

Concurrent Assessment of Mobile Medical Unit (MMU) in Tripura

REGIONAL RESOURCE CENTRE FOR NE STATES
MINISTRY OF HEALTH AND FAMILY WELFARE, GOVT. OF INDIA
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(Dr. A.C. Baishya)

Director, RRC-NE

ABBREVIATIONS

| | |
|------|------------------------------------|
| ANM | Auxiliary Nurse Midwife |
| ASHA | Accredited Social Health Activist |
| AWW | Anganwadi Worker |
| CHC | Community Health Centre |
| CMHO | Chief Medical Health Officer |
| DHS | District Health Society |
| DME | District Media Expert |
| DPM | District Programme Manager |
| DPMU | District Programme Management Unit |
| MHU | Medical Health Unit |
| MMU | Mobile Medical Unit |
| MO | Medical Officer |
| MOU | Memorandum of Understanding |
| NFHS | National Family Health Survey |
| NGO | Non-Government Organization |
| NRHM | National Rural Health Mission |
| ORS | Oral Rehydration Salt |
| PHC | Primary Health Centre |
| PNC | Post Natal Check-up |
| POL | Petrol Oil and Lubricant |
| PPP | Public Private Partnership |
| PRI | Panchayat raj Institution |
| RCH | Reproductive Child Health |
| SAM | State Accounts Manager |
| SHS | State health Society |
| SNO | State Nodal Officer |
| SPMU | State Programme Management Unit |
| SRS | Sample Registration System |
| TFR | Total Fertility Rate |

EXECUTIVE SUMMARY

According to a recent UN report (2011), India ranks as low as 134 among 187 countries in terms of Human Development Index (HDI), which assesses long term progress in health, education and income indicators. Despite making significant strides in the field of information technology and being touted as the upcoming superpower in the modern world, the grave reality is that the country is still lagging behind in the social sectors and health is still a “privilege” and not a right for millions of its citizens.

In India, there are many areas that are predominantly tribal and hilly, making it difficult to reach these areas to provide essential health services. The population residing in those outreach areas lack basic health facilities as it is difficult to travel far to reach the health centre, for seeking health care services. Thus, with an objective to provide accessible, affordable and accountable quality health services to the poorest households in the remotest parts of the country, National Rural Health Mission was launched by the Government of India in the year 2005.

In order to reach out and cater to the basic health requirements of the people in inaccessible areas, the need for a Mobile Medical Unit was felt by the state. Thus under NRHM, Mobile Medical Unit (MMU) was started in 2006 to overcome the problem in the outreach areas and to provide comprehensive health care facilities to the people at their door steps. These Mobile Medical units not only provide access to basic health care services, but also provide essential knowledge and information about the services provided under the umbrella of NRHM.

In an effort to provide health care services at the doorstep of the outreach beneficiaries, the Government of Tripura has initiated to establish Mobile Medical Unit in each district under the NRHM. The Hon’ble chief Minister of Tripura launched MMU in the year 2008. The MMU is managed by the District Health Society (DHS) in three districts of Tripura namely Dhalai, North Tripura and South Tripura whereas in the West district, Government of Tripura and a Private Agency (Ram-Krishna Mission) signed an MOU for the functioning of Mobile Medical Unit in a PPP model to meet its objective of providing health care facility in outreach areas of the district.

Around 74 per cent (Census 2011) population of the state resides in rural areas and out of this; more than 60 per cent are below poverty line. During the financial year 2012, Govt of Tripura has carved out four new districts in the state namely Sipahijala , Khowai , Gomati and Unakoti , in addition to the existing four districts for strengthening of administration.

MMU has been operational for the last four and a half years in Tripura since 2008; to bridge the gaps of the health system by providing preventive and curative healthcare to the inaccessible/ outreach areas. In the absence of any concrete evaluation of the Mobile Medical Unit in the state , it becomes essential to assess the performance of MMU to understand the current implementation in terms of the actual service delivery on the field , both quantitatively and qualitatively.. Regional Resource Centre for North Eastern States (RRC – NEs), has been entrusted by MoHFW to carry out this study titled “Concurrent Assessment of MMU” in the state of Tripura.

For this concurrent assessment study, the district level MMUs of undivided four districts of Dhalai, North Tripura, South Tripura and West Tripura were covered which are also providing services in the recently formed districts of the state. The study is a cross sectional study with both qualitative and quantitative data. Data collection for the study was done in the month of August 2013. The respondents for the study were the Joint Director of Health Service of particular districts, NRHM officials like CMHO , DPM, DAM and the MMU team (comprising of the staff of the nearest health facility).

Pretested interview schedule was used as a data collection tool for this study. The scope of this study is to evaluate the overall functioning and performance of the Mobile Medical Units in the state in the last five years. The study findings will help in providing inputs and facilitate the necessary measures for the effective implementation of the MMU in the future.

Salient Findings: -

1. It is found that there is no dedicated team appointed from the district for functioning of MMU, as well as there is no operational mechanism followed for effective implementation of MMU in these districts, except west Tripura. The staff of

the nearest health facility to the camp site is entrusted with the responsibility of conducting the MMU camp which might be affecting the routine service delivery of the health facility. The staff is not paid any incentive for participation in the MMU camp.

2. Similarly, drugs and other consumables like laboratory reagents are carried by the respective health facility staff on the day of the MMU camp from its own drug stock. The particular health facility (PHC/CHC) is not provided with any separate drug, consumable stock for MMU camps.
3. There is lack of proper documentation/ recording of the health care services provided such as; OPD services, distribution of drugs, referral services, ANC, laboratory & radiological services in all districts (except West Tripura) specially since there is no sense of responsibility of the particular health facility staff to the conduction of MMU camp .
4. There is no mechanism for verification of the number of camps held and the services provided at the camp site.
5. MMU is also involved in mega health camps in few of its districts. But, utilisation of diagnostic services is found to be poor. Various diagnostic and laboratory equipments like X – ray machine, Ultrasound, ECG machine, Slit-lamp, centrifuge etc were grossly unutilised in the MMU camps.
6. It was found that none of the DHS and private agency has received TV and DVD player, essential equipment for dissemination of IEC and BCC activities.
7. There is complete absence of monitoring, supportive supervision and any sort of follow-up of MMU camps from the state and district level.
8. MMU functioning through Private Agency (Ram-Krishna Mission) since Nov. 2008 has engaged skilled dedicated personnel for effective implementation of MMU, such as; Medical officers including Specialists (O&G, Paediatrician, Radiologist/ Sonologist), Nurse, Lab tech, Pharmacist and other staffs. This is the only district providing specialist care in their MMU.
9. Ram-Krishna Mission devised its own mechanism for implementation of MMU, such as selection of camp site and mobilisation of beneficiaries, purchase of relevant

- drugs, diagnostic procedure and record keeping, which is shared with the State NRHM on a monthly basis.
10. There is lack of coordination between the district officials and Ram – Krishna Mission about the MMU functionality. Ram – Krishna Mission neither involves the districts officials (respective districts) for planning of camp schedule nor informs to district for number of camps held.
 11. The involvement of grass root level health workers for mobilising and dissemination of information regarding MMU camps to the community is very poor in all the districts.
 12. There is no mechanism for sharing the outcome of camps in all the MMUs which includes referral services and identification of communicable diseases with their respective districts.
 13. There is no mechanism of waste disposal at MMU camp site.

Recommendations: -

- ✚ State has to initiate appointing a dedicated team of skilled personnel for uninterrupted functioning of MMU at outreach areas. Possibility of replicating the PPP model by out-sourcing of MMU service may be considered in other districts of Tripura also.
- ✚ CMHO and DPM to ensure regular monitoring & supervision of MMU camps . Due to lack of dedicated MMU team; there should be a provision for involvement of nearest health facility staffs in MMU camp for service delivery, but care to be taken that the services are not hampered in their respective PHC/CHC catchment areas.
- ✚ State to make a comprehensive plan for uniform coverage of the outreach areas Also ,the records should be maintained properly and verified on quarterly basis.
- ✚ State has to supply separate MMU kit to the districts. Separate indent and distribution records to be maintained if the drugs are supplied from the nearest health facilities.
- ✚ State to ensure the local existing health staffs such as ASHA, ASHA supervisor and AWW to disseminate the information about the MMU visit 3-4 days ahead to the

community for effective utilization. A calendar of MMU visits can be shared to the community ahead of time for better coverage.

- ✚ Moreover, it is also recommended that, the available technical and supporting staff of the MMU should be apprised against set output indicators. So, that the MMU service frame is kept on track.
- ✚ The route map of MMU to be prepared in consultation with DPMU and respective PHC staff to cover the remote areas.
- ✚ Supervision, monitoring and timely review is critical for the effective implementation of any public health intervention. It is recommended to State; that roll out of MMU should be concurrently supervised both at district and state level with provision of timely review of performances.

CHAPTER - 1**INTRODUCTION****Background:**

The National Rural Health Mission was launched by the Government of India in 2005 with the goal to provide accessible, affordable and quality health care to rural people. The Mission aims to strengthen existing health infrastructure to meet Indian Public Health Standards in each part of the country, which emphasis more in maternal and child health care. There are approximately 70% of people residing in rural areas of India (Census 2011). Access to basic health services was affirmed as a fundamental human right by the Declaration of Alma-Ata in 1978. In reality, due to poor management and coordination of health systems most of the rural belt was ignored to provide equitable access to basic health care services. The health status of the community depends on the mode of health services delivery. To achieve these goals, NRHM has set core strategies for strengthening health system delivery and decentralise budgetary outlays for effective implementation of public health services. Also NRHM has implemented decentralized village and district level health action plan and management to create awareness and community ownership among the beneficiaries.

Geographically, most of the areas of north eastern states in India are hilly. Two third parts are tribal and hilly areas, making it difficult to reach/access and provide quality of health care in these outreach areas. There is lack of health infrastructure and facilities in outreach areas; to address this challenge, NRHM has proposed Mobile Medical Unit for states to provide a door step health care facilities in the outreach areas. The objective of Mobile Medical Unit (MMU) is to provide health services to those who have no or limited access to basic health care services due to lack of transportation. Under the NRHM, provision of Mobile Medical Unit (MMU) in each District is one of the strategies to improve access of health care services.

State Profile of Tripura:

Tripura is the third-smallest state in the country, it covers 10,491 km² (4,051 sq mi) and is bordered by Bangladesh to the north, south, and west, and the Indian states of Assam and Mizoram to the east. In 2008, there were four districts of Tripura; namely Dhalai, North Tripura, South Tripura and West Tripura. In 2012, Govt of Tripura has divided and formed its four into eight districts for strengthening of administration. Most of the areas of Tripura are hilly terrain, non-approachable by public transport, and long distances for reaching the health care centres; necessitate the need of MMU with specialized health facilities for the beneficiaries in outreach areas.

Graph 1: (Districts Map of TRIPURA- Source Maps of India)

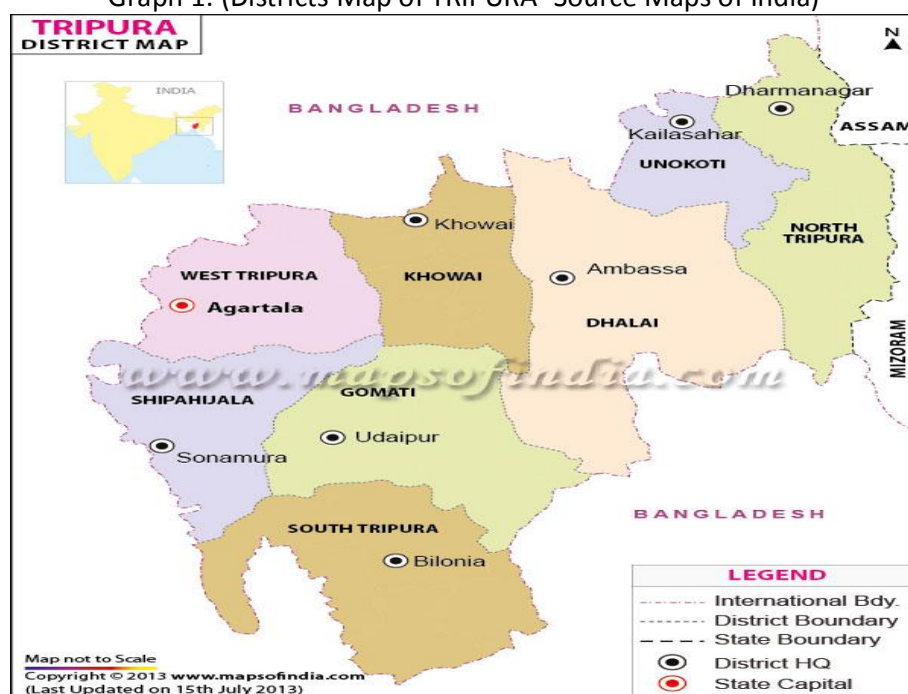


Table 1: Demographic Profile of Tripura & India: -

| Background Characteristics | Census 2011 | |
|------------------------------|-------------|---------------|
| | Tripura | India |
| Geographic Area (in Sq. Kms) | 10491 | 3,166,414 |
| Total population | 3671032 | 1,210,193,422 |
| Male Population | 1871867 | 623,724,248 |
| Female Population | 1799165 | 586,469,174 |

| Background Characteristics | Census 2011 | |
|-------------------------------|-------------|-----------|
| | Tripura | India |
| Population density sq km | 350 | 382 |
| Decadal Growth Rate | 14.75 | 17.64 |
| Population (0-6 yrs) – Total | 444055 | 158789287 |
| Population (0-6 yrs) – Male | 227354 | 82952135 |
| Population (0-6 yrs) – Female | 216701 | 75837152 |
| Literacy rate (Total) | 87.75 | 74.04 |
| Sex Ratio - Total | 961 | 940 |

Health Indicators of Tripura:

According to the SRS 2012 Bulletin, the health indicators of Tripura have shown a significant improvement over the time. Women empowerment and education is one of the major factors for the improvement of the health indicators of the State. According to the NFHS -3 the TFR of Tripura is 2.22 contributing majorly for the decline in Infant Mortality rates.

Table 2: Health Indicators of Tripura

| INDICATORS | SRS BULLETIN | | | | | | |
|-----------------------|----------------------|--------|--------|--------|--------|--------|--------|
| | Oct'12 | Jan'11 | Oct'09 | Oct'08 | Oct'07 | Oct'06 | Apr'06 |
| Birth rate | 14.3 | 14.8 | 15.4 | 17.1 | 16.6 | 16 | 15 |
| Death rate | 5 | 5.1 | 5.9 | 6.5 | 6.3 | 5.7 | 5.5 |
| Infant Mortality Rate | 29 | 31 | 34 | 39 | 36 | 31 | 32 |
| TFR | 2.22 (as per NFHS-3) | | | | | | |

Establishment of Mobile Medical Unit in Tripura:

National Rural Health Mission came with a new initiative to bring health care at the doorstep of rural people with basic specialist services and diagnostics facilities by providing services through Mobile Medical Unit in 2006. The States are expected to address the diversity and ensure the adoption of the most suitable and sustainable model for the MMU to suit for their local requirements.

In an effort to provide health care services at doorstep of the outreach beneficiaries, the Government of Tripura has initiated to establish Mobile Medical Unit in each district under NRHM. The Hon'ble chief Minister of Tripura launched MMU in 2008 in all four districts at that time namely, West Tripura, South Tripura, Dhalai and North Tripura. Each district has the responsibility to plan and establish the MMU according to their geographical context.

There are four Mobile Medical Units which were started in December – 2008 in undivided districts of Tripura, having the responsibility to cater the services at eight divided respective district of Tripura. MMU covering divided districts of Tripura are as follows:

Table 3: Districts covered by the MMU

| Designated MMU | Operated by | Districts covered |
|-------------------|-----------------------------|--|
| Dhalai MMU | District Health Society | 1. Dhalai |
| North Tripura MMU | District Health Society | 1. Unakati District 2. North Tripura |
| South Tripura MMU | District Health Society | 1. Gomati 2. South Tripura |
| West Tripura MMU | Ram – Krishna Mission (PPP) | 1. Khowai District 2. West Tripura 3. Sipahijala |

Out of four MMU, one MMU has been catering the services through Public Private Partnership mode by the partner agency “Ram – Krishna Mission” as being decided by the state, during its inception. A MoU has been signed between the Government of Tripura and Ram – Krishna Mission (NGO) listing out the roles and responsibilities of both the partners for effective functioning of Mobile Medical Unit in the West District. Rest of the three MMUs has been operational by the respective DHS of Dhalai, North Tripura and South Tripura districts.

The objective of NRHM - Tripura is to operationalise Mobile Medical Unit in every district across the state for improving accessibility and availability of basic health care services in underserved areas. Keeping all these factors the State made a comprehensive plan for implementing the MMU. To begin with a careful mapping of the medically underserved areas was done, followed by the provision of one mobile medical unit to each district of the

State. The mobile medical unit at the State consist of three vehicles; two equipped with the necessary diagnostic facilities and one for transporting the medical and paramedical staffs.

Equipped MMU Vehicles:

MMU consists of three vehicles with the NRHM logo on either side of the vehicle, conveying the message; *“NRHM seeks to provide accessible, affordable, and quality health care to the rural populations”*. The vans are equipped with inbuilt OPD, laboratory facilities and other essential diagnostic equipment fitted with power generators and other vehicle for the transportation of MMU staffs.

- Vehicle No.1 is a Mobile Unit with essential equipments for general examination of patients such as Microscope, Auto-analyzer, Slit-lamp etc. and power backup generator. The space at the back side of vehicle has a bed for the examination purpose of patient during camps and for transporting patients at times of emergency/referral.
- Vehicle No. 2 is a Mobile Unit with diagnostic facilities such as Portable X-Ray, Portable Ultrasound Machine and Portable ECG Machine with a power backup (Generator).
- Vehicle No. 3 (Gypsy) is used to transport the MMU team comprising of, two Medical Officers, one Radiographer, two Nurses, one Laboratory Technician, and one Pharmacist.

Manpower:

According to the guidelines, A set of dedicated manpower have to identify and appoint by the DHS for the period of time to effective implementation/functioning of MMU in outreach areas. The MMU consists of the following manpower;

- Medical Officer: Two, one of whom will be a lady Medical Officer
- Radiologist
- Nurse
- Laboratory Technician
- Pharmacist

- Helper
- Drivers: three
- Specialists: O & G Specialist, Paediatrician and Physician

The MMU in the 3 districts of Tripura; Dhalai, North Tripura and South Tripura does not have any dedicated manpower except for three drivers (for a vehicle each). The manpower i.e. Medical Officers, GNM / ANM, laboratory technician pharmacist and radiographer are mobilized from the nearby PHC area to conduct camp. So every camp has different set of manpower to render the services. The MMU in West district which is run by Ram – Krishna Mission has a dedicated team from their own hospital to run the MMU.

Service Delivery: -

According to the guidelines of MMU the services to be provided includes curative care, Reproductive & Child health services, and Family Planning services, diagnostic, and emergency/disaster services, (8). Also MMU has the responsibility of creating awareness among the rural people through dissemination of IEC material on health, hygiene, and nutrition, Counselling on Family Planning, RTI/STI or any disease prevalent in the areas. Every Mobile Medical Unit is equipped to provide the following services:

➤ **Curative Care**

- Early detection of TB, Malaria, Leprosy, Kala-Azar and other locally endemic communicable diseases and non-communicable diseases such as hypertension, diabetes, cataract cases etc.;
- Referral of complicated cases;
- Minor surgical procedures and suturing;

➤ **Reproductive & Child Health**

- Ante-natal check up and related services e.g. injection-tetanus toxoid, iron and folic acid tablets, basic laboratory tests such as haemoglobin, urine for sugar & albumin and referral for other tests as required;
- Referral for complicated pregnancies;
- Promotion of institutional delivery;
- Post-natal check up;

- Immunization clinics (to be coordinated with local Sub-Centres/ PHCs)
- Treatment of common childhood illness such as diarrhoea, ARI/Pneumonia, complication of Measles etc.;
- Treatment of RTI/STI;
- Adolescents care such as lifestyle, education, counselling, treatment of minor ailments and anaemia etc.
- **Family Planning**
 - Counselling for spacing and permanent method;
 - Distribution of Nirodh, oral contraceptives, emergency contraceptives;
 - IUD insertion.
- **Diagnostic facilities**
 - Investigation facilities like haemoglobin, urine examination for sugar and albumin;
 - Blood Smear for malaria and vaginal smear for trichomonas;
 - Clinical detection of leprosy, tuberculosis and locally endemic diseases;
 - Screening of breast cancer, cervical cancer etc.
- **Specialized facilities and services**
 - X-ray
 - ECG
 - Ultrasound test
 - Emergency services and care in times of disaster/epidemic/public health emergency/accidents etc.
 - IEC materials on health including personal hygiene, proper nutrition, use of tobacco, diseases, PNDT Act etc., RT/STI, HIV/AIDS.

Rational of the Study:

Tripura, MMU has been operational for over four years since its inception; to bridge the gaps of the health system by providing preventive and curative healthcare to the inaccessible/ outreach reach areas. During this period of four years, gamuts of services have been provided to the people. So, it is an appropriate time for assessment of utilisation of

MMU in terms of quality of health care services provided and understanding the implementation of these designated MMU at outreach areas. Thus, arose a need to evaluate the effectiveness and efficacy of services been provided by these MMU's in the state.

Scope/Aims of the Study: -

The scope of the study is not only to identify the necessity of the MMU but also to measure the quality of the services provided. It will help in understanding; (a) the process of planning and implementation of MMU at the outreach areas. (b) The prospective of the provider and beneficiaries in preventive, promotive and curative care. (c) The nature of involvement of the community in camps.

The main purpose of the study is to assess the status of implementation of mobile medical units and to identify the strengths, weaknesses and gaps in the implementation of MMUs, including financial implication. The study findings will also help in providing inputs and necessary measures for effective implementation of the MMU in future.

Objectives of the Study:

The main objectives of the study are as follows:

1. To assess the level of coverage of the MMU at out reached areas with its effectiveness of services.
2. To examine various services such as RCH, FP, IEC/BCC, Immunizations and follow up the cases, provided by the MMU.
3. To examine the ownership and participation as well as the nature of involvement of the community and peer leaders of villages during and after the camps.

CHAPTER – 2

METHODOLOGY**Study Area:**

All the four Mobile Medical Units at Dhalai, North Tripura, South Tripura and West Tripura districts have been included in the study.

Study Period:

The field level data collection was completed in one week (1st week of Aug'13).

Methodology of the Study:

It is a cross sectional descriptive study, which involves collection of both qualitative and quantitative data.

Four major heads of evaluation are:

- i. Functional status of MMUs including the status of vehicle, drugs, diagnostic facilities and manpower
- ii. Coverage of the MMU with mechanism for selection of camp site.
- iii. Service delivery

The study has covered the functional status and coverage of the MMUs. The data collected for the study is from 2012-2013 financial years, and also for the month of April to July for the financial year 2013-14 (Annexure -2).

Study Tools: Semi structured interview schedule were developed, field tested and used for data collection. The study tool comprises of the following sets;

Checklist for District level consists of: -

- Manpower position for the functioning MMU
- Maintenance of vehicles
- Status of diagnostic equipments and its maintenance

- Availability of drugs and mechanism of replenishment
- Gamut of services provided by MMU
- Operational plan and coverage of outreach areas
- Status of service delivery
- Financial management and its implications.

Checklist for state level Consists of: -

- Role of state for implementation of MMU
- Monitoring & Supervision
- Financial management systems.

Key Informants at district level are; Chief Medical Health Officer, National Rural Health Mission staffs i.e. District Programme Manager, District Media Expert, District Accounts Manager, in-charge of District Drug Store and the MMU staffs i.e. the Medical officers, pharmacist, laboratory technician, Radiographer, Nurses, drivers, and the key informants of state level are; State Nodal Officer – MMU, State Accounts Manager.

Data Analysis: - Descriptive statistical analysis is done using Microsoft Excel.

CHAPTER – 3

FINDINGS

This chapter describes all the study findings. Three MMUs were operated by District Health Society and one MMU is operated under Ram – Krishna Mission. The MMU's vehicle status, equipments functionality & utilisation, man power availability, drug procurement process, planning process, service delivery, IEC/BCC activities and record maintenance status are discussed in detail in this chapter.

Status of the Vehicle: -

All the three vehicles were found to be functional on the day of visit in all the districts except north Tripura where the vehicle No. 1 (Van carrying laboratory equipments and reagents) was non functional on the day of visit.

Table 4: Functional status of MMU vehicles

| Vehicle | Dhalai | North Tripura | South Tripura | West Tripura |
|-----------|------------|-----------------------|---------------|--------------|
| Vehicle 1 | Functional | Non Functional | Functional | Functional |
| Vehicle 2 | Functional | Functional | Functional | Functional |
| Vehicle 3 | Functional | Functional | Functional | Functional |

Repairing and servicing of Vehicles: - The District health society is responsible for regular servicing as well as maintenance of vehicle as per the requirements for three MMUs namely Dhalai, North Tripura and South Tripura. It was found that all the three DHS are doing regular servicing of vehicle on a half yearly basis. In case of any breakdown, the vehicle was repaired at the nearest service station at district head quarter. West Tripura also repairs and services its MMU vehicles in the same manner.

Status of Diagnostic Equipments: -

The MMU vehicles are equipped with various diagnostic equipments such as Microscope, semi-auto analyser, Centrifuge, X – ray machine, USG Machine, ECG and other diagnostic equipments. All the equipments are in functional status in all the four MMU vehicles. The

utilisation of these instruments was found to be are very poor in all the DHS operated MMUs.

Hb test is done in all the districts except South Tripura district MMU which is not doing Hb test. MP test and Urine test is done only in the North Tripura and West Tripura MMU. X – ray is done in all the district MMU. Slit-lamp, ECG and USG machine was found utilized in all district MMU except Dhalai. A wheelchair, stretcher and motor pump is also found available in vehicle. Instruments like stethoscope, thermometer, BP apparatus, and vaccine carrier were not available in the MMU vehicle is it transported from the nearest health centre to the respective camp by the respective deputed PHC/CHC health staffs.

Manpower Availability: -

Out of three DHS operated MMU; none of the MMU had a dedicated medical officer or a nurse. All the MMU's have designated drivers for their MMU vehicles appointed under MMU. Except North Tripura none of the DHS operated MMU have a dedicated lab technician or pharmacist. There is availability of all the manpower in West Tripura (under PPP) except the radiographer. This includes specialist's services on a rotational basis for 5 days a week in West Tripura. Specialists like Paediatrician, O&G, Radiologist, Sonologist were appointed by the Ram – Krishna mission, making it an unique MMU amongst the other MMUs in the district.

Table 5: Availability of dedicated MMU staffs across the districts

| Staffs | Dhalai | North Tripura | South Tripura | West Tripura (PPP) |
|------------------|--------|---------------|---------------|--|
| Medical Officers | 0 | 0 | 0 | 2 |
| Nurses | 0 | 0 | 0 | 1 |
| Lab Technician | 0 | 1 | 0 | 2 |
| Pharmacist | 0 | 1 | 0 | 2 |
| Radiographer | 0 | 0 | 0 | 0 |
| Drivers | 3 | 2 | 2 | 3 |
| Others | 0 | 0 | 0 | 1- Radiologist 1- Sinologist 1- Paediatrician 1- O&G 1- Accountant 1- Assistant |

Due to non availability of dedicated MMU health staffs, the state from its inception, had implemented a comprehensive plan for conducting the camps at the outreach areas. The comprehensive plan being that the staff from the nearest health facility is deputed and involved in the conduction of the MMU camps in its catchment area. The staff from the nearest PHC/CHC i.e. Medical officers (Allopathic/AYUSH/Dental Surgeon), pharmacists, lab technician, ANM etc were identified and given the charge of conducting the camp for that particular day.

It was found that due to non availability of a dedicated MMU health team, the DHS has difficulty in planning and conducting of camps in outreach areas as the service provision gets hampered in the respective PHC/CHCs from where the health providers are deployed for the MMU camps. Due to absence of dedicated MMU team, the service delivery was not uniform throughout the district in the DHS operated MMU's. For instance ,on the day of visit in Dhalai, it was observed that, both the lab technicians of a PHC had been sent for MMU camp due to which the laboratory facilities at the PHC suffered for the entire day.

Ram – Krishna Mission is given authority as per MOU for the appointment of human resources and fixing their salary structure as feasible of the service provider. The camp site and the specialist visit is decided by the programme officer of Ram – Krishna Mission.

Procurement of Drugs & Stock Position: -

There is no separate mechanism for providing the drugs from state and district to the MMU for conducting the camps. The drugs and other reagents, consumables required for the MMU camp is transported from nearest health facilities like PHC/ CHC on the day of camp. It was found that the pharmacist and lab technicians of the PHC/CHC carry drugs and consumables to the MMU camp based on the current stock available at their health facility. They were not provided with separate MMU drug kit/consumables for MMU camp. It was observed that by this mechanism the regular stock at the PHC meant for its own catchment populations is affected.

Procurement of drugs, reagents and consumables are done independently as per the requirement by Ram – Krishna Mission in West Tripura. They follow a separate systematic

mechanism for procurement of drugs for the MMU. During the assessment of MMU the essential medicine such as; Antacid, Nifedipine, ORS, Zinc Tab, etc were not available. Last two years of record shows that the procurement of drugs is increasing apparently to meet the camps requirement. The drugs register such as; indent and distribution registers is not properly maintained by the pharmacist. The team has advised that the registers should properly maintain by the respective personnel and has to verify in monthly basis. The medicines were procured bimonthly by the Ram – Krishna Mission in West Tripura district.

Planning of MMU Camps:

The responsibility of planning the camp lies with the respective DHS in the divided districts. In South Tripura, district the MMU caters two districts namely Gomati and South Tripura. MMU is scheduled to conduct 10 camps in each of the two districts. Similarly, North district caters two of its divided districts namely Unakoti and North Tripura.

One major finding in this planning process was that the operational plan is prepared by the District Nodal Officer as such without the involvement of any field level staff including the Medical Officer of the nearest health facility (as there is no dedicated MMU staff). This jeopardizes the “bottom up planning approach” of the MMU to better cater to the needy areas. It was found that there was no mechanism for assessing/ monitoring to ensure that the camps were actually conducted in the field and its pre-determined location.

Planning process for the MMU was same across all the DHS operated MMUs. After approval of MMU camp schedule from the district nodal person, the schedule is circulated to respective health facility for the timely involvement of their staffs.

In Dhalai, there are 4 subdivisions; however the health camps of MMU were conducted in Longtra and Gandachara sub-division on a fortnightly basis as the accessibility was poor in these subdivisions.

As directed by the State, West Tripura MMU is responsible to cover all three districts namely Khowai, Sipahijala and West Tripura. Ram – Krishna Mission in planning and covering the outreach areas of these districts. On an average 17 camps are planned and conducted by the Ram – Krishna Mission making it 6-7 camps per district. Ram – Krishna Mission has the

own mechanism for selection of site. The involvement of the district official like CMHO, DPM, DME is very much poor in terms of planning and arranging the camps in outreach areas. They have their own dedicated workers in outreach areas to assess the existing health problems and need based solutions (health services including specialist services by MMU) of the villages in coordination with the PRI groups of the respective villages for conducting the MMU camps. Keeping in mind the existing health problems of the outreach areas, Ram – Krishna Mission team schedule the specialist services as per requirement and arrange the camps in Panchayati Raj Institution of the respective villages. Although the Ram – Krishna Mission is effectively implementing the MMU in all the three districts, but there is lack of coordination between the NRHM district officials of the respective districts and the Ram-Krishna Mission team. The district officials are also unaware of the actual services being provided.

Service Delivery: -

All the MMUs had a proper operational plan for the year 2012-13 except South Tripura. On an average only 10-15 camps were held in Dhalai, 2 camps in South, 3 camps in North and 17 camps in West. Only West Tripura is on par with the number of camps held per month, rest other districts are conducting below par camps in their jurisdiction. (Annexure 1)

In South Tripura, due to frequent breakdown of MMU vehicles, camps were held only from June'12 to Sept'12 and in March'13, the remaining months of the 2012-13 no camps were held. Mega camps were held in south Tripura as per the State order.

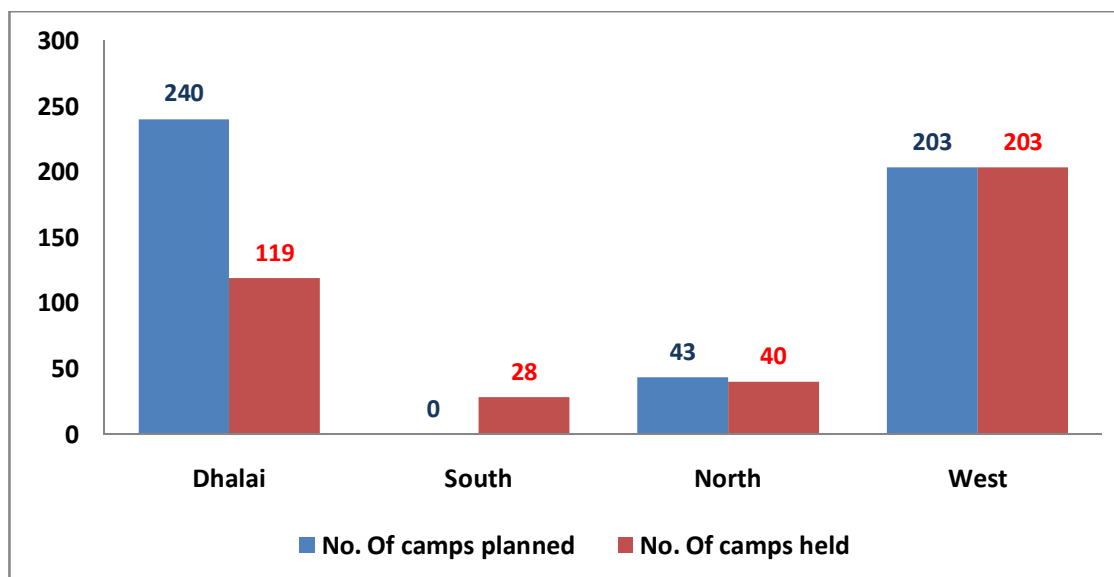
Due to frequent break down of MMU vehicles there was no camp organised during the month of Apr'13 and May'13 in North Tripura.

Table 6: Number of MMU camps planned vs. held Tripura

| Camps Planned vs. Held | Dhalai | South | North | West |
|------------------------|--------|-------|-------|------|
| No. of Camps Planned | 240 | NA | 43 | 203 |
| No. of Camps Held | 119 | 28 | 40 | 203 |

Only West Tripura had successfully conducted the camps as per its planned schedule. Dhalai district though had planned properly was only moderately successful in conducting the camps as per the schedule.

Graph 2: Number of MMU camps planned vs. held in Tripura



The above graph shows that; there was no proper scheduled plan for conducting the camp during the financial year 2012-13 for the South Tripura MMU. Total 28 MMU camps held in 2012-13 financial years but there was not any target for scheduled camps; which show that the district has not taken ownership to conduct the camps in outreach areas.

Camps were conducted in schools or Anganwadi centres in all the DHS operated MMU, whereas camps were conducted most in PRI institutions by Ram – Krishna Mission operated MMU. The average distance of camps site is around 40-50 kms from the district headquarter.

Average OPD cases seen in a camp was high in South Tripura MMU were 128 cases seen per camp. North Tripura MMU had seen only 6 patients on an average per camp. Majority of the North Tripura's OPD cases were found to be ANC's. Every second case treated in North Tripura MMU was an ANC as per their records (Annexure 1).

It was found that only in North Tripura MMU there is very less number of camps held during 2012-13 and less number of beneficiaries were mobilised to the camp site, which invariably means less involvement of grass root level health workers. On an average, 3 – 4 MMU camps were conducted in every month. Due to frequent breakdown of MMU vehicles, MMU camps were held only from Apr'12 to June'12 and from Sept'12 to Dec'12, the remaining months of the 2012-13 financial years no camps were held.

The various laboratory tests were done depending on the capability of personnel, reagents available with the particular health team. The laboratory facilities provided by MMU camps are RDK test for Malaria, Haemoglobin estimation, blood grouping, sputum collection and pregnancy test subject to availability of reagent stock and skills of the lab technician for a particular camp. ANC, Immunisation services were also provided at the camps in case the team carried vaccines in the vaccine carriers making its services irregular. Microscope was used by the laboratory technician while analyser and centrifuge were not utilized at all. X rays were done at the camp site as per the requirement.

As per the records provided by the MMU team and the districts there is almost nil laboratory test being performed in Dhalai. It was observed that the laboratory tests were conducted but not recorded/ reported adequately. This situation holds true for all the MMUs. Only West Tripura is regularly referring the sick and high risk patients to referral centres. Except South Tripura all the districts are doing Hb test. On an average only 3 Hb test is performed in Dhalai, 2 Hb test in North and 1 Hb test in West Tripura as proportionate to camp organised per month. ANC services have started only after Nov 2012 in West Tripura.

Stool test is performed in none of the districts. X-ray is been performed in all the MMUs. On an average one to two X-ray per camp are done at Dhalai, North and West Tripura. South Tripura performs 6 X-ray on an average per camp.

ECG and USGs are performed in all the districts except Dhalai. On an average one ECG is performed per camp in all districts except Dhalai.

Table 7: Service delivery at all the MMU's in Tripura

| Services provided during 2012-13 | Dhalai | South | North | West |
|----------------------------------|--------|--------------------|-------|-------|
| No. Of camps planned | 240 | No camps scheduled | 43 | 203 |
| No. Of camps held | 119 | 28 | 40 | 203 |
| No. Of villages covered | 124 | 28 | 77 | 203 |
| No. Of OPD | 4428 | 3589 | 259 | 20414 |
| No. Of ANC | 0 | 0 | 116 | 20 |
| No. Of referral | 0 | 0 | 3 | 407 |
| No. Hb test | 410 | 0 | 85 | 156 |
| No. Of MP test | 0 | 0 | 130 | 34 |
| No. Of urine test | 0 | 0 | 71 | 48 |
| No. Of stool test | 0 | 0 | 0 | 0 |
| No. Of ECG | 0 | 58 | 46 | 138 |
| No. Of X-ray | 114 | 168 | 78 | 136 |
| No. Of USG | 0 | 90 | 72 | 65 |

Equipments like semi auto analyser and centrifuge were hardly used in any of the MMUs including the Ram Krishna Mission MMU.

IEC/ BCC Activities: -

Functioning of MMU is not only for the service delivery to the outreach areas, but also to create health awareness among the beneficiaries. In Tripura's context, none of the MMU has received TV and DVD player during the establishment of MMU. Also there was no active involvement of the deputed team for creating awareness in field. There was no IEC/BCC activities conducted in both DHS operated MMU as well as Ram Krishna Mission operated MMU.

Maintenance of Records: -

The DHS operated MMU was found to be poor in record keeping, (data capturing & compilation) of the MMU activities/camps. None of the deputed MMU team maintains the registers / records of day to day service delivery at field. The deputed health facility team has their own mechanism for maintaining the records leading to a "non uniform recording

system” across the state. There was no consistency and regularity in maintenance of the MMU records in the DHS operated MMUs. There is no systematic referral system recorded by the MMU team either. The MMU format available at the CMO office is found to be not designed properly to capture the field data.

Ram – Krishna Mission has maintained the MMU’s OPD records properly. But diagnostic records such as USG, X – ray registers and laboratory test registers were not properly maintained by the concerned personnel. There is availability Ram – Krishna Mission’s own internal monitoring mechanism to assess & supervise services provided in the field. There is a systematic mechanism for referral system by the Ram – Krishna Mission but the record maintenance is very poor.

Monitoring & Supervision: -

It was found that there is no structured mechanism for monitoring and supervision of MMU camps or activities at block, district and state level. No monitoring visit is made by any higher officials since the inception of MMU in all the districts including the PPP MMU run in West District. No records of Monitoring and supervision visits were maintained at the MMU vehicle either.

There was no mechanism in place to verify or monitor the actual services being provided in the field. It also shows that there is lack of coordination between the district officials with Ram – Krishna Mission in terms of planning and implementing the MMU at outreach areas.

On the whole, the involvement of the grass root level health workers like ASHA, AWW and health supervisor is very much poor in all the MMU, but the mobilisation (by PRI members) of the beneficiary is quite good by the Ram Krishna Mission operated West Tripura MMU. Also, Ram – Krishna Mission has created a service oriented environment between the service provider and beneficiaries, thus the effective mobilisation of beneficiaries has been worked out in the field which is reflected in the turnout of OPD cases in the West Tripura MMU coverage areas. Ram – Krishna Mission is the only MMU providing the specialist services at the outreach areas by providing specialist as per the community’s requirement.

CHAPTER – 4

CONCLUSION & RECOMMENDATIONS

Four MMU's are established in Tripura in 2008, which covers eight districts of Tripura. In three districts the MMU is functional by DHS; i.e. Dhalai, North Tripura and South Tripura. And one MMU is functioning through a Public Private Partnership mode by Ram-Krishna Mission at West Tripura district.

- ❖ Due to lack of dedicated human resource for the MMU (run by DHS), it has not delivered health services in its length and breadth of outreach areas since 2008. So, the State Health Society has introduced a comprehensive plan for conducting the Camps at outreach areas by deputing the nearest health facility staffs to conduct camps as well as the required medicines to the MMU is utilised from the deputed health facility itself. In view of absence of a dedicated MMU team, the service delivery was not uniform throughout the district. Only Ram – Krishna Mission has dedicated a MMU team along with specialists like O&G, Paediatrician, Radiologist/ Sonologist.
- ❖ The nearest identified health facility(PHC/CHC) staffs are involved in MMU camps at outreach areas but, the services to be provided to the actual PHC/CHC is hampered due to poor planning causing non availability of the health staffs in the PHC/CHC.
- ❖ Expensive equipments and instruments have been provided in a well designed vehicle which remains largely unutilized thus adding to a heavy recurring expenditure.
- ❖ Mostly camps are organised at schools, AWC's in the DHS operated MMUs which defeats the objective of the MMU to reach out to inaccessible areas where health services are not available otherwise. Ram – Krishna Mission is working with PRI members for selection of site and arranging the camps in Panchayat office.
- ❖ Before 2012, none of the MMU had the mechanism for operational plan to effectively implement MMU at outreach areas. Even though the schedule for MMU camps is planned in the district level, it was found that the actual site for conducting the camps is modified at times.

- ❖ As of now there is no mechanism for supply of drugs from the state but the nearest health facilities arrange all the required medicines during MMU camps. Ram – Krishna Mission have their own mechanism for implementation of MMU, such as; selection of camp site and mobilisation of beneficiaries, purchase of relevant drugs, diagnostic procedure and record keeping, which is eventually shared with state NRHM on monthly basis.
- ❖ MMU is in place since 2008 at the respective districts, but there is lack of proper documentation/ recording of the services such as; OPD services, distribution of drugs, referral services, ANC, laboratory & radiological services.
- ❖ There is no mechanism for referral services and follow up of cases at the field level.
- ❖ Mostly outpatient beneficiaries were benefited in camps. But the delivery of diagnostic services is considerably poor. Service delivery depends on the knowledge and skills of the staffs available with the particular health camp.
- ❖ There is no mechanism of MMU for waste disposal.
- ❖ There have been no IEC/BCC services provided by any of the MMU.
- ❖ It was found that MMU is involved in mega health camps in few of the districts, but the information's are not documented well by the deputed MMU team.
- ❖ Monitoring and supportive supervision mechanism was also lacking at the district and state level which raises serious concern over the authenticity of the reports and records generated. The Ram – Krishna Mission is not actively involved with staff of the districts officials (respective districts) for planning of camp schedule nor informed to district for held. As well there is no mechanism for sharing the outcome of camps including the referral services and identification of communicable disease patients with the respective districts.
- ❖ Complete absence of monitoring, supervision and follow-ups from district level has deteriorated the service delivery of the MMU in the district, which calls for vigorous corrective measures. There is no mechanism for monitoring of PPP mode MMU from the state level.
- ❖ Overall it's found that Ram – Krishna Mission is effectively implementing its services at field as compared with other MMUs.

RECOMMENDATIONS

- ✚ State has to initiate appointing dedicated skilled personnel for uninterrupted functioning of MMU at outreach areas. Possibility of replicating the PPP model by out-sourcing of MMU service may be considered in other districts of Tripura also.
- ✚ CMHO and DPM should be actively involved in the monitoring & supervision of MMU camps. Due to lack of dedicated MMU team; there should be a provision for involvement of nearest health facility staffs in MMU camp for service delivery, but care to be taken that the services will not be hampered in their respective PHC/CHC catchment areas.
- ✚ The route map of MMU to be prepared in consultation with DPMU and respective PHC staff to cover the remote areas. It should be kept in mind while planning that the camps are to be held in the remote locations of the district rather than simply conducting them adjacent to a health facility.
- ✚ State is advised to supply separate MMU kit to the districts. Separate indent and distribution records to be maintained if the drugs are supplied from the nearest health facilities.
- ✚ State to ensure the local existing health staffs such as ASHA, ASHA supervisor and AWW to disseminate the information about the MMU camp 3-4 days ahead to the community for effective utilization. A calendar of MMU visits can be shared to the community ahead of time for better coverage.
- ✚ Moreover, it is also recommended that, the available technical and supporting staff of the MMU should be apprised against set output indicators. So, that the MMU service frame is kept on track.
- ✚ Supervision, monitoring and timely review is critical for the effective implementation of any public health intervention. It is recommended that the implementation of the MMU should be concurrently supervised both at district and state level with provision of timely review of performances.

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ANNEXURES – 1**Table – 1a: - Service delivered by the MMU in Dhalai district during the period (2012-13)**

| Services | April'12 | May'12 | June'12 | July'12 | Aug'12 | Sep'12 | Oct'12 | Nov'12 | Dec'12 | Jan'13 | Feb'13 | Mar'13 |
|-------------------------|----------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| No. Of camps planned | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| No. Of camps held | 20 | 8 | 10 | 15 | 9 | 1 | 5 | 15 | 9 | 6 | 11 | 10 |
| No. Of villages covered | 20 | 8 | 10 | 16 | 9 | 1 | 5 | 15 | 9 | 8 | 13 | 10 |
| No. Of OPD | 705 | 303 | 331 | 530 | 303 | 32 | 145 | 410 | 365 | 458 | 535 | 311 |
| No. Of ANC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of referral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Hb test | 131 | 47 | 69 | 130 | 20 | 0 | 0 | 13 | 0 | 0 | 0 | 0 |
| No. Of MP test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of urine test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of stool test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of ECG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of X-ray | 17 | 5 | 0 | 21 | 12 | 0 | 0 | 13 | 31 | 11 | 4 | 0 |
| No. Of USG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table – 2a: - Service delivered by the MMU in South Tripura and Gomati districts during the period (2012-13)

| Services | April'12 | May'12 | June'12 | July'12 | Aug'12 | Sep'12 | Oct'12 | Nov'12 | Dec'12 | Jan'13 | Feb'13 | Mar'13 |
|-------------------------|---------------------------------------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| No. Of camps planned | No planning done for the year 2012-13 | | | | | | | | | | | |
| No. Of camps held | 0 | 0 | 1 | 3 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 8 |
| No. Of villages covered | 0 | 0 | 1 | 3 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 8 |
| No. Of OPD | 0 | 0 | 60 | 521 | 868 | 1067 | 0 | 0 | 0 | 0 | 0 | 1073 |
| No. Of ANC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of referral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Hb test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of MP test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of urine test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of stool test | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of ECG | 0 | 0 | 38 | 15 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| No. Of X-ray | 0 | 0 | 60 | 18 | 4 | 53 | 0 | 0 | 0 | 0 | 0 | 33 |
| No. Of USG | 0 | 0 | 35 | 17 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 |
| Others | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Table – 3a: - Service delivered by the MMU in North Tripura and Unakoti districts during the period (2012-13)

| Services | April'12 | May'12 | June'12 | July'12 | Aug'12 | Sep'12 | Oct'12 | Nov'12 | Dec'12 | Jan'13 | Feb'13 | Mar'13 |
|-------------------------|----------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| No. Of camps planned | 4 | 5 | 6 | 0 | 0 | 10 | 10 | 2 | 6 | 0 | 0 | 0 |
| No. Of camps held | 4 | 5 | 3 | 0 | 0 | 10 | 10 | 2 | 6 | 0 | 0 | 0 |
| No. Of villages covered | 9 | 10 | 9 | 0 | 0 | 16 | 15 | 5 | 13 | 0 | 0 | 0 |
| No. Of OPD | 25 | 31 | 27 | 0 | 0 | 45 | 51 | 31 | 49 | 0 | 0 | 0 |
| No. Of ANC | 14 | 16 | 7 | 0 | 0 | 33 | 26 | 8 | 12 | 0 | 0 | 0 |
| No. Of referral | - | - | - | - | - | 2 | 1 | - | - | - | - | - |
| No. Hb test | 7 | 15 | 4 | 0 | 0 | 23 | 17 | 7 | 12 | 0 | 0 | 0 |
| No. Of MP test | 13 | 28 | 12 | 0 | 0 | 33 | 31 | 3 | 10 | 0 | 0 | 0 |
| No. Of urine test | 9 | 13 | 3 | 0 | 0 | 21 | 15 | 2 | 8 | 0 | 0 | 0 |
| No. Of stool test | - | - | - | - | - | - | - | - | - | - | - | - |
| No. Of ECG | 2 | 6 | 1 | 0 | 0 | 17 | 6 | 5 | 9 | 0 | 0 | 0 |
| No. Of X-ray | 12 | 21 | 5 | 0 | 0 | 16 | 10 | 6 | 8 | 0 | 0 | 0 |
| No. Of USG | 11 | 16 | 2 | 0 | 0 | 25 | 8 | 3 | 7 | 0 | 0 | 0 |
| Others | | | | | | | | | | | | |

Table – 4a: - Service delivered by the MMU in West Tripura, Sipahijala and Khowai districts during the period (2012-13)

| Services | April'12 | May'12 | June'12 | July'12 | Aug'12 | Sep'12 | Oct'12 | Nov'12 | Dec'12 | Jan'13 | Feb'13 | Mar'13 |
|-------------------------|----------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| No. Of camps planned | 15 | 17 | 18 | 18 | 16 | 16 | 10 | 18 | 20 | 18 | 18 | 19 |
| No. Of camps held | 15 | 17 | 18 | 18 | 16 | 16 | 10 | 18 | 20 | 18 | 18 | 19 |
| No. Of villages covered | 15 | 17 | 18 | 18 | 16 | 16 | 10 | 18 | 20 | 18 | 18 | 19 |
| No. Of OPD | 1567 | 1801 | 1720 | 1572 | 1635 | 1672 | 1979 | 1866 | 1614 | 1639 | 1604 | 1745 |
| No. Of ANC | | | | | | | | 2 | 4 | 3 | 5 | 6 |
| No. Of referral | 134 | 94 | 44 | 11 | 19 | 28 | 12 | 15 | 16 | 15 | 14 | 5 |
| No. Hb test | 18 | 12 | 18 | 13 | 15 | 10 | 11 | 13 | 9 | 7 | 8 | 22 |
| No. Of MP test | 3 | 4 | 3 | 2 | 6 | 2 | 4 | 3 | 1 | Nil | 2 | 4 |
| No. Of urine test | 3 | 2 | Nil | 4 | 7 | 5 | 6 | Nil | Nil | Nil | 14 | 7 |
| No. Of stool test | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| No. Of ECG | 10 | 14 | 15 | 9 | 7 | 9 | 8 | 14 | 12 | 23 | 11 | 6 |
| No. Of X-ray | 12 | 14 | 15 | 11 | 10 | 8 | 9 | 10 | 10 | 6 | 11 | 20 |
| No. Of USG | 6 | 9 | 8 | 8 | 5 | 6 | 3 | 7 | 5 | 6 | 2 | Nil |
| Others | | | | | | | | | | | | |

ANNEXURES – 2**INTERVIEW SCHEDULE FOR ASSESMENT OF MOBILE MEDICAL UNIT FOR DISTRICT OFFICIALS****(JT. DHS/ DISTRICT PROGRAMME MANGER)**

1. Name of the District:
2. Date/ Year of functioning of MMU in the district.
3. Maintenance of MMU :

| Equipment | Functional status | If out of order, since when | Steps for repairing | AMC/ CMC | Remarks |
|-----------|-------------------|-----------------------------|---------------------|----------|---------|
| Vehicle 1 | | | | | |
| Vehicle 2 | | | | | |
| Vehicle 3 | | | | | |

4. Status of diagnostic equipment and maintenance :

| Equipment | Nos. | Functional status | If out of order, since when | Steps for repairing | AMC/ CMC | Remarks |
|------------------------|------|-------------------|-----------------------------|---------------------|----------|---------|
| Microscope | | | | | | |
| Semi auto analyser | | | | | | |
| Centrifuge | | | | | | |
| Steriliser / autoclave | | | | | | |
| X-ray | | | | | | |
| USG machine | | | | | | |
| ECG | | | | | | |
| TV | | | | | | |
| DVD player | | | | | | |
| Generator | | | | | | |
| Others | | | | | | |

5. Manpower Availability for the functioning of MMU

| Category of Manpower | Available Y / N | Date of joining | Trained (Yes/ No), if yes, name of trainings attended | Remarks if any |
|----------------------|-----------------|-----------------|---|----------------|
| Medical Officer 1 | | | | |
| Medical | | | | |

| | | | | |
|---|--|--|--|--|
| Officer 2 | | | | |
| Staff Nurse 1 | | | | |
| Staff Nurse 2 | | | | |
| Radiographer | | | | |
| Lab Technician | | | | |
| Pharmacist | | | | |
| Driver | | | | |
| Handyman | | | | |
| Others (plz add below giving specification) | | | | |

6. Availability of drugs in the MMU: What are the drugs available provided to the patient during the MMU camp? Please provide the list.

| SN | Name of the drugs | Drugs available on the day of visit | Drugs received during 12-13 | Drugs distributed during 12-13 |
|----|---|-------------------------------------|-----------------------------|--------------------------------|
| 1 | Tab. Paracetamol 500 mg | | | |
| 2 | Syp. Paracetamol 125mg/5ml | | | |
| 3 | Tab. IFA (L) | | | |
| 4 | Tab. Anacid | | | |
| 5 | Tab. Ranitidine/Omerprazole | | | |
| 6 | Tab. Nifedipine 5mg | | | |
| 7 | Cough syrup | | | |
| 8 | Tab. Salbutamol 2/4 mg | | | |
| 9 | Tab. Vitamin B Complex | | | |
| 10 | ORS | | | |
| 11 | Tab. Zinc Sulphate 10mg | | | |
| 12 | Cap Ampicillin / Amoxicillin 500mg | | | |
| 13 | Syp. Ampicillin / Amoxicillin 250mg/5ml | | | |
| 14 | Tab. Trimethoprin +Sulphadoxine(20+100) Ped | | | |
| 15 | Tab. Trimethoprin +Sulphadoxine(80+400) | | | |
| 16 | Gloves | | | |
| 17 | Laboratory reagents | | | |
| 18 | X-ray films | | | |

7. What is the replenishment system of the drugs in the MMUs? Please provide the details.

- a. From which source is the drug provided to the MMUs:
 - b. What is the mechanism of indent:
 - c. What is the frequency of replenishment:
 - d. Where are the drugs stored:
8. What are the gamut of services provided:

| Gamut of services | Available (yes/ No) |
|---------------------------------------|---------------------|
| OPD | |
| Laboratory facility , please specify | |
| Radiological services, please specify | |
| ECG services | |
| Family planning services | |
| IEC activities | |
| Others (please specify below) | |

9. Is the operational plan of MMU prepared? (Yes/ No)
10. If yes, for what duration the plan is prepared, pls specify:
11. What is the criteria for selection of camp areas:

| Camp areas | Criteria for selection | Average no. Of camps | Average distance from nearest PHC/CHC |
|----------------|------------------------|----------------------|---------------------------------------|
| CHC area | | | |
| PHC area | | | |
| SC area | | | |
| Outreach areas | | | |

Pls attach the annual work plan for the year 2012-13:

12. Frequency of coverage of mapped areas in a year:
13. If no work plan, please specify the process of functioning of MMU.
14. Service delivery by the MMUs during 12-13 & 2013-14 (upto May 2013)

| Services | April'12 | May'12 | June'12 | July'12 | Aug'12 | Sep'12 | Oct'12 | Nov'12 | Dec'12 | Jan'13 | Feb'13 | Mar'13 | April '13 | May'13 |
|----------------------|----------|--------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|
| No. Of camps planned | | | | | | | | | | | | | | |
| No. Of camps | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | |
|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| held | | | | | | | | | | | | | | | | | | |
| No. Of villages covered | | | | | | | | | | | | | | | | | | |
| No. Of OPD | | | | | | | | | | | | | | | | | | |
| No. Of ANC | | | | | | | | | | | | | | | | | | |
| No. Of referral | | | | | | | | | | | | | | | | | | |
| No. Hb test | | | | | | | | | | | | | | | | | | |
| No. Of MP test | | | | | | | | | | | | | | | | | | |
| No. Of urine test | | | | | | | | | | | | | | | | | | |
| No. Of stool test | | | | | | | | | | | | | | | | | | |
| No. Of ECG | | | | | | | | | | | | | | | | | | |
| No. Of X-ray | | | | | | | | | | | | | | | | | | |
| No. Of USG | | | | | | | | | | | | | | | | | | |
| Others | | | | | | | | | | | | | | | | | | |

15. Financial Management System:

| Particulars | During 2012-13 | April & May 2013 |
|--|----------------|------------------|
| Total fund released by the state to the districts for functioning of MMU | | |
| Total expenditure incurred during in terms of the following on MMU | | |
| Salary of the MMU staff | | |
| Procurement of drugs | | |
| POL expenses | | |
| Expenses on diagnostic facilities | | |
| Expenses on lab facilities | | |
| Expenses on IEC activities | | |
| Expenses on maintenance of equipments | | |
| Expenses on maintenance of vehicles | | |
| Other expenses, please specify | | |
| Other expenses, please specify | | |
| Other expenses, please specify | | |
| Total expenditure on MMU | | |

Signature of the Jt. Director/ DPM

Signature of the Investigator

