



Evaluation of Tea Garden Hospitals under PPP with NRHM, Assam





Regional Resource Centre for North Eastern States
Ministry of Health & Family Welfare
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ABBREVIATIONS

ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
API	Annual Parasitic Incidence
AYUSH	Ayurveda, Yoga, Unani, Siddha and Homeopathy
BCG	Bacillus Calmette Guerin
BPMU	Block Programme Management Unit
CHC	Community Health Centre
DH	District Hospital
DOTS	Directly Observed Treatment, Short course
DPMU	District Programme Management Unit
DPT	Diphtheria-Pertussis-Tetanus
FRU	First stage Referral Unit
Goi	Government of India
GNM	General Nurse Midwife
HIV	Human Immunodeficiency Virus
IFA	Iron and Folic Acid Tablet
IMEP	Infection Management and Environment Plan
IMR	Infant Mortality Rate
IUCD	Intra Uterine Contraceptive Device
MMR	Maternal Mortality Ratio
MO	Medical Officer
MP	Malaria Parasite
MTP	Medical Termination of Pregnancy
NVBDCP	National Vector Borne Disease Control Programme



NRHM	National Rural Health Mission
OPD	Out Patient Department
OPV	Oral Polio Vaccine
OT	Operation Theatre
ORS	Oral Rehydration Salt
PHC	Primary Health Centre
PPP	Public Private Partnership
RCH	Reproductive and Child Health
TB	Tuberculosis
TT	Tetanus Toxoid

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The assessment of tea garden hospitals under public private partnership with NRHM, Assam was conducted by Regional Resource Centre for North Eastern States (RRC, NE) during Sept, 2013 to Oct, 2013. A total of 150 PPP tea garden hospitals of Assam were covered. As a part of the study, the concerned officials at State (SPMU), District (DPMU) and the entire medical and paramedical staffs of the tea garden hospitals were interviewed.

I would take this opportunity to thank Sri. Prateek Hajela, IAS, (former Mission Director, NRHM, Assam) and Sri Manish Thakur, IAS, Mission Director, National Rural Health Mission, Assam for supporting the RRC-NE team for conducting the Public Private Partnership Tea Garden Hospitals Assessment in the State. I would also like to acknowledge the support and cooperation extended by the management of tea gardens, Joint Director of Health Services and the officials of the District Programme Management Unit of the districts throughout the study. My heartiest thanks to all the medical and para-medical staff of Tea Garden Hospitals who spent their valuable time with us and provided all the necessary information, which helped the RRC-NE team to accomplish the task assigned successfully and on time.

(Dr. A.C. Baishya)
Director, RRC-NE

EXECUTIVE SUMMARY

National Rural Health Mission, Assam had executed a Memorandum of Understanding with Tea Garden hospitals under Public Private Partnership (PPP) to broaden the access and availability of proper health care services to the tea growing community of Assam. The tea community remains underserved with respect to basic health care facilities adding to high disease burden and mortality rate. The NRHM PPP with tea garden hospitals has been implemented in the state since 2006-07 in a phased manner. Initially a total of 60 tea gardens were brought under the umbrella of PPP and gradually the remaining tea estates, and at present it is being implemented by 150 Tea Garden Hospitals in Assam. The major objectives of the scheme were to provide health care services to the tea garden workers as well as non-workers. The focused area of interventions were to provide maternal health care, child health care, emergency services, referral services and care for communicable and non-communicable diseases by upgrading the existing infrastructure and strengthening manpower.

The aim of the NRHM PPP evaluation study was to evaluate the effectiveness of the PPP model in providing healthcare services to the targeted population. The objectives of study were (a) assessment of infrastructure, human resource & training, assessment of the availability of diagnostic facilities, equipment and drugs (b) assessment of service delivery (c) analysis of the financial utility by tea gardens and (d) remedial measures for further strengthening the PPP for optimal outcome.

The study was a cross sectional study with qualitative and quantitative data. The study was conducted in all the 150 tea garden hospitals of Assam under NRHM PPP during the month of September and October 2013. The respondents for the study were the Medical Officers, Laboratory Technicians, Pharmacists, Staff nurses, Account Managers and Managers of the respective tea garden hospitals. Primary data were collected from the tea garden hospitals about health indicators, human resources availability, infrastructure, service delivery and performance of facilities etc.

The study revealed that among the 150 tea garden hospitals in Assam, number of health care settings under PPP availability is- Medical Officers were available in 126 (84%) tea garden hospitals and out of those 126 hospitals, 9 hospitals have visiting doctor and 9 hospitals have AYUSH doctor. The availability of GNM was in 81 (54%) tea garden hospitals, ANM in 124 (82.6%) hospitals, Pharmacist in 136 (90.6%) hospitals and Laboratory technician in 61 (40.7%) tea garden hospitals. The study revealed that 6 tea garden hospitals had no Medical Officer, GNM and ANM. These tea gardens were Isabheel TE (Karimganj), Bhuvan Valley TE (Cachar), Arucuttipore TE (Cachar), Doolhat TE (Lakhimpur), Chandmari TE (Tinsukia) and Lengri TE (Dibrugarh).

Training is one of the critical areas which require more focus for the tea garden hospitals. The study revealed that there was lack of training for SBA, NSSK and IMNCI for the tea garden staffs.

The physical infrastructures in all the tea garden hospitals under the study in Assam were fairly good. Institutional deliveries were conducted in 142 hospitals of Assam. Average of 0-4 deliveries per month were conducted in 77 hospitals, 5-9 deliveries per month in 52 hospitals and ≥ 10 deliveries in 14 hospitals in 2012-2013. It was observed that Janani Suraksha Yojana (JSY) beneficiaries were gradually declining over the years in tea garden hospitals from 91.05% in 2010-11 to 81.56% in 2012-13.


Functional New Born Care Corners were available only in 30.7% of the health facilities visited but the equipment and logistics (Radiant Warmer, Phototherapy unit, Resuscitation kit, weighing scale etc.) were available in varied range in the delivery facilities. Moreover, the equipment were procured by the Tea Garden Management themselves without any need based assessment and the utilization rate of the equipment is very low due to lack of trained man-power.

It was observed that there was gradual increase in antenatal care for 3rd trimester from 64.02% in 2010-11 to 72.27% in 2012-13 (4900 average population). But there was decrease in registration of ANC in 1st trimester from 64.45% in 2010-11 to 61.65% in 2012-13. Services like TT 1st dose and TT 2nd dose have increased from 2010 to 2013. There was increase in number of immunizations from 79607 in 2010-11 to 106429 in 2012-13.

The study revealed that laboratory investigations that were performed in the hospitals was Haemoglobin estimation (54%), Malaria Parasite Test (43.30%), Blood sugar estimation (38.70%), Blood ABO & Rh typing (34.70%) and Urine examination for sugar and albumin (32.70%). Most of the investigations were performed by portable testing kits.

Family planning services and IEC activities were poor in many tea garden hospitals under NRHM PPP. The permanent methods of sterilization like vasectomy and tubectomy were low in the TE garden hospitals and it was available in 28.67% and 45.33% of the hospitals respectively. Other method like IUCD was available in 17.33%. Medical Termination of Pregnancy (MTP) was performed only in 14 TE hospitals.

On analysis of fund utilisation, it was revealed that averages of 77.20% of the funds were spent from funds received from NRHM in all the 150 TE hospitals. The analysis was done on the overall expenditure from the date of MoU signed till March 2013 i.e. from March 2008 to March 2013. On salary 42.74% was expended, 35.07% was expended on infrastructure, 5.31% on drugs and laboratory consumables, 9.24% on equipment and 13.59% was expended on POL and others like maintenance on vehicle, IEC etc.



Monitoring and supervision from districts as well from the state were poor. Monthly reporting of the services provided was given to the district on prescribed format provided by the NRHM. But supervision and monitoring was not done from the district. In some of the district financial audits were conducted but there were no records of the audit in the hospital. It was observed that the fund allocation to each tea garden hospitals under NRHM PPP was same irrespective of the population catered. However, the MoU guidelines varied from district to district.

Chapter One

INTRODUCTION:

Assam is the highest tea producer state in the country with 55% of the total production. About 20% of the total population of the state belongs to the tea growing communities. There are many studies on the health status of the tea garden community regarding maternal and child health, nutritional status and health assessment of the community by the national and international organizations. All those studies revealed that the nutritional status of these communities is poor and amongst the tea tribe population anaemia, hypertension, malnutrition and diarrhoeal diseases are major contributing factors to morbidity resulting in high maternal and infant death.

Various factors are responsible for frequent outbreaks of diarrheal diseases like lack of proper sanitation facilities and safe water. These are identified as critical gaps in the worker's residential lines. While provisions of these facilities are made by the Tea Garden management, they are sporadic, not used and maintained properly and also in many cases the assets (toilet) are damaged. The unclean or submerged drainage system in many of these lines (during monsoon) becomes a serious public health risk. The lines are inhabited by regular workers and casual workers/non workers. An estimated 40% of the populations in the worker lines are casual workers/non workers. Thus, even if, the Tea garden managements manage to provide the facilities, the actual beneficiaries are only about 60% of the total population, thereby a large number of households remain un-served. This population is deprived of basic health care facilities adding to high disease burden and mortality rate. It was also observed that there was increase in maternal mortality ratio (MMR) i.e. 430 in 2010-11 to 436 in 2011-12 (*Annual Health Survey*) in upper Assam which comprises of maximum numbers of tea gardens. From the surveys it was revealed that maximum number of maternal deaths in PHCs, CHCs and District hospitals were from the tea tribe community. Hence, the District Health Society and the Management of Tea gardens worked together to implement the Health Initiatives in Tea Estates. The purpose of the scheme was to strengthen primary health care in the estate hospitals as well as extend health services to casual/non workers from within the resident population of the estate.

The National Rural Health Mission was launched in 2005 in India with the goal to provide accessible, affordable and quality health care to rural populations, especially vulnerable and underserved population groups in the country especially to the poor, women and children. The Mission aims at operationalising the existing health facilities to meet Indian Public Health Standards in each block of the country, emphasis were more on maternal and child health care. Considering the bleak scenario of the tea garden community and with a view to broadening the access and availability of proper health services for the under-served Tea Garden workers and their dependents, Govt. of Assam under National Rural Health signed MoU with the Tea Garden hospitals under Public-Private Partnership

(PPP). The existing government health centres in Assam could not cater proper health care to all these deprived tea garden non-workers population due to increase in case load and work load with limited health infrastructure and manpower.

The NRHM PPP for the tea garden hospital is being implemented in the state since 2006-07 in a phased manner, initially a total of 60 tea gardens were brought under the umbrella of PPP and gradually the remaining tea estates, and at present it is being implemented by 150 Tea Garden Hospitals in Assam.

STUDY OBJECTIVES:

The government of Assam had adopted the PPP approach for providing healthcare delivery services in the tea garden hospitals. MoU was signed with the tea garden associations after identification of the requisite tea gardens. The idea was to provide subsidized medical facilities to both permanent and temporary tea garden workers and others residing in the region nearby the tea garden.

With declining investments in tea gardens, there was a lack of medical personnel as well as shortage of drugs, a gap that the State government planned to address with supplies of medicine and skilled manpower. Thus after implementation for 5 years and the varying dynamics in the running of tea garden hospital in the state, a need was felt to assess the efficiency and impact of the tea garden hospitals in the region. Ministry of Health and Family Welfare entrusted Regional Resource Centre – NE states to carry out the requisite study in the state. The aim of the study was to evaluate the effectiveness of the PPP model in providing health service to the targeted population. On the basis of their current performance and deliverables, further modifications would be made in their functioning so as to better serve the targeted community in the due course.

The objectives of the NRHM PPP Tea Garden Hospitals evaluation study was to:

1. Review the Management and implementation process under the PPP including:
 - a. Assessment of infrastructure (additions/renovations),
 - b. Human resources (recruitment & availability over what is mandated) training, ongoing capacity building.
 - c. Assessment of the availability of diagnostic facilities, equipment and drugs.
2. Assess the service delivery outcomes of tea garden hospitals under NRHM PPP with respect to the Memorandum of Understanding.
3. Analyse the adequacy of financial arrangements between the state and tea garden hospitals, the quantum of in-kind and monetary contribution.
4. Remedial measures for further strengthening the PPP for optimal outcome.

The PPP evaluation also aims to review the MoU and capture the details on the following key domain:

- Infrastructure strengthening of hospitals
- Human resources availability
- Process of programme implementation.
- Performance of the Hospitals in the following areas of service delivery:
 - Antenatal care, postnatal care, newborn care, arrangement (24x7 days) for institutional deliveries,
 - Immunization
 - Family planning, IUD insertion and terminal methods.
 - Laboratory services.
 - Limited inpatient facility and extensive OPD facility.
 - ARI / Diarrheal care
 - Depot holder for ORS / contraceptives.
 - Health education & outreach service: RCH/Tubectomy/Immunization camps
 - Services under NVBDCP, DOTS etc.
 - Targeted IEC, BCC and training.
- Financial Management system.
- Constraint faced by the PPP Tea Garden Hospitals in delivering the assured services as per MoU.

METHODOLOGY OF THE STUDY:

The study was a cross sectional study based on qualitative and quantitative data. The aim of the study was to understand the effectiveness of PPP tea garden hospitals under NRHM, Assam in regards to health care service delivery in the tea garden areas. The study was carried out in all the 150 PPP tea garden hospitals.

The study area comprised of the following major heads:

- i. Review of Term of Reference (ToR) of Memorandum of Understanding (MoU) signed between partners.
- ii. Status of the health facilities providing the services.
- iii. Assess the knowledge and skills of service providers.

Sampling Procedure:

For category i. The Term of Reference of MoU signed between all the 150 tea garden was reviewed.

For category ii. Assessment of all the 150 tea garden hospitals was done using a pre-set questionnaire.

For category iii. The core service provider team of the health facility from each of the PPP run tea garden health facility was taken up for the study. The core service providers were Medical Officers, Laboratory Technicians, Pharmacists, Staff nurses, Account Managers and Managers of the respective tea garden hospitals.

Study tools:

1. Structured questionnaire to assess the
 - functional status of the hospitals,
 - necessary equipment and drugs
 - manpower availability and training status
 - the types of services provided in the hospital
 - awareness and IEC activities and
 - financial involvement
2. Baseline data/information about health indicators, human resources availability, infrastructure, service delivery and performance of facilities etc.
3. Secondary data, HMIS /programme reports and relevant documents at various levels

Study period

September 2013 to December 2013

Chapter Two

PPP TEA GARDEN HOSPITALS UNDER NRHM, ASSAM:

In order to strengthen the primary health care services in the estate hospitals as well as to extend healthcare delivery services to non-entitled cases from within the resident population of the estates, the district health society and the management of tea garden agreed to work together to implement the health initiative in the tea estates under NRHM in PPP mode. The process was initiated in the state in 2006-07 in a phased manner. Initially a total of 60 tea gardens were brought under the umbrella of PPP and at present it is being implemented by 150 tea garden hospitals. The purpose of the scheme was to provide affordable medical facilities to both permanent and temporary tea garden workers and others residing nearby the tea garden areas. The state through NRHM provides budgetary support ranging from Rs. 7.5 lakh to Rs. 15 lakh for each of the tea garden hospitals annually. They are basically supported in terms of infrastructure development, honorarium to manpower, drugs, mobility support, social mobilization and orientation of the available human resources.

The agreement was in force for one year from the date of signing the MoU and was renewed after completion of one year depending upon adherence to NRHM norms by the tea garden management and requisite approvals. The source of funding for the scheme was done through NRHM, Assam. Fifty percent of the agreed amount was released by the District Health Society on signing of the MoU. The balance amount was released to the Hospital Management Committee of T.E. on submission of Utilization Certificate and the Statement of Expenditure (SOE) of the previous amount.

Coverage

The scheme covers:

- Workers and their authorized dependents as per census book;
- Staff members and authorized dependents residing in tea estates;
- Non-entitled cases excluded under Definition of 'Family' of the PLA;
- Retired workers;
- Other authorized and identified residents of the estate;

Objectives

The objective of the scheme is:

- To provide health care services to the tea garden workers and non workers;
- To strengthen existing infrastructure in the TE hospitals based on facility survey;
- To purchase medical equipment pertaining to service delivery mentioned in the MoU;
- To standardize the existing labour room;
- To provide baby care corner and other facility to meet emergencies of new born;
- To appoint doctors, nurses and paramedical staff, if required;
- To appoint support staff, if required;
- To undertake expenditure as approved by committee for betterment of existing facility.

Services:

Following services are being rendered under the partnership:

- Mother and child health care;
- Provision of normal delivery;
- Routine antenatal & postnatal care to all women.
- Facility for New born Care such as neonatal resuscitation & management of neonatal hypothermia, jaundice etc.;
- Immunization of the children;
- Diagnosis and management of anaemia & vitamin A deficiency among children and adults;
- Family Planning services e.g. OC Pill, Condom, IUD insertion and permanent methods like Vasectomy (NSV);
- Counseling and appropriate referral for safe abortion services (MTP) for those in need or MTP using Manual Vacuum Aspiration (MVA) technique;

- Provision of facility on Janani Suraksha Yojna (JSY);
- Free medical camps and awareness on nutrition, hygiene at regular intervals;
- For laboratory investigations viz. routine examination of blood, stool and urine; the specimen collected in the tea garden hospital would be tested in the nearby designated PHC. The responsibility of the collection and transporting specimens and collection of reports rests with the tea garden hospital;
- Nutrition & health counseling;
- 24 hours emergency service : appropriate management of injuries and accidents, first aid, stabilization of patients before referral and other emergency conditions;
- Referral services;
- Prevention & control of diseases like malaria, tuberculosis, and Japanese encephalitis etc.;
- In case of epidemics and any emergencies, TE hospitals will provide services to the people of nearby villages keeping in mind their capacity and security of the TE.

The service providers have certain duties to follow and maintain according to the NRHM norms and guidelines. They must maintain the hospital and premises clean and in hygienic manner. The records of services provided and referral cases must be well maintained along with the stock of medicines as per PLA guidelines and NRHM norms. They also should maintain all relevant records for purpose of audit and submission of returns to District Health Society (DHS).

Hospital Management Committee:

A hospital management committee is formed from amongst the following persons for the functioning of the scheme in the tea garden hospitals. They are:

- Manager (Chairman)
- Medical officer of the tea garden hospital (Member Secretary)
- President/Secretary of recognized union at estate level.
- A nominated representative from tea community from the estate.
- 3 Representative from BPHC including SDM&HO and BPM
- Welfare officer.

