29.9	7	10.4	1	1.5	67
GOALPARA		0.0		0.0	12	85.7		0.0	1	7.1	1	7.1	14
GOLAGHAT	3	8.3		0.0	19	52.8	14	38.9		0.0		0.0	36
HAILAKANDI		0.0		0.0	5	22.7	10	45.5	7	31.8		0.0	22
JORHAT		0.0	6	26.1		0.0	13	56.5		0.0	4	17.4	23
KAMRUP R	2	7.4	2	7.4	7	25.9	14	51.9	2	7.4		0.0	27
KAMRUP M	1	5.6	1	5.6		0.0	14	77.8	2	11.1		0.0	18
KARIMGANJ	1	5.6	1	5.6	5	27.8	4	22.2	7	38.9		0.0	18
KOKRAJHAR		0.0	1	5.3	10	52.6		0.0	3	15.8	5	26.3	19
LAKHIMPUR	3	7.9	4	10.5	24	63.2		0.0	6	15.8	1	2.6	38
MORIGAON		0.0	6	54.5	1	9.1	1	9.1	3	27.3		0.0	11
NAGAON	2	12.5	2	12.5	3	18.8	3	18.8	6	37.5		0.0	16
NALBARI	3	11.5		0.0	8	30.8	14	53.8		0.0	1	3.8	26
SIVSAGAR	24	40.0	19	31.7	2	3.3	11	18.3	2	3.3	2	3.3	60
SONITPUR	1	4.3	3	13.0	14	60.9		0.0	5	21.7		0.0	23
TINSUKIA	7	15.9	5	11.4	17	38.6	3	6.8	11	25.0	1	2.3	44
UDALGURI	1	4.0	5	20.0	3	12.0	3	12.0	13	52.0		0.0	25
Assam	83	12.4	89	13.3	204	30.5	171	25.6	102	15.2	20	3.0	669

Table 3.3.9: District wise distributions of mothers according to PNC status after delivered a baby at the facility

Districts	PNC Status		Number of Institutional Delivery
	Three to fourteen days after Delivery		
	No.	PC	
BAKSA	48	23.4	205
BARPETA	96	48.7	197
BONGAIGAON	65	28.5	228
CACHAR	91	38.9	234
CHIRANG	49	22.9	214
DARRANG	61	26.6	229
DHEMAJI	128	49.2	260
DHUBRI	47	26.7	176
DIBRUGARH	116	42.3	274
GOALPARA	96	42.9	224
GOLAGHAT	67	26.4	254
HAILAKANDI	72	33.6	214
JORHAT	149	54.6	273
KAMRUP R	96	34.2	281
KAMRUP M	143	55.0	260
KARIMGANJ	116	67.1	173
KOKRAJHAR	13	5.9	219
LAKHIMPUR	179	69.4	258
MORIGAON	46	21.1	218
NAGAON	61	25.7	237
NALBARI	53	21.8	243
SIVSAGAR	77	27.3	282
SONITPUR	53	21.6	245
TINSUKIA	164	67.8	242
UDALGURI	46	21.6	213
Assam	2132	36.4	5853

Table 3.3.10: District wise distribution of mothers by JSY beneficiaries

District :	Received JSY benefit		Total ID at Gov. facilities
	No.	PC	
BAKSA	159	82.8	192
BARPETA	169	93.9	180
BONGAIGAON	174	83.3	209
CACHAR	185	86.9	213
CHIRANG	163	84.0	194
DARRANG	197	92.9	212
DHEMAJI	228	93.4	244
DHUBRI	156	101.3	154
DIBRUGARH	189	83.3	227
GOALPARA	171	79.9	214
GOLAGHAT	201	85.5	235
HAILAKANDI	147	79.0	186
JORHAT	202	86.0	235
KAMRUP R	198	81.8	242
KAMRUP M	98	51.3	191
KARIMGANJ	124	90.5	137
KOKRAJHAR	184	88.5	208
LAKHIMPUR	209	86.7	241
MORIGAON	179	91.3	196
NAGAON	187	87.8	213
NALBARI	196	90.3	217
SIVSAGAR	179	79.2	226
SONITPUR	169	84.1	201
TINSUKIA	155	75.6	205
UDALGURI	156	80.8	193
Assam	4375	84.7	5165

