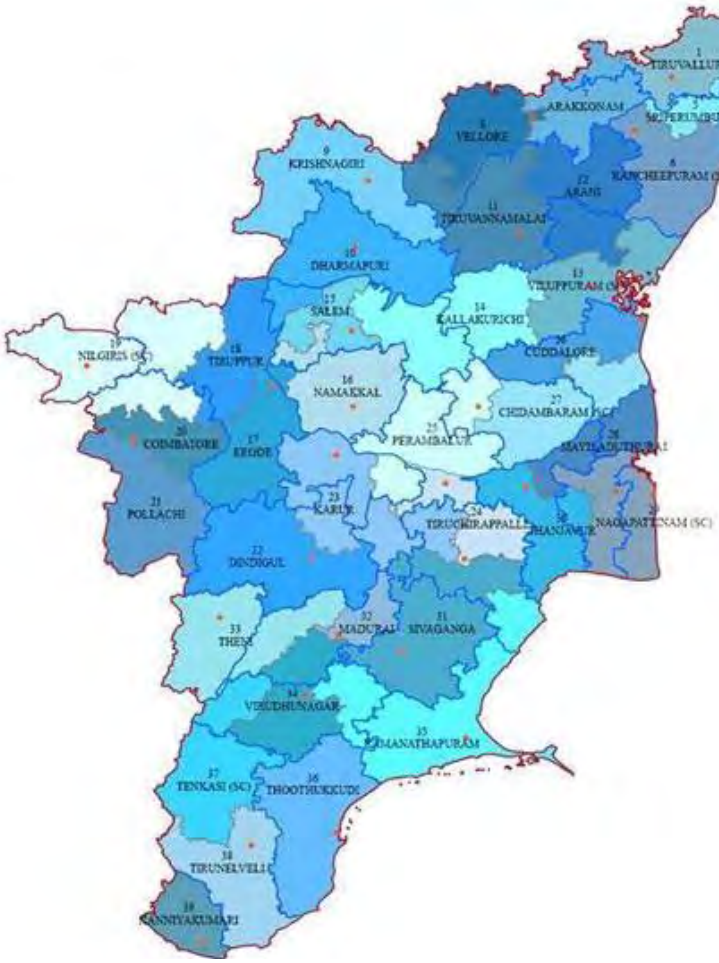
VI CRM Report – Tamil Nadu



NATIONAL RURAL HEALTH MISSION
NRHM
राष्ट्रीय ग्रामीण आरोग्य अभियान

Contents

INTRODUCTION

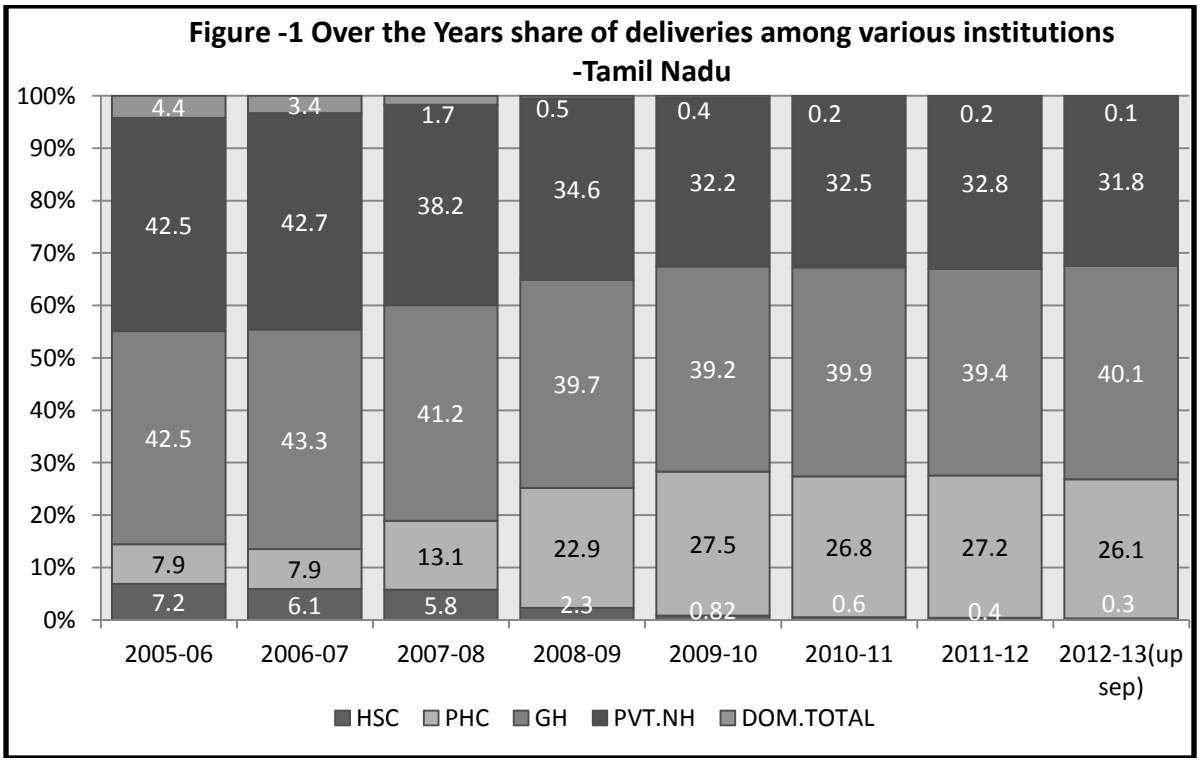
A. State Profile

Tamil Nadu State is the seventh most populous State in the country with a population of 72138958 as per 2011 census. Tamil Nadu is also most urbanized State in the country. The State has 32 districts and 385 blocks. For the management of health services the State has divided whole area in 42 Health Unit Districts. There are 10 Municipal Corporations, 125 Municipalities in the State. District covered by CRM teams were Tiruppur (Population- 2,471,222) & Cuddalore (Population- 2,600,880).

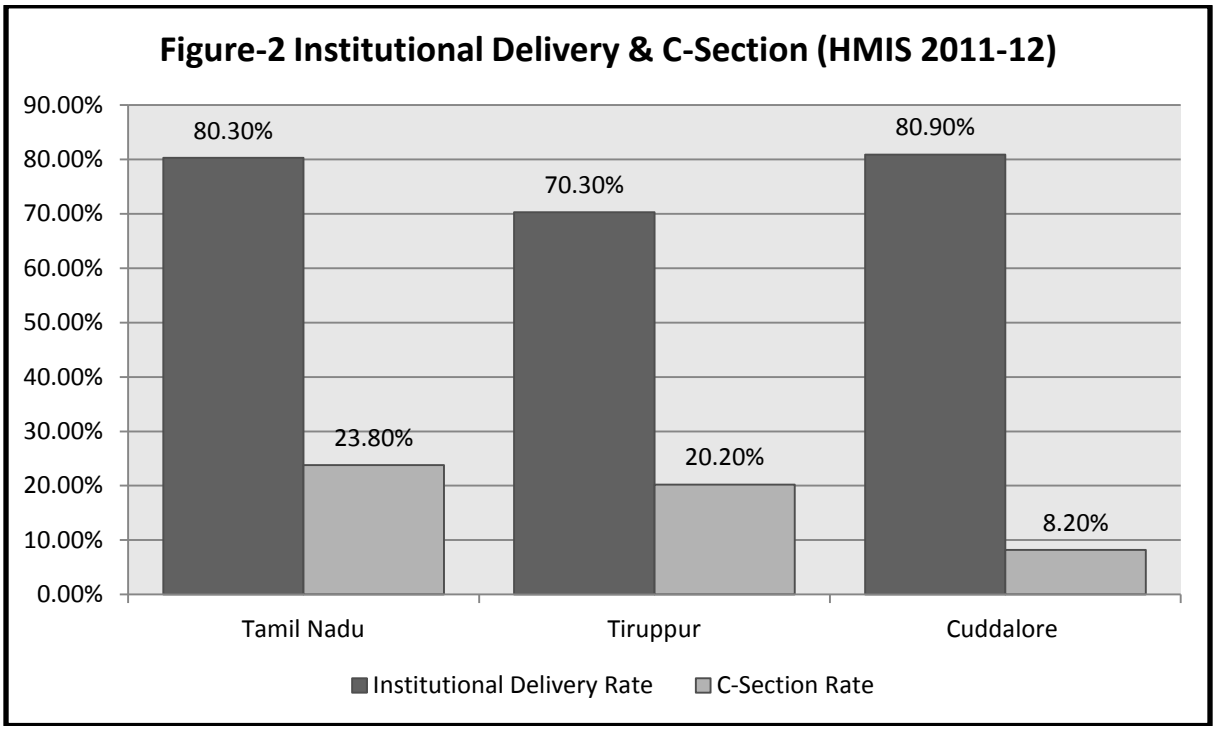
Tamil Nadu is one of the better performing State in terms of reproductive & child health and has already achieved the NRHM/RCH goals. The current IMR of the State is 24 (SRS 2011) well below the national target of 30 per 1000 live births and as per the SRS 2007-09 State MMR is 97 below target of 100 per lakh live births, which has gone down further to 72 per lakh live births as per the State data HMIS 2011-12. The State has also achieved replacement level of fertility and current TFR is 1.7 for the State.

Table-1 Tamil Nadu RCH Targets and Achievements

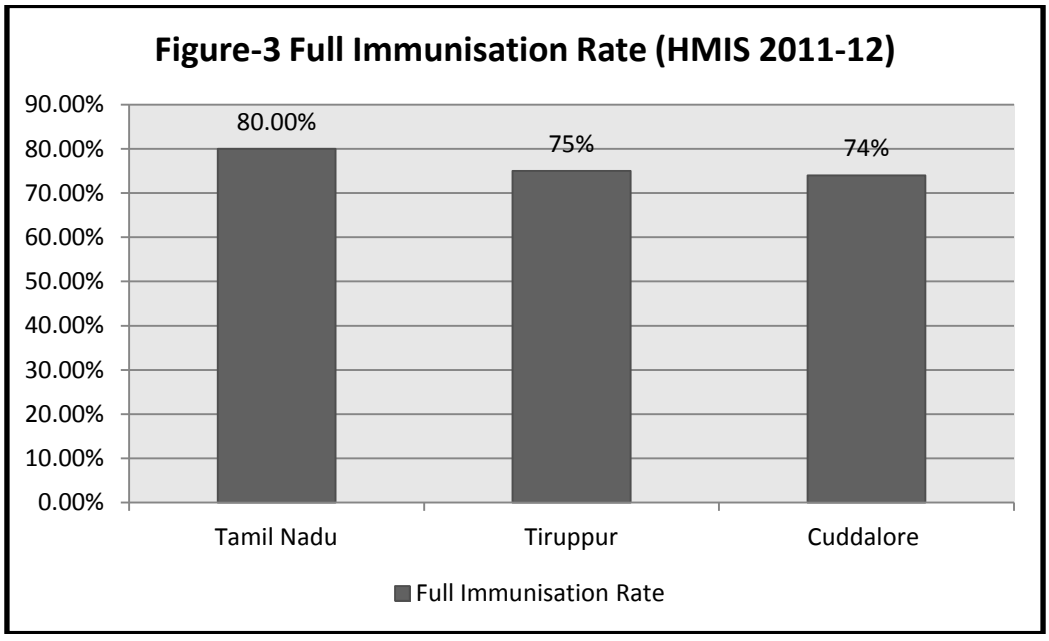
RCH - II GOAL	Current status		Target		
	India	Tamil Nadu	2011-13	2013-15	2015-17
MMR (per 100000 LB)	212	97 (SRS 07-09)	83	71	60
Under 5 mortality	59	27	17	14	11
IMR (per 1000 LB)	44 (SRS 2011)	24 (SRS 2011)	15	12	9
Neonatal Mortality Rate	33	16	10	8	6
TFR	2.5	1.7	Maintain		



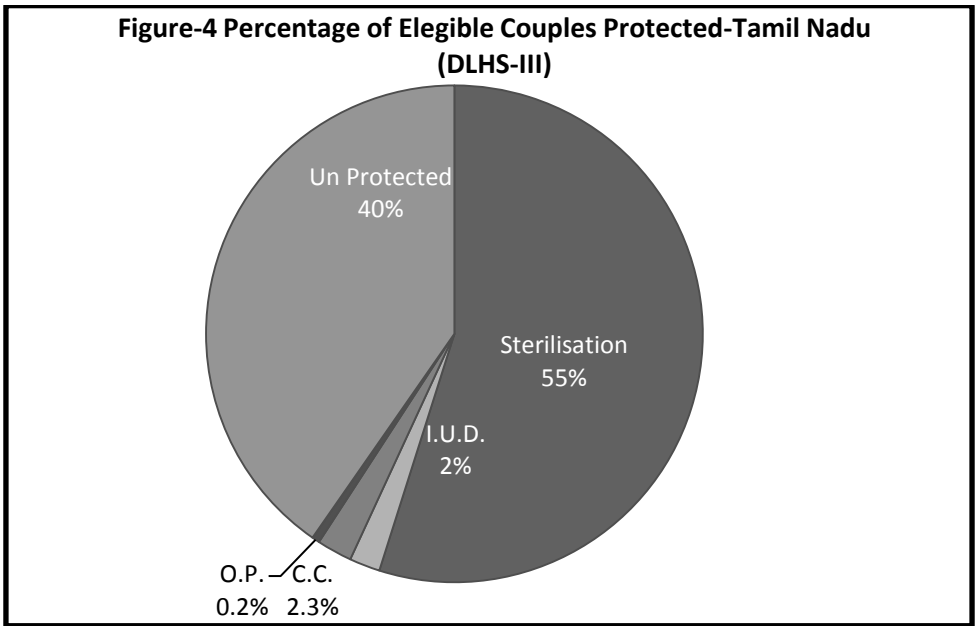
94% of deliveries in the State are currently taking place at the institutions and gradually over the years delivery share of the sub-Centre and home has reduced significantly in the State.



In recent years, the full Immunization coverage had dropped by 10% in the state (DLHS-2: 91.4% and DLHS 3: 81.6%). The state had stopped vaccination in outreach sessions after the AEFI report in 2008.



Family Planning services are more inclined towards permanent methods of sterilization. As per the DLHS III 4.5% of eligible couples were covered using spacing methods.



Current level of achievement of the spacing method for the Tamil Nadu is given below in the table.

Table-2 Family Welfare Program Achievement (HMIS Apr-Sept 2012)

Methods	Annual ELD	Prop. ELD	Achive-ment	%
Sterilization	3,65,000	1,82,500	1,61,372	88.4
IUD	3,90,000	1,95,000	1,63,921	84.1
OP Users	1,50,000	1,50,000	29,744	19.8
CC Users	1,80,000	1,80,000	99,902	55.5

B. Visit Schedule

1. The twelve member CRM team reached the Chennai on 3rd of November 2011. Whereupon reaching State briefing workshop was held under chairmanship of Mission Director.
2. One the 3rd November evening both teams have started their travel to the districts.
3. From 4th November to 8th November both teams visited facilities, interacted with Chief Medical Officers, District Program Management Unit Staff, Medical Officers, Doctors, Specialists, Staff Nurses, ANMs, Community Members, ASHAs, PRI members, District Collector. List of the facilities visited by CRM team in both the districts is given below in table.
4. On 9th November CRM debriefing session was held at Chennai under the chairmanship of Mission Director and the CRM team made the presentations on the observations made during the visit.

Table-3 Facilities Visited by CRM Team		
Type of Facility	**Tiruppur**	**Cuddalore**
District Hospital	Tiruppur	Cuddalore
Govt. Hospital	Kangeyam & Udumalapet	Vridhachilam
CHC	Mutthoor & Vellakovil	Oraiyur & Kammapuram
PHC	Gudimangalam, Perumanallur , Amravati & Kunnuthur	Melpattambekkam, Puduchathiram, Mangalore & Buvanagri
HSC	Mettupalayam, Manupatty, Appiyapalayam, Pattampalayam, Velamyapam & Velliravlli	Attapi, P N Palayam, Tunisilamed, Allichikudi, C.Pudupettai & Periyakurichi
Villages	Kodandur, Pattampalayam & Thoravallur	Periyakurichi, C.Pudupettai Tunisilamed & Avatti

C. Team Composition

Table-4 VI CRM Team Composition Tamil Nadu	
Team Cuddalore	**Team Tiruppur**
Dr. Teja Ram, DC(FP), MoHFW	Dr. Yashpal Sharma, Mission Director, NRHM, J&K
Sh. B. K. Pandey, Director, Planning Commission	Mr Michael Alexander, Attaché, Delegation of the European Union to India
Mr Rajiv Saurastri, Project Director HUP (PHFI)	Dr (Ms) Naveeda Khatun, AD, NIPCCD, MWCD
Dr Shaji Kumar, AD, AYUSH, MoHFW	Dr. Amit Shah, RH&FP Advisor, USAID
Sh. Jayant Mandal, FMG, MoHFW	Dr. Amit Mishra, Consultant, NHSRC
Dr Pooja Passi, TMSA	Dr. Nikhil Utture Consultant, MoHFW
State Representatives	
Dr.V.Vasanthi	Dr. Prebhu Clement Devadoss

D. Action taken on recommendations of IV-CRM

Table-5 Action Taken on recommendations of IV-CRM			
S. N.	**IV CRM Recommendations**	**State Actions**	**VI CRM Team Observations**
1.	Improve infection Control and Environment Plan including Bio-medical waste management.	Bio-Medical Waste Management Training is provided to the VHNs at HSC level and Staff Nurses working n different departments in SDH/DHCHC & PHC.	Different color bins are used in the facilities for waste collection. However segregation at source is not done properly. Sharp waste was found laying in open in facilities.

		Final Disposal of waste is outsourced in the State.	
2.	Regional Training Institutes need to be strengthened.	Infrastructure up-gradation is ongoing. Contractual faculty hired for training support.	Regional training institute are functioning well.
3.	ASHA scheme and community action for health needs to be expanded.	Community based monitoring and sensitization of PRI started with the help of NGOs in district. Program Specific ASHAs inducted to bridge specific gaps.	Pilot project of community monitoring is going-on needs to be expanded to rest of the districts. Program specific ASHAs training and outcomes needs to be monitored very closely.
4.	Residential accommodation, duty room for night duty staff for 24*7 facilities and security.	Security is beefed-up in major hospitals. Residential accommodation available for staff at 24x7 PHCs.	Security is weak even in major hospitals. No available in PHCs. Utilization of residential accommodation of doctors is almost nill. Staff Nurse are staying at facilities however needs to be monitored closely.
5.	MPW (male) vacancies to be filled.	Training has been started.	Huge gap, training should be done in few more institutes to bridge the gap.
6.	Existing Immunization policy needs to be reviewed in view of drop in total immunization	Immunization has started from the HSCs and outreach session again.	Restarting of immunization had a positive impact on immunization coverage.
7.	Provision of Accountants at the facilities may help in financial management reform and in book keeping – computer savvy commerce graduate may also help in data management.	One person hired for accounts work at facility level.	Account registers are maintained by pharmacists and the staff requires training on financial management.
8.	Payment of RCH Sanitary worker, Trained Dias may be reviewed.	Proposed to be increased.	Security and rest of the contractual grade IV staff getting one thousand per month only. Needs to be revised as per the norm.
9.	Special efforts may be made to step-up health promotion for non-communicable & life style diseases.	NCD clinics are started as pilot in 15 district. Staff Nurse is conducting IEC activities.	NCD clinics are well functioning. However VHN needs to be trained properly on NCD counseling.

E. NRHM Conditionalities and Incentives

Table-6 NRHM Conditionalities and Incentives		
Conditionalities and incentives	**Current Status**	**Time Line**
1. Rational deployment of HR with the highest priority accorded to high focus districts and delivery points/priority facilities (Non-compliance would lead to reduction of up to 7 ½%).		
1.1 Policy criteria		
1.1.1 Rational deployment policy which would inter alia include: Posting of staff on the basis of case load (OPD/IPD/Normal deliveries/C-sections),rational deployment of specialists especially gynaecologists, anaesthetists, EmOC and LSAS trained doctors in teams, posting of trained HR as per the level of the facility e.g. LSAS and EmOC to be posted in the FRUs, and filling up of vacancies in high focus/remote areas on priority basis	State has rationalised the EmOC and LSAS trained Doctors in the required places. But the process of rationalisation of specialists is on-going. Policy notification will be hosted soon.	Web hosting by Novem ber 2012
1.2 Implementation criteria		
1.2.1 Preparation of baseline data for HR including the current place of posting and their productivity/caseload; system in place for updation.	Preparation of data base is under process.	Web hosting by Nov.12
1.2.2 Evidence of corrective action in line with the policy	Preparation of data base is under process.	Web hosting by Dec. 12
2. Facility wise performance audit and corrective action based thereon. (Non-compliance would lead to reduction of up to 7 ½% of MFP)		
2.1 Policy criteria		
2.1.1 Range of services (as in MNH guidelines for RCH services, OPD, IPD and other services to be determined by the State) specified at least for delivery points	Facility-wise performance uploaded on state NRHM portal.	Hosted in state Website
2.2 Implementation criteria		
2.2.1 Facility wise reporting on HMIS portal by all priority facilities/delivery points for October(SC data if needed be uploaded from PHC)	State has just received the user id for facilities for 4 districts & facility wise reporting will start in phased manner.	Novem ber 2012
2.2.2 Corrective action (priority to be given to high focus districts) based on facility wise reporting.	Will be done in phased manner.	
3. Gaps in implementation of JSSK (May lead to a reduction in outlay up to 10% of RCH base flexi-pool.)		

3.1 Policy criteria		
3.1.1 Government order for coverage of entire State regarding: • Free delivery (including C-section if required) • Free diet • Free treatment to sick new born up to 30 days • Grievance redressal system with specified timelines for redressal	Copy of GO hosted in the website	Septem ber 2012
3.2 *Implementation criteria*		
3.2.1 State wide dissemination of GO/policy; visible IEC in facilities and community awareness.	IEC activities are planned but the process of dissemination of IEC is yet to take off. On field visit no visible IEC on JSSK was found in facilities.	October 2012
3.2.2 No user charges for pregnant women and new-borns. Drugs, diagnostics, diet should be available free. Grievance redressal system operational.	Free drugs, diagnostics and diet available to all pregnant women and new-borns in all health facilities. GO awaited for grievance redressal system.	October 2012
3.2.3 At least 50% of pregnant women and sick new-borns coming in should be using assured and cashless means of transport- and getting a similar drop back home.	Cashless means of transport is available for pregnant women and sick new-borns but drop back to home service provision is poor and would be strengthened.	Novem ber 2012
4. Continued support under NRHM for 2nd ANM would be contingent on improvement on ANC coverage and immunization as reflected in MCTS. Vaccines, logistics and other operational costs would also be calculable on the basis of MCTS data	Second ANM is not available across SCs in Tamil Nadu except for 237 HSCs situated at difficult areas/conducting deliveries where second ANM is provided.	
4.1 Increase in ANC coverage (first ANC and full ANC) as per MCTS data in (1) State (2) High Focus districts	State has strengthened the field based activities of VHN to increase the ANC coverage	January 2013
4.2 Increase in full immunization as per MCTS data in (1) State (2)High Focus districts	VHNs are doing immunisation to the infants at the field level, so that no children will be omitted	January 2013
5. Responsiveness, transparency and accountability (incentive up to 8% of MFP).		
5.1 Demonstrated initiatives including innovations for responsiveness in particular to local health needs e.g. use of epidemiological data, active participation	Community monitoring is implemented in PPP mode in 6 HUDs. During this year, expansion to the rest of the HUDs	Novem ber 2012

of public representatives in DHS / RKS meetings, etc.	will take place. Action is being taken for hosting the mandatory disclosures such as fixed day RCH camp schedule, MMUs schedule etc. on the state NRHM portal. State level grievance redressal call centre to be established soon.	
5.2 Demonstrated initiatives /innovations for transparency e.g. mandatory disclosures and other important information including HR posting to be displayed on State NRHM website, schedule of MMUs and RCH camps etc. to be disseminated among user groups in addition to these being displayed in the State NRHM websites etc.		
5.3 Demonstrated initiatives /innovation for accountability: e.g. call centre for integrated grievance handling system, aggrieved party to receive sms with a grievance registered number; action taken within stipulated time; community monitoring; Jan sunwai etc.		
6. Quality assurance (incentive up to 3% of MFP).		
6.1 Policy criteria		
6.1.1 States notify quality policy/strategy (align to national policy) as well as standards	Frame work is under preparation with respect to national policy.	Novem ber 2012
6.2 Implementation criteria		
6.2.1 Constitute dedicated teams. Training of state and district quality team and DH quality team completed.	A dedicated training team is available at the state and district level (DTT) and the training is going on.	Novem ber 2012
6.2.2 Current levels of quality measured for all "priority facilities" and scored and available on public domain. Deadlines for each facility to achieve quality standards declared.	Quality assurance cell is working on the scores of all the facilities and the prioritise the same	Novem ber 2012
7. Inter-sectoral convergence (incentive up to 3% of MFP).		
7.1 Policy criteria		
7.1.1 Implementation frame work for intersectoral convergence with allied sectors/departments	State has developed the frame work for coordination with AYUSH (ISM), TANSACS, ICDS and Education department. Copy of implementation framework will soon be hosted.	Novem ber 2012
7.2 Implementation criteria		
7.2.1 Intersectoral convergence opportunities identified with WCD, PHED, education, etc. and action initiated.	Draft GO is under preparation	
8. Recording of vital events including strengthening of civil registration of births and deaths (incentive up to 2% of MFP).		

8.1 A strategy paper identifying reasons and the road map for increasing registration	Directorate of Public Health &Preventive Medicine is acting as Chief registrar of Births & Deaths, and a road map is being prepared for increasing registration	October 2012
8.2 Death reports with cause of death (especially any under 5 children or any woman in 15 to 49 age group) shared with district health team on monthly basis.	The maternal death review is conducted at facility level and community level. The facility level audit is conducted through Video Conferencing on every 4th Thursday by team of medical experts at state level whereas the community level audit is conducted by the district collectors for all women death in the age group of 15- 49 years due to maternal causes and some of the infant deaths. Guidelines to conduct audit for 1-5 years children deaths are under preparation.	Novem ber 2012
9. Creation of a public health cadre (by states which do not have it already) (incentive up to 10% of MFP)		
9.1 Policy criteria		
9.1.1 Stated policy and road map (including career path on creation of a public health cadre)	A separate directorate for Public Health & Preventive Medicine is available in state and managed by Public Health experts. Copy of policy will be hosted soon.	Novem ber 2012
9.2 Implementation criteria		
9.2.1 Notification for creation of public health cadre		
10. Policy and systems to provide free generic medicines to all in public health facilities(incentive up to 5% of MFP)		
10.1 Policy criteria	A separate agency for procurement for drugs and equipments to the health facilities (TNMSC) is available at the state level. State EDL is available but facility-wise EDL not available. Drug ware houses are available at the district level. They are monitoring the stocks on real time basis. TNMSC have a separate website.	Septem ber 2012
10.1.1 Clear policy articulation of free generic medicines to all in public health facilities		
10.2 Implementation criteria		
10.2.1 EDLs finalised and drug formulary published and made available in all public health facilities		
10.2.2. Overall procurement and logistics strategy in place. Detailed design and plan for rate contracting, regular stock up dates, indent management, warehousing, promotion of rational drug use, contingency funds with devolution of financial powers etc. in place.		

Best Practices/ Innovations

1. **Public Health Cadre**- The State from very long time has separate Public Health Cadre with a separate directorate, budget and legal support. This has helped in improving preventive, promotive activities in the State in addition to the management of primary care services.
2. **Tamil Nadu Medical Service Corporation (TNMSC)-**is the state-of-the-art nodal agency in the State for the procurement of drugs, equipments and supplies for all public health facilities. Each district has a drug warehouse and each facility is awarded an annual budget with the passbook for the procurement of drugs from District drug warehouse. This has ensured essential drugs availability in facilities. CRM team observed no out of pocket expenditure on drugs, diagnostics during the visit. Similar to the TNMSC, **TAMPCOL** acts as drug procurement and supply agency for AYUSH medicines.
3. **Congenital Foetal Abnormality Detection**- To monitor congenital abnormality in fetus, Medical Officers use advance USG machines across CHCs. This is done in a PPP mode where training, supervision and hand-holding are outsourced to a reputed third party. Till date 630 Neural tube defects/ major congenital abnormalities have been identified at CHCs.
4. **Maternal Severe Anemia Management**- Tamil Nadu is the first State to start Administration of Iron Sucrose for management of severe anemia in pregnant women. Injectable Iron Sucrose is available across all facilities up to PHC level and staff is well trained in severe/ moderate anemia management.
5. **Birth Companion Program**- To improve psychological support to the pregnant women during labour, the state has introduced a new program to allow one family member as birth companion in the labour room. This has had positive impact on increasing institutional deliveries in public facilities.
6. **Maternity picnic & Bengal ceremony** –PHC staff with ANMs conduct Maternity Picnics and Bengal Ceremony with all pregnant women. This helps in reducing gap between community and service providers and builds more trust and confidence in availing services from public institutions.
7. **Well Functional & Co-located AYUSH services** are provided across all facilities in the State. The utilization of Siddha, Naturopathy and Yoga services are well appreciable in the state.
8. **Mortuary Van Services**- Tamil Nadu Health System Project has provided Mortuary Vans in all District Hospitals for the dropping dead bodies back home free of cost. Good IEC activities have done to spread information about this service. Very good utilization of the Mortuary Vans was observed by the CRM team during the visit to drop dead bodied in distant parts of the State.
9. **State Health Data Resource Centre**- In line with Health Information Exchange, the State is developing Health Data Resource Center for development of data warehouse for

integrated data analysis. This will help in integration of various system and availability of analysed data products at a single click of button.

10. **Immediate issuance of birth certificate after delivery**- In all PHCs birth certificates are issued immediately after delivery and the birth records are forwarded to the Birth & Death registration office. This helps in improve registration of birth in the state.
11. **Modified School Health Programme**- The State has modified School Health Program and made provision for a dedicated Medical Officer for the School Health Program Only. Under the School Health Program each child in all schools are screened for diseases, nutritional deficiencies and for refractive errors. Cases which require treatment are referred to the nearest health center and rest receives treatment during screening in shcools. Free spectacles are provided to the children identified with refractive errors.
12. **Sensitization of collector's and performance awards**- Each district collector is awarded based on NRHM performance of his/her district on monthly basis by the Health Minister. This helps in improving ownership of NRHM by the administrative staff at district level.
13. **Non-Pnuematic Anti Shock Garment (NASG)-** NASG is used in the State for the management of shock due to PPH. This helps in reduction of maternal deaths due to bleeding and shock.
14. **Program specific ASHAs-** The State has introduced program specific ASHAs to bridge the specific gaps. Program specific ASHAs are available for the HBNC, Malaria Control, Leprosy and Blindness Control.
15. **NCD Clinics:** The State has started NCD clinics for cardio-vascular diseases and diabetes in 15 districts on pilot basis. One Staff Nurse is trained to do the screening and refer patients to specialists for the treatment. In addition the State has also conducted mass screening for CA cervix and breast cancer in rural women last year and this year screening for oral cancer will be done. The State has also started deafness clinics at the PHC level and equipment support is provided form the NRHM.
16. **Palliative Care treatment-** The State has started special initiatives for home based palliative care services as pilot project in 5 districts in PPP mode.
17. **Community Monitoring –**The State is conducting community based monitoring with the help of NGOs. Each Panchayat is given a Report Card and based on the health status of community members it is updated regularly. Community feedback is taken in consideration for organization of health services and facilities.

Overall Recommendations

I. Infrastructure & Facility Service Delivery

1. Infrastructure development should be done looking at the case load and facility service utilization. It is advisable that infrastructure should be developed in integrated manner with a good architecture design. There should be an infrastructure development team in the district comprises of district health officials, PWD engineers and architect, helping with design, construction and supervision.
2. State needs to assess utilization of residential accommodation by PHC/CHC staff and ensure stay of staff nurse in the PHC premise if MO is staying outside.
3. Looking at the profile of emergencies rescued by EMRI 108, the State should strengthen some of its hospitals in district as emergency care centers to cater the emerging emergency care needs.
4. In addition to the routine screening & referral of the non-communicable disease cases, additional fixed day clinics by experts can also be organized at the PHC level to reduce the referral load at the higher centers.

II. Service Provision from sub-Center

1. Service delivery from the sub-Center has reduced to a great extend and the ANM is mobilizing pregnant women to the PHC for all investigation and examination, which she can provide at her level. It is advisable that sub-Centers should be strengthened in order to reduce overcrowding at the PHCs and to streamline referrals. Additional plans for service provision and screening of non-communicable diseases can be tested at sub-Center to counter the changing disease profile in the State.
2. IEC/BCC activities have taken a back-step in the State at sub-Center and community level. It is advisable to strengthen IEC/BCC activities from the sub-Centers. ANMs should provide family planning counseling especially for spacing methods to each mother.
3. There should be enough supply of family planning consumables such as oral pills, condoms; IUCDs and Pediatric IFA tab/syrup at the HSC level.
4. Hemoglobin estimation should be done from all HSCs. Old/non functional Heamoglobinometers should be replaced from HSCs and ANM should be trained to conduct Hb tests.

III. Outreach services

1. Improve the frequency, periodicity, range and quality of services rendered by MMU's to the tribal areas.
2. Impact of MMU services on unserved and underserved needs to be assessed properly.
3. Incentives for the ASHAs working in the tribal areas should be enhanced and provision of uniform can be made for identity and recognition in the community.

IV. RCH

1. Tracking of severely anaemic pregnant women treated with injectable iron sucrose need to be done to identify/document outcome of the treatment.
2. Tracking of newborns in the SNCU needs to be done for improved survival.
3. Safe abortion services through MVA need to be ensured at designated service delivery points.
4. There is a need for sensitizing facility level providers in appropriate usage of the non-pneumatic anti-shock garment (NASG) usage which is an innovation introduced in the state for obstetric shock cases resulting from PPH.
5. The current policy of ARSH clinics at only the medical colleges in the state needs to be revisited to ensure that adolescents are adequately reached for preventive and curative services.
6. There needs to enhanced focus on spacing methods and PPFP services. Emergency contraceptive pills need to be made available across all service delivery points.
7. Power-backup to the ILRs at the PHC should be made available to maintain cold-chain status and avoid vaccine wastage/AEFI.
8. JSSK entitlements need to be prominently displayed in all facilities.
9. Web listing of JSY beneficiaries needs to be done at the earliest.

V. Quality of Services

1. Quality Assurance Cell needs to be constituted at State level and Quality Assurance team needs to be created at district level for speedy implementation of quality management system.
2. Cleanliness of the facilities and public toilets needs to be improved. There should be provision of minimum accommodation for the patient relatives and ASHA in the facility premise.
3. All female wards need to be have proper curtains and an arrangement need to be done for provision of separate beds with curtains for male and female patients in injection rooms.
4. Security needs to be strengthened in all facilities and the payment of the security staff needs to be increased up to the daily wedge norms.
5. Waste segregation needs to be strengthened at source and all facilities need to follow protocols properly. Deep burial should be used for disposal of sharp waste. Ensure needle cutters in all the health facilities.
6. Grievance redressal mechanism need to put in place in all facilities properly and monitored for follow-up. In addition patient information kiosks need to be developed in all SDH/DH.
7. Common signage boards needs to be put in place in all District and sub-District hospitals indicating services/facilities in each building/ sections.
8. There is a need for uniform SOP's and guidelines related to RMNCH to be displayed at SHD/DH.

9. Quality of care should be regularly assessed across all facilities by a client feedback mechanism to review the end-user satisfaction and also identify areas of improvement.

VI. Emergency Transport Services

1. IEC/BCC activities need to be done to improve utilization of EMRI services for obstetric and newborn rescue especially from rural and remote areas.
2. Drop-back services for mother needs to be strengthened in order to reduce Out of Pocket expenditure. In addition proper data needs to be collected on drop-back to improve services.

VII. Human Resources & Training

1. All vacancies need to fill-up immediately. I t would be advisable to delegate recruitment responsibility to recruit MOs, specialist at the District level.
2. Male Health Workers should be made available and some of the training institutes should be strengthened for MPW training.
3. Payment of Grade IV staff should be raised up to the daily wedge norms.
4. To improve retention of skilled human resources at primary care institutions, it is advisable to create more career progression opportunities for the doctors and nurses working in the primary care institutions under the Directorate of Public Health & Preventive Medicine.
5. Absorption and career progression plan for the AYUSH contractual staff should be carved in the State. It is also advisable that they should be given opportunity for multi-skilling and work for other NRHM programs such as school health, screening, outreach camps, MMUs and can also work for program management with additional training on public health management.
6. A nodal person similar to District MCH officer in PHC/CHC should be identified for post training mentoring support and follow-up at secondary care institutions to ensure quality of service delivery by nursing staff.
7. District Program manager should be recruited in all districts to coordinate with different cadres within district and to implement NRHM activities.
8. One Administrator trained in Hospital Administration should be hired for the hospital administration in all SDH/DH.
9. One Accountant and M&E officer at block level and one Data Entry Operator at facility level should be put in place for NRHM activities.
10. All administrative and managerial staff should be given refresher training.
11. Evaluation studies to be undertaken to know the gaps in training and its effectiveness.

VIII. PC-PNDT & Gender

1. From the PC-PNDT Act implementation perspective, it is critical that uniform F's are introduced to all providers, they are adequately sensitized on the legal requirements and regular mechanisms of monitoring are established to ensure compliance with the Act.
2. A concerted BCC strategy involving all stakeholders needs to be developed and implemented across the state for addressing female feticide

3. There is a need for sensitization of providers on gender issues and VISHAKHA guidelines need to be displayed at all facilities.

IX. Communicable Diseases

1. To improve TB case detection Factory Health Inspectors need to be involved for referral of cases to the public health facilities.
2. Private sector health facilities (hospitals, clinics and diagnostic labs) need to be covered and tracked for newer cases. In addition intensive IEC efforts needs to done to educate community about the availability of free TB treatment in the facilities.
3. Malaria drugs and mosquito bed nets should be made available in all facilities, especially in the disease prone areas.

X. Information System

1. TN is well positioned to build a state level Health Information Exchange [HIE]. The SHDRC move to integrate various data sources for data warehouse and data analysis is the right direction. However it should be made clear that integration should be done through inter-operability of different system rather through manual integration of reports. It is also recommended that each system needs to relook at its reporting system and remove duplication and process errors through business process reengineering.
2. Comprehensive capacity building & change management is required for improving adoption of the existing systems.
3. It is also important that each facility should publish its annual/ monthly performance in the facility premise for transparency and accountability.

XI. Finance

1. Action plan should be carved to improve Fund Absorption capacities and Internal Audit needs to be strengthened.
2. The position of District Accounts Manager needs to be filled up and position of Block Accountants needs to be created and filled immediately.
3. Payment to JSY beneficiaries should be done on camp basis to reduce backlogs.
4. There should be more community participation in RKS/PWS meetings.

XII. Innovations

1. Considering the various innovations/best practices introduced in the state in the maternal and child health thematic areas, it is necessary that the state makes dedicated efforts at introducing innovations in family planning services especially to improve the male involvement and also correct the skewed contraceptive usage patter which currently is focused on sterilization services.
2. The state should establish a best practice/innovations cell within the SPMU to effectively document and disseminate them. It also necessary to undertake rigorous evaluations of such initiatives so they can provide useful guidance for up-scaling of such initiatives by other states and also for any course correction, if needed.

TOR I- Access Affordability and Quality

Main Observations

A. Public Health Infrastructure

I. Over the years under NRHM the State has strengthened primary care infrastructure by strengthening PHCs & CHCs in the state.

II. During seven year period of NRHM the state has created 135 PHCs and 126 CHC in the State and upgraded some of the PHCs into CHCs. In addition to this no other major change in the public health facilities was seen during NRHM period. As per the population norm there are some gaps in the infrastructure, however on an average each primary care facility (PHC/CHC/SDH/DH) shares average population of 37,320 which is adequate.

III. The state however has a 33% shortage of sub centers as per population norms and during last seven year period only 24 new HSCs have been added in the state.

Table:7- Change in Public Health Facilities in TN from 2005 to 2012

	In 2005	In 2012	Change in numbers
SC	8682	8706	24
PHC	1290	1229	-61
CHC	131	385	254
SDH	235	232	-3
DH	29	29	0

Table: 8- Public Health Facilities- Shortfall as per population norms – Tamil Nadu

Facilities	Public Health Facilities as on 2012	Projected Facilities as per population (Census-2011)	Shortfall
SC	8706	13164	4458
PHC	1287	2194	907
CHC	385	548	163
DH	29	31	2
Cuddalore District			
SC	319	520	201
PHC	50	87	37
CHC	17	22	2
Tiruppur District			
SC	242	494	252
PHC	32	82	50
CHC	13	21	1

IV. It has been identified that 100% CHCs & DH are functioning in government buildings and more than 95% of PHCs functioning in government buildings in the State.

V. 75% of HSCs are functioning in the Government buildings in the State. However Tiruppur district has 66% of HSCs in government buildings.

VI. In whole of the state 139 HSC construction activity has been taken up during 2012-13 periods and in Tiruppur district 11 HSC constructions has taken up during the same period.

Table: 9- Status of Public Health Infrastructure in Government Buildings

	HSC functioning in govt. building	PHC functioning in govt. building	CHC functioning in govt. building
Cuddalore	294 (92%)	48 (97%)	17 (100%)
Tiruppur	159 (66%)	31 (96%)	13 (100%)
Tamil Nadu	6510 (75%)	1204 (94%)	385 (100%)

VII. In Tamil Nadu State Public Works Department (PWD) look after the construction and repair activities in all public health facilities. PWD has a separate Health Infrastructure Development Wing, under which one executive engineer looks after the health infrastructure work of 3-4 districts. Infrastructure development plan is proposed by each district separately which is compiled and prioritized at state level. In districts; Deputy Director Health Services in consultation with other officers documents infrastructure requirements at the district level.

Tiruppur District Amravati Block- Tribal Community Interaction- 5/11/12

High number of ANC women at PHC Gudimangalam (Tiruppur Dist.) Mobilized by ANMs for investigations - 6/11/12

VIII. During visit it has been identified that PHC compounds had big area and the new building structures were created nearby existing ones, without any linkages. Overall in most of the PHCs separate building blocks were created without connecting it to the existing structure. No covered passage was available letting patient to be shifted in open.

IX. Infrastructure development is being solely done by PWD and no person from the health department is involved in the design, development and supervision of infrastructure development. Due to lack of coordination and understanding about the requirements separate building blocks were created in the PHCs.

X. State also needs to relook at the accessibility in Tribal concentrations in north, central and western regions especially regions where tribal hamlets are in hilly and forest areas. During visit to the tribal block (Amravati Block, Tiruppur District) it has been identified that physical accessibility of tribal population was limited due to inaccessible and difficult terrain. Nearest PHC is 20km away from the village and the nearest point to avail transport is 6 kms which is to be covered through walking. Mobile network doesn't work in that area so emergency ambulance service can't be availed also.

Table: 10- Infrastructure development under NRHM –Tamil Nadu (2005-12)

	Major construction taken-up under NRHM (2005-12)	Major construction completed (2005-2012)	Minor construction taken-up under NRHM (2005-12)	Minor construction completed (2005-2012)
Tamil Nadu	524	350	1590	1162
Cuddalore	33	33	37	30
Tiruppur	5	3	44	26

B. Service delivery improvements

Over the years service utilization has increased from public facilities.

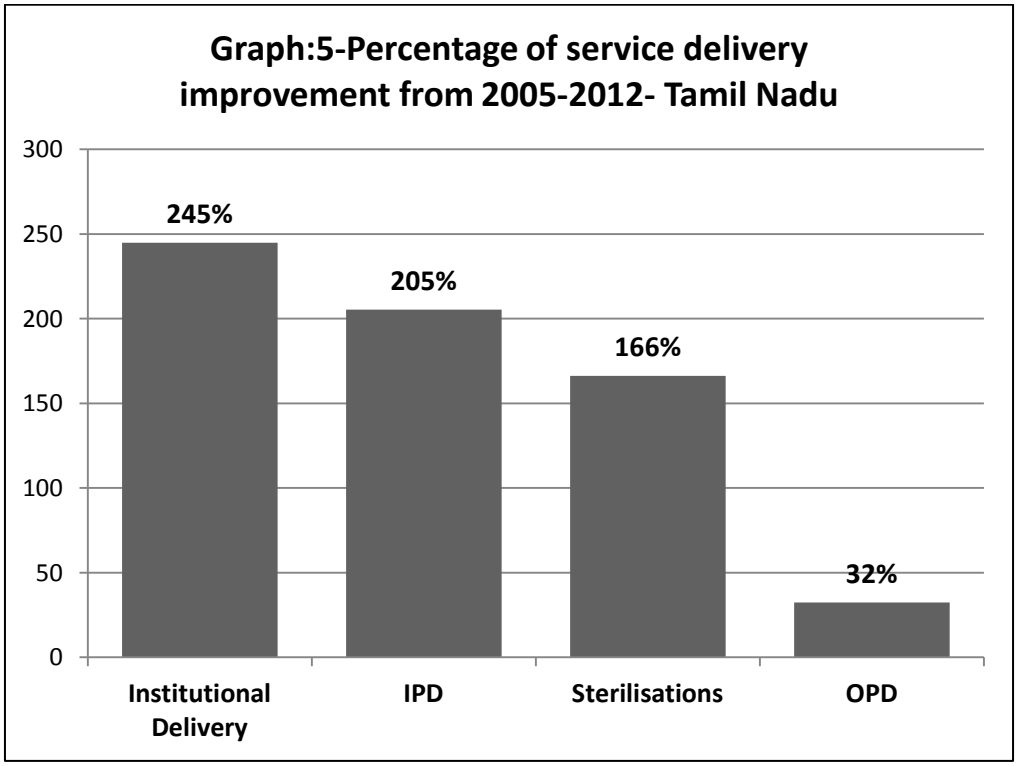


Table:11- Service Delivery improvement in Tamil Nadu (2005-2012)		
	2005-06	**2011-12**
OPD	62867029	83257998
IPD	382823	1168646
Delivery	81190	279991
C-Section	NA	8249
Total Sterilisations	27644	73595

The highest service delivery improvement has been seen in the institutional delivery followed by IPD services indicating better inpatient and emergency care service availability in the government facilities. Maximum service utilization has been seen in the PHCs across the state. Most of the PHCs visited by the CRM teams were seen overcrowded. However most of the patients were pregnant women mobilized by the ANM to the PHC for laboratory investigations and other examinations.

C. Ancillary services:

All ancillary services such as laboratory and radiography investigations, medicines and equipments are available free of cost to the patients. These services are provisioned by the Tamil Nadu Medical Services Corporation. All facilities visited by the CRM team found adequate equipments and diagnostics services. Each facility had well maintained pharmacy which had adequate supply of required medicines.

D. Blood Bank and Blood storage centre:

The blood bank facility is available in district hospitals and major sub district hospitals. Blood storage centre are available in sub-district hospitals and CHCs. No PHC currently has blood storage centre however the state has supplied blood storage equipments in 138 PHCs, which is yet to be operationalized.

Table:12- Blood bank and storages in Tamil Nadu			
DISTRICT	**No. of blood bank-Govt**	**No. of blood storage-Govt.**	**No. of blood bank-Pvt**
Tamil Nadu	91	**157**	**167**
Cuddalore	4	2	3
Tiruppur	3	7	4

Blood banks found to be maintained properly with adequately trained staff & records. Temperature monitoring and monitoring of expiry date of each unit of blood was done meticulously by the staff.

E. Supportive Services

Overall the state has made good progress in providing supportive services and amenities with adequate quality to the patients. In some facilities during the visit it has been identified

that cleanliness of toilets was not done properly and availability of accommodation facility for patient relatives was not available.

i. Diet – Diet was available in all facilities. In PHCs/ CHCs food was not cooked in-house but was arrangement from nearby hotels. In the SDH/DH food was cooked in-house and was distributed to all patients. Kitchens were clean and the food menu was prepared in advance. It has also been identified that in the PHC/CHC each pregnant mother was served food if she stays beyond 12 noon for check-up.

ii. Laundry-In house arrangement, each hospital has employed washer-man in-house to wash all cloths in the facility premise. There was a variation in the laundry services with certain facilities such as DH Thiruppur had automated laundry system whereas GH Kangeyam had manual cleaning system in Tiruppur District. In Cuddalore District also laundry service was automated.

Table: 13-Amenities available in the facilities- Tamil Nadu

Services	**Drinking water**	**Seating arrangements**	**Accommodation facilities for attendants/ASHAs**	**Provision of public toilets**
Cuddalore	Drinking water was available in all the facilities	Seating arrangements were found short in light of the large volume of patients visiting the facilities.	Patients' attendants were found resting/ waiting in verandahs since no specific place was available to them	In most cases the toilets were not usable due to unclean and unsanitary conditions
Tirupur	Available in each facility	Available but needs improvement in terms of space with covered shed	No such facility was available in any of the hospitals, CHCs.	Available but not clean

iii. Signage's-All rooms in the facilities were well marked with signage in local language. However in double storied buildings and building with multiple blocks any common signage board indicating services in each building was not available.

iv. Patient Information- In all SDH & DH patient information kiosk were not available and it was done with the registration counter.

v. Citizen Charter- In all facilities citizen charter was available and properly displayed in local language.

vi. Grievance redressal- In most of the facilities grievance redressal mechanism was found to be inadequate. Even in the major hospitals in both the districts complaint boxes, complaint registers were not available.

vii. Bio-Medical Waste Management- BMW final disposal is outsourced in the state. It has been identified that each facility had color coded bins. However the waste segregation at source was not done properly in both the districts and the sharp waste

was found lying in the open in some of the facilities (e.g. GH Kangeyam, PHC Perimannalur in Tiruppur District and Oraiyur PHC in Cuddalore District).

viii. User Charges & Out of Pocket Expenditures: No user fee is posed in the facilities for any of the services. In addition CRM team has not found any out of pocket expenditure on drug, diet, lab and consumables, however significant out of pocket expenditure was noted in the drop-back services for delivery cases.

ix. Privacy and security issues: Efforts to maintain privacy was seen across the facilities in both the districts. However it has been found that all injection rooms had no curtains and beds. No separate injection rooms were available for both male & female in both the districts. In some facilities few wards had no proper curtains. In one GH Kangeyam of Tiruppur District both male and female patients were placed in one ward. However in all facilities separate wards were available.

In PHCs security personnel were not available and in the DH & SDH security personnel were available however they were available at one entry gate however the hospital had multiple entry points. Also in the District Hospitals of both districts multiple building blocks were not manned with security personnel.

x. The State has condemnation policy for discard equipment and materials, Government Orders have been issued with the guidelines to all facilities in this regard.

F. Quality Management

Quality of services provided by the facilities and overall service quality has improved in the state to a large extent due to implementation of quality management systems. 48 PHCs are ISO certified in the Tamil Nadu and 30 are in the process of certification. In addition major district hospitals are in process of NABH accreditation due to which service quality and maintenance has improved. However State Quality Assurance Cell is not formed which is required for speedy implantation and monitoring.

Sharp Waste disposed in open PHC Kunnuthur, Tiruppur District -6/11/12

Emerngecy tray well maintained at GH Kangeyam Tiruppur District -5/11/12

Recommendation:

I. Infrastructure development needs to done looking at the facility utilization and case load. It is advisable that infrastructure is to be developed in an integrated manner with a good architecture design. There should be an infrastructure development team in the district comprises of district health official, PWD engineers and one architect in helping with design.

II. Drop-back services need to be strengthened in order to reduce OOP expenditure.

III. Cleanliness of the facilities is an issues and this needs to be dealt with proper planning

IV. All female wards need to be provided proper curtains and an arrangement need to be done for provision of separate beds with curtains for male and female patients in injection rooms.

V. Security needs to be strengthened in all facilities.

VI. Waste segregation needs to be strengthened at source and all facilities need to follow protocols properly. Deep burial should be used for disposal of sharp waste. Ensure needle cutters in all the health facilities.

VII. Grievance redressal mechanism need to put in place in all facilities properly and monitored for follow-up. In addition patient information kiosks need to be developed in all SDH/DH.

VIII. Common signage boards needs to be put in place in all District and sub-District hospitals indicating services in each building/ sections.

IX. Quality Assurance Cell needs to be constituted at State level and Quality Assurance team needs to be created at district level for speedy implementation of quality management system.

TOR II- Outreach and Patient Transport Services

Main Observations

A. Package of Services provided at each level:

Following services are available at primary and secondary care institutions.

I. Secondary Care Institutions (SDH/DH)-

i. Extended Medical specialty services like Medicine, Surgery, Obstetrics and Gynaecology, Ophthalmology, E.N.T, Venerology, Orthopaedics, Anaesthesiology, Child Health, Dental, Psychiatry, Leprosy, Tuberculosis, Diabetology, Cardiology;
ii. Comprehensive Emergency Obstetrics and Neo Natal Care Services (CEmONC);
iii. Accident and Emergency Services;
iv. Family Welfare Services
v. Mental Health- Counseling services
vi. Ancillary Services- Blood Transfusion, Laboratory services, Medicines

II. Primary Care Institutions (PHC/CHC)-

i. Reproductive and Child Health (RCH) Services-BEmOC Services, Immunisation Programme, Family Welfare Programme including sterilizations at CHCs.
ii. Disease Control Programs
iii. School Health Programme,
iv. Out-reach services through MMUs.
v. Ancillary Services- Laboratory services, Medicines.

III. Health Sub Centres (HSCs)-

i. Maternal health services- ANC, PNC Services
ii. Child care services- immunization, deworming
iii. Family Planning- contraceptive distribution, counseling
iv. Adolescent- Menstrual Hygiene, IFA supplementation, deworming
v. Outreach- VHNDs
vi. IEC, referrals
vii. School Health Program

B. Sub Centre services and VHNDs

i. Each HSC is manned by one ANM, which look after all activities of the HSCs.
ii. There is acute shortage of Male Health Workers in the State and wherever MPWs are available they look after two sub-Centers.

iii. Deliveries at HSCs have come down significantly from 7.2% in 2005-06 to 0.4% in 2011-12 due to availability of quality delivery services in higher centers and referral transport. Out of total HSCs, only six are currently conducting three or more deliveries per month however they are functioning with only one ANM with limited training on newborn care. Total 31 HSCs are conducting deliveries in the State and each HSC will be provided with three ANMs trained on SBA, NSSK, ARSH from this year onwards.

iv. Second ANM is not available across sub centers in the State and the State has taken a decision to provision 2nd ANM in 237 HSCs only, which are either situated in difficult areas or conducting deliveries.

v. In both the districts visited it has been found that ANMs were well knowledgeable about health issues. Village Health and Nutrition Days are organized on every Friday across State. VHNDs provide ANC, PNC services, immunization services, and distribute contraceptive. VHNDs however lack on IEC services on nutrition, disease prevention, counseling for spacing methods. Good convergence between HSC and Anganwadi was seen in both the districts.

vi. HSCs have also started supplying sanitary napkins to the adolescent girls and PNC mothers. Weekly Iron Folic Acid supplementation to the adolescent girls in addition to the deworming is also done through door to door visits.

vii. In all HSCs visited in both districts no ANM is conducting Hb estimation, and for all investigation she is mobilizing pregnant women to the PHCs.

viii. Family planning supplies are in short supply at sub centers, which affects the spacing activity from the HSCs. There is also lack of supply of Paediatric IFA syrup and tablets in the state at all level.

ix. It has been identified during the visit in both the districts that HSCs are not utilized adequately and the mothers are mobilized to the PHCs for the services which ANM can provide at the HSC level.

x. It has been also found that whole IEC/BCC activities for preventive and promotive care have taken a back step in the State at HSC and community level.

C. Immunisation Services

i. Immunisation services are provided from the HSCs. The state had withheld immunization from the HSCs in 2008 due to few AEFI cases. This has led to the drop in immunization coverage in the state. However the state has now restarted immunization services from the HSCs.

ii. Cold Chain Maintenance is being done properly in the state. ILRs are available up to the PHC level and from here vaccines are distributed to HSCs (with proper ice packs) on immunization days.

iii. There is no power back-up available for ILRs at the PHC level, however the temperature monitoring is done twice a day and if required vaccines are transported to the nearest facility where power back-up is available.

D. Urban Slums

i. There are no notified urban slums in Tiruppur district. In Cuddalore district five Urban Health Posts were developed to provide services to the slum population for primary care services.

ii. The UHCs provide RCH services in addition to the implementation of national health programs. As the slums are not clean and communicable disease outbreak is common in the area. It becomes difficult to provide services during outbreaks due to flood of cases in the UHC. It is a challenge for the municipality to keep the area clean.

iii. Considering the large number of non-notified slums, the district administration needs to consider inclusion of them in the notified category, enabling the excluded to access the universal services. Also the network of water supply points in the slums needs to be reassessed and provided as at one point in the slum the closest water supply point was reportedly over 400 meters. Secondly, use of shallow bore hand pumps needs to be discouraged and they should be replaced with water supply stand posts or installation of India Mark II hand-pumps, which are deep bore and most probably provide safe drinking water.

E. Mobile Medical Units

i. One MMU per block is available in the state and there are a total of 385 MMUs providing outreach services in the State.

ii. MMUs are manned by one medical officer, one staff nurse, one assistant and one driver.

iii. Each MMU's visit schedule is fixed in advance and the MMU conducts field visits as per the schedule.

Table-14 MMU Performance April 2012-September 2012

Services Provided	Tamil Nadu	Tirupur	Cuddalore
AN Cases examined	290368	4000	15719
High Risk AN mothers - Referred	15609	94	1838
PN Cases Examined	106833	1651	7276
IUD Inserted	1983	35	450
Family Planning Counseling (M)	71379	54	4230
Family Planning Counseling (F)	161440	1812	7515
New Borns examined	102838	3724	6988
Under 5 Year Children treated	687422	27477	26425
Adolescent girls examined & treated	11458627	2896	17624
Lab Services Utilization	277477	1316	9839

iv. Services provided include – OPD, laboratory investigation, medicine & family planning consumables distribution, follow-up, counseling, referral and screening. In

addition MMUs also provide IEC activities and implement components of national health programs.

v. On every Friday, MMUs reach to the VHND sites and provide additional services to the mother and child i.e. Lab, Medicine, Other disease screening etc. In addition MMUs also receive patients referred by the ASHAs, School Health Teams etc.

vi. However in the visit it has been found that distant and remote tribal block in Tiruppur district receives MMU services once in a month. Which needs to be improved as the nearest facility is 22 KMs from the community.

	
Urban Slum in Cuddalore District -7/11/12	Well Furbished MMU –Tamil Nadu-8-11-12

F. Emergency & Patient Transport Services

i. 108 Emergency Patient Transport System is used in the state for referral transport. A total of 499 EMRI ambulances are available in the state out of which 4 are neonatal ambulances (3-Chennai, 1-Kanchepuram). 134 ambulances are ready to be launched soon in the state. Overall one ambulance is available for 1,40,000 population in Tamil Nadu with some district specific variations.

ii. For provision of emergency care EMRI has signed MoU with 1806 private hospitals during Sept 2008-Sept 2012 period.

iii. As per the data available with EMRI central unit- A total of 3588382 calls were made to the EMRI call centre during last six month period (April -September, 2012) however 5.8% of calls were unattended.

iv. During field visit and interaction with the users of 108 services, it has been observed that after making call to EMRI Call Centre, the ambulance reaches to the scene/place in 15 minutes in urban area and in 20-25 minutes in rural area.

v. As per the data provided by the state following time is spend is availing 108 services.
   a. Average call handling time is 1.53 minutes,
   b. Average Ambulance dispatch time is 3 minutes,
   c. Average time taken to reach scene/incident is 17 minutes and
   d. Average time taken to reach to hospital is 38 minutes.

e. An average 8.5 minutes time is taken at the scene to put patient in the ambulance.
f. On an average 1 hour 15 minutes is taken to reach to hospital after call is made to the 108 services.

vi. Out of total calls attended 11.3% of calls were emergency in nature and out of which 95% calls were medical emergencies and rest were police (2%) and fire (3%) emergencies.

vii. Out of total emergency calls 73% utilized ambulance service and 6% have not utilized ambulance service, in 10% cases ambulance service couldn't reach due to unavailability.

viii. Out of the total cases lifted by 108 services, 2.8% cases were rescued from the tribal areas.

ix. A total of 26.3% inter-facility transfers were done using 108 services. Obstetric inter-facility transfers were 49% out of total obstetric emergencies.

Table: 15 Obstetric emergency rescue profile –Tamil Nadu (April-September 2012)

Obstetric emergency profile	**(%)**
Obstetric emergency to hospital from community	51.0
Inter-facility transfer	48.9
Referral to higher centers	0.1

x. If we look at the profile of the emergencies rescued all type of emergencies are rescued through 108 services. However the obstetric emergencies share was 20.5% and the accidental & injury emergency share was 26%. Neonatal (2.2%) and pediatric (0.1%) emergencies were also rescued during the same period.

Table:16 Profile of emergency rescued through 108 Services- Tamil Nadu (April-September 2012)

Type of Emergency handled	**(%)**
Neonatal (up to 1month)	2.2
Pediatric (up to 12 yrs)	0.1
Obstetric Emergency	20.5
Accident trauma burn	26.6
Chest pain, stroke and cardiovascular emergencies	10.3
Poisoning, hanging, drowning, animal bites.	6.0
Other medical emergencies	11.6
Others	22.7

xi. If we look at the total share of public and private facility utilizations through 108 services, 82.3% cases were shifted to the government hospitals and 8.7% cases shifted

to the private hospitals. In 8.9% of cases after first aid no further treatment was accepted/ provided.

xii. Drop-back service is not provided by the 108 services and is being started in the state separately using hospital ambulances. However the utilization of drop-back is low in the state.

xiii. Utilization of emergency transport for obstetric care is limited and ***only 13%*** deliveries out of total estimated deliveries in the state have used 108 Services in last six months to reach the hospital/ PHC. This is even less in rural areas which needs to be addressed properly.

Recommendations:

I. Service delivery from the sub-Center has reduced to a great extend and the ANM is mobilizing pregnant women to the PHC for all investigation and examination, which she can provide at her level. It is advisable to strengthen sub-Centers in order to reduce overcrowding at the PHCs and to streamline referrals.

II. Make IEC/BCC activities a regular activity from the sub centers. There should be enough supply of family planning consumables such as oral pills, condoms, IUCDs in the HSCs. ANMs should provide family planning counseling especially for spacing methods to each mother. Pediatric IFA tab/syrup should be available at the HSC level.

III. Hemoglobin estimation should be done from all HSCs. Old/non functional Heamoglobinometers should be replaced from HSCs and ANM should be trained to conduct Hb tests. Currently it is not being done due to either unavailability or due to lack of skills.

IV. Power-backup to the ILRs at the PHC should be made available to maintain cold-chain status and avoid vaccine wastage/AEFI.

V. Spread of MMU and impact on unserved and underserved needs to be assessed properly and it also needs to assessed that whether MMUs reach to all underserved areas.

VI. Rescue of obstetric cases through EMRI services is low in the state. It is even lower in the rural and tribal areas. IEC/BCC activities need to be done to improve utilization of EMRI services for obstetric and newborn rescue.

VII. Looking at the profile of emergencies rescued, the State should strengthen some of its hospitals in district as emergency care centers to cater the emerging emergency care need.

TOR III- Human Resources for Health

Main Observations

A. Overall HRH Status

The state has made a good progress in providing skilled human resources at each level of facilities. Over past seven years of NRHM, number of human resources in public facilities has increased to a large extent.

Table-17 Human Resources for Health –Tamil Nadu (2012)		
Category of Staff	**Regular**	**Contractual**
Medical Officer	3441	431
Medical Officer (ISM)	815	403
Medical Officer (Dentist)	0	129
Medical Officer (MMU)	0	339
Staff Nurse	318	6148
Pharmacist	1323	89
Radiographer	123	28
ANM	1044	83
Lab Technician	1007	66

The state has recruited limited human resources under contractual role except Staff Nurses, Dentists and AYUSH Medical Officers. Staff Nurses are initially recruited as contractual and based on the vacancy gets regularize.

For medical officers no contractual recruitment is done. Initially MMU doctors were recruited under contractual arrangement but now are given regular appointment due to high attrition. Their salary is released through treasury route with significant centre and state share.

B. Cadres

Tamil Nadu State has two separate cadres- Medical Services and Public Health. Tamil Nadu is the only State that has separate Public Health Cadre supported by Public Health Directorate having own budget and legal support.

a) Public Health Cadre:

This cadre works in admin positions and manages the primary health services in the state. Fresh Medical Graduate can join as Municipal Health Officer and is given chance to complete Diploma in Public Health (from Madras Medical College) within 4 years of joining. After completion of diploma they are regularized and with vacancy they will be promoted to the deputy director position. Three categories of posts are available for deputy directors- first at district level to head primary health services, second as principal of training institutes

and third as faculty in community medicine department of medical colleges. With MD medicine they can pursue their career in the medical colleges otherwise they have the option to come back to the field postings. Deputy Director can become Joint Director, Additional Director and Director with seniority and vacancy.

b) Medical Services Cadre:

All Medical Graduates enter this cadre at the PHC/CHC as Medical Officer and after three years of work, all MBBS doctors become eligible to join PG specialization as government candidates in all Medical colleges. After the specialization they become assistant surgeons. Assistant surgeons after five years of service completion can become civil surgeon. With two more years of service and availability of vacancies a Civil Surgeon can become Chief Civil Surgeon. They can also move to medical college as faculty if they possess right qualification. This cadre is deployed in the hospitals and provides specialist services and manages the hospitals.

c) Nursing Cadre:

i. All ANMs (one and half year Certificate Course) join as VHN and can become Sector Health Nurse and subsequently Community Health Nurse and District Maternal & Child Health Officer based on the vacancy and the seniority.

ii. All GNMs (three and half year Diploma Course) join as staff nurse in PHCs. From here they can become ward sister, matron, senior matron based on vacancy and seniority. NRHM nurses are contractual initially; when vacancy comes they are given regular services. However till the vacancy comes they remain in the contractual service. The amount of salary paid to the staff nurse is less as compared to the regular nurses. However in the field this has not been seen as obstacle in the performance.

C. Vacancies

Vacant positions are still there in both directorates. In DPH&PM high number of vacancies for MPW (HIs), MCH Officer, MMU MOs, Sector Health Nurse & Nursing Assistant is seen. In addition 25% posts of Deputy Directors are also vacant which impacts routine management of preventive and promotive services. In DM&RS vacancies exist in all specialty however vacancies for Obs &Gyn, Pediatrician and Anesthetists are high as compared to vacancies in other specialist positions.

The state has acute shortage of grade-IV staff. In more than 200 bedded hospitals tasks of grade IV staff is outsourced to external agencies. In less than 200 bedded hospitals it is conducted with contractual arrangements. However the monetary incentives given to cleaning staff and security personnel is Rs. 1000/m only which is very low and needs revision as per the norm

Table -18 Vacancies in Tamil Nadu 2012			
Directorate of Public Health & Preventive Medicine (DPH&PM)		**Directorate of Medical & Rural Services (DM&RS)**	
Designation	**Vacancy (%)**	**Designation**	**Vacancy (%)**
Deputy Director of PH&PM	25	Medical Specialist -GM	10.7
Maternal & Child Health Officer	50.0	Surgery Specialists - GS	8.7
Medical Officer	16.9	O&G Specialist	18.5
Medical Officer (ISM)	7.5	Dermatologist/Venereologist	12.7
Medical Officer (Dentist)	3.7	Pediatrician	10.9
Medical Officer (MMU)	35.1	Anesthetist (Regular/ trained)	21.7
Sector Health Nurse	31.2	ENT Surgeon	16.2
Staff Nurse	12.4	Ophthalmologist	2.9
Nursing Assistant (M+F)	48.3	Orthopedician	10.8
ANMs	7.0	Radiologist	3.0
Block Health Supervisor	26.8	Casualty Doctors/ General Duty Doctors	12.3
Health Inspector Gr I	43.1	Dental Surgeon	17.2
Hospital Worker	26.0	AYUSH Physician	14.4
Pharmacist	10.2		
Radiographer	20.6		
Lab Technician	28.6		

D. HRH Production

TN has adequate number of medical colleges, AYUSH colleges and nursing schools as per the current requirement. However the state is lacking Male health Workers Training Institutes. The overall HRH production in the state is given below-

Table -19 Medical AYUSH and Nursing institutes in Tamil Nadu -2012				
	Public	**Private**	**Total**	**Annual Intake**
Medical Colleges	18	30	48	5385
AYUSH Institutions				
Siddha	3	5	8	380
Homeopathy	1	9	10	550
Unani	1	0	1	26
Ayurveda	0	7	7	290
Naturopathy	1	4	5	220
Yoga	1	0	1	
Nursing Institutions				
ANM	5*	17	17	437
GNM (including post basic)	24	184	208	5821
Health Visitors	1	1	2	90
BSc Nursing (including post basic)	6	155	161	8620
MSc Nursing	2	40	42	780

*Admissions withheld in these five training centers.

E. AYUSH

The GoTN has adopted the policy of co-location of ISM wings at all levels starting from the PHCs in rural areas to Medical College Hospitals in urban areas. Under NRHM the state has taken initiatives to recruit AYUSH practitioners on contractual basis. Contractual AYUSH MOs work three days per week and are paid Rs. 3000 per week. In addition to the providing of AYUSH services, AYUSH MOs take part in School Health Program, MMU activities and are also members of RKS committees. However there is no plan carved for their regularization and career development. In Tiruppur District AYUSH OPDs were functional for all five days a week and AYUSH MOs were involved in the other NRHM activities. However in Cuddalore District AYUSH MOs were working for three days week only and were not involved in any of the NRHM activities.

Table-20 TAMILNADU - ISM - Doctors Position - 2012

SN	Specialty	Regular - Sanctioned	Regular – In Position	Vacancy-Regular	NRHM – Sanctioned	NRHM-In Position	Vacancy-NRHM
1	SIDDHA	824	730	94	275	245	30
2	AYURVEDHA	51	46	5	52	42	10
3	UNANI	28	5	23	40	23	17
4	YOGA & NAT	2	2	0	51	41	10
5	HOMEO	49	32	17	57	52	5
	TOTAL	**954**	**815**	**139**	**475**	**403**	**72**

Trainee Staff Nurses – DH Cuddalore 7/11/12

GNM Training School Tiruppur 8/11/12

F. HR Management

a) Rational Deployment

State has made it mandatory to rationally deploy HR in all facilities.

i. A policy decision has been taken at state level to provide 2-3 MOs in all PHCs (6 to 10 bed) and 5 MOs in all CHCs (30 beds).

ii. State has not intended to place specialist in these facilities. There will be one Level II MCH centers in each health unit district where Gynecologist, Anesthetist and pediatrician will be placed. In rest places MOs will be trained in LSAS and EMOC.
iii. **Dentists:** In all PHCs and higher centers contractual recruitment of dentists is done to provide dental services in these facilities. They work for half a day on 6 days a week and are paid Rs. 3000 per week. Plan has been developed for their utilization in dental screening and school health program for which they will be paid additionally.
iv. **Second ANM:** All HSCs have only one ANM and no second ANM is provided in any HSC currently. This is the policy decision the state has taken. As only in few HSCs deliveries are taking place, these HSCs with some additional HSCs in difficult areas will be provided with second ANM. A total of 237 HSCs will be provided second ANMs through ongoing recruitment process.
v. In Tamil Nadu State the Diploma in Public Health staff at state level is posted in the ICDS Department for better convergence.

b) Retention & promotion

i. There are fixed number of posts in each cadre and when vacancy is notified, senior person is given preference for the promotion.
ii. There is more promotion opportunities exist in the DM&RS than DPH&PM.
iii. For Medical Officers, ANM & Staff Nurses career path is defined and based on the vacancy and seniority they are promoted time to time.
iv. There is no promotion policy in place for contractual AYUSH, MMU doctors.

c) Postings and transfers

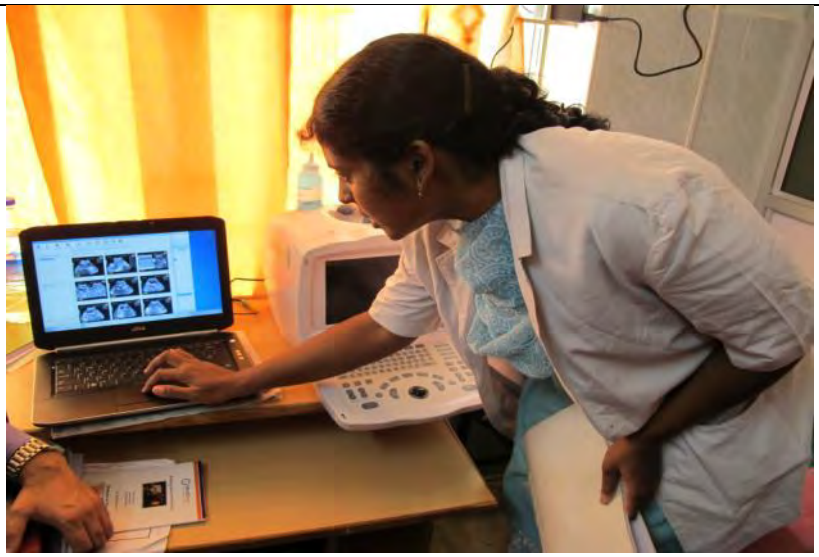
All postings are done by the respective Directorates, however fresh candidates are given choice of posting. Transfers and postings are not done by districts and based on the requirement they can only attach staff from one place to other.

d) Incentives and allowances (for Medical Officers)

i. Allowance to work in rural areas- Rs. 1000/m
ii. PG preference to 50% seats if work for minimum two years in rural areas. For each year of service one additional mark is also awarded.
iii. Non-practicing allowance is given to some cadres only- administrators, Public Health Cadre. Allowance varies from cadre to cadre and is ranges from (1000-1800 Rs/m)
iv. In most of the facilities residential accommodation is given to MOs.

e) Residential Facilities

In most of the facilities residential accommodation is available for the staff. However the Medical Officers doesn't stay in government quarters and they mostly stay in nearby urban area. State is not interested in constructing more quarters for doctors due to under utilization. However all staff nurses are provided residence in the facility premise on priority basis. The other available quarters are given to the rest of hospital staff.



Medical Officer Conducting USG Scan 7/11/12 Kunnuthur PHC, Tiruppur District

Recommendations

I. All vacancies need to fill-up immediately. I t would be advisable to delegate recruitment responsibility to recruit MOs, specialist at the District level.

II. Male Health Workers should be made available and some of the training institutes should be strengthened for MPW training.

III. Payment of Grade IV staff should be raised up to the daily wedge norms.

IV. There are limited promotions opportunities exist for the doctors and nurses working in the Directorate of Public Health & Preventive Medicine and whenever vacancy comes in the Directorate of Medical & Rural Services they move for better career progression. It is advisable that more career progression opportunities should be carved for the doctors and nurses working in the primary care institutions under the Directorate of Public Health & Preventive Medicine.

V. Absorption and career progression plan for the AYUSH contractual staff should be carved in the State. It is also advisable that they should be given opportunity for multi-skilling and work for other NRHM programs such as school health, screening, outreach camps, MMUs and can also work for program management with additional training on public health management.

VI. State needs to assess utilization of residential accommodation by PHC/CHC staff and it should be ensured that at least staff nurse should stay in the PHC premise if MO is staying outside.

TOR IV-Reproductive and Child Health Program

Main Observations

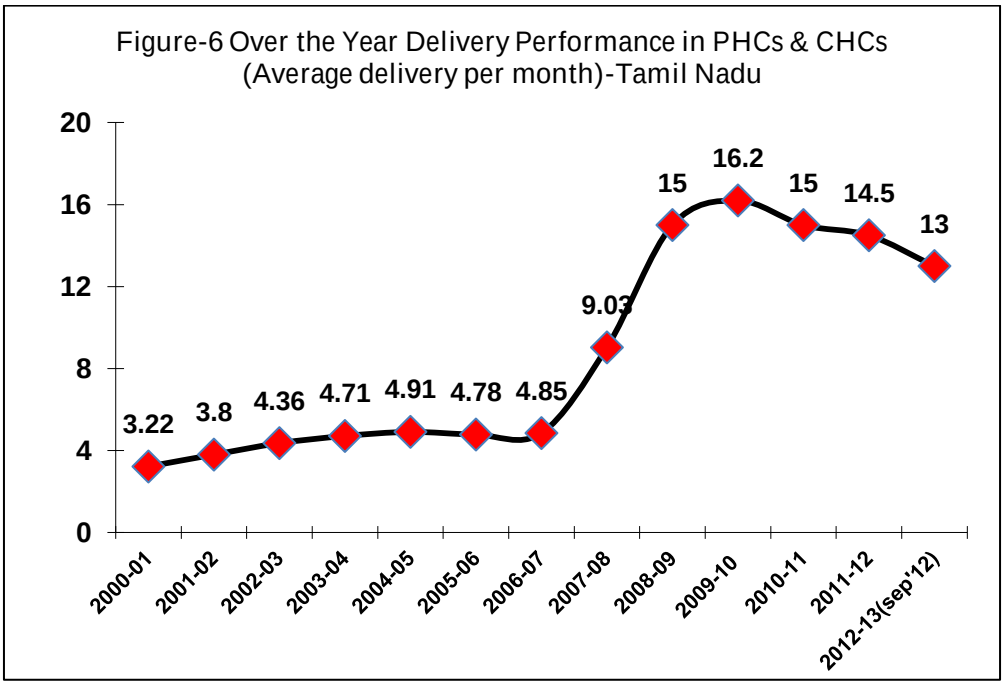
A. Maternal Health

Tamil Nadu is one of the better performing states in the country in terms of reproductive and child health services. Systematic planning, infrastructure development and provision of adequately skilled human resources, medicines have supported the state in achieving maternal child health goals.

I. Basic Obstetric Care:

i. As for as maternal health is concerned, all PHCs in the state are providing 24x7 delivery services, in addition 105 PHCs are also providing caesarian section services. All PHCs are staffed with 3 Staff Nurses trained in SBA, F-IMNCI, NSSK and IMEP. All Medical officers are given short term anesthesia training and emergency management of obstetric care training at the PHC level.

ii. Vibrant PHCs are seen in the state and a substantial load of institutional deliveries are being managed at the PHC level. PHCs are equipped for complications management and 13.8% of obstetric complications were management at the PHC level (HMIS 2011-12). In addition PHCs have conducted 1.7% of c-sections during same period.



II. Emergency Obstetric Care:

iii. As 24x7 emergency obstetric care is available in the hospitals, most of the PHCs perform only elective caesarians and emergency cases are referred to the higher centers. 108 referral transport service is used to transfer emergency obstetric cases to the SDH/DH.

Out of the total obstetric emergency rescue by EMRI-108 Service 48.9% were inter-facility transfers.

iv. There are 42 Level II MCH Centres and 18 MCH hospitals in addition to 29 well functional DH and 232 SDH.

Table-21 Facility based RCH Services in Tamil Nadu (2012)				
	PHC	**CHC**	**SDH**	**DH**
Total No. of Facilities	1229	385	232	29
Facilities providing 24x7 Delivery services	1127 (99.8%)	385 (100%)	232(100%)	29 (100%)
Facilities providing C-Section	13 (1.1%)	84 (21.8%)	131 (56.5%)	29 (100%)
Facilities with Blood Bank (BB)	0	0	29 (12.5%)	25 (86.2%)
Facilities with Blood Storage (BS) Unit	16 (1.3%)	195 (50.6%)	38 (16.4%)	2 (6.9%)
Facilities providing Abortion 1st Trimester	67 (5.5%)	349 (90.6%)	227 (97.8%)	29 (100%)
Facilities providing Abortion 2nd Trimester	0	77 (20%)	108 (46.6%)	29 (100%)
Facilities providing Male Sterilizations	1227 (99.8%)	385 (100%)	232(100%)	29 (100%)
Facilities providing Female Sterilizations	67 (5.5%)	349 (90.6%)	227 (97.8%)	29 (100%)
Facilities with NBSU	-	-	114	
Facilities with SNCU	-	-	47	

III. Blood Bank & Blood Storage Facility:

i. Blood banks functioning at the SDH/DH level only, however CHC (50.6%) & PHC (1.3%) have blood storage centers other than SDH (16.4%) and DH (6.9%). In addition 138 PHCs have also been provided with the equipments for the establishment of the blood storage units, which is yet to be operationalized.

ii. Through blood donation camps, blood collection is being done in the districts. A good convergence between youth welfare organizations, health department and NGOs is seen for the organization of the blood donation camps.

iii. All blood storage unit and blood banks work in close coordination with private blood banks/ storage units for the exchange of blood, reduction of wastage and for fulfilling emergency requirements.

IV. Safe Abortion Services:

i. First trimester abortion services are available in the all CHCs, SDH, DH and MCH centers. However only 5.5% of PHCs only have first trimester abortion facility.

ii. Second trimester abortion services are available in the all District hospitals and MCH centers. In addition half of the SDH and 20% of CHCs also have second trimester abortion services.

iii. In the FY 2012-13 up to September month, 57003 Abortions (6.04% of estimated pregnancies) have taken place.

iv. District level Committee has been constituted for the certification and regulation of private sector for provision of safe abortion services.

V. RTI/STI Services:

402 ICTCs are functioning in the PHC & CHCs for the provisions of RTI/STI services in the state. Each pregnant woman is screened and treated for RTI/STI in these centers. In addition counselling is also done at ICTC centers.

VI. JSSK-

i. All clinical services at Government institutions are provided free of cost in the state and government orders were issued for JSSK.

ii. Free transport is provided through 108 services. 1 to 2 vehicles are upgraded for neonates/ district.

iii. Drop back facility is provisioned through government vehicles. Diet for Antenatal mothers visiting the Ante Natal clinics under NRHM. Diet to delivered mothers under JSSK being provided at CHC/PHC and UHP.

iv. It has been seen that there is higher out of pocket expenditure for the drop back. Even the utilization of EMRI 108 by pregnant women is low.

v. There is limited IEC material found on JSSK entitlements in the facilities visited in both districts.

VII. JSY

i. The women delivering at the facilities are provided with JSY benefits.

ii. Across the state, there exists a mechanism for cross-verification of JSY beneficiaries through random checks conducted by district level officials.

iii. However, the team found that the web-site listing of JSY beneficiaries has not yet been instituted by the state.

VIII. State Initiatives:

i. **Congenital anomaly screening** is being done in all CHCs. 2 MOs in each CHC are trained for a short duration to perform obstetric scans. The State has done MoU with the MediScan to train MOs in detection of congenital anomalies. There is online auditing of images for one year after training. Till date, 630 Neural tube defects/ major congenital abnormalities have been identified.

ii. In addition to the JSY, the state has another conditional cash transfer scheme named **Dr. Mutthulaxmi Reddy Maternity Benefit Scheme (MRMBS**). In this scheme all BPL pregnant women are given 12,000 Rs. If they complete all ANC, delivery, PNC and child full immunisation in the government facilities. To improve service utilizations form the public facilities the state has not accredited private providers either for JSY or for MRMBS,

iii. Tamil Nadu is the first state in the country to introduce **injectable iron sucrose** for the treatment of moderate anemia (7-9gm%). In the facilities visited, the team for Thirupur district found well maintained registers of pregnant anemic women as per their trimesters. In addition management of gestational diabetes in also done at the PHC level.

iv. Active Management of third stage labour training to combat Post Partum Heamorrhage (PPH). State has also introduced **Non-Pnuematic Anti Shock Garment (NASG)** for the management of PPH.

Field Observations

- All the PHC's visited had protocols related to AMTSL, Eclampsia management and new-born resuscitation prominently displayed in the labor rooms. In comparison there was no uniformity in display of protocols at most of the secondary facilities visited by the teams. For instance GH Kangeyam had no protocols whereas GH Udumalpet which was a high delivery case load facility had limited ones.
- All the staff nurses interviewed were well versed with AMTSL protocols, PPH/Eclampsia management and infection prevention practices. One notable feature which was witnessed by the team was the mentoring support available to the PHC S/N. In the 24X7 PHC's there was a chart displayed in the labor room which had the details of the nearest referral centre (GH/DH) to be contacted for emergency cases.
- The emergency drug trays too were found to adequately and appropriately stocked with all drugs.
- Partographs were available at all birthing centres and the team found that they were attached for all labor cases. However, fetal dopplers, cardiotocography machines not available in labour rooms.
- Interviews with post-natal women at the facilities revealed a high degree of satisfaction with the quality of services received.
- All the facilities visited had provision of laboratory services which offered a range of bio-chemistry, pathology and micro-biology tests based on the level of facility.

v. High risk cases are admitted to the CHC before expected delivery date under close supervision of the staff nurse and when referred to the higher center, staff nurse accompanies the patient with the attendant. The state has also started **birth companion program** through which one attended from family is allowed to be in labour room to support mother at the time of delivery which the team found to have had a positive impact on promoting institutional deliveries.

vi. **Maternity Picnic** and **Bangle ceremony** is being conducted by the health staff with pregnant women to reduce gap between service providers and users and to improve more trust on the service providers.

IX. Maternal Death Review

The maternal death review at the facility level and community level was one best practice which the team found out to be very effective in tracking and ascertaining the causes of maternal death. The Maternal Death Audit is conducted through Video

Conferencing on every 4th Thursday by team of medical experts at state level whereas the community level audit is conducted by the district collectors.

B. Child Health

I. New Born care

i. All the PHCs across the state have been provided with New Born Corner – Radiant warmer, other necessary equipment and trained staff.

ii. There are overall 47 Sick newborn Care Units located at medical colleges hospitals, district hospitals and large sub-district hospitals. However, there is no state-wide tracking mechanism for SNCU babies as this data is not captured either in the HMIS or the PICME software.

iii. In addition there are 114 NBSUs are available at SDH & DH level.

iv. A pilot has been initiated in 3 SNCUs and based on it implementation of tracking mechanism is being planned. The NBSU support has been approved in August 2012. All extramural admissions are by 108 ambulance service.

v. All Doctors in SNCU are pediatricians and trained in facility based new born care.

vi. For better home based care the State has initiated HBNC training in 15 blocks with high IMR. A total of 1500 ASHA (100 per block) are being trained on home based new born care. Monthly one paediatrician from SNCU will visit the PHCs in the block to provide training and handholding support.

vii. One best practice that the state has instituted is the issuance of the Birth Certificate at the place of delivery in rural areas. The team noted that this was being done at all facilities and the delivered women and their families reported satisfaction at this service.

viii. The Community based verbal autopsy of each infant death is ongoing in the state since 2010 whereas the Facility based infant death audit in all SNCUs has been initiated since April 2012.

ix. The team to Cuddalore witnessed a pilot Scheme for intervention services for children with disabilities in collaboration with NGOs. The team to Thirupur found a research study project for children with Neuchene's Muscular Dystrophy being implemented in the district.

II. Nutritional Rehabilitation Center

The state currently does not have any NRCs. Two NRCs are proposed to be established in this year.

III. Immunisation

i. In terms of immunization, in the state annually about 12 lakh pregnant women and 11 lakh infants are targeted and immunized with different vaccines. In recent years, the full Immunization coverage had dropped by 10% in the state (DLHS-2: 91.4% and DLHS 3: 81.6%). The state had stopped vaccination in outreach sessions after the AEFI report in 2008. This had translated into 4% children missing vaccination.

ii. For the current year this has increased and state has reinstituted the provision of outreach immunization services. Now, field immunization services are provided to all villages on every Wednesdays through the VHND's with an average of 10,00 weekly immunization sessions being conducted.

iii. In addition, institutional immunization is provided in all Govt. Hospitals on 3 or more days per week as per demand.

iv. Due to successful implementation of immunization programme, the State has had no polio case for the past 8 years, neonatal tetanus has been virtually eliminated and the incidence of Diphtheria, Pertussis is almost nil.

v. AEFI committees are formed in each district and at the state level and the reporting is done as per GOI guidelines.

vi. Measles cases are currently reported around 2000 cases annually and Measles 2nd dose vaccination has been introduced under routine immunization in the entire state of Tamil Nadu for the 16 month – 24 month age-group. Pentavalent vaccine too has been introduced under routine immunization in the state from Dec. 2011.

vii. Other initiatives by the state include: Routine immunization given to the migrant children of other States, 2 special rounds of OPV conducted every year exclusively to cover migrant children prior to National Pulse Polio campaign, Hepatitis B birth dose started and JE vaccination implemented in 9 districts.

C. Adolescent Health

i. Adolescent health program is implemented through 17 Medical colleges by establishing Teen Clinics. Third year MBBS students and Nursing students are trained in Adolescent health. The program has linkage with the Modified School Health Programme and cases are referred from the schools.

ii. Biannual deworming and weekly supplementation of Iron tablets on every Thursday to school and non school going girls.

iii. The state has introduced Modified School Health Programme, which is implemented in phased manner throughout the state.

D. Family Planning

The state has achieved replacement level of fertility with a low TFR of 1.7. However, the contraceptive usage pattern is skewed towards sterilizations and spacing methods form a miniscule proportion of the overall CPR.

i. All facilities with operation theatre provide family planning surgeries. At the CHC level fixed day family planning surgery facility is available. Most of the surgeries conducted are post partum. Laparoscopy camps are conducted in the CHCs, once in a month. In addition camps are being held in the tribal blocks where performance is poor.

	
Staff Nurses with delivery records –CHC Kammapuram Cuddalore Dist 6/11/12.	VHN Taking Blood Pressure at HSC Periyakurichi Cuddalore Dist 7/11/12.

ii. The state has accredited private institutions for the provision of family planning services.

iii. The state has instituted the new Multi-load Cu 375 at the District Hospital level. The ToT's have been conducted and cascade training initiated for post-partum IUCD services at high case load facilities. The assistance of FPAI has been taken for PPIUCD and interval IUCD trainings.

iv. The state has initiated the process of appointing dedicated RMNCH/ FP counsellors at high case load facilities. 172 counsellors have thus far been appointed in 110 institutions based on case load (1for less than 100 deliveries and 2 for more than 100). The state has constituted QACs at state and district level for monitoring of FP programme. The state has also initiated measures for strengthening contraceptives supply management up to peripheral facilities for IUCD, Tubal ring, Condoms and OCPs through the DFW and District FWB. For the supply of ECPs – PIP approved through TNMSC.

v. The FP commodities and services at HSC level too were found to be limited. The shortage of NSV technique trained doctors was also found to be a barrier for affects the provision of male sterilization services. Male participation in the family planning services was almost nil in the State. Although there was IEC material for FP services there was lack of concerted BCC efforts for enhanced male involvement. Emergency contraceptive pills non availability was an issue across facilities. The team visits to the districts revealed that provision of Safe abortion services (MVA) was not uniformly available at facilities.

Recommendations

I. Web listing of JSY beneficiaries needs to be done at the earliest.

II. JSSK entitlements need to be prominently displayed in all facilities. Drop-back services need to be strengthened and proper data needs to be collected on drop-back to improve services.

III. Tracking of severely anemic pregnant women treated with injectable iron sucrose need to be done to identify/document outcome of the treatment.

IV. There is a need for sensitizing facility level providers in appropriate usage of the non-pneumatic anti-shock garment (NASG) usage which is an innovation introduced in the state for obstetric shock cases resulting from PPH.

V. Safe abortion services through MVA need to be ensured at designated service delivery points.

VI. Tracking of newborns in the SNCU needs to be done for improved survival.

VII. Adolescent health is missing from the whole gamut of primary care and it needs to be established in all districts at the CHC/SDH/DH level. The current policy of ARSH clinics at only the medical colleges in the state needs to be revisited to ensure that adolescents are adequately reached for preventive and curative services.

VIII. There needs to enhanced focus on spacing methods and PPFP services need to be strengthened. IEC/BCC activities need to be done to improve utilization of contraceptive methods. Regular and adequate supplies of contraceptives need to be ensured with the HSCs and with the ASHAs in tribal areas. Emergency contraceptive pills need to be made available across all service delivery points.

IX. There is a need for uniform SOP's and guidelines related to RMNCH to be displayed at various levels of facilities. There is wide variability in the guidelines availability and also the post-training mentoring support of trained providers at the primary and secondary levels of care. A nodal person similar to District MCH officer who is a lady PHN and supports the primary care facilities needs to be identified for the secondary care institutions to ensure uniformity of quality support.

TOR V- Disease Control Programs- Communicable and Non Communicable Diseases

Main Observations

A. IDSP

i. The Integrated Disease Surveillance Programme (IDSP) is being implemented in the state which continuously monitors the occurrence of infectious diseases and outbreaks on daily and weekly basis.

ii. Two District Public Health laboratories are functioning in Cuddalore and Ramanathapuram districts. Six District Public Health Laboratories are under establishment in Erode, Thiruvannamalai, Tiruchy, Dindugul, Nagappattinam and Kanyakumari districts.

iii. The data is collected on a weekly basis and send to IDSP unit at district level. In case of Tiruppur district, IDSP unit establishment is in process and reporting is done to Coimbatore IDSP Unit. In Cuddalore District daily reports are send on time to IDSP unit.

iv. Regular feedback is received from IDSP unit and the same is given to the concern PHCs for necessary action. The data is also used for district planning. IDSP unit makes awakening call before 11 AM daily to the identified government and private hospitals in the high risk areas to identify cases.

v. In Tiruppur District currently Health Inspector is doing data entry at PHC level. Data entry operator and Data Manager are required. In Cuddalore District adequate staff is available.

vi. Health Inspectors (HI) at PHCs conducts surveillance activities at Health Sub centre level. The Health Inspector and Entomologist report if any disease alert identified to Deputy Director of Health Services and the same is communicated to Directorate of Public Health (DPH). Cross notification action is taken immediately. Also immediate action is taken if any media alerts received from central surveillance unit.

vii. Leptospirosis is a State Specific disease under Integrated Disease Surveillance Project. A Leptospirosis reference laboratory has been established in the Directorate of Public Health and Preventive Medicine, for diagnosis, training and research on Leptospirosis.

Recommendations

I. Fill all vacant posts in the District Surveillance Units.

II. Data should be used at all levels for program improvement.

III. District and Block officers' needs to be motivated to conduct local review meetings more frequently.

B. National Vector Borne Disease Control Programme (NVBDCP)

i. More number of Dengue cases is reported in this year as compared to last year in the State. Thiruppur District is not Malaria prone and has cases due to migration only. Chickengunya cases were also found but were on lower side. (In Thiruppur- 5 cases reported this year and 2 cases were reported last year and in Cuddalore 13 cases were found this year and 11 cases were found last year.) No cases of Japanese Encephalitis and Kala-Azar were reported in Thiruppur District. In case of Cuddalore District, 2 cases of Japanese encephalitis were found this year.

ii. Various measures like fever surveillance, source reduction, temephos application, indoor fogging operation, IEC activities (HI, VHN and local PRI members conduct these activities) are taken for vector control.

iii. There is no direct involvement of PHC MOs in NVBDCP activities except for treating the fever cases and supervision of health inspectors. The ASHAs, VHNs and PRIs are actively involved in NVBDCP activities. Local level initiatives are taken by VHSNCs. If any alert is received, Emergency Response Team is formed comprising of MO, VHN, HI, Block Health Supervisor, MMU, Staff Nurse etc. and immediate action is taken. PRIs are actively involved in all the activities.

iv. IRS and LLN are not being used in Tiruppur District but in Cuddalore district IRS is administered in the affected areas and also in areas where newer cases are being reported. AT PHC level microscopy is done but no RDT is used. Revised drug guidelines are being followed. No incentives are being paid for Malaria and Kala-Azar programmes. Drugs provided to PHCs (On demand) from DDHS office who receive it from regional centers. Although drugs are available at DDHS office, most of the PHCs have had no anti-malarial drugs. Bed nets are not provided. MDAC is not done and no cases of lympodema and hydrocele were reported.

v. NIV kits are made available and reporting is done at 3 Regional centres - Zonal Entomological Team, Coimbatore; CMCH Hospital, Coimbatore and Institute of Vector Control and Zoonoses, Hosur.

vi. The density of the Ades larval survey and control activities are being carried out by the Health Inspectors every Wednesday. Aedes larval control activities are also carried out by mobilizing the student and the local body's members and volunteers. House to house elimination of breeding sites is carried out in villages and town panchayat areas.

vii. Since an increasing number of VBD cases are surfacing the district health department under the leadership of the District Collector, extensive activities for its control and eradication were underway during visit of the CRM in both districts.

viii. **Japanese Encephalitis (JE)** has emerged as an important public health problem in the state during the last decade. Districts such as Perambalur, Villupuram, Cuddalore, Tiruvannamalai, Virudhunagar, Tiruchirapalli, Thanjavur, Tiruvarur and Madurai report JE cases. Japanese Encephalitis Control Units at Cuddalore, Villupuram, and Perambalur with Monitoring Unit in Chennai are carrying out Japanese Encephalitis

Vector Control activities. JE vaccination is being carried out in the above said districts under routine immunization and all children at the age of 18 months are being immunized. JE vector monitoring is being carried out regularly in the endemic districts. Fogging operation is being carried out in villages where suspected JE cases are reported. Acute Encephalitis Syndrome (AES) Surveillance is being carried out in District Head Quarters Hospitals, Medical College Hospitals and major private hospitals. Serum samples are taken from the AES cases for diagnosis of JE. Lab diagnosis is done in 4 Medical College Hospitals and King Institute of Preventive Medicine. When JE is confirmed by laboratory diagnosis, necessary symptomatic treatment is given to the patient in Medical College Hospitals. In case of Tiruppur no cases of JE were reported this year, but in Cuddalore District two cases were reported in the current year in comparison to one in 2011, nevertheless the district health department is closely tracking for surfacing of any newer cases in Cuddalore.

ix. Diagnostic centres for JE, Chickungunya and Dengue are functional at 3 regional centres - Zonal Entomological Team, Coimbatore; CMCH Hospital, Coimbatore and Institute of Vector Control and Zoonoses, Hosur.

Recommendation

I. Acceleration of anti malaria activities required for improving surveillance and management of malaria cases. Malaria Drugs & Mosquito nets should be available in facilities.

II. The line listing of lymphoedema and hydrocele cases needs to be mapped for each district indicating the village-wise list in order to help in morbidity management.

III. Strengthening of PHCs/CHCs is required to sustain action for management of lymphodema and surgical operation of Hydrocele.

IV. Sentinel surveillance system for Dengue/Chikungunya and JE needs to be established in endemic districts.

V. For the control of Dengue/DHF/Chikungunya, legislative measures by local bodies and public partnership need to be strengthened.

C. Revised National Tuberculosis Control Programme (RNTCP):

i. The RNTCP programme in Tamil Nadu is implemented in all the districts through 144 TB Units, 791 microscopy centres and about 11,000 DOT centres. One TB Unit (TU) is formed for every 5 lakh population and each TB Unit is manned by one of the PHC Medical Officers in the Unit, who is designated as Medical Officer (TB Control). One Designated Microscopy Centre (DMC) has been formed for every 1 lakh population with one Laboratory Technician who is provided with a Binocular Microscope.

ii. Multi Drug Resistant TB is a new challenge that has arisen in the field of TB management. DOTS Plus activities for the management of Multi Drug Resistant TB patients, which was started from 30.01.2010, in 4 districts in Cuddalore, Kancheepuram, Villupuram, Tiruvannamalai and Government Hospital for Thoracic Medicine,

Tambaram has been extended to 15 more Districts i.e. Vellore, Dharmapuri, Krishnagiri, Salem, Namakkal, Thoothukudi, Tirunelveli, Coimbatore, Erode, Thanjavur, Nagapattinam, Virudhunagar, Tiruvallur, Dindigul and Theni Districts. The Programme will be extended to the rest of the state shortly.

iii. Culture tests for Multi - Drugs Resistant TB (MDR) patients are being carried out at the Intermediate Reference Laboratory (IRL) established in the campus of the Institute of Thoracic Medicine (ITM), Chetpet.

iv. The State TB Training and Demonstration Centre established in the ITM Campus, Chennai is conducting training to all those associated with the TB control Programme in the State.

v. **Tiruppur District Findings:** Under RNTCP 85 % treatment rate achieved but district is facing constraints in case detection (49%) because migration is on large scale in Tirruppur due to textile industry. Also High default rate (6.1%) is found in Tiruppur district. Currently in Tiruppur 14 patients are on MDR-TB treatment. Numbers of cases are increasing over the years. No efforts are being taken by district to work in collaboration with factory.

vi. **Cuddalore District Findings:** During the past three years ie. 2009-10 to 2011-12 there has been a gradual decline (from 63% to 58%) in achieving the targets for new sputum smear positive detection rate. However in the first six months of current year 2012-13 the achievement has been better at 72%. On the other hand, the Cure Rate under RNTCP has declined to 87% in the first half of the current year from 91% in 2009-10. The Failure rate in the same period is at 0.75%, Death Rate is 6.4% and the Default Rate is 4.75%.

vii. In Tiruppur District One STLS, one TB Health Visitor, One Lab Technician, posts is vacant. In Cuddalore District 10 Lab Technician posts are vacant.

Recommendations:

I. To improve TB case detection Factory Health Inspectors need to be involved for referral of cases to the public health facilities.

II. Private sector health facilities (hospitals, clinics and diagnostic labs) need to be covered and tracked for any newer cases.

III. Intensive IEC efforts needs to done to educate community about the availability of free TB treatment in the facilities.

D. National Program for Control of Blindness (NPCB):

Observations & Recommendations:

Performance of government's eye care services is much better as compared to the NGOs in terms of achievement against targets and is improving over the years. However, the rationale for allocating targets for government facilities vis-a-vis NGOs needs to be reviewed and revised to cover a larger share of potential eye care seekers.

A progressive shift of service provisioning share from NGOs to Government needs to be considered. This is currently in the ratio of 15:85 between the Government and the NGOs.

As evident from the records and also as indicated by the DBCS official of Cuddalore district, the services of the government eye care facilities can be improved by addressing the following aspects – adequate number of Medical Officers need to be inducted and deputed, ophthalmologists should only concentrate on clinical work and the administrative responsibilities be vested in administrative staff, adequate number of nurses and theatre assistants needed exclusively for eye operations PHCs at Vadalur, Puduchattaram and Oariyur should have exclusive Operation Theatres for eye operations, considering the potential and volume of patients, more number of beds should be provided in rural hospitals/ facilities to accommodate the ophthalmic patients, designated number of instruments need to be provided to the existing facilities (especially in the GHs of Chidambaram, Vriddhachalam and Panruti). Also modern instruments such as Ultrasonograph (B Mode) instrument, Non-Mydriatic Fundus Cameras, Green Retinal Laser, High End Microscopes and Flash Autoclave should be introduced to increase the efficiency of services. There is obvious need for effective IEC to reach the rural and urban population

An analysis of the data shared with the CRM team indicated that although the NGOs and the private practitioners are dominating the urban eye care services, the rural clientele is still not being adequately covered by them. (Of the 1939 operations conducted at the government facilities during the period April – October 2012, only 168 operations were in the urban facilities, whereas 1771 operations were conducted in the rural facilities). Hence the government health care facilities have a marked potential to cover the rural areas and thereby enhance their share of eye care services in the district.

Lab Technician Conducting Widal Test DH Tiruppur 8/11/12

Blood Storage Unit –GH Vridhachilam, Cuddalore District 8/11/12

E. National Leprosy Elimination Program (NLEP):

As Tiruppur district is newly carved out, the leprosy activities for Tiruppur HUD is looked by Coimbatore DD, Leprosy and similarly Dharapuram HUD is looked by Erode DD, Leprosy. Target for elimination is achieved in 2005. So now programme is awareness oriented and not target oriented. Adequate funds and drugs are available in both Tiruppur and Cuddalore district.

Staff at Tiruppur disrtict:

Technical Staff: DD, leprosy – 1, health educator- 1, health inspector-6 (4 available), non-medical supervisor-1, Physio therapy – 1, Administrative Staff: assistant-1, oa-1, Driver-1.

Staff at Cuddalore District:

Technical & Administration staff - District Leprosy Officer – vacant (sanctioned 1), Medical Officer – nil (sanctioned nil), Health Educator – 1 (sanctioned 1), Non-Medical Supervisor - (sanctioned 1), Health Inspector – 2 (sanctioned 2), Phy. Tech – 1 (sanctioned 1), Assistants 1 (sanctioned 2), OA – nil (sanctioned 1), Driver 1 (sanctioned 1), LT 1 (sanctioned 1)

DPMR guideline is being implemented and Re-Constructive Surgeries conducted. MCR footwear is provided in Tamil Nadu. The Treatment Completion Rate (TCR) of around 97 % was reported at both districts. The master treatment registers and individual patient cards are maintained at facility level all over the state. All districts have achieved the elimination target. In case of Cuddalore although the district's prevalence rate is less than one, the PR in the town of Nellikuppam is 1.69/ 10,000 and in Panruti it is marginally below 1, ie 0.96/ 10,000.

In Tiruppur HUD grade II disability was not found in new cases. 4 cases of grade I disabilities were found out of 34 new cases in 2012-13.In Dharapuram HUD: 24 new cases were detected this year. No case had grade I & II deformity. In Cuddalore District, 789 Grade II deformity cases were identified and 3 in 2012-13 (till August 2012). RCS was performed on 53 cases till March 2012 and 3 in 2012-13. Remaining RCS are needed in the earlier 14 cases and 11 during 2012-13. Of the 11 RCS conducted during 2011-12 10 were paid incentives, since eligible and these 10 showed functional improvements. While during the current year's 3 RCS cases were provided the eligible incentive and all three showed functional improvement.

Stigma is less due to vigorous and continuous IEC activities being conducted routinely. The IEC Planincludes Health melas (2/3 per year), Rallies (2/3 per year), Group Discussions, Training to staff nurses, VHNs, para medical staff, Quiz Programs for health staff. PHC staffs, VHN are trained to suspect leprosy cases in community. This staffs are trained on yearly basis. The challenge of field staff not much interested in leprosy activities after integration of leprosy program with public health was reported.

F. Non Communicable Disease:

i. Various programmes like Cardio Vascular Diseases Prevention and Control Programme, Prevention and Treatment of Diabetes Mellitus, Cervical Cancer Screening and Treatment

Programme, Prevention of Breast Cancer and Treatment are being implemented for early screening, detection and treatment for Non-Communicable Diseases.

ii. Nalamaana Thamizhagam, a non-communicable disease Program was implemented during 2010-11, in which screening of diabetes and hypertension was done in camp mode.

iii. For all the Non- Communicable Diseases (NCD) interventions explained above, massive IEC activities for creating awareness regarding the risk factors leading to diabetes and cardio vascular diseases as well as the need for diagnosis and continued treatment for all the NCDs have been initiated through the IEC wing of the Tamil Nadu Health Systems Project.

iv. Every Friday Special Diabetics and HTN clinic is conducted in PHCs. There is no linkage of NCD activities with school health program. AYUSH doctors are not involved in any of the activities related to national programmes.

v. In addition, need based programs are being conducted for specific conditions like in Coimbatore district Thalassemia program is implemented in tribal area in PPP mode with NGO. Also Muscular Dystrophy Programme is implemented in Tamil Nadu on pilot basis. (Thiruppur is one of the pilot districts).

vi. Medi Scan Program: Screening for early anomalies and delay in mile stones carried out in Thiruppur and few other districts on pilot basis.

G. Special programs for disability screening and treatment:

The state has launched a pioneering scheme using NRHM funds to screen all school children between the sixth and the tenth standards for refractive errors and providing those identified with free spectacles. School teachers will record about students to PMOAs (Para Medical Ophthalmic Assistant) and then PMOAs will provide spectacles to children.

National Control of Deafness Programme (NPPCD): This programme has been started last year and modified hearing