Chapter Three

FINDINGS OF THE STUDY

3.1 Infrastructure:

The physical infrastructures in all the tea garden hospitals under the study in Assam were fairly good. The objective of the memorandum was to strengthen the existing infrastructure of the tea estate hospitals, standardize the existing labour room and a provision of new born care unit to meet the emergencies of new born care. Almost all the TE hospitals have utilised fund from NRHM for up-gradation of the health facilities except in few TE hospitals.

The study revealed that the availability of functional OPD was 98.7% and was not available in Chandmari TE (Tinsukia) and Sonajuli TE (Sonitpur). However, AYUSH OPD was not seen in any of the tea garden hospitals. Emergency room and separate dressing room was available in 76% of the total TE hospitals and separate male and female wards were available in 92.6 % and not available in 11 TE Hospitals (Figure 1).

The availability of labour room was 94.7% and was not available in 8 TE hospitals. Though labour room was available in 142 TE hospitals, it was utilized in 135 TE hospitals. In 7 TE hospitals the labour rooms were not utilised because the labour tables were out of order and there were no mattresses on the tables as a result the deliveries were conducted on bed. The 8 TE hospital where labour room were not available were Chandmari TE (Tinsukia), Nandanban TE (Dibrugarh), Balimora TE(Dibrugarh), Hatijan TE (Dibrugarh), Lalamikh TE (Hailakandi) and Bhuvan Valley TE (Cachar) and hospitals that had labour room under construction were Manuhari TE (Dibrugarh), Fatemabad TE (Baksa) and Krishnakoli TE (Dhubri) (Annexure:A,Table I). In Dhelakhat TE Hospital in Tinsukia district, though labour room had been constructed, equipment was not available and there was no institutional delivery since 7 years. In 28 TE hospitals they had no attached toilet in the labour rooms.

The provision of new born care corner and other facilities for handling the emergencies of new born care was one of the important criteria under the MoU for PPP tea garden hospitals in Assam. The study revealed that the new born care corner was available in 119 TE hospitals which comprises 79.3% but the utility of the new born care corner was only in 68 TE hospitals(45.3%). The reason behind the non-utility of the new born care corner was lack of knowledge and training in functioning of the equipment like radiant warmer, phototherapy machine and resuscitation kits.

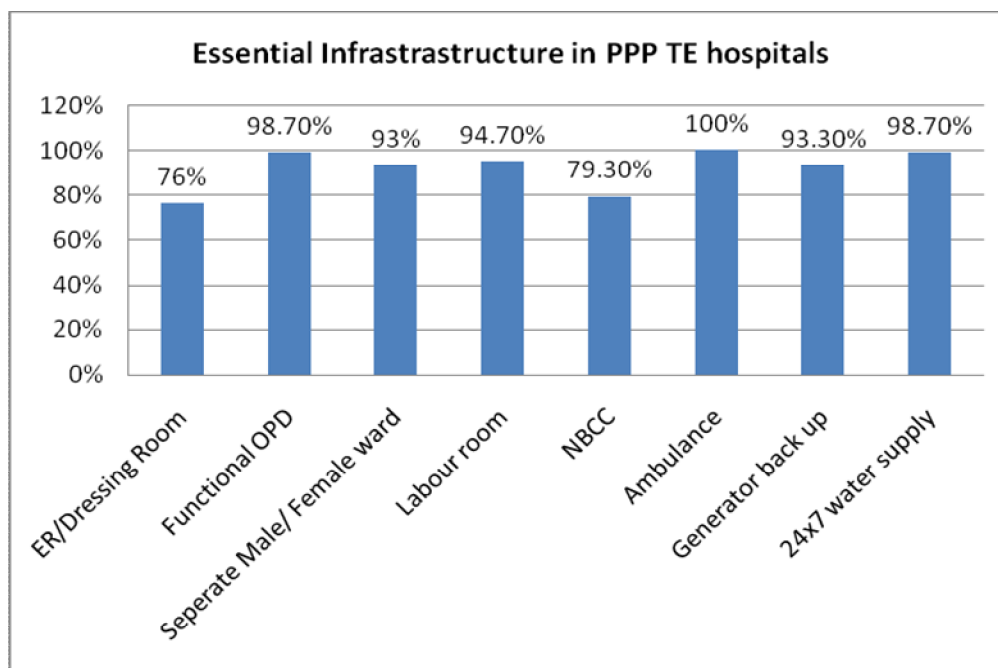


Figure 1: Availability of essential infrastructure in the TE hospitals in Assam.

Ambulance was available in all the TE hospitals. Our study revealed that the ambulance which was functioning often was the ambulance provided by NRHM and the company ambulance was utilised for company's official works and rarely utilised for hospital purposes. As a result, the NRHM ambulance's maintenance cost and POL was exceeding than the sanctioned amount.

Generator back up was available in 140 TE hospitals i.e. 93.3%. The source for generator back up was from Tea Company. The water supply was available in all the tea garden hospital except in Chandmari TE (Tinsukia) and Bhuvan Valley TE (Cachar).

There was no operation theatre available in the 150 TE hospitals. The emergency room was utilised for minor OTs basically for accidental cases and cut injuries. The critical cases were always referred to nearest referral centres. The cases like LTO, MTP were not performed in the TE hospitals and were referred to PHCs and CHCs nearby.

The study revealed that many TE hospitals had their existing infrastructure before MoU was signed with NRHM Assam. Those TE hospitals are owned by the national/international companies like Mcleod Russel, India Tea Company, Amalgamated Planters Private Limited (formerly Tata Tea Limited) etc. It was observed that though they had existing infrastructure, the funds provided by NRHM were utilized for renovation. Many of the tea garden committee utilized fund for construction of labour rooms, male/female wards, verandas, doctor's duty room, nursing stations etc.

3.2 Human Resource and Training:

One of the main objectives of the NRHM PPP scheme for tea garden hospital was to strengthen the existing manpower. According to the MoU, a tea garden hospital may appoint new doctors, nurses and paramedical staff if required to provide proper health care services.

Our study revealed that out of the 150 tea garden hospitals in Assam, availability of medical officer was in 126 (84%) tea garden hospitals and out of those 126 hospitals, 9 hospitals have visiting doctor and 9 hospitals have AYUSH doctor. The availability of GNM was in 81 (54%) tea garden hospitals, ANM in 124 (82.6%) hospitals, pharmacists in 136 (90.6%) hospitals and laboratory technician in 61 (40.7%) tea garden hospitals (Figure 2).

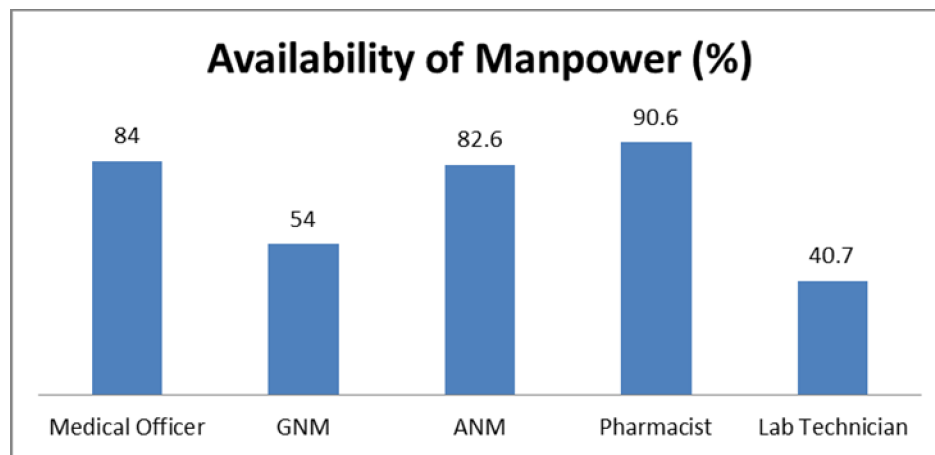


Figure 2: Availability of manpower in the tea garden hospital of Assam.

The study revealed that in Dibrugarh district, a single Medical Officer was appointed as a visiting doctor for three tea garden hospitals (Moud, Madhuban and Bijulibari tea garden hospitals of Dibrugarh district) and the visiting days were on the same day of the week. He was given a fixed salary under NRHM from Madhuban TE and additional incentives from the other two TE hospitals. As a result, the OPD was managed by the pharmacist and other paramedical staffs in the respective hospital. Critical cases were referred to the nearby PHCs and tertiary centres.

It was observed during the study that funds from NRHM were utilised for construction of laboratories. Procurement of equipment and instruments was done irrespective of need assessment but laboratory technicians were available only in 40.7% of the TE hospitals.

There were no Medical Officer, GNM and ANM in 6 tea garden hospitals namely Isabheel TE (Karimganj), Bhuvan Valley TE (Cachar), Arucuttipore TE (Cachar), Doolhat TE

(Lakhimpur), Chandmari TE (Tinsukia) and Lengri TE (Dibrugarh). There were no specialists appointed in any of the tea gardens hospitals under NRHM PPP in Assam, hence all the critical cases of Obstetrics, Medicine and Surgery were referred to the tertiary centres.

GNTMs availability was 54% whereas that of ANM was 82.6%. In 5 tea garden hospitals there were no GNM and ANM, those were in Cachar district: Doyapore TE, Pathemara TE, and Unnunaband TE, Fatemabad TE (Baksa), and Naduwa TE (Dibrugarh) (Annexure:A, Table I)

Training status

Training is one of the critical areas which require more focus for the tea garden hospitals. The study revealed that there was lack of training on Skilled Birth Attendant (SBA), Navajat Sishu Suraksha Karyakram (NSSK) and Integrated Management of Neonatal and Childhood Illnesses (IMNCI) for the tea garden hospital staffs. It was observed that no SBA training was imparted to Medical Officers (MOs), for GNM it was 17.3% and ANM it was only 15.3% among all the tea garden hospitals under the study. IMNCI training for MOs was only 8%, GNM it was only 12.7% and none for ANM. NSSK training for MOs was 2.7%, GNM 5.3% and ANM 1.3%.

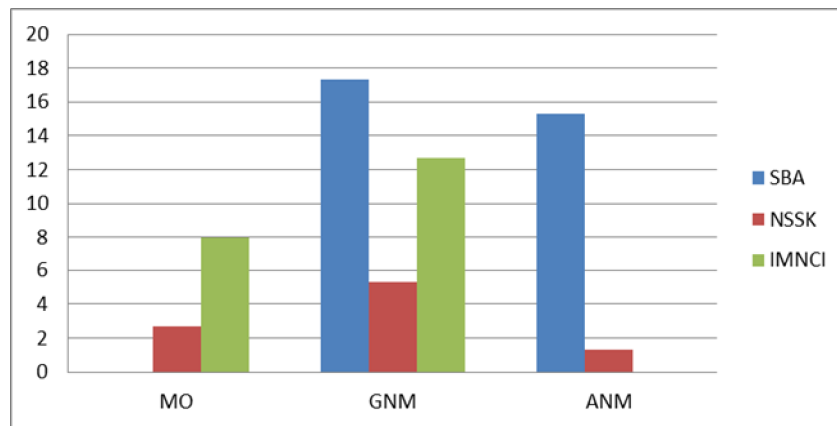


Figure 3: Trained manpower of tea garden hospital under NRHM.

3.3 Equipment

The availability of basic equipment and instruments in labour room, new born care corner, laboratory, emergency room and other clinical areas are important for proper functioning of a hospital. The NRHM provided fund for upgradation of the TE hospitals and hence many TE hospitals have utilised fund for purchasing equipment, furniture and instruments for providing better mother and child care.

Table 1 shows the basic equipment in the labour room in all the 150 tea garden hospitals of Assam. It was observed that labour table were not available in those TE hospitals where there were no labour room. It was available in 142 tea garden hospitals out of which in 5 TE hospitals it was out of order. Mattress on the labour table was available in 114 TE hospitals. The reason for non-availability was delay in supply from the district. The other shortages of basic equipment in the labour room were wall clock and wheel chair (Annexure: A, Table II).

Table 1: Basic equipment in labour room in the PPP TE hospitals in Assam. (n=150).

Equipment	Available In TE hospital (Total: 150)	Not available	Out of Order/utility
Labour table	142	8	5
Spot Light	115	35	15
Mattress for labour table	114	36	
Foot step	129	21	
Wall clock	53	97	
Wheel chair	72	78	
Electric sterilizer	125	25	14
IV stand	122	28	

Source: TE hospitals

Table 2 shows the basic equipment in new born care corner in the entire evaluated TE hospitals of Assam. It was observed that radiant warmers were available in 88 TE hospitals but were utilised in 42 TE hospitals and phototherapy machine was available only in 26 TE hospitals. The utility rate for radiant warmers was 47.7%% and phototherapy machine was 42.3%. The utility rate for both the equipment was low because of lack of training to the Medical Officers and nursing staff.

Table 2: Basic equipment in New Born Care Corner in the TE hospitals. (n=150).

Equipment	Available (n=150)	Not available	Utilised	Utility (percentage)
Radiant warmer	88	62	42	47.7%
Phototherapy machine	26	124	11	42.3%
Resuscitation kit	78	72	46	59.0%
Weighing scale	114	36	108	94.7%
Mucus extractor	99	51	89	89.9%
Oxygen Cylinder	48	102	23	47.9%
Cord clamp	106	44	106	100.0%

Source: TE hospitals

The availability of oxygen cylinder was found only in 48 TE hospitals and its utility was 47.9%. Resuscitation kit was available in 78 TE hospitals but its utility was only 59.0%. Similarly, infant weighing machine is important for identification of low birth weight babies as well as for assessing the nutritional status of the infants and monitoring their growth. The weighing machine was available in 114 TE hospitals and its utility was 94.7%.

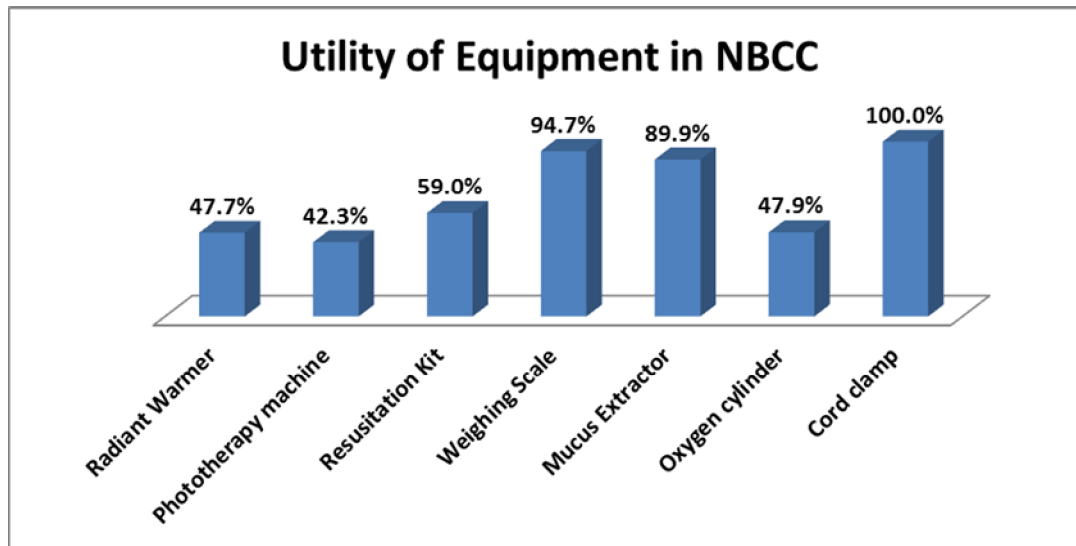


Figure 4: Utility of the basic equipment in the New born care corner

The essential equipment for vaccination like cold boxes, deep freezers and ILR were not available in any of the TE hospitals. Vaccines were provided from the nearby government health facility. The ASHAs of that particular area helped in mobilization of the community for immunization. Other basic equipment like colour coded bins and Needle destroyer were available in 64 and 86 TE hospitals respectively.

Table 3: Other basic equipment in the TE hospitals (n=150).

Equipment	Available	Not available
Colour coded bins	64	86
Needle destroyer	86	64
Sharp pit	63	87
ILR	0	-
Deep Freezer	0	-
Cold Box	0	-

Source: TE Hospitals

Hence from the study it has been observed that the new born care corner was rarely utilised. Before procurement of the essential equipment for the new born care, the need assessment was not done properly by the management committee of the TE hospitals as a result the equipment were not utilised.

3.4 Service Delivery

3.4.1 Population Coverage:

The average population covered by each tea garden hospitals in Assam was 4900 approximately. There were tea gardens which ranged from 1200 to 12,000 populations.

3.4.2 OPD/IPD and Emergency services:

The OPD services were available in 98.7% of the TE hospitals in Assam and were not available in Chandmari TE (Tinsukia) and Sonajuli TE (Sonitpur). From the analysis it was observed that there was increase in OPD cases and IPD cases in almost all the TE hospitals. There was no separate AYUSH OPD available in any of the TE hospitals whereas there were AYUSH doctors appointed in 9 tea garden hospitals. Emergency rooms were available in 76% of the TE hospitals but most of the cases were referred to the nearby PHC, CHCs and District hospitals. There were separate wards for isolations and tuberculosis patients. On an average there used to be 50-60 OPD cases per day depending on the population as the study reveals that there was vast variation in coverage of population from 1200 to 12000. Some of the TE hospitals have separate OPD timing for permanent and non-permanent worker and separate OPD cards.

3.4.3 Maternal and Child Health

Reduction of infant mortality rate and maternal mortality ratio is one of the most important goals of National Rural Health Mission. Antenatal care, intra-natal care, postnatal care, new born care, child health care including immunisation and family planning services form the basic maternal and child health services. The tea garden PPP scheme was introduced in the tea garden hospitals to reduce the maternal morbidity and mortality and to upgrade the health infrastructure to provide safe mother and child care to the tea community.

Antenatal care

Antenatal care is one of the most essential components of maternal health care services. Antenatal care aims to prevent maternal mortality and morbidity through timely detection and management of complications which arise during pregnancy and child birth. As per programme protocol a pregnant mother should receive at least four antenatal check-ups during pregnancy.

In Table 4, it shows the comparison of ANCs in 1st and 3rd trimester in three consecutive years i.e. from 2010 to 2013. It was observed that there was gradual increase in antenatal care for 3rd trimester from 64.02% in 2010-11 to 72.27% in 2012-13 (4900 average population). But there was decrease in registration of ANC in 1st trimester from 64.45% in

2010-11 to 61.65% in 2012-13. Services like TT 1st dose and TT 2nd / booster dose has increased from 2010 to 2013.

District wise analysis of data reveals that percentage of mothers who received at least three ANC was found highest in Khoomtaie TE Sivsagar (100%), Kellyden TE Nagaon (100%), Ligripukhuri TE Sivsagar (97.87%), Dinjan TE Tinsukia (96.29%), and Doyapore TE Cachar (84.5%) (Annexure: A, Table III) ANC data were not available in 18 TE hospitals in Assam and out of which 8 TE hospitals do not provide maternal and child health care services which were mentioned earlier in this chapter. The table also reveals that there is large variation among the districts regarding ANC registration from 12% to 100%.

Table 4: Percentage of ANC registered in TE hospitals of Assam (n=150).

ANC Registration In TE hospitals	2010-11(%)	2011-12(%)	2012-13(%)
ANC 1st trimester	64.45	66.08	61.65
ANC 3rd trimester	64.02	67.56	72.27
TT 1 st dose	83.38	86.83	89.81
TT2 nd / Booster dose	83.52	82.58	82.30

Source: TE Hospitals

The RCH programme recommends two doses of TT vaccine to a pregnant woman with the 1st dose at 16-24 weeks of pregnancy and the 2nd after an interval of 4 weeks after the first dose. From the above table 4, it shows the percentage of women receiving TT 1st dose which was increased from 83.38% in 2010-11 to 89.81% in 2012-13 whereas TT 2nd/booster dose percentage decreased from 83.52% in 2010-11 and 82.30% in 2012-13. The other major important service under ANC was IFA tablets to the pregnant women. There were no records of distribution of IFA tablets in the most of the tea garden hospitals and it was mentioned that IFA tablets were distributed by ASHAs of the particular block. However, supply of IFA tablets was consistently low from the district drug store to the tea garden hospitals.

Institutional deliveries:

From the study, as already mentioned earlier, total 142 tea hospitals had constructed the labour room utilizing the NRHM fund. Hence, institutional deliveries were conducted in 142 TE hospitals in Assam. It was observed that average number of deliveries conducted in those 142 TE hospitals per month was between 0-4 deliveries.

Table 4 shows the number of hospitals which conducted deliveries from 0-4, 5-9 and above 10 deliveries in a month. It was observed that 48 TE hospitals conducted between 5-9 deliveries in a month in 2010-11, 56 deliveries in 2011-12 and 52 deliveries in 2012-13. However, maximum numbers of TE hospitals conducted 0-4 deliveries in a month and only

few TE hospitals conducted above 10 deliveries in a month which was 12 in 2010-11, 11 in 2011-12 and 14 deliveries in 2012-13.

Though there were upgradation of labour rooms and new born care unit from the NRHM fund in almost all the TE hospitals in Assam except 8 TE hospitals but the institutional deliveries were low. On evaluation it was observed that the deliveries were conducted by the staff nurses i.e. GNMs. In many cases, ANMs of the TE hospitals were not provided with any incentives under NRHM as per the MoU guidelines, so the ANMs hardly conducted any deliveries if the patient is a non-permanent worker. So many cases were referred to the nearby referral centres as there was lack of cooperation among the hospital staff. However, in some TE hospitals the incentives were divided among the GNM and ANM as per the hospital committee depending on the work load.

Table 5: Institutional deliveries in TE hospital in Assam per month (n=150).

Number of Institutional Deliveries (per month)		2010-11		2011-12		2012-13	
≥ 10		12		11		14	
5 to 9		48		56		52	
2 to 4	0 to 4	48	87	35	66	50	77
1		8		8		12	
0		31		23		15	

Note: Data were not available for 6 TE hospitals in 2012-13, 11 TE hospitals in 2011-12 and 3 TE hospitals in 2010-11.

Tea garden hospital wise analysis of institutional deliveries (deliveries per month) conducted in a month was found highest in Khoomtaie TE Sivsagar (20), Doyapore TE Cachar (17), Doolhat TE Sivsagar (14), Dewan TE Cachar (14) and Rajmai TE Sivsagar (13) (Annexure: A, table IV). Though during our study the home delivery data were not collected in the TE hospitals but it was observed that there were home deliveries conducted in the tea garden areas. The study also revealed that there was lack of communications between the ASHAs and the hospital staff.

There were 15 tea garden hospitals where number of institutional delivery in the past two years is zero per month and the delivery cases were referred to the nearby PHCs and CHCs (Table 5). Out of these 15 tea garden hospitals 6 tea garden hospitals have not constructed labour room and in 3 tea garden hospitals labour rooms were under construction those are Manuhari TE (Dibrugarh), Fatemabad TE (Baksa) and Krishnakoli TE (Dhubri). 12 tea garden hospitals had 1 delivery per month (Annexure: A, table IV). Though there were provisions of maternal health care through ANC and institutional delivery, the

performance over the years after implementation of the PPP was found to be poor in the tea garden hospitals. Most of the cases were referred to the nearby hospitals.

Janani Suraksha Yojana (JSY):

In figure 5 it shows the percentage of JSY beneficiaries registered in the TE hospitals and the analysis revealed that there was gradually decreased in JSY beneficiaries registration from 2009-10 with 91.05% to 81.56% in 2012-13. In many TE hospitals the records of JSY beneficiaries were not available during the day of visit as the records were maintained by the ASHAs of the particular block. Among the 142 tea garden hospitals where institutional deliveries were conducted, the incentives given to the JSY beneficiaries were from the PHCs of particular block. JSY funds were not released to any tea garden hospital committee and the incentives were collected from the block PHCs. The tea garden only maintains the records of JSY beneficiaries.

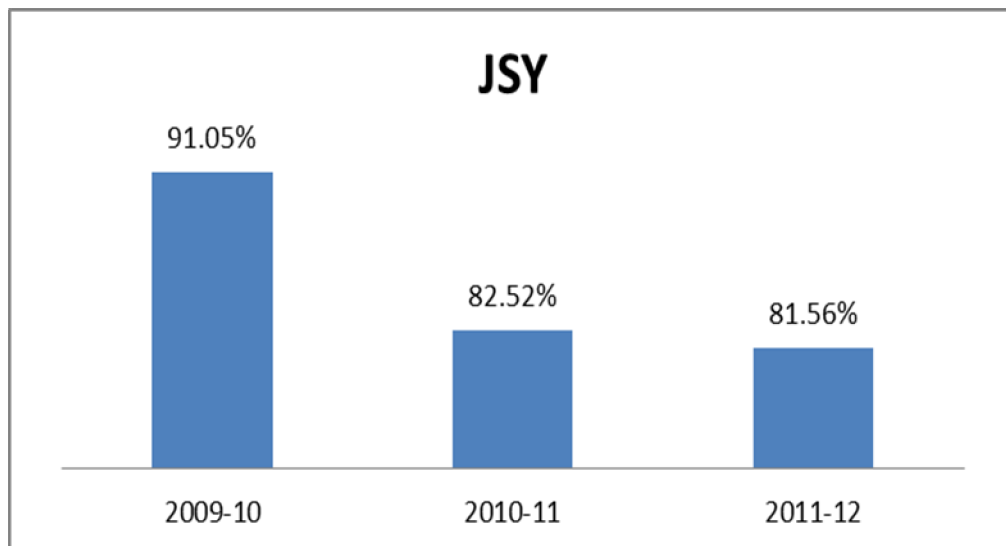


Figure 5: Registration of JSY beneficiaries in PPP TE hospitals (n=150)

Immunization

Immunization services were available through a fixed immunization days (every 2nd and 4th Wednesday of a month) in every PPP hospitals. Vaccines were brought by the ASHAs from the block PHC in vaccine carriers and children were given immunization by nursing staff

In Table 6, it shows the summary of number of children who had received immunization in the PPP TE hospitals from 2010 to 2013. It was observed that there was increased in number of doses of vaccines administered from 79607 in 2010-11 to 106429 in 2012-13

Table 6: Summary of no. of children immunized in the TE hospitals in Assam from 2010-2013.

Vaccine	No. of children immunized		
	2010-11	2011-12	2012-13
BCG	7404	8026	8555
OPV1	7941	8652	9235
OPV2	7825	8599	9092
OPV3	7662	8424	8386
DPT1	7886	8482	8807
DPT2	7761	8441	8647
DPT3	7534	8148	8533
Hep 1	2681	4855	7820
Hep2	2562	4553	7497
Hep3	2425	4011	7275
Measles	6788	8891	7915
Vitamin A	11138	14649	14667

Source: TE Hospitals

3.4.4 Laboratory Services

In PPP tea garden hospitals the availability of laboratory technicians was 40.7%. The study revealed that investigations that were performed in the hospitals was haemoglobin estimation (54%), malaria parasite kit test (43.30%), blood sugar (38.70%), blood ABO & Rh typing (34.70%) and urine examination (32.70%). Most of the investigations were performed using portable test kits. The laboratory services were performed in those TE hospitals which had existing laboratories prior to NRHM PPP.

Table 7: Laboratory services performed in the TE hospitals.

INVESTIGATIONS	TOTAL (n=150)	Percentage
Blood routine examination - Hb%,	81	54%
Blood routine examination - ESR	40	26.70%
Blood routine examination - TC	29	19.33%
Blood routine examination - DLC	30	20%
Blood grouping ABO & RH Typing	52	34.70%
Blood Sugar	58	38.70%
Blood for MP Test	65	43.30%
Blood for VDRL	16	10.70%
Stool Routine Examination	24	16%
Urine Routine Examination	49	32.70%

Source: TE Hospitals

3.4.5 Family Planning

Family planning services such as tubectomy, vasectomy, contraceptives, counseling and follow up are essential part of maternal and child health care services. From the evaluation it was observed that none of the tea garden doctors appointed in the hospitals conducts tubectomy and vasectomy. LTO and NSV were performed by the specialist doctors in the PHCs and CHCs which was organized as camps by the districts twice or thrice a year.

Table 8: Availability of Family planning service in PPP TE hospitals.

Family planning services	No of PPP TE hospitals (n=150)	Percentage
IUCD	26	17.33
Vasectomy	43	28.67
Tubectomy	68	45.33

Source: TE Hospitals

The tea garden hospitals which motivated eligible couples for permanent methods of sterilization i.e. vasectomy and tubectomy were 28.67% and 45.33% respectively (Table 3.5). Other method of contraception like IUCD insertion was conducted in 26 (17.33%) tea garden hospitals. The distribution of condoms and OCPs were done by the ASHAs of the particular areas. The awareness regarding family planning was done through IEC and ASHAs. It was observed that the tubectomy rates were higher than vasectomy in the tea garden .

Out of the 150 PPP TE hospitals, Medical Termination of Pregnancy (MTP) was performed in 14 TE hospitals. The TE hospitals which has highest number of MTP performed in a year were Nirmala TE, Sonitpur (5-6), Greenwood TE, Dibrugarh (3-4), Kolony TE, Sonitpur (2-3), Hazelbank TE, Dibrugarh (2-3) and Harmoty TE, Lakhimpur (1-2) (Annexure: A, table V). The reason behind decreased percentage of MTP performed in the TE hospitals of Assam was lack of training facilities to the Medical Officers and staff nurses. Hence most of the cases were performed in PHCs and other hospitals.

3.4.5 Referral services

One ambulance was provided to each tea garden hospitals under NRHM PPP with POL and maintenance services for the ambulance under NRHM fund. From the study it was observed that the maintenance of log book was very poor in all the tea garden hospitals. Vehicle log books and records of referral of patients were not maintained properly by the tea garden committee. In most of the tea garden hospitals, the only functioning ambulance was the NRHM ambulance and company's ambulance was used for factory's purposes rather than providing services for the respective hospitals.

3.5 Other Services

As per MoU, the responsibilities of the tea garden hospital management committee must provide prevention and control of diseases like malaria, tuberculosis, diarrhea and japanese encephalitis. However, from the study it was revealed that prevention and control of communicable as well as non-communicable disease were negligible in all the tea garden hospitals. Nutrition and health counseling as a part of IEC were also negligible but it was observed that funds were shown utilized for IEC in the monthly performa. Health camps were also negligible.

Some of the tea garden hospitals have DOTS center, isolation wards and TB wards but rarely cases were admitted. Most of the patients were referred to PHCs, CHCs and district hospitals due to lack of skilled manpower in the tea garden hospitals.

Chapter Four

FINDINGS ON FINANCIAL ALLOCATIONS

On analysis it was revealed that on an average 77.20% of the funds were utilised from the total amount of fund received from NRHM in all the 150 TE hospitals. The analysis was done on the overall expenditure from the date of signing MoU till March 2013 i.e. from March 2008 to March 2013. On salary 42.74% was expended, 35.07% was expended on infrastructure, 5.31% on drugs and laboratory consumables, 9.24% on equipment and 13.59% was expended on POL and others like maintenance on vehicle, IEC etc. (Figure 5).

It was also observed that funds were not utilised in 2 TE hospitals namely Chandmari TE (Tinsukia) and Dalaobari TE (Kokrajhar). Chandmari TE was under NRHM PPP since April 2013 and there were only OPD services in the hospital. Data on financial utility were not available for 6 TE hospitals and those were Jamira TE (Dibrugarh), Baughpara TE (Dibrugarh), Arun TE (Sonitpur), Fatemabad TE (Baksa), Mornoi TE (Kokrajhar) and Krishnakoli TE (Dhuburi).

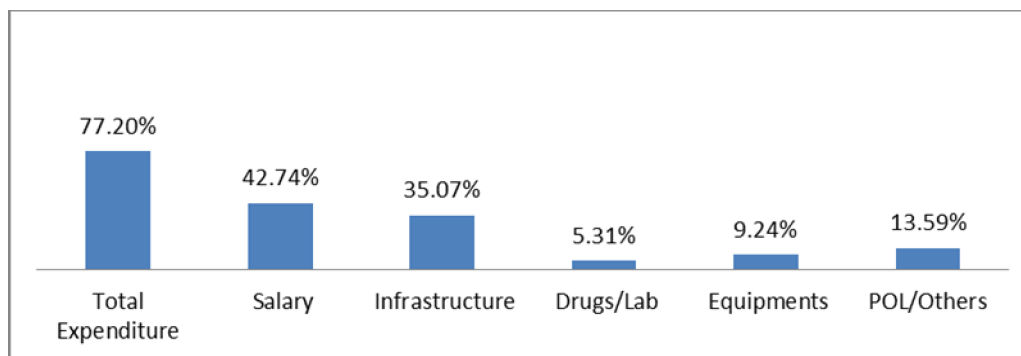


Figure 5: Percentage of total expenditure in 150 TE hospitals in various sectors.

4.1 Expenditure on Salary

As per the NRHM PPP scheme, objective was to strengthen the manpower wherever required and there would be incentives given according to the population covered. It was observed that 42.74% of the funds were spent on salary from the total expenditure. No incentives were given to staff in 4 TE hospitals and they were Manuhari TE, Nandanban TE, Balimora TE and Hatijan TE of Dibrugarh District.

In 12 TE hospitals almost 80% of fund was utilized on salary and there was no other utilization of the fund (Table 9). In Margherita TE (Tinsukia) and Lalamikh TG (Hailakandi) funds were only utilised for providing the incentives to the staff. In many TE hospitals incentives were not paid to the ANM as per the guideline, hence there were conflict and

non-cooperation in work between the GNM and ANM. In 9 TE hospitals there were visiting doctors and their incentives were paid from the NRHM fund. In 10 TE hospitals, Medical Officers were appointed under NRHM and were paid a fixed salary as per the guidelines.

Table 9: Expenditure on Salary (percentage)

Percentage (%)	No. of TE hospitals (n=150)
0-19	38
20-39	34
40-59	46
60-79	11
80-99	6
≥ 100	6
Data Not available	9

Source: TE hospitals

4.2 Expenditure on Infrastructure

On an average 35.07% was spent on infrastructure from the total expenditure. The TE hospitals with highest expenditure on infrastructures were Balimora TE (84.50%) Dibrugarh, Nandanban TE (83.41%) Dibrugarh, Halmira TE (81.46%) Golaghat, Hoolonguri TE (80.15%) Jorhat and Joonktollie TE (80.15%) Dibrugarh. Analysis also revealed that 2 TE hospitals expenditure had shown higher than the total expenditure which were in Dejuo TE (136.50%) Lakhimpur and Nalini TE (100.71%) Tinsukia. There were 10 TE hospitals whose fund were not utilized on infrastructure but was utilised for other expenses like salary, drugs, and POL.

Table 10: Expenditure on Infrastructure

Percentage (%)	No of TE hospitals (n=150)
0-19	32 (0=10*)
20-39	54
40-59	35
60-79	12
80-99	5
≥ 100	2
NA*	9

NA- Data was not available for 9 TE hospitals and * - 10 TE hospitals had not spent on infrastructure.

It was also observed that major construction under NRHM fund was utilised to build the labour room, new born care corner, renovation of male and female wards, waiting area for the patient, water supply, doctor's duty room, verandas and renovation of OPD.

4.3 Expenditure on Drugs and Equipment

Expenditure on drugs and laboratory consumables were 5.31% and on equipment it was 9.24%. The procurement of drugs and laboratory consumables were done through the guidelines allotted by the district. As in Tinsukia districts, no funds were allowed to purchase drugs whereas other districts have. The range of fund utilised for procurement of drugs were varied from 0.12% to 73.07%. The districts with highest expenditure on drugs were Kondoli TE Nagaon (73.07%), Koilamari TE Lakhimpur (40.51%), Narayanpur TE Sonitpur (35.38%), Hookrajuli TE Sonitpur (26.83%) and Maijaan TE Dibrugarh (23.1%). In 48 TE hospitals fund were not utilised for procurement of drugs or laboratory consumables.

Table 4.3: Expenditure on Drugs/Laboratory consumables, Equipment and others

Percentage (%)	No. of Hospitals		
	Drugs/Laboratory	Equipment	Others
0-9	116(0=48)	76	56
10-19	17	53	59
20-29	5	8	15
30-39	1	3	6
40-49	1	1	0
≥ 50	1	0	3

Source: TE Hospitals

On equipment 9.24% was utilised from the total expenditure. On observation during the study, it was found that most of the equipment bought under NRHM fund were the equipment for New born care corner, delivery set, sterilization sets and other minor surgical equipment irrespective of need. The TE hospitals with highest expenditure on equipment were Gatooga TE Jorhat (40.80%), Deopani TE Sivsagar (34.91%), Manmohinipur TE Sonitpur (31.96%), and Rajmai TE Sivsagar (30.44%). In 14 TE hospitals fund was not utilised for purchase of equipment.

4.4 Expenditure on POL/IEC and others:

The expenditure on POL/IEC and other utility was 13.59% in the TE hospitals. The availability of NRHM ambulance was 100% in the 150 tea garden hospitals of Assam. In almost all the tea garden fund was utilised for POL except Bozaloni TE Tinsukia, Lalamikh TE Hailakandi, Cossipore TE Cachar and Nonoi TE Nagaon. Highest expenditure was observed in Hatijan TE Dibrugarh (99%), Devan TE Cachar (73.34%) and Gatoonga TE Jorhat (52.59%) in POL and maintenance of ambulance.



4.5 Unspent Balance

From the analysis of data it was observed that the tea garden hospitals had unspent balance amount ranging from Rs. 10,000 to Rs. 24 lakhs in account. Tea garden hospitals submit monthly expenditure performa to the district but the review of the balance amount was not monitored. However every year funds were allotted to the tea garden committees and which is uniform for all the tea garden hospitals irrespective of the balance amount and population catered. The highest balance amounts were in Shakomata TE, Sonitpur (Rs. 24 Lakh), Juitlibari TE, Dibrugarh (Rs. 21 lakh), Bijulibari TE, Dibrugarh (Rs. 21 Lakh), Kacharigaon TE, Sonitpur (Rs. 15 Lakh) and Deepling TE, Sivsagar (Rs. 15 Lakh).

4.6 Review of Memorandum of Understanding (MoU)

The MoU was signed between the District Health Society and management of Tea Estates. The partnership became effective from the date of signing of MoU. The MoU was reviewed for the PPP tea garden hospitals in Assam for delivery of primary health care to the tea estate population and is summarised as below.

- In terms of coverage of population under the PPP for tea garden: the scheme covers workers as well as non-workers, retired personnel and other authorized resident of the estate. However, during assessment it was observed that many tea garden hospitals have no records of coverage.
- Financial management as per MoU: 50% fund is released against submission of utilization certificate and statement of expenditure. However, during the evaluation it was observed that many tea gardens provide the statement of expenditure to the district but the physical performance and verification were not done from the district or State before releasing the fund as a result huge amount of balance were accumulated in the tea garden bank accounts and it has not been verified yet. The accumulated amount ranged from Rs. 10,000 to Rs. 24 lakh and which has not been utilized.
- It was also observed that many tea gardens constructed non-entitled activities without need assessment for claiming the 2nd installment. Equal amount of fund were released to the tea gardens from the district and State irrespective of the population which ranged from 1200 to 12000.
- As per the MoU objectives, operational of maternal and child health services, strengthening of existing manpower and infrastructure, emergency services and other services for primary health care were set. However, almost all tea garden hospitals have constructed and renovated the labour room and new born care corner as per standard but the service delivery was poor and equipment of new born care corner were not utilized.

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- Most of the services provided were ANC, immunization, and institutional delivery which were also low. However, services for family planning, laboratory and prevention and control of malaria, TB and non-communicable diseases were negligible.
 - Though there was monthly reporting of services delivery and statement of expenditure to the district, the verification was not done from either the district or the State. During evaluation, it was observed that tea gardens with no institutional delivery provide records of conducting deliveries to the district.
 - As per the MoU guidelines, before renewal of agreement there must be proper and satisfactory use of NRHM funds. However, in many tea estates the funds were not utilized and without verification from the district, the renewal was agreed. Recommendation from hospital management committee and District health society were not on records.

CONCLUSION:

The major findings that were revealed from the PPP tea garden evaluation which was carried out in 150 tea garden hospitals of Assam are as follows:


- The physical infrastructures in all the tea garden hospitals under the study in Assam were fairly good. The prioritization of construction work under NRHM fund was followed according to the MoU guideline. However, services utility was low.
- Among the 150 tea garden hospitals in Assam, availability of medical officer was in 126 (84%) tea garden hospitals and out of those 126 hospitals, 9 hospitals had visiting doctor and 9 hospitals had AYUSH doctor. The availability of GNM was in 81 (54%) tea garden hospitals, ANM in 124 (82.6%) hospitals, pharmacist in 136 (90.6%) hospitals and laboratory technician in 61 (40.7%) tea garden hospitals.
- The tea garden with no medical officer, GNM and ANM were observed in 6 tea garden hospitals. Those were Isabheel TE (Karimganj), Bhuvan Valley TE (Cachar), Arucuttipore TE (Cachar), Doolhat TE (Lakhimpur), Chandmari TE (Tinsukia) and Lengri TE (Dibrugarh).
- Training is one of the critical areas which require more focus for the tea garden hospitals. The study revealed that there was lack of training on SBA, NSSK and IMNCI for MOs, Staff Nurses, ANMs of the tea garden hospitals.
- Though there was upgradation of existing health facilities in the tea garden hospitals but the services delivery that were provided were mostly OPD services and maternal and child health. Most of the serious cases were referred to the nearest higher health facility. Services under National programmes like prevention and control of malaria, tuberculosis, Japanese encephalitis were almost negligible. Many of the tea garden hospitals do not have DOTS centers.
- Institutional deliveries were conducted in 142 tea garden hospitals of which 0-4 deliveries/month were conducted in 77 tea garden hospitals, 5-9 deliveries/month were conducted in 52 hospitals and ≥ 10 deliveries/month were conducted in only 14 tea garden hospitals. Antenatal services were 61.65% in 1st trimester and 72.27% in 3rd trimester (4900 approx. population). There was increase in number of vaccines administered from 79607 in 2010-11 to 106429 in 2012-13.
- Though many tea gardens have procured equipment for new born care corners but its utility was negligible i.e. radiant warmer utility was 28% and phototherapy machine was 7%. The utility was negligible due to lack of training facilities to the MO,

GNM and ANM. For procurement of instruments and equipment, need assessment was not done in any of the tea garden hospitals.

- The study revealed that investigation that was performed in the hospitals was Hb test (54%), MP Test (43.30%), Blood sugar (38.70%), Blood ABO & Rh typing (34.70%) and urine examination (32.70%). Most of the investigations were performed by portable methods. The laboratory performance was low due to lack of laboratory technicians which was only 40.7%.
- Family planning services and IEC activities were poor in many tea garden hospitals under NRHM PPP. The permanent methods of sterilization like vasectomy and tubectomy were low and it was available in 28.67% and 45.33% respectively. The other method like IUCD was available in 17.33%. Medical termination of pregnancy (MTP) was performed in 14 TE hospitals out of 150 tea garden hospitals.
- There was shortage of drugs from the district supply in the PHC kit but every month fund was allotted to procure drug to the tea garden hospitals.
- In some instances the management committees of tea garden was solely dependent on PPP funds and medicine supplies from district drug stores and had stopped their regular purchase of medicines from garden management.
- NRHM ambulances were available in all the tea garden hospitals. It was observed that NRHM ambulances were functioning for hospital purposes and the tea garden ambulance was utilized for company's official works and rarely utilized for referral of cases.
- In some of gardens it has been observed that the tea garden management hired visiting doctors instead of recruiting a full time medical officer which was observed in 9 TE hospitals.
- In most of the tea garden hospitals, the hospital management committees (HMC) were non-functional. The HMC meetings were irregular and there were lack of communication and coordination among the tea estate hospitals, BPMU, and DPMU of NRHM

RECOMMENDATIONS

1. Engagement of full time medical staff like medical officer, staff nurse, laboratory technician and ANMs at hospitals which do not have at present must be done.
2. Training programmes should be conducted at district level for medical and paramedical staff of TE hospitals on SBA, IMNCI, NSSK etc. for increasing the quality of MCH services provided by the TE hospitals.
3. Biomedical waste management must be strengthened by each and every TE hospital and necessary IMEP training should be imparted to waste handlers.
4. NRHM ambulances have been provided to all the tea garden hospitals. These ambulances must not be used as substitute for the exiting garden hospital's ambulance. Tea Estate management must take steps so that tea garden ambulances are utilized for medical purpose and not for factory use.
5. Newborn Care corners should be made functional by providing need based logistics and consumables along with training to the service providers.
6. As observed during the evaluation process, many TE hospitals have renovated and also built laboratories but are lying non-functional. These laboratories should be made functional at the earliest.
7. Services of vertical programmes like RNTCP, NVBDCP etc. should be provided at all TE hospitals and monitored by Programme officers.
8. It was also observed that after signing the MoU with NRHM, Assam many tea estates had withdrawn their regular financial input to the hospital in term of funds for maintenance of hospital building, drugs, laboratories etc. The PPP with TE must be viewed as complementary from NRHM to improve the quality of healthcare provided by TE hospitals and not as substitute for the regular services that the TE hospitals must provide.
9. Financial audit must be conducted regularly. Funds should be allotted only after submission of utilization certificate and statement of expenditure of 75% of the previous installment. Elaborate guidelines needs to be framed with respect to the procedure of fund utilization
10. Infrastructure constructed/renovated under PPP should be optimally utilized in all the TE hospitals. Tea estates with lesser population may be catered by nearby delivery point or by mobile medical unit services.
11. Those TE hospitals under PPP which were not having any health activities or were underperforming in terms of service deliverables may be notified for a period of three months to increase service delivery and the performance appraised for renewal of the partnership.
12. There should be regular monitoring and supportive supervision of all the TE hospitals monthly by the BPMU, quarterly by the DPMU and half yearly by the SPMU and their performance should be monitored monthly.

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13. Conditionalities of the MoU should be reviewed in the light of the observation described above and new MoU should be agreed for a minimum of six months while ensuring adherence to the conditionalities.
 14. Drugs Supply: Procurement and inventory management should be strengthened; regular and need based replenishment of the drugs and consumables may be linked up with the reporting BPHC.
 15. The Hospital Management Committee should be sensitized in the light of evaluated observations as a part of continuous IEC from the district.



ANNEXURE: A

TABLES (FACILITYWISE PERFROMANCE DETAILS)

Table I: Manpower details in tea garden hospitals of Assam.							
Facility	District	MO	AYUSH	GNM	ANM	Pharmacist	Lab Tech
Anandbari TE	Dibrugarh	1			1	1	
Namsung	Dibrugarh	1			1	1	
Nandanban	Dibrugarh	Visiting MO			1	1	
Kenduguri	Dibrugarh	1		1		1	
Joonktollee	Dibrugarh	1		1		1	
Tinkong	Dibrugarh	1		1	1	2	
Ouphulia	Dibrugarh	1			2	1	
Rajgarh	Dibrugarh	1		1	1	1	
Nilmoni	Dibrugarh	1		1	1	1	
Desam	Dibrugarh	1		1	1	1	
Balimora	Dibrugarh	Visiting MO			1		
khowang	Dibrugarh	1		1	1	1	1
Teloijan	Dibrugarh	1		1	1	1	
Bamun	Dibrugarh			1	1	1	
Basmotia	Dibrugarh	1		1	1	1	1
Romai	Dibrugarh	1			2	1	
Langarjan	Dibrugarh	1		2	1	1	1
Harishpur	Dibrugarh	1			1		
Borboorah	Dibrugarh	1		1	1	1	1
Hazelbank	Dibrugarh	Visiting MO		1	1	1	
Bijjulibari	Dibrugarh	Visiting MO		1	1	1	
juitlibari	Dibrugarh	1		2	3	1	
Moud	Dibrugarh	Visiting MO		1		1	
Greenwood	Dibrugarh	1		1	1	1	2
Madhuban	Dibrugarh	Visiting MO		1	1		
Madarkhat	Dibrugarh	1			1	1	
Manuhari	Dibrugarh				1	1	
Tarajan	Dibrugarh	1			1	1	
Thanai TE	Dibrugarh	1		1	1	1	
Lengeri	Dibrugarh	Visiting MO				1	
Hatijan	Dibrugarh	Visiting MO			1	1	
Santi	Dibrugarh	1		1		1	
Nudwa	Dibrugarh	1					
Maijaan	Dibrugarh	1		1		1	1
Madhuting	Dibrugarh	1			2	2	1
Jamirah	Dibrugarh	1		1	1	1	
Baughpara	Dibrugarh	1		1	1	1	1

Table I: Manpower details in tea garden hospitals of Assam.							
Facility	District	MO	AYUSH	GNM	ANM	Pharmacist	Lab Tech
Raidang	Tinsukia	1		3	2	2	
Koomsong	Tinsukia	1		1	1	1	1
Phillobari	Tinsukia	1			2	1	
Bahadur	Tinsukia			1		1	
Rangagora	Tinsukia	1		1	1	1	1
Dinjan	Tinsukia	1		2		1	1
Nalini	Tinsukia			1	1	1	
Chandmari	Tinsukia					1	
Bordubi	Tinsukia	1		1	1	1	
Dhelakhat	Tinsukia	1			1	1	
Anandbag	Tinsukia		1	1		1	
Margherita	Tinsukia	1		2	1	2	1
Bozaloni	Tinsukia	1		1	1		
Lankashi TE	Tinsukia	1		1			
Baghjan TE	Tinsukia	1		2	1	1	
Tengapani TE	Tinsukia	1		1	2	1	
Borasali	Sivsagar	1		1	1	1	1
Salkathoni	Sivsagar	1		1		2	1
Kanu	Sivsagar	1			2	2	
Mackeypore	Sivsagar	1			1	1	1
Borsillah	Sivsagar				2	2	1
Deopani	Sivsagar				1	2	1
Mathurapore	Sivsagar	1		1	2	1	1
Lakmijaan	Sivsagar	1		1	1	1	1
Ligripukhuri	Sivsagar	1			2	1	1
Lakuwah	Sivsagar	1			2	1	
Rajmai	Sivsagar	1		1	1	1	1
Deepling	Sivsagar				2	1	
Dumordullong	Sivsagar	1		1	2	1	1
Hingrijaan	Sivsagar	1		1	1	1	
Napuk	Sivsagar	1		1	2	1	
Khoomtaie	Sivsagar	1		1	2	2	
Cinnamara	Jorhat	1		2	1	1	1
Sangsua	Jorhat	1		1	1	1	1
Tyroon	Jorhat			1	1	1	
Gatoonga	Jorhat			1	1	1	
Naginijan	Jorhat				1	1	
Bokahola	Jorhat	1			1	1	
Lahpohia	Jorhat	1			1	1	

Table I: Manpower details in tea garden hospitals of Assam.							
Facility	District	MO	AYUSH	GNM	ANM	Pharmacist	Lab Tech
Borhulla	Jorhat	1		1		1	
Hoolonguri	Jorhat	1			2	1	
Soraipani	Jorhat	1			2	1	
Koomtai	Golaghat		1	1	1	1	1
Halmira	Golaghat		1		1	1	
Borkatonee	Golaghat	1			1	1	
Rungagora	Golaghat	1		1	1	1	1
Dooria	Golaghat	1		1	1	1	
Murphulani	Golaghat	1			1	1	
Numaligurh	Golaghat	1		1	1	1	
Sockieting	Golaghat	1			2	1	
Ghillidary	Golaghat	1		1	1	1	
Mokrung	Golaghat	1		1	1	1	1
Diffilo	Golaghat	1			2	1	
Kellyden	Nagaon	1		1	2	1	
Amsoi	Nagaon	1			1	1	1
Salonah	Nagaon	1			3	1	1
Nonoi	Nagaon	1			4	1	1
Kondoli	Nagaon	1			3	1	
Burrapahar	Nagaon				1	1	
Sagmootea	Nagaon	1			1	1	
Hatigor	Udalguri	1		1	3	1	1
Dhunseri	Udalguri	1			2	1	1
Bettybari	Udalguri	Visiting MO			1	1	
Suola	Udalguri		1		1	1	
Bahipookhri TE	Udalguri	1		1	1	1	
Ananda	Lakhimpur	1			2	1	1
Harmoty	Lakhimpur	1		1	1	1	1
Chinatoli	Lakhimpur			1	1	1	1
Koilamari	Lakhimpur	1			2	1	1
dejoo	Lakhimpur	1			2	1	1
Silonibari	Lakhimpur			1	2	2	
Doolhat	Lakhimpur					1	1
Seajuli	Lakhimpur	1		1	1	1	1
Nirmala	Sonitpur	1		1	1	1	1
Brohmajaan	Sonitpur			1		1	
Dhendai	Sonitpur		1		2	1	1
Borjuli	Sonitpur	1		1		1	1
Sonajuli	Sonitpur			1	2		1

Table I: Manpower details in tea garden hospitals of Assam.							
Facility	District	MO	AYUSH	GNM	ANM	Pharmacist	Lab Tech
Shakomato	Sonitpur	1			1	1	
Kacharigaon	Sonitpur		1	1	1	1	1
Dhulapadung	Sonitpur	1		1	3	2	1
Kolony	Sonitpur	1		1	1	1	1
Dhullie	Sonitpur	1		1	1	1	
Manmohinipur	Sonitpur	1		1		1	
Shyamaguri	Sonitpur				1	1	
Arun	Sonitpur	1		1	1	1	1
Panbari	Sonitpur			1	1	1	1
Sapoi	Sonitpur		1	1	1	1	
Singri	Sonitpur		1		1	1	
Hirajuli	Sonitpur	1		1	1	1	
Hookrajuli	Sonitpur	1			1		
Narayanpur	Sonitpur	1		1	1	1	
Durang	Sonitpur	1		1	1	1	
Unnunaband TG	Cachar	1				1	1
Sabita Bhasin	Cachar	1			2		1
Pathemara TE	Cachar	1				1	
Chandighat TE	Cachar	1			1	1	
Cossipore TE	Cachar	1		1		1	1
Arcuttipore TE	Cachar					1	1
Doyapore TE	Cachar	1				2	1
Rampore TE	Cachar				1	1	1
West Jalinga TE	Cachar	1			1	1	1
Bhuvan valley TE	Cachar					1	1
Dewan TE	Cachar	1			1	1	1
Lakhipur TG	Cachar	1		1	1		1
Dalaobari	Kokrajhar	1			1	1	
Krishnakoli	Dhubri	1	1		1		
Ainakhal TG	Hailakandi	1			1	2	1
Fatemabad	Baksa	1					
Mornoi	Kokrajhar	1		1	3	1	
Lalamikh TG	Hailakandi				2	1	1
Dhalai TG	Hailakandi				1		1
Isabheel TG	Karimganj					2	
TOTAL							

Table II: Availability of labour room and basic amenities in labour room.

Name of the Facility	District	Labour room	Floor tiles	Attached toilet	Labour table	Spot light	Mattress on the labour table	Foot Step	Wall clock
0= not available, 1= available, 2= available but not utilized.									
Raidang	Tinsukia	1	1	0	1	1	1	1	0
Koomsong	Tinsukia	1	1	1	1	1	1	1	1
Phillobari	Tinsukia	1	1	1	1	1	1	1	1
Bahadur	Tinsukia	1	1	1	1	1	1	1	2
Rangagora	Tinsukia	1	1	1	1	1	1	1	0
Dinjan	Tinsukia	1	1	1	1	1	1	1	0
Nalini	Tinsukia	1	1	1	1	1	1	1	0
Chandmari	Tinsukia	0	0	0	0	0	0	0	0
Bordubi	Tinsukia	1	1	1	1	1	1	1	1
Dhelakhat	Tinsukia	2	1	1	0	0	0	0	0
Anandbag	Tinsukia	1	1	1	1	0	1	1	0
Margherita	Tinsukia	1	0	0	1	1	1	1	0
Bozaloni	Tinsukia	1	1	1	1	1	1	1	0
Lankashi TE	Tinsukia	1	1	1	1	1	1	1	0
Baghjan TE	Tinsukia	1	1	1	1	1	1	1	1
Tengapani TE	Tinsukia	1	1	1	1	1	1	1	0
Borboorah	Dibrugarh	1	1	0	1	1	0	1	0
Hazelbank	Dibrugarh	1	1	1	1	1	1	1	1
Bijjulibari	Dibrugarh	1	1	1	1	1	1	1	1
juitlibari	Dibrugarh	1	1	1	1	1	0	0	1
Moud	Dibrugarh	1	1	1	1	1	1	1	1
Greenwood	Dibrugarh	1	1	0	1	1	1	1	0
Madhuban	Dibrugarh	1	1	1	1	1	0	1	0
Madarkhat	Dibrugarh	1	0	0	1	0	0	1	0
Manuhari	Dibrugarh	2	2	2	0	0	0	0	0
Tarajan	Dibrugarh	1	1	1	1	0	0	1	0
Thanai TE	Dibrugarh	1	1	1	1	1	1	1	0
Anandbari TE	Dibrugarh	1	1	1	1	1	1	1	0
Namsung	Dibrugarh	1	1	1	1	2	1	1	0
Nandanban	Dibrugarh	0							
Kenduguri	Dibrugarh	1	1	1	1	1	1	1	0
Joonktollee	Dibrugarh	1	1	1	1	0	0	1	0
Tinkong	Dibrugarh	1	1	1	1	1	1	1	0
Ouphulia	Dibrugarh	1	1	1	1	0	1	0	0

Table II: Availability of labour room and basic amenities in labour room.

Name of the Facility	District	Labour room	Floor tiles	Attached toilet	Labour table	Spot light	Mattress on the labour table	Foot Step	Wall clock
0= not available, 1= available, 2= available but not utilized.									
Rajgarh	Dibrugarh	1	1	1	1	1	1	1	1
Nilmoni	Dibrugarh	1	1	1	1	2	1	1	1
Desam	Dibrugarh	1	1	1	1	1	1	1	1
Balimora	Dibrugarh	0	0	0					
khowang	Dibrugarh	1	1	1	1	2	1	1	1
Teloijan	Dibrugarh	1	1	1	1	2	1	1	1
Bamun	Dibrugarh	1	1	1	1	2	1	0	1
Basmotia	Dibrugarh	1	1	1	1	0	1	1	1
Romai	Dibrugarh	1	1	1	1	1	1	1	1
Langarjan	Dibrugarh	1	1	1	1	1	1	1	0
Harishpur	Dibrugarh	1	1	1	1	2	1	1	0
Lengeri	Dibrugarh	2	2	2	2	0	0	0	0
Hatijan	Dibrugarh	0			0	0	0	0	0
Santi	Dibrugarh	1	1	1	1	1	1	1	0
Nudwa	Dibrugarh	1	1	0	1	1	1	1	0
Maijaan	Dibrugarh	1	1	1	1	1	1	1	0
Madhuting	Dibrugarh	1	1	1	1	1	1	1	0
Jamirah	Dibrugarh	1	1	1	1	1	1	1	0
Baughpara	Dibrugarh	1	1	1	1	1	1	1	0
Borasali	Sivsagar	2	1	1	1	1	0	1	0
Salkathoni	Sivsagar	1	1	1	1	2	1	1	2
Kanu	Sivsagar	1	1	0	1	2	1	1	0
Mackeypore	Sivsagar	1	1	0	1	2	1	1	0
Borsillah	Sivsagar	1	1	1	1	1	1	1	0
Deopani	Sivsagar	1	1	0	1	1	1	1	0
Mathurapore	Sivsagar	1	1	1	1	0	0	1	2
Lakmijaan	Sivsagar	1	1	1	1	1	1	1	0
Ligripukhuri	Sivsagar	1	1	1	1	1	1	1	0
Lakuwah	Sivsagar	1	1	1	1	2	1	1	0
Rajmai	Sivsagar	1	1	1	1	1	1	1	0
Deepling	Sivsagar	1	1	1	1	2	1	1	0
Dumordullong	Sivsagar	1	1	1	1	1	1	1	0
Hingrijaan	Sivsagar	1	1	1	1	1	1	1	0
Napuk	Sivsagar	1	1	1	1	2	1	1	0

Table II: Availability of labour room and basic amenities in labour room.

Name of the Facility	District	Labour room	Floor tiles	Attached toilet	Labour table	Spot light	Mattress on the labour table	Foot Step	Wall clock
0= not available, 1= available, 2= available but not utilized.									
Khoomtaie	Sivsagar	1	1	1	1	0	1	1	1
Cinnamara	Jorhat	1	1	1	1	0	1	1	0
Sangsua	Jorhat	1	1	1	1	0	1	1	1
Tyroon	Jorhat	1	1	1	1	1	1	1	0
Gatoonga	Jorhat	1	1	1	1	0	1	1	0
Naginijan	Jorhat	1	1	1	1	1	1	1	0
Bokahola	Jorhat	1	1	1	1	1	1	1	0
Lahpohia	Jorhat	1	1	1	1	1	1	1	0
Borhulla	Jorhat	1	1	1	1	1	1	1	0
Hoolonguri	Jorhat	1	1	1	1	1	1	1	1
Soraipani	Jorhat	1	1	1	1	1	1	1	1
Koomtai	Golaghat	1	1	1	1	1	1	1	1
Halmira	Golaghat	1	1	1	1	1	1	1	1
Borkatonee	Golaghat	1	1	1	1	0	1	1	0
Rungagora	Golaghat	1	1	1	1	1	1	1	1
Dooria	Golaghat	1	1	1	1	1	1	1	1
Murphulani	Golaghat	1	1	1	1	1	1	1	1
Numaligurh	Golaghat	2	2	2	1	1	1	1	1
Socketing	Golaghat	1	1	1	1	1	0	1	0
Ghillidary	Golaghat	1	1	1	1	1	1	1	1
Mokrung	Golaghat	1	1	1	1	1	1	1	1
Diffilo	Golaghat	1	1	1	1	1	1	1	0
Kellyden	Nagaon	1	1	1	1	1	1	1	1
Amsoi	Nagaon	1	1	1	1	1	1	1	2
Salonah	Nagaon	1	1	1	1	2	1	1	1
Nonoi	Nagaon	1	1	1	1	1	1	1	0
Kondoli	Nagaon	1	1	1	1	0	1	1	0
Burrapahar	Nagaon	2	2	2	2	2	2	0	0
Sagmootea	Nagaon	1	1	1	1	1	1	1	0
Arun	Sonitpur	1	1	1	1	1	1	1	0
Panbari	Sonitpur	1	1	1	1	1	0	1	0
Sapoi	Sonitpur	1	1	1	1	0	0	1	0
Singri	Sonitpur	2	1	1	2	0	0	1	0
Shyamaguri	Sonitpur	1	1	1	1	0	2	1	0

Table II: Availability of labour room and basic amenities in labour room.

Name of the Facility	District	Labour room	Floor tiles	Attached toilet	Labour table	Spot light	Mattress on the labour table	Foot Step	Wall clock
0= not available, 1= available, 2= available but not utilized.									
Hirajuli	Sonitpur	1	1	1	1	1	0	0	0
Hookrajuli	Sonitpur	1	1	1	1	0	1	1	1
Narayanpur	Sonitpur	1	1	1	1	1	1	1	0
Durang	Sonitpur	1	1	1	1	1	1	1	0
Manmohinipur	Sonitpur	1	1	1	1	1	1	1	0
Nirmala	Sonitpur	1	1	1	1	1	0	1	2
Brohmajaan	Sonitpur	1	1	0	1	0	0	1	0
Dhendai	Sonitpur	1	1	1	1	0	1	1	0
Borjuli	Sonitpur	1	1	0	1	1	1	1	1
Sonajuli	Sonitpur	1	1	1	1	1	1	1	0
Shakomato	Sonitpur	1	1	1	1	1	1	1	1
Kacharigaon	Sonitpur	1	1	1	1	1	1	1	1
Dhulapadung	Sonitpur	1	1	0	1	1	1	1	1
Kolony	Sonitpur	1	1	1	1	1	1	1	1
Dhullie	Sonitpur	1	1	1	1	1	1	1	1
Ananda	Lakhimpur	1	1	1	1	2	0	1	0
Harmoty	Lakhimpur	1	1	1	1	1	1	1	1
Chinatoli	Lakhimpur	1	1	1	1	2	0	1	0
Koilamari	Lakhimpur	1	1	1	1	1	1	1	1
dejoo	Lakhimpur	1	1	0	1	1	1	0	1
Silonibari	Lakhimpur	1	1	1	1	1	1	1	1
Doolhat	Lakhimpur	1	1	1	1		1	1	1
Seajuli	Lakhimpur	1	1	1	1	1	1	1	0
Hatigor	Udalguri	1	1	1	1	1	1	1	0
Dhunseri	Udalguri	1	1	1	1	1	1	0	0
bettybari	udalguri	1	1	1	1	1	1	1	0
Suola	Udalguri	1	1	1	1	0	0	0	0
Bahipookhri TE	Udalguri	1	1	1	1	1	1	0	0
Fatemabad	Baksa	0	0	0	0	0	0	0	0
Mornoi	Kokrajhar	1	1	1	1	1	0	1	0
Dalaobari	Kokrajhar	1	1	1	1	1	0	0	0
Krishnakoli	Dhubri	0							
Ainakhal TG	Hailakandi	1	0	0	0	0	0	1	0
Lalamikh TG	Hailakandi	0	0	0					

Table II: Availability of labour room and basic amenities in labour room.

Name of the Facility	District	Labour room	Floor tiles	Attached toilet	Labour table	Spot light	Mattress on the labour table	Foot Step	Wall clock
0= not available, 1= available, 2= available but not utilized.									
Dhalai TG	Hailakandi	1	0	0	1	0	0	0	0
Isabheel TG	Karimganj	1	0	0	1	0	1	1	0
Unnunaband TG	Cachar	1	1	1	1	1	1	1	0
Sabita Bhasin	Cachar	1	1	0	1	1	1	1	1
Pathemara TE	Cachar	1	1	1	1	0	1	1	0
Chandighat TE	Cachar	1	1	0	1	1	1	1	1
Cossipore TE	Cachar	1	1	1	1	1	0	1	1
Arcuttipore TE	Cachar	1	1	0	1	1	1	1	0
Doyapore TE	Cachar	1	1	0	1	1	0	1	0
Rampore TE	Cachar	1	1	0	1	0	0	1	0
West Jalinga TE	Cachar	1	0	1	1	1	1	1	1
Bhuvan valley TE	Cachar	3	0	0	1	1	0	0	0
Dewan TE	Cachar	1	1	1	1	1	1	1	1
Lakhipur TG	Cachar	1	0	0	1	0	0	1	0

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Raidang	Tinsukia	207	26	12.5	198	26	13.13				207	120	57.9	198	109	55.05			
Koomsong	Tinsukia	369	122	33	378	134	35.44	260	128	49.23	369	88	23.84	378	104	27.5	260	63	24.23
Phillobari	Tinsukia	82	53	64.6	74	78	100	107	55	51.4	82	78	95.12	74	113	100	107	70	41.17
Bahadur	Tinsukia	39	34	87.1	23	32	100	18	NA	na	39	28	71.7	23	12	52.17	18	NA	0
Rangagora	Tinsukia	56	30	53.5	40	20	50	74	39	52.7	56	26	46.42	40	20	50	74	35	70
Dinjan	Tinsukia	135	73	54.07	122	55	45.8	102	56	54.9	135	130	96.29	122	112	91.8	102	101	100
Nalini	Tinsukia	80	80	100	90	90	90	94	94	100	80	76	95	90	85	94.4	94	92	100
Chandmari	Tinsukia	0	0	0	0	0		0	0		0	0	0	0	0	0	0	0	0
Bordubi	Tinsukia	203	na		205	na	NA	215	na	NA	203	na	Na	205	na	0	215	na	0
Dhelakhat	Tinsukia	53	7	13.2	67	9	13.4	52	13	25	53	53	100	67	67	100	52	52	100
Anandbag	Tinsukia	19	19	100	32	32	100	20	20	100	19	19	100	32	32	100	20	20	100
Margherita	Tinsukia	89	40	44.9	117	56	47.86	123	47	38.21	89	76	85.39	117	101	86.32	123	97	78.86
Bozaloni	Tinsukia	160	48	30	170	66	38.8	230	130	56.5	160	99	61.8	170	99	58.23	230	107	46.52
Lankashi TE	Tinsukia	7	7	100	15	6	40	28	13	46.4	7		0	15	7	46.6	28	15	53.57
Baghjan TE	Tinsukia	100	35	35	109	68	62.3	119	57	47.8	100	63	63	109	71	65.13	119	78	65.54
Tengapani TE	Tinsukia	33	26	78.7	31	12	38.7	34		na	33	36	100	31	27	87.09	34	29	85.29
Borboorah	Dibrugarh	58	34	58.6	59	44	74.5	42	35	83.3	58	64	100	59	49	83.05	42	26	61.9
Hazelbank	Dibrugarh	63	41	65.07	84	66	78.5	70	50	71.4	63	77	100	84	68	80.9	70	62	88.57
Bijjulibari	Dibrugarh	15	15	100	28	28	28	21	21	100	15	22	100	28	18	64.28	21	15	71.42
juitlibari	Dibrugarh	58	31	53.4	75	29	38.67	65	7	10.7	58	54	100	75	70	93.3	65	63	100
Moud	Dibrugarh	27	25	92.5	26	26	100	26	26	100	27	25	100	26	26	100	26	26	100
Greenwood	Dibrugarh	35	59	100	185	64	34.6	152	56	36.84	35	99	100	185	77	41.62	152	78	51.31

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Madhuban	Dibrugarh	Na		Na							Na								0
Madarkhat	Dibrugarh	22	22	100	32	32	100	0	0		22	22	100	32	32	100	0	0	0
Manuhari	Dibrugarh	65	0		48	0	NA	0	0		65	0		48	0	0	0	0	0
Tarajan	Dibrugarh	Na									Na								
Thanai TE	Dibrugarh	80	56	70	107	52	48.5	80	11	13.7	80	66	82.5	107	67	62.61	80	36	45
Anandbari TE	Dibrugarh	10		0	14		NA	19		na	10	10	100	14	14	100	19	22	100
Namsung	Dibrugarh	9	18	100	14	40	100	0	0		9	29	100	14	54	100	0	0	0
Nandanban	Dibrugarh	18	15	93	25	20	96	30	25	83.3	18	16	100	25	20	80	30	25	83.33
Kenduguri	Dibrugarh	31	16	51.5	36	16	44.5	50	24	48	31	35	100	36	31	86.11	50	42	84
Joonktollee	Dibrugarh	53	12	22.6	66	17	25.7	83	20	25	53	41	77.3	66	49	74.24	83	63	75.9
Tinkong	Dibrugarh	12	9	75	12	18	100	12	13	100	12	49	100	12	59	78.6	12	51	100
Ouphulia	Dibrugarh	58	45	77.5	104	39	37.5	83	83	100	58	52	89.6	104	51	49.03	83	67	80.72
Rajgarh	Dibrugarh	36	36	100	35	34	100	49	43	98	36	33	91.6	35	35	100	49	42	85.71
Nilmoni	Dibrugarh	45	38	84.4	65	39	60	44	33	75	45	36	80	65	49	75.38	44	45	100
Desam	Dibrugarh	21	21	100	36	26	72.23	33	18	54.54	21	21	100	36	29	80.5	33	41	100
Balimora	Dibrugarh	0									0								
khowang	Dibrugarh	47	47	100	71	71	100	64	64	100	47	40	85.1	71	66	92.95	64	53	82.8
Teloijan	Dibrugarh	50	15	30	82	25	30.48	48	0	na	50	48	96	82	76	87.8	48	28	58.33
Bamun	Dibrugarh	92	60	65.2	104	67	64.42	85	51	60	92	94	100	104	95	91.34	85	81	95.29
Basmotia	Dibrugarh	172	59	34.3	162	53	32.71	100	46	46	172	42	24.4	162	61	37.65	100	54	54
Romai	Dibrugarh	50	36	72	73	45	61.6	88	52	59.09	50	31	62	73	36	49.31	88	23	26.13
Langarjan	Dibrugarh	39	27	69.2	60	29	48.3	152	45	29.6	39	32	82.2	60	54	90	152	47	30.92

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Harishpur	Dibrugarh	23	7	30.4	9	8	100	26	4	15.3	23	11	47.8	9	10	100	26	10	38.46
Lengeri	Dibrugarh	50	50	100	44	44	100	47	47	100	50	50	100	44	44	100	47	47	100
Hatijan	Dibrugarh	14			12		NA	17		na	14	14	100	12	12	100	17	17	100
Santi	Dibrugarh	17	17	100	23	23	100	25	25	100	17	17	100	23	21	96	25	18	72
Nudwa	Dibrugarh	27	24	96	46	46	100	46	24	52.17	27	28	100	46	47	100	46	28	60.86
Maijaan	Dibrugarh	153	78	50.9	165	119	72.12	124	114	91.9	153	141	92.1	165	103	62.4	124	101	81.45
Madhuting	Dibrugarh																		
Jamirah	Dibrugarh	69	23	33.3	43	15	34.88	82	18	21.95	69	42	60.8	43	15	34.88	82	20	24.39
Baughpara	Dibrugarh																		
Borasali	Sivsagar	73	38	52.05	63	29	46.03	64	33	51.5	73	48	65.7	63	33	52.38	64	49	76.5
Salkathoni	Sivsagar	62	18	29.03	92	14	15.2	81	6	7.4	62	45	72.58	92	84	91.3	81	56	69.13
Kanu	Sivsagar	135	84	62.2	122	80	65.6	120	72	60	135	72	53.3	122	74	60.6	120	70	58.33
Mackeypore	Sivsagar	111	178	100	165	155	93.93	150	145	96.6	111	118	100	165	110	66.7	150	75	50
Borsillah	Sivsagar	68	68	100	56	56	100	91	91	100	68	49	72.05	56	35	62.5	91	50	54.94
Deopani	Sivsagar	91	42	46.1	53	53	100	60	60	100	91			53		0	60		
Mathurapore	Sivsagar	144	86	59.7	172	85	49.4	165	92	55.7	144	86	59.7	172	85	49.4	165	92	55.75
Lakmijaan	Sivsagar	90	85	94.4	85	78	91.7	111	88	79.27	90	71	78.89	85	93	100	111	52	46.84
Ligripukhuri	Sivsagar	141	139	98	42	39	92.85	51	49	96.07	141	138	97.87	42	38	90.4	51	48	94.11
Lakuwah	Sivsagar	106	106	100	138	138	100	138	138	100	106	101	100	138	134	97.1	138	145	100
Rajmai	Sivsagar	117	36	30.7	166	44	26.5	128	32	25	117	60	51.28	166	75	45.18	128	56	43.75
Deepling	Sivsagar	137	81	59.12	127	62	48.8	161	69	42.8	137	71	51.82	127	49	38.58	161	47	29.19
Dumordullong	Sivsagar	101	55	54.4	142	86	60.56	74	57	77.02	101	93	91.07	142	138	97.18	74	69	93.24

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Hingrijaan	Sivsagar	84	84	100	108	97	89.8	98	66	67.34	84	69	82.14	108	94	87.03	98	74	75.5
Napuk	Sivsagar	136	39	28.67	135	60	44.4	170	77	45.29	136	69	49.64	135	72	53.3	170	55	32.35
Khoomtaie	Sivsagar	195	105	53.84	148	113	76.35	170	124	72.94	195	195	100	148	148	100	170	170	100
Cinnamara	Jorhat	263	77	29.27	156	67	42.95	4	7	100	263	63	23.95	156	52	33.3	4	7	100
Sangsua	Jorhat	121	85	70.24	107	63	58.9	104	17	16.3	121	101	83.47	107	90	84.1	104	64	61.53
Tyroon	Jorhat	54	36	66.6	70	57	81.42	75	57	76	54	53	100	70	44	62.8	75	45	60
Gatoonga	Jorhat	172	172	100	196	196	100	176	176	100	172	178	100	196	81	41.32	176	157	89.2
Naginijan	Jorhat	245	57	23.2	310	65	20.9	257	49	19.06	245	24	9.7	310	19	6.1	257	27	10.5
Bokahola	Jorhat	60	60	100	43	43	100	17	17	100	60	30	50	43	21	48.8	17	6	35.29
Lahpohia	Jorhat	62	20	32.2	58	7	12.08	52	12	23.07	62	49	79.2	58	51	87.9	52	40	78.43
Borhulla	Jorhat	78	47	60.25	35	41	100	41	22	53.65	78	42	53.84	35	52	100	41	38	92.68
Hoolonguri	Jorhat	76	64	84.21	207	150	72.4	133	84	63.15	76	45	59.21	207	132	63.7	133	114	85.71
Soraipani	Jorhat	137	44	32.11	129	42	32.55	77	48	62.33	137	44	32.11	129	35	27.13	77	46	59.74
Koomtai	Golaghat	61	29	47.54	51	91	100	12	66	100	61	64	100	51		0	12		
Halmira	Golaghat	98	58	59.18	85	68	80	125	91	72.8	98	71	72.44	85	75	88.23	125	129	100
Borkatonee	Golaghat	41		0	35		NA	33		na	41			35		0	33		
Rungagora	Golaghat	72	72	100	77	77	100	96	96	100	72	72	100	77	77	100	96	96	100
Dooria	Golaghat	54	19	35.18	62	25	40.3	110	12	10.9	54	25	52	62	37	59.6	110	98	89.09
Murphulani	Golaghat	78	38	48.7	85	30	37.5	134	44	32.8	78	20	28.57	85	40	47.05	134	70	53.2
Numaligurh	Golaghat	77	138	100	105	65	61.9	55	44	80	77	97	100	105	105	100	55	35	63.63
Socketing	Golaghat	210	65	30.9	144	50	34.7	135	52	38.5	210	56	26.6	144	37	25.6	135	33	24.44
Ghillidary	Golaghat												0						

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Mokrung	Golaghat	103	59	57.28	122	62	50.81	38	26	68.4	103	44	42.3	122	60	49.18	38	12	31.5
Diffilo	Golaghat	43	27	62.79	48	44	100	42	26	61.9	43	26	60.4	48	30	62.5	42	24	57.14
Kellyden	Nagaon	135	135	100	148	148	100	116	116	100	135	135	100	148	148	100	116	116	100
Amsoi	Nagaon																		
Salonah	Nagaon	117	72	61.5	111	63	56.75	118	44	37.28	117	61	52.13	111	83	74.7	118	62	52.4
Nonoi	Nagaon	107	38	35.5	107	50	46.7	102	28	27.45	107	100	93.45	107	99	92.5	102	100	100
Kondoli	Nagaon	47			62			36		na	47	42	89.36	62	35	56.45	36	28	77.7
Burrapahar	Nagaon																		
Sagmootea	Nagaon	51	42	82.35	64	51	79.6	75	57	76	51	51	100	64	64	100	75	75	100
Ananda	Lakhimpur	116	125	100	140	50	35.71	152	40	26.3	116	78	67.24	140	96	68.57	152	63	41.44
Harmoty	Lakhimpur	178	38	32.75	110	51	46.36	147	2	1.3	178	50	28.08	110	91	82.73	147	93	63.26
Chinatoli	Lakhimpur	118	118	100	111	111	100	122	122	100	118	63	53.38	111	76	68.46	122	81	66.39
Koilamari	Lakhimpur	133	76	57.14	135	58	42.96	157	81	51.5	133	106	79.69	135	91	67.4	157	99	63.05
dejoo	Lakhimpur	95	171	100	60	70	100				95	90	94.73	60	41	68.3			
Silonibari	Lakhimpur	89	69	77.52	50	20	40	66	28	42.24	89	71	79.7	50	62	100	66	27	40.9
Doolhat	Lakhimpur	89	74	83.14	62	62	100	125	56	44.8	89	50	56.17	62	30	48.4	125	45	36
Seajuli	Lakhimpur	46	22	47.82	54	12	22.2	40	4	10	46	45	100	54	39	72.2	40	25	62.5
Shyamaguri	Sonitpur	114	70	61.4	159	86	54.08	96	80	83.3	114	34	29.82	159	73	45.9	96	16	16.66
Hirajuli	Sonitpur	49	49	100	71	71	100	69	69	100	49	11	22.4	71	43	60.56	69	39	39.39
Hookrajuli	Sonitpur	47	47	100	39	39	100	54	54	100	47	23	48.93	39	34	87.17	54	26	48.14
Narayanpur	Sonitpur	46	46	100	52	52	100	76	76	100	46	40	86.95	52	50	100	76	70	92.1
Durang	Sonitpur	126	43	34.12	98	68	69.38	72	55	76.38	126	78	61.9	98	45	45.9	72	32	44.4

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Nirmala	Sonitpur	43	20	46.51	42	21	50	40	20	50	43	25	58.13	42	18	42.85	40	22	55
Brohmajaan	Sonitpur	113	50	44.24	88	85	96.6	99	113	100	113	53	46.9	88	62	70.45	99	49	49.49
Dhendai	Sonitpur	75	9	12	98	17	17.3	86	14	16.27	75	40	53.33	98	20	20.4	86	27	31.39
Borjuli	Sonitpur	139	49	35.25	140	51	36.42	147	54	36.73	139	99	71.22	140	88	62.85	147	112	76.19
Sonajuli	Sonitpur	81	81	100	78	78	100	75	75	100	81	68	83.95	78	50	64.1	75	35	46.6
Shakomato	Sonitpur	165	76	46.06	108	81	75	140	103	73.5	165	122	73.93	108	90	83.3	140	108	77.14
Kacharigaon	Sonitpur	60	10	16.7	83	15	18.07	76	25	32.8	60	49	81.6	83	80	96.38	76	63	82.89
Dhulapadung	Sonitpur	172	23	13.3	106	19	17.9	105	14	13.3	172	172	100	106	98	92.45	105	91	86.66
Kolony	Sonitpur	67	87	100	92	65	70.6	108	76	70.37	67	62	92.53	92	88	95.6	108	102	94.44
Dhullie	Sonitpur	70	50	71.42	80	42	52.5	51	26	50.9	70		NA	80		0	51		
Manmohinipur	Sonitpur																		
Arun	Sonitpur																		
Panbari	Sonitpur	66	66	100	56	56	100	65	65	100	66	58	87.87	56	48	85.7	65	50	50
Sapoi	Sonitpur	134	134	100	117	117	100	117	117	100	134	83	61.94	117	98	83.7	117	98	83.76
Singri	Sonitpur	61	61	100	42	42	100	54	54	100	61			42			54		
Hatigor	Udalguri	42	74	100	39	28	71.7	33	0	na	42	77	100	39	98	100	33	86	100
Dhunseri	Udalguri	95	43	45.26	104	70	67.3	100	73	73	95	8	8.4	104	4	0%	100	7	7
bettybari	Udalguri	50	50	100	58	58	100	61	61	100	50	37	74	58	41	70.6	61	34	55.73
Suola	Udalguri	86	55	63.95	98	45	45.9	76	40	52.63	86	55	63.95	98	42	42.8	76	15	19.73
Bahipookhri TE	Udalguri	58	56	100	54	56	100	56	69	100	58	59	100	54	60	100	56	72	100
Fatemabad	Baksa																		
Mornoi	Kokrajhar	46	0	0	29	0	NA	24	0	na	46	18	39.12	29	14	48.27	24	10	41.66

Table III: Antenatal care in the evaluated tea garden hospitals during 2010-2013.

Name of the facility	District	ANC 1st Trimester 2012-13			ANC 1st Trimester 2011-12			ANC 1st Trimester 2010-11			ANC 3rd Trimester 2012-2013			ANC 3rd Trimester 2011-2012			ANC 3rd Trimester 2010-2011		
		Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%	Total	No.	%
Dalaobari	Kokrajhar	0	0	0	0	0		0	0		0	0		0			0	0	
Krishnakoli	Dhubri			0															
Isabheel TG	Karimganj	93	93	100							93	2	2.1						
Ainakhal TG	Hailakandi	29		0	36		NA	4		na	29	26	89.6	36			4		
Lalamikh TG	Hailakandi			0															
Dhalai TG	Hailakandi			0															
Unnunaband TG	Cachar			0															
Sabita Bhasin	Cachar	74	37	50	90	44	48.8	85	52	61.17	74	81	100	90	129	100	85	146	100
Pathemara TE	Cachar	34	22	64.7	46	27	58.6	29	26	100	34	28	82.35	46	33	71.7	29	28	100
Chandighat TE	Cachar																		
Cossipore TE	Cachar	26	10	38.46	56	14	25	37		na	26	23	88.46	56	20	35.7	37		
Arcuttipore TE	Cachar																		
Doyapore TE	Cachar	157	157	100	235	235	100				157	84	53.5	235	62	26.38			
Rampore TE	Cachar																		
West Jalinga TE	Cachar	89	22	24.71	85	17					89	32	35.95	85	81	95.29			
Bhuvan valley TE	Cachar																		
Dewan TE	Cachar																		
Lakhipur TG	Cachar	34	10	29.41	30	10		8	8	100	34	12	2.2	30		0	8		
TOTAL		10909	6527	61.65	11278	6606	66.08	10086		64.45	10909	7123	72.28	11278	7221	67.563	10086	6291	64.03

Table IV: Average Institutional deliveries conducted in the tea garden hospitals from 2010-2013

Name of the facility:	District:	Institutional Deliveries (average)		
		2012-13 Per month	2011-12 Per month	2010-11 Per month
Raidang	Tinsukia	7	8	
Koomsong	Tinsukia	10	13	10
Phillobari	Tinsukia	1	7	5
Bahadur	Tinsukia	3	1	
Rangagora	Tinsukia	6	6	6
Dinjan	Tinsukia	12	9	8
Nalini	Tinsukia	9	12	10
Chandmari	Tinsukia	0	0	0
Bordubi	Tinsukia	NA	NA	NA
Dhelakhat	Tinsukia	0	0	0
Anandbag	Tinsukia	2	3	2
Margherita	Tinsukia	7	5	6
Bozaloni	Tinsukia	4	4	7
Lankashi TE	Tinsukia	1	1	2
Baghjan TE	Tinsukia	6	5	6
Tengapani TE	Tinsukia	3	3	4
Borboorah	Dibrugarh	0		4
Hazelbank	Dibrugarh	5	4	4
Bijjulibari	Dibrugarh	2	2	2
juitlibari	Dibrugarh	2	3	3
Moud	Dibrugarh	1	1	1
Greenwood	Dibrugarh	9	10	9
Madhuban	Dibrugarh	18	0	0
Madarkhat	Dibrugarh	0	0	1
Manuhari	Dibrugarh	0	0	0
Tarajan	Dibrugarh	NA	NA	NA
Thanai TE	Dibrugarh	8	10	8
Anandbari TE	Dibrugarh	1	1	2
Namsung	Dibrugarh	2	3	1
Nandanban	Dibrugarh	0	0	1
Kenduguri	Dibrugarh	3	3	4
Joonktollee	Dibrugarh	5	8	6
Tinkong	Dibrugarh	4	5	5
Ouphulia	Dibrugarh	4	5	2
Rajgarh	Dibrugarh	4	4	4
Nilmoni	Dibrugarh	3	3	1
Desam	Dibrugarh	1	1	2
Balimora	Dibrugarh	0	0	0

Table IV: Average Institutional deliveries conducted in the tea garden hospitals from 2010-2013

Name of the facility:	District:	Institutional Deliveries (average)		
		2012-13 Per month	2011-12 Per month	2010-11 Per month
khowang	Dibrugarh	4	7	6
Teloijan	Dibrugarh	4	5	3
Bamun	Dibrugarh	8	8	7
Basmotia	Dibrugarh	5	4	5
Romai	Dibrugarh	5	7	7
Langarjan	Dibrugarh	4	5	4
Harishpur	Dibrugarh	2	2	1
Lengeri	Dibrugarh	0	0	0
Hatijan	Dibrugarh	0	0	0
Santi	Dibrugarh	1	1	1
Nudwa	Dibrugarh	3	4	3
Maijaan	Dibrugarh	8	8	7
Madhuting	Dibrugarh	NA	0	0
Jamirah	Dibrugarh	4	4	7
Baughpara	Dibrugarh	NA	NA	NA
Borasali	Sivsagar	6	5	5
Salkathoni	Sivsagar	5	5	5
Kanu	Sivsagar	9	8	10
Mackeypore	Sivsagar	7	8	6
Borsillah	Sivsagar	9	8	5
Deopani	Sivsagar	4	4	5
Mathurapore	Sivsagar	8	10	11
Lakmijaan	Sivsagar	5	5	4
Ligripukhuri	Sivsagar	3	4	4
Lakuwah	Sivsagar	10	9	16
Rajmai	Sivsagar	10	14	11
Deepling	Sivsagar	4	4	2
Dumordullong	Sivsagar	8	7	7
Hingrijaan	Sivsagar	8	8	7
Napuk	Sivsagar	8	8	9
Khoomtaie	Sivsagar	13	24	25
Cinnamara	Jorhat	1	0	0
Sangsua	Jorhat	5	4	2
Tyroon	Jorhat	2	5	4
Gatoonga	Jorhat	10	4	2
Naginijan	Jorhat	3	3	3
Bokahola	Jorhat	1	1	0
Lahpohia	Jorhat	1	1	0

Table IV: Average Institutional deliveries conducted in the tea garden hospitals from 2010-2013

Name of the facility:	District:	Institutional Deliveries (average)		
		2012-13 Per month	2011-12 Per month	2010-11 Per month
Borhulla	Jorhat	1	0	0
Hoolonguri	Jorhat	10	9	9
Soraipani	Jorhat	4	3	4
Koomtai	Golaghat	7	7	8
Halmira	Golaghat	6	5	4
Borkatonee	Golaghat	3	3	3
Rungagora	Golaghat	7	6	8
Dooria	Golaghat	6	4	6
Murphulani	Golaghat	8	7	6
Numaligurh	Golaghat	6	5	2
Socketing	Golaghat	2	3	2
Ghillidary	Golaghat	1	1	0
Mokrung	Golaghat	3	2	1
Diffilo	Golaghat	3	3	3
Kellyden	Nagaon	7	7	7
Amsoi	Nagaon	1	0	0
Salonah	Nagaon	7	7	6
Nonoi	Nagaon	8	8	8
Kondoli	Nagaon	3	2	0
Burrpapahar	Nagaon	0	0	0
Sagmootea	Nagaon	4	6	6
Ananda	Lakhimpur	10	10	7
Harmoty	Lakhimpur	12	9	11
Chinatoli	Lakhimpur	7	8	7
Koilamari	Lakhimpur	8	7	8
dejoo	Lakhimpur	8	0	0
Silonibari	Lakhimpur	4	5	3
Doolhat	Lakhimpur	13	16	14
Seajuli	Lakhimpur	3	4	2
Shyamaguri	Sonitpur	3	5	3
Hirajuli	Sonitpur	2	2	3
Hookrajuli	Sonitpur	4	2	2
Narayanpur	Sonitpur	4	5	5
Durang	Sonitpur	6	8	5
Nirmala	Sonitpur	4	2	
Brohmajaan	Sonitpur	5	6	5
Dhendai	Sonitpur	1	0	0
Borjuli	Sonitpur	7	4	11

Table IV: Average Institutional deliveries conducted in the tea garden hospitals from 2010-2013

Name of the facility:	District:	Institutional Deliveries (average)		
		2012-13 Per month	2011-12 Per month	2010-11 Per month
Sonajuli	Sonitpur	7	6	6
Shakomato	Sonitpur	9	5	5
Kacharigaon	Sonitpur	5	5	6
Dhulapadung	Sonitpur	8	5	5
Kolony	Sonitpur	4	5	6
Dhullie	Sonitpur	7	5	6
Manmohinipur	Sonitpur	4	2	3
Arun	Sonitpur	NA	NA	NA
Panbari	Sonitpur	0	0	0
Sapoi	Sonitpur	7	7	7
Singri	Sonitpur	3	0	0
Hatigor	Udalguri	8	9	8
Dhunseri	Udalguri	7	6	4
bettybari	Udalguri	5	4	
Suola	Udalguri	6	7	2
Bahipookhri TE	Udalguri	4	4	4
Fatemabad	Baksa	U/C	U/C	U/C
Mornoi	Kokrajhar	4	4	3
Dalaobari	Kokrajhar	4	3	5
Krishnakoli	Dhubri	U/C	U/C	U/C
Isabheel TG	Karimganj	4	0	0
Ainakhal TG	Hailakandi	3	0	0
Lalamikh TG	Hailakandi	0	0	0
Dhalai TG	Hailakandi	0	0	0
Unnunaband TG	Cachar	5	4	3
Sabita Bhasin	Cachar	8	11	13
Pathemara TE	Cachar	4	3	2
Chandighat TE	Cachar	11	8	4
Cossipore TE	Cachar	3	2	2
Arcuttipore TE	Cachar	0	0	0
Doyapore TE	Cachar	17	10	
Rampore TE	Cachar	4	3	2
West Jalinga TE	Cachar	4	2	
Bhuvan valley TE	Cachar	0	0	0
Dewan TE	Cachar	14	9	13
Lakhipur TG	Cachar	6	2	1

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Raidang	Tinsukia	0	0	0	0	0	0	0	0	0	0	0	0	0	87	0	0	0	0
Koomsong	Tinsukia	0	0	0	154	218	113	60	111	47	0	0	0	-	-	-	-	-	-
Phillobari	Tinsukia	-	-	-	219	93	95	910	1625	1200	0	0	0	41	51	-	-	-	-
Bahadur	Tinsukia	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rangagora	Tinsukia	0	1	0	30	36	37	20	15	15	0	0	0	1	36	38	0	0	0
Dinjan	Tinsukia	-	-	-	84	89	76	99	112	54	-	-	-	-	-	-	-	-	-
Nalini	Tinsukia	0	0	0	105	239	36	0	0	0	0	0	0	0	0	0	0	0	0
Chandmari	Tinsukia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bordubi	Tinsukia	0	0	0	48	48	0	0	0	0	0	0	0	33	13	34	0	0	0
Dhelakhat	Tinsukia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anandbag	Tinsukia	0	0	0	67	146	122	50	73	91	0	0	0	0	0	0	0	0	0
Margherita	Tinsukia	0	0	0	306	289	236	33	56	0	0	0	0	25	43	34	0	4	14
Bozaloni	Tinsukia																		
Lankashi TE	Tinsukia				80	80	80	240	240	240									
Baghjan TE	Tinsukia	0	0	0	35	62	38	31	55	20	0	0	0	7	69	49	0	0	0
Tengapani TE	Tinsukia	0	0	0	402	429		341	304		1			0	7	17	0	0	0
Borboorah	Dibrugarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazelbank	Dibrugarh	5	16	0	414	377	304	496	525	522	2	4	3	17	0	32	0	0	1
Bijjulibari	Dibrugarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
juitlibari	Dibrugarh	0	0	0	28	14	0	0	2	0	0	0	0	17	25	33	0	5	0
Moud	Dibrugarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Greenwood	Dibrugarh	78	58		118	128	109	134	156	111	7	0	10	40	0	104			
Madhuban	Dibrugarh																		
Madarkhat	Dibrugarh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Manuhari	Dibrugarh	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0
Tarajan	Dibrugarh																		
Thanai TE	Dibrugarh	0	0	0	68	47	53	117	17	21	0	0	0	50	64	0	0	0	0
Anandbari TE	Dibrugarh	0	0	0	28	20	11	20	10	0	0	0	0	3	7	4	0	7	1
Namsung	Dibrugarh																		
Nandanban	Dibrugarh				12	18	20	40	30	48	2	4	2	5	8	10	6	3	6
Kenduguri	Dibrugarh				83	63	49	810	570	586				0	29	0	0	4	1
Joonktollee	Dibrugarh				1990	1750	1830	578	300	250				13	24	32	0	1	7
Tinkong	Dibrugarh				15	15	15	100	100	100				14	32	26	23	16	0
Ouphulia	Dibrugarh				9	8	5	27	1	0	0	0	0	0	37	0	0	6	0
Rajgarh	Dibrugarh				77	49	6	149	41	30	0	0	1	9	23	0	8	0	0
Nilmoni	Dibrugarh				103	66	101	80	370	165	0	0	0	0	0	0	0	0	0
Desam	Dibrugarh	7	1	0	9	43	55	230	445	490	1	0	1	5	24	13	0	0	0
Balimora	Dibrugarh																		
khowang	Dibrugarh	0	0	0	71	76	74	30	73	96				7	35	28	0	14	8
Teloijan	Dibrugarh				8	0	0	2	0	0	0	0	0						
Bamun	Dibrugarh				21	10	56	62	41	68				10	54	37	2	5	32
Basmotia	Dibrugarh	3	0	0	122	130	80	29	36	47	0	0	0	0	25	0	0	1	0
Romai	Dibrugarh	4	0	0	18	24	20	12	11	12	0	0	0	12	44	2	3	33	0
Langarjan	Dibrugarh	11	15	7	0	116	78	0	177	273	0	0	0	16	21	20	0	0	0
Harishpur	Dibrugarh																		
Lengeri	Dibrugarh							12	25	30	0	0	0	10	11	10	2	5	3
Hatijan	Dibrugarh	4	4	5				21	72	80									
Santi	Dibrugarh	0	0	0	14	24	21	90	70	80	0	0	0	12	11	0	0	0	0

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Nudwa	Dibrugarh	17	6	4	300	240	264	180	168	144	0	0	0	14	13	22	2	8	4
Maijaan	Dibrugarh	38			171	193	89	1596	2040	1584	1	0	0	4	71	72	9		
Madhuting	Dibrugarh																		
Jamirah	Dibrugarh																		
Baughpara	Dibrugarh																		
Borasali	Sivsagar	4	0	0	106	71	65	130	67	60	0	0	1	23	16	48	18	0	0
Salkathoni	Sivsagar	0	0	0	0	0	0	30	20	10	0	0	0	0	0	0	0	0	0
Kanu	Sivsagar	8	14	0	108	120	84	120	122	135	0	0	0	20	0	0	10	0	0
Mackeypore	Sivsagar	0	0	0	147	225	285	91	105	115	0	0	0	0	0	0	0	0	0
Borsillah	Sivsagar	0	0	0	685	613	500	536	727	700	0	0	0	0	0	0	0	0	0
Deopani	Sivsagar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mathurapore	Sivsagar	0	0	0	0	0	0	96	82	70	0	0	0	0	0	0	0	0	0
Lakmijaan	Sivsagar	0	0	0	137	97	70	115	79	60	0	0	0	40	24	55	7	0	0
Ligripukhuri	Sivsagar	0	0	0	10	10	15	15	10	15	0	0	0	0	0	0	0	0	0
Lakuwah	Sivsagar	106	138	138	551	511	383	476	419	252	0	0	0	55	35		0	0	0
Rajmai	Sivsagar	14	10	5	4	9	1	141	98	69	0	0	0	179	183	0	0	0	0
Deepling	Sivsagar	0	0	0	29	50	45	0	125	0	0	0	0	0	0	0	0	0	0
Dumordullong	Sivsagar	0	0	0	100	110	115	100	80	40	0	0	0	66	67	46	0	0	0
Hingrijaan	Sivsagar	0	20	0	262	174	127	202	202	183	0	0	0	0	0	0	0	0	0
Napuk	Sivsagar	0	0	0	213	731	445	1026	1746	469	0	0	0	0	0	0	0	0	0
Khoomtaie	Sivsagar	0	0	0	452	65	89	156	36	50	0	0	0	0	0	0	0	0	0
Cinnamara	Jorhat																		
Sangsua	Jorhat				269	246	239	229	258	241									
Tyroon	Jorhat				35			241											

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Gatoonga	Jorhat				111	105	139	127	130	130		7							
Naginijan	Jorhat																		
Bokahola	Jorhat				12	10	5	12	10	5									
Lahpohia	Jorhat																		
Borhulla	Jorhat				91			48											
Hoolonguri	Jorhat		14		116	165	110	1284	1540	620									
Soraipani	Jorhat				51	60	31	76	213	250									
Koomtai	Golaghat				96	117	155	178	338	155	6	7		40	27	46	36	27	17
Halmira	Golaghat				150	175	150	75	90	60				34	34	16			
Borkatonee	Golaghat				35	25	27	150	130	100									
Rungagora	Golaghat				800			760											
Dooria	Golaghat							110	124	203							54	62	73
Murphulani	Golaghat							620	327	144									
Numaligurh	Golaghat				244	347	307	1725	1584	1253				7	30	56			
Socketing	Golaghat				127	250		530	800							29			
Ghillidary	Golaghat				45	141		260	518								112	110	
Mokrung	Golaghat				141	312	630	150	231	436				24	33	41			
Diffilo	Golaghat				231	167	233	116	99	127									
Kellyden	Nagaon	0	0	0	50	60	40	65000	40000	60000	0	0	0	70	65	60	0	0	0
Amsoi	Nagaon				8			3											
Salonah	Nagaon	35	nil	nil	90	67	121	390	400	330	nil	nil	nil	nil	123	89	nil	nil	nil
Nonoi	Nagaon	5	0	0	442	333	622	0	0	0	0	0	0	44	31	92	0	0	0
Kondoli	Nagaon																		
Burrapahar	Nagaon																		

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Sagmootea	Nagaon				396	435	265	165	35	10									
Ananda	Lakhimpur	0	4	4	105	133	133	105	121	121	0	0	0	62	68	37	0	2	10
Harmoty	Lakhimpur	9	17	1	96	168	194	1260	1245	1095	2	4	2	0	0	0	0	0	0
Chinatoli	Lakhimpur	0	0	0	189	162	148	656	826	825	0	0	0	24	39	68	0	0	0
Koilamari	Lakhimpur	0	0	0	108	110	104	112	107	102	0	0	0	0	0	0	0	0	0
dejoo	Lakhimpur				108			50											
Silonibari	Lakhimpur				121	62	157	322	160	269									
Doolhat	Lakhimpur				150	51	84	212	61	120									
Seajuli	Lakhimpur				207	100	49	145	64	69				11	20				4
Shyamaguri	Sonitpur				29	46	68										0	3	11
Hirajuli	Sonitpur	0	28	30													4	3	0
Hookrajuli	Sonitpur	0	0	0	17	15	12	16	12	10	2	1	0	0	0	0	12	9	5
Narayanpur	Sonitpur	0	0	0	55	81	63	10	230	171	0	0	0	17	0	0	0	0	27
Durang	Sonitpur	0	0	0	153	176	305	94	129	300	0	0	0				4	2	
Nirmala	Sonitpur	0	0	0	505	495	498	345	328	334	6	8	7	13	21	0	1	9	11
Brohmajaan	Sonitpur	0	0	0	72	52	65	26	9	12	0	0	0	7	8	9	12	20	26
Dhendai	Sonitpur	0	0	0	87	24	16	16	90	60	0	0	0	26	37	5	0	0	28
Borjuli	Sonitpur	2	1	0	153	213	186	72	150	136	1	2	2	22	46				6
Sonajuli	Sonitpur	0	0	0	89	86	60	98	78	50	0	0	0	0	0	0	30	35	20
Shakomato	Sonitpur				86	40	30	35	25	27									
Kacharigaon	Sonitpur	2	2		15	22	30	10	12	20									
Dhulapadung	Sonitpur				65	80	60	50	40	35									
Kolony	Sonitpur				72	70	72	54	60	58	4	2	3	17	49	56		6	26
Dhullie	Sonitpur				309	480	542	469	304	659									

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Manmohinipur	Sonitpur	0	11	0	83														
Arun	Sonitpur																		
Panbari	Sonitpur	0	0	0	12	0	25	20	0	12	0	0	0	0	0	0	0	0	0
Sapoi	Sonitpur	0	0	0	409	378	378	406	462	462	0	0	0	0	0	0	12	14	14
Singri	Sonitpur							80	65										
Hatigor	Udalguri	0	0	0	395	368	449	2026	2062	1925	0	0	0						
Dhunseri	Udalguri				847	15	35	381	28	38								8	9
bettybari	udalguri	0	0	0	7	31	13	9	44	14	0	0	0				8	0	9
Suola	Udalguri	0	0	0	620	520	110	900	810	100	0	0	0						
Bahipookhri TE	Udalguri		27		240	220	190	90	85	60							2		
Fatemabad	Baksa																		
Mornoi	Kokrajhar																		
Dalaobari	Kokrajhar																		
Krishnakoli	Dhubri																		
Isabheel TG	Karimganj				78			30											
Ainakhal TG	Hailakandi																		
Lalamikh TG	Hailakandi																		
Dhalai TG	Hailakandi																		
Unnunaband TG	Cachar																		
Sabita Bhasin	Cachar				565	600	555	3050	2680	2800									
Pathemara TE	Cachar																		
Chandighat TE	Cachar													22	20	23	3	0	3
Cossipore TE	Cachar																		
Arcuttipore TE	Cachar																		

Table V: Family planning services in the tea garden hospitals of Assam under NRHM PPP (n=150).

Name of the facility	District	No of IUCD			No of OCPs distributed			No of Condoms distributed			No of MTP			No of LTO			No of NSV		
		2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11	2012-13	2011-12	2010-11
Doyapore TE	Cachar				87	80		189	143								19	15	
Rampore TE	Cachar																		
West Jalinga TE	Cachar				72	63		637	1140										
Bhuvan valley TE	Cachar																		
Dewan TE	Cachar	3	6	8															
Lakhipur TG	Cachar																		
Total number of tea garden performing FP service		26 (17.33%)									14 (9.3%)			68 (45.33%)			43 (28.67%)		



ANNEXURE: B

TABLES (FACILITY-WISE FINANCIAL DETAILS)

Table VI: Overall expenditure in all the tea garden hospitals of Assam under NRHM PPP (n=150)														
1.Name of the facility:	2. District:	TOTAL Received	TOTAL Expended	PC	Salary	PC	Infrastructure	PC	Drugs	PC	Equipments	PC	Others	PC
Raidang	Tinsukia	2000000	609414	30.47	457006	74.99	11500	1.89	0	0	0	0	139948	22.96
Koomsong	Tinsukia	2250000	1287697	57.23	773500	60.07	219048	17.01	0	0	111649	8.67	183500	14.25
Phillobari	Tinsukia	2250000	1229680.99	54.65	620458	50.46		0.00	52992	4.31	128254	10.43	427977	34.80
Bahadur	Tinsukia	2747821	2114728	76.96	477000	22.56	1045470	49.44	204743	9.68	190072	8.99	157775	7.46
Rangagora	Tinsukia	3247821	2245589.3	69.14	738604	32.89	650000	28.95	404500	18.01	288942	12.87	258543	11.51
Dinjan	Tinsukia	3997822	3535369	88.43	814750	23.05	741507	20.97	810886	22.94	161093	4.56	1018870	28.82
Nalini	Tinsukia	2500000	1237430	49.50	638000	51.56	1246175	100.71	21724	1.76	145042	11.72	175468.3	14.18
Chandmari	Tinsukia	750000		0.00										
Bordubi	Tinsukia	1500000	1042565	69.50	514500	49.35	236780	22.71	0	0.00	103204	9.90	132211	12.68
Dhelakhat	Tinsukia	2747821	2290465.3	83.36	402111	17.56	1171503	51.15	52934	2.31	207237	9.05	456680	19.94
Anandbag	Tinsukia	3247821	2979396	91.74	439621	14.76	1318132	44.24	183369	6.15	292116	9.80	290871	9.76
Margherita	Tinsukia	1250000	427575	34.21	530075	123.97	0	0.00	86000	20.11	0	0.00	105385	24.65
Bozaloni	Tinsukia	2747821	1723501	62.72	791250	45.91	892209	51.77		0.00		0.00		0.00
Lankashi TE	Tinsukia	3000000	1600668	53.36	97930	6.12	963828	60.21	88250	5.51	106636	6.66	275635	17.22
Baghjan TE	Tinsukia	2250000	1825378	81.13	939461	51.47	420986	23.06	35530	1.95	183459	10.05	245942	13.47
Tengapani TE	Tinsukia	1997821	2001352	100.18	572950	28.63	1030033	51.47	139164	6.95	145939	7.29	112983	5.65
Borboorah	Dibrugarh	3147821	2153687.59	68.42	769089	35.71	519349	24.11	173158	8.04	155330	7.21	42569	1.98
Hazelbank	Dibrugarh	3503257	2987231	85.27	1204048	40.31	812408	27.20	143425	4.80	188774	6.32	638576	21.38
Bijjulibari	Dibrugarh	4628765	8940175	193.14	430740	4.82	1315679	14.72	158701	1.78	273777	3.06	252235	2.82
juitlibari	Dibrugarh	3497656	1269071	36.28	525740	41.43	130500	10.28	232950	18.36	77420	6.10	332461	26.20
Moud	Dibrugarh	3497821	2658592	76.01	745084	28.03	940779	35.39	338599	12.74	128689	4.84	58267	2.19
Greenwood	Dibrugarh	3497821	4841422	138.41	1125127	23.24	954745	19.72	594454	12.28	137300	2.84	463796	9.58
Madhuban	Dibrugarh	4005685	3734531	93.23	1775388	47.54	1409316	37.74	124361	3.33	106790	2.86	316044	8.46
Madarkhat	Dibrugarh	1150000	650000	56.52	112000	17.23	0	0.00	0	0.00	0	0.00	54607	8.40
Manuhari	Dibrugarh	500000	339232	67.85	0	0.00	245216	72.29	0	0.00	0	0	104817	30.90
Tarajan	Dibrugarh	2847656	2191610	76.96	735976	33.58	1048208	47.83	6503	0.30	163870	7.48	236753	10.80
Thanai TE	Dibrugarh	3497821	2452183	70.11	969500	39.54	522289	21.30	379175	15.46	191391	7.80	389828	15.90
Anandbari TE	Dibrugarh	3197281	2500978	78.22	1560000	62.38	542902	21.71		0.00	246510	9.86	151566	6.06
Namsung	Dibrugarh	2747821	1931360	70.29	465167	24.08	665727	34.47	95381	4.94	12540	0.65	692482	35.85
Nandanban	Dibrugarh	950000	141225	14.87	0	0.00	117795	83.41	0	0.00	0	0.00	23430	16.59
Kenduguri	Dibrugarh	2747821	2532339	92.16	1095110	43.24	703509	27.78	80769	3.19	109700	4.33	543251	21.45
Joonktollee	Dibrugarh	1500000	499038	33.27	402500	80.66	400000	80.15	0	0	18247	3.66	77616	15.55
Tinkong	Dibrugarh	3250000	2819105	86.74	1002926	35.58	1377861	48.88	3780	0.13	77108	2.74	357430	12.68
Ouphulia	Dibrugarh	750000	633680	84.49	160025	25.25	398344	62.86		0.00	68611	10.83	6700	1.06
Rajgarh	Dibrugarh	3197821	2098767	65.63	852864	40.64	588277	28.03	73034	3.48	202485	9.65	382107	18.21
Nilmoni	Dibrugarh	1950000	1538747	78.91	614000	39.90	585000	38.02	59962	3.90	108111	7.03	178674	11.61
Desam	Dibrugarh	2747821	2461907	89.59	1134250	46.07	980860	39.84	23654	0.96	47101	1.91	276042	11.21
Balimora	Dibrugarh	1150000	481299	41.85	0	0.00	406699	84.50	0	0.00	0	0.00	74600	15.50
khowang	Dibrugarh	3497821	2774385	79.32	1347746	48.58	827362	29.82	54087	1.95	304584	10.98	240606	8.67
Teloijan	Dibrugarh	2650000	1573766	59.39	476846	30.30	801680	50.94	60710	3.86	171040	10.87	63489	4.03

Table VI: Overall expenditure in all the tea garden hospitals of Assam under NRHM PPP (n=150)														
1.Name of the facility:	2. District:	TOTAL Received	TOTAL Expended	PC	Salary	PC	Infrastructure	PC	Drugs	PC	Equipments	PC	Others	PC
Bamun	Dibrugarh	3497656	2579566	73.75	1068766	41.43	889876	34.50	95999	3.72	140140	5.43	384785	14.92
Basmotia	Dibrugarh	4000050	2663023	66.57	1367328	51.34	1186792	44.57	78633	2.95	90050	3.38	194823	7.32
Romai	Dibrugarh	2747821	2227159	81.05	999549	44.88	620221	27.85	51281	2.30	98630	4.43	457478	20.54
Langarjan	Dibrugarh	3497821	2584885	73.90	1157921	44.80	872715	33.76	41519	1.61	104406	4.04	432825	16.74
Harishpur	Dibrugarh	850000	1435135	168.84	713600	49.72	539688	37.61	0	0.00	48562	3.38	12655	0.88
Lengeri	Dibrugarh	500000	498737	99.75	6500	1.30	247681	49.66	0	0	78700	15.78	165856	33.26
Hatijan	Dibrugarh	500000	178158	35.63	0	0.00	0	0.00	0	0	1790	1.00	176368	99.00
Santi	Dibrugarh	2447821	2244573	91.70	768800	34.25	768234	34.23	83388	3.72	250960	11.18	373171	16.63
Nudwa	Dibrugarh	3497821	2591141	74.08	2868861	110.72	624452	24.10	351558	13.57	246597	9.52	470673	18.16
Maijaan	Dibrugarh	3247821	2381473	73.33	1002500	42.10	531104	22.30	550018	23.10	251200	10.55	36812	1.55
Madhuting	Dibrugarh	1500000	773202	51.55	329500	42.61	330854	42.79		0.00	22940	2.97	89908	11.63
Jamirah	Dibrugarh	NA												
Baughpara	Dibrugarh	NA												
Borasali	Sivsagar	3000000	2287146	76.24	1129100	49.37	715550.98	31.29	98285	4.30	193756	8.47	150455	6.58
Salkathoni	Sivsagar	2286085	2200828	96.27	1071000	48.66	546428	24.83	243000	11.04	261000	11.86	79400	3.61
Kanu	Sivsagar	1349787	1360627	100.80	747466	54.94	200084	14.71	15017	1.10	240448	17.67	157612	11.58
Mackeypore	Sivsagar	2247821	1741896	77.49	882346	50.65	355651	20.42	84943	4.88	325453	18.68	93503	5.37
Borsillah	Sivsagar	2247821	1785564	79.44	812500	45.50	587592	32.91	301639	16.89	0	0	83833	4.70
Deopani	Sivsagar	2247821	2151274	95.70	823800	38.29	501587	23.32	0	0.00	750991	34.91	74896	3.48
Mathurapore	Sivsagar	1750000	1349362	77.11	730800	54.16	365380	27.08	108611	8.05	128986	9.56	15585	1.15
Lakmijaan	Sivsagar	2247821	1652727	73.53	925600	56.00	324940	19.66	12169	0.74	357680	21.64	32338	1.96
Ligripukhuri	Sivsagar	2997821	2091006	69.75	935751	44.75	348192	16.65	55558	2.66	350263	16.75	368042	17.60
Lakuwah	Sivsagar	1750000	1333622	76.21	7748047	580.98	194649	14.60	0	0.00	104682	7.85	173626	13.02
Rajmai	Sivsagar	2500000	1751257	70.05	851045	48.60	0	0.00	0	0.00	533106	30.44	367100	20.96
Deepling	Sivsagar	2500000	1646071	65.84	392000	23.81	258251	15.69	3568	0.22	115687	7.03	228615	13.89
Dumordullong	Sivsagar	2997821	2457823	81.99	719459	29.27	852240	34.67	263227	10.71	158212	6.44	464655	18.91
Hingrijaan	Sivsagar	3499999	2738278	78.24	1022691	37.35	1413933	51.64	212563	7.76	43815	1.60	45276	1.65
Napuk	Sivsagar	2247821	1515956	67.44	888500	58.61	360141	23.76	0	0.00	169608	11.19	97706	6.45
Khoontaie	Sivsagar	2500000	1740272	69.61	702540	40.37	551233	31.68	97420	5.60	9000	0.52	380079	21.84
Cinnamara	Jorhat	2050000	1304074	63.61	1042346	79.93	149744	11.48		0.00	4650	0.36	107334	8.23
Sangsua	Jorhat	1550000	925363	59.70	115500	12.48	395000	42.69	2225	0.24	161677	17.47	250961	27.12
Tyroon	Jorhat	2047821.81	1075009	52.50	248031	23.07	433657	40.34	72293	6.72	183035	17.03	137993	12.84
Gatoonga	Jorhat	1904585	605626	31.80	40000	6.60		0.00		0.00	247101	40.80	318525	52.59
Naginijan	Jorhat	2050000	1710822	83.45	290654	16.99	759414	44.39	13859	0.81	135323	7.91	511574	29.90
Bokahola	Jorhat	2047822	1585255	77.41	775212	48.90	492801	31.09	74686	4.71	153812	9.70	88744	5.60
Lahpohia	Jorhat	2047822	1775582.17	86.71	987135	55.60	594003	33.45		0.00	72317	4.07	122127	6.88
Borhulla	Jorhat	2967489	2490946	83.94	1454814	58.40	465286	18.68		0.00	204646	8.22	372200	14.94
Hoolonguri	Jorhat	997822	691654	69.32	17500	2.53	556890	80.52		0.00	14950	2.16	102314	14.79
Soraipani	Jorhat	1597822	1732463	108.43	1015142	58.60	445533	25.72	7606	0.44	121169	6.99	143013	8.25
Koomtai	Golaghat	2747821	1842200.77	67.04	423000	22.96	862174.52	46.80		0.00	460775	25.01	95801.25	5.20

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1.Name of the facility:	2. District:	TOTAL Received	TOTAL Expended	PC	Salary	PC	Infrastructure	PC	Drugs	PC	Equipments	PC	Others	PC
Halmira	Golaghat	3497821	2527375.48	72.26	128592	5.09	2058819.25	81.46		0.00	161083.03	6.37	178335.2	7.06
Borkatonee	Golaghat	2750321	1939388	70.51	272250	14.04	1244573	64.17		0.00	133948	6.91	288620	14.88
Rungagora	Golaghat	1250000	1054095	84.33	270000	25.61	532336	50.50		0.00	120198	11.40	131561	12.48
Dooria	Golaghat	2750000	1941024.78	70.58	279800	14.42	866738.35	44.65		0.00	193568	9.97	432618.4	22.29
Murphulani	Golaghat	2747821	2143170.73	78.00	792349	36.97	859437.9	40.10	10441.38	0.49	238335	11.12	300449.9	14.02
Numaligurh	Golaghat	2000000	1283026.53	64.15	624505.48	48.67	428730.05	33.42	80555	6.28	103196	8.04	46046	3.59
Sockieting	Golaghat	1250000	1231705.27	98.54	190560.06	15.47	913773.72	74.19		0	72577.08	5.89	54794.41	4.45
Ghillidary	Golaghat	2750000	1947299	70.81	327000	16.79	1516419	77.87		0	97158	4.99	6722	0.35
Mokrung	Golaghat	1750000	1178272	67.33	136000	11.54	897186	76.14		0	129000	10.95	16086	1.37
Diffilo	Golaghat	2747821	2470012.65	89.89	1230105	49.80	764365	30.95		0	62226.43	2.52	413316.2	16.73
Kellyden	Nagaon	1378000	1364731	99.04	544500	39.90	554417	40.62		0	99872	7.32	116507	8.54
Amsoi	Nagaon	500000	485450	97.09	84000	17.30	213715	44.02		0	139295	28.69	48449	9.98
Salonah	Nagaon	2250000	2086145	92.72	971628	46.58	216031	10.36	422443	20.25	24953	1.20	102834	4.93
Nonoi	Nagaon	2248320	1724875	76.72	844529	48.96	548053	31.77	33307	1.93	263482	15.28	2722	0.16
Kondoli	Nagaon	1000000	540246	54.02	688156	127.38	203688	37.70	394738	73.07	0	0.00	179876	33.30
Burrapahar	Nagaon	1000000	741771	74.18	233825	31.52	254958	34.37	9893	1.33	187447	25.27	96918	13.07
Sagmootea	Nagaon	2247820		0.00	679378		635435						1500	
Shyamaguri	Sonitpur	2997822	3110887	103.77	896000	28.80	1314689	42.26	204057	6.56	348886	11.22	347255	11.16
Hirajuli	Sonitpur	2375000	2845150	119.80	351248	12.35	1226814	43.12	313267	11.01	174563	6.14	279258	9.82
Hookrajuli	Sonitpur	1275000	1100061	86.28	125000	11.36	696161	63.28	2972	0.27	119205	10.84	156723	14.25
Narayanpur	Sonitpur	2997822	3440627	114.77	502000	14.59	930771	27.05	1393917	40.51	178960	5.20	434979	12.64
Durang	Sonitpur	2997822	997140	33.26	80000	8.02	1361088	136.50	0	0.00	203463	20.40	137272	13.77
Manmohinipur	Sonitpur	3392822	4195770	123.67	368962	8.79	1845025	43.97	171395	4.08	366151	8.73	907861	21.64
Nirmala	Sonitpur	2375000	2265048	95.37	1247900	55.09	639225	28.22	15994	0.71	219030	9.67	142899	6.31
Brohmajaan	Sonitpur	1275000	1138353	89.28	193848	17.03	685772	60.24		0.00	99341	8.73	88757	7.80
Dhendai	Sonitpur	3747822	3819406	101.91	548962	14.37	2411679	63.14	139814	3.66	310974	8.14	648349	16.98
Borjuli	Sonitpur	1650000	1455562	88.22	364000	25.01	603399	41.45	93553	6.43	140330	9.64	254280	17.47
Sonajuli	Sonitpur	3017822	2960613	98.10	336839	11.38	1163701	39.31	794478	26.83	257049	8.68	407936	13.78
Shakomato	Sonitpur	4997822	2831576.69	56.66	504100	17.80	623027	22.00	998516.91	35.26	237766	8.40	148167.5	5.23
Kacharigaon	Sonitpur	2997822	1296024.6	43.23	36000	2.78	850282	65.61	74509.6	5.75	198171	15.29	311138.6	24.01
Dhulapadung	Sonitpur	1002754	1684333	167.97	435000	25.83	291489	17.31	39805	2.36	272026	16.15	162571	9.65
Kolony	Sonitpur	2997822	1834244.21	61.19	380000	20.72	800699.03	43.65	254081.22	13.85	266002.96	14.50	84270.96	4.59
Dhullie	Sonitpur	3963380.96	3423302.63	86.37	508160	14.84	1275862.97	37.27	476732	13.93	476732	13.93	214954.1	6.28
Arun	Sonitpur	NA	NA										432299	
Panbari	Sonitpur	1650000	1639937	99.39	194500	11.86	594887	36.27	223079	13.60	404607	24.67	222864	13.59
Sapoi	Sonitpur	1197822	1919006	160.21	64000	3.34	842748	43.92	364155	18.98	107404	5.60	350622	18.27
Singri	Sonitpur	1550000	888351	57.31	57000	6.42	423108	47.63	74817	8.42	174563	19.65	159063	17.91
Ananda	Lakhimpur	3247822	2485779	76.54	693943	27.92	1143200	45.99	258791	10.41	296737	11.94	93108	3.75
Harmoty	Lakhimpur	2747822	2191655	79.76	675769	30.83	948553	43.28	179322	8.18	303222	13.84	84789	3.87
Chinatoli	Lakhimpur	3697822	2480700	67.09	231500	9.33	1330000	53.61	46796	1.89	270483	10.90	525721	21.19

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Koilamari	Lakhimpur	1803822	2473011	137.10	534500	21.61	784864	31.74	267818	10.83	790414	31.96	95415	3.86
dejo	Lakhimpur	1304000	583109	44.72	510900	87.62	380771	65.30	5625	0.96	95508	16.38	9305	1.60
Silonibari	Lakhimpur	3197822	2826000.55	88.37	846075.89	29.94	973248	34.44	233405	8.26	368087	13.03	405183.8	14.34
Doolhat	Lakhimpur	4200000	4199359	99.98	2645163	62.99	810105	19.29	239635	5.71	208357	4.96	296099	7.05
Seajuli	Lakhimpur	3462822	3164347.06	91.38	1255570	39.68	805798.5	25.46	312650	9.88	480368	15.18	309960.6	9.80
Hatigor	Udalguri	1671000	1095000	65.53	497000	45.39	373000	34.06		0.00	124000	11.32	146000	13.33
Dhunseri	Udalguri	2150000	1405619	65.38	355418	25.29	530663	37.75	26743	1.90	334454	23.79	158344	11.27
bettybari	Udalguri	900000	912074	101.34	155760	17.08	448530	49.18	0	0.00	167085	18.32	140699	15.43
Suola	Udalguri	2150000	1411714	65.66	439000	31.10	695557	49.27		0	209922	14.87	67236	4.76
Bahipookhri TE	Udalguri	2150000	1323099.74	61.54	321129.52	24.27	672837.5	50.85		0		0.00	329132.7	24.88
Fatemabad	Baksa													
Mornoi	Kokrajhar													
Dalaobari	Kokrajhar	10971822		0.00	34000		1942485						45464	
Krishnakoli	Dhubri													
Ainakhal TG	Hailakandi	1300000	1218450.83	93.73	998035.19	81.91		0.00		0	119493	9.81	100922.6	8.28
Lalamikh TG	Hailakandi	1800000	1457608	80.98	1373309	94.22	43760	3.00	1300	0.09		0.00	38239	2.62
Dhalai TG	Hailakandi	500000	222250	44.45	222250	100.00		0.00		0.00		0.00		0.00
Isabheel TG	Karimganj	1915000	1380915.32	72.11	977087	70.76	243575.32	17.64	1610	0.12	21777	1.58	136871	9.91
Unnunaband TG	Cachar	1091000	926846	84.95	656766	70.86	0	0.00	150000	16.18		0.00	120080	12.96
Sabita Bhasin	Cachar	2819260	2260697	80.19	1602893	70.90	100000	4.42	35990	1.59	100000	4.42	421814	18.66
Pathemara TE	Cachar	1245883	910916	73.11	573483	62.96	122315	13.43	53213	5.84	83670	9.19	78235	8.59
Chandighat TE	Cachar	1316600	627249	47.64	791338	126.16	120000	19.13		0.00	10000	1.59	75684	12.07
Cossipore TE	Cachar	3208949	2922779	91.08	2354404	80.55	450895	15.43	72000	2.46	45000	1.54	480	0.02
Arcuttipore TE	Cachar	1854877	1718326	92.64	1205737	70.17	144784	8.43		0.00	148835	8.66	117752	6.85
Doyapore TE	Cachar	1179434	1078509	91.44	690967	64.07	146348	13.57		0.00	150000	13.91	91194	8.46
Rampore TE	Cachar	997664	831473	83.34	441723	53.13	110548	13.30	50000	6.01	100000	12.03	129202	15.54
West Jalinga TE	Cachar	2476805	2133261	86.13	1421042	66.61	185000	8.67	100000	4.69	230000	10.78	831219	38.96
Bhuvan valley TE	Cachar	2038000	1436630	70.49	572287	39.84	480068	33.42		0.00	150000	10.44	234275	16.31
Dewan TE	Cachar	1039000	813490	78.30	216890	26.66		0.00		0.00		0.00	596600	73.34
Lakhipur TG	Cachar	2740109	2364896	86.31	1947396	82.35	120000	5.07	35000	1.48	100000	4.23	52500	2.22
TOTAL				77.20		42.74		35.07		5.31		9.24		13.59



PHOTOGALLERY



Fig1.1: Construction of Labour room with NRHM fund at Harmoty TE Lakhimpur



Fig1.2: Labour room and table in a PPP TE.



Fig 2.1: Storage of NRHM Drugs



Fig 2.2: Storage of NRHM Drugs.



Fig 3.1: Biomedical waste management constructed with NRHM Fund



Fig 3.2: Biomedical waste management in TE hospital.



Fig 4: Construction of Laboratory.



Fig 5: Display of IEC in a PPP TE hospital



Fig 6.1: Maternity ward in TE Hospital.



Fig 6.2: Maternity ward in TE Hospital.



Fig 7: New born care room.



Fig 8: General ward.