Table 3.3.11: District wise distributions of mothers by awareness about JSSK

District :	Knowledge about JSSK Scheme		Total mothers surveyed
	No.	PC	
BAKSA	131	43.7	300
BARPETA	152	50.8	299
BONGAIGAON	133	44.3	300
CACHAR	152	50.5	301
CHIRANG	110	36.5	301
DARRANG	134	44.7	300
DHEMAJI	127	42.3	300
DHUBRI	98	32.6	301
DIBRUGARH	105	35.0	300
GOALPARA	133	44.3	300
GOLAGHAT	121	40.3	300
HAILAKANDI	126	42.0	300
JORHAT	127	42.3	300
KAMRUP R	187	62.3	300
KAMRUP M	215	71.7	300
KARIMGANJ	123	41.0	300
KOKRAJHAR	73	26.0	281
LAKHIMPUR	129	43.0	300
MORIGAON	153	51.0	300
NAGAON	161	53.7	300
NALBARI	99	33.0	300
SIVSAGAR	127	41.9	303
SONITPUR	101	33.8	299
TINSUKIA	156	52.3	298
UDALGURI	105	35.0	300
Assam	3278	43.8	7483

Table 3.3.12: District wise distributions of mothers by source of awareness about JSSK

District :	Source of information about JSSK														JSSK aware mothers
	ASHA		ANM / MPW		Radio / TV		Signboard at the Hospital		News Paper		Family members		Relatives / Friends		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	54	41.2	24	18.3	21	16.0		0.0	16	12.2	8	6.1	11	8.4	131
BARPETA	89	58.6	36	23.7	24	15.8	16	10.5	19	12.5	4	2.6	6	3.9	152
BONGAIGAON	78	58.6	23	17.3	41	30.8	1	0.8	15	11.3		0.0		0.0	133
CACHAR	89	58.6	28	18.4	12	7.9	12	7.9	2	1.3	4	2.6	10	6.6	152
CHIRANG	85	77.3	12	10.9	14	12.7		0.0		0.0		0.0		0.0	110
DARRANG	51	38.1	22	16.4	26	19.4	9	6.7	16	11.9	7	5.2	6	4.5	134
DHEMAJI	76	59.8	11	8.7	31	24.4	2	1.6	22	17.3	12	9.4	23	18.1	127
DHUBRI	73	74.5	41	41.8	14	14.3		0.0	3	3.1		0.0		0.0	98
DIBRUGARH	74	70.5	47	44.8	23	21.9	3	2.9	2	1.9		0.0		0.0	105
GOALPARA	83	62.4	46	34.6	11	8.3		0.0		0.0		0.0		0.0	133
GOLAGHAT	77	63.6	41	33.9	39	32.2	23	19.0	10	8.3	6	5.0	1	0.8	121
HAILAKANDI	47	37.3	22	17.5	17	13.5	4	3.2	12	9.5	26	20.6	6	4.8	126
JORHAT	91	71.7	50	39.4	35	27.6	18	14.2	5	3.9	1	0.8	2	1.6	127
KAMRUP R	68	36.4	41	21.9	37	19.8	11	5.9	3	1.6		0.0		0.0	187
KAMRUP M	22	10.2	43	20.0	62	28.8	23	10.7	26	12.1	27	12.6	31	14.4	215
KARIMGANJ	78	63.4	22	17.9	22	17.9	2	1.6	1	0.8	18	14.6	19	15.4	123
KOKRAJHAR	51	69.9	29	39.7	21	28.8		0.0		0.0		0.0		0.0	73
LAKHIMPUR	74	57.4	22	17.1	29	22.5	1	0.8	35	27.1	5	3.9	15	11.6	129
MORIGAON	112	73.2	17	11.1	9	5.9	9	5.9	13	8.5	6	3.9		0.0	153
NAGAON	82	50.9	27	16.8	15	9.3	12	7.5	11	6.8	14	8.7	6	3.7	161
NALBARI	79	79.8	13	13.1	21	21.2	6	6.1	2	2.0	3	3.0	9	9.1	99
SIVSAGAR	87	68.5	71	55.9	46	36.2		0.0		0.0		0.0		0.0	127
SONITPUR	77	76.2	98	97.0	11	10.9		0.0		0.0		0.0		0.0	101
TINSUKIA	46	29.5	45	28.8	19	12.2	3	1.9		0.0		0.0	2	1.3	156
UDALGURI	74	70.5	35	33.3	12	11.4		0.0		0.0		0.0		0.0	105
Assam	1817	55.4	866	26.4	612	18.7	155	4.7	213	6.5	141	4.3	147	4.5	3278

Table 3.3.13: District wise distributions of mothers by awareness about benefit of JSSK

District :	Source of information about JSSK												JSSK aware mothers
	Free diagnostic / Lab. Services		Free Medicine		Free delivery for Normal / CS		Free diet		Free pick – up from Home to Hospital		Free Drop Back		
	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	No.	PC	
BAKSA	62	47.3	96	73.3	46	35.1	35	26.7	16	12.2	13	9.9	131
BARPETA	98	64.5	75	49.3	33	21.7	37	24.3	22	14.5	18	11.8	152
BONGAIGAON	99	74.4	112	84.2	72	54.1	27	20.3	31	23.3	28	21.1	133
CACHAR	103	67.8	120	78.9	71	46.7	76	50.0	14	9.2	11	7.2	152
CHIRANG	93	84.5	107	97.3	54	49.1	29	26.4	47	42.7	44	40.0	110
DARRANG	51	38.1	88	65.7	50	37.3	46	34.3	15	11.2	11	8.2	134
DHEMAJI	39	30.7	97	76.4	69	54.3	25	19.7	23	18.1	20	15.7	127
DHUBRI	33	33.7	71	72.4	84	85.7	35	35.7	48	49.0	43	43.9	98
DIBRUGARH	69	65.7	91	86.7	71	67.6	46	43.8	67	63.8	45	42.9	105
GOALPARA	83	62.4	107	80.5	78	58.6	57	42.9	39	29.3	36	27.1	133
GOLAGHAT	77	63.6	111	91.7	96	79.3	19	15.7	56	46.3	53	43.8	121
HAILAKANDI	96	76.2	102	81.0	62	49.2	51	40.5	29	23.0	26	20.6	126
JORHAT	82	64.6	121	95.3	104	81.9	76	59.8	88	69.3	65	51.2	127
KAMRUP R	86	46.0	103	55.1	75	40.1	11	5.9	12	6.4	9	4.8	187
KAMRUP M	92	42.8	149	69.3	116	54.0	21	9.8	41	19.1	25	11.6	215
KARIMGANJ	41	33.3	96	78.0	73	59.3	46	37.4	33	26.8	30	24.4	123
KOKRAJHAR	68	93.2	67	91.8	52	71.2	9	12.3	37	50.7	34	46.6	73
LAKHIMPUR	62	48.1	36	27.9	40	31.0	34	26.4	26	20.2	23	17.8	129
MORIGAON	98	64.1	102	66.7	98	64.1	62	40.5	51	33.3	48	31.4	153
NAGAON	103	64.0	118	73.3	95	59.0	80	49.7	65	40.4	49	30.4	161
NALBARI	54	54.5	51	51.5	67	67.7	58	58.6	38	38.4	35	35.4	99
SIVSAGAR	90	70.9	110	86.6	90	70.9	59	46.5	44	34.6	41	32.3	127
SONITPUR	87	86.1	89	88.1	66	65.3	61	60.4	46	45.5	38	37.6	101
TINSUKIA	114	73.1	106	67.9	78	50.0	79	50.6	26	16.7	23	14.7	156
UDALGURI	78	74.3	91	86.7	76	72.4	36	34.3	64	61.0	61	58.1	105
Assam	1958	59.7	2416	73.7	1816	55.4	1115	34.0	978	29.8	829	25.3	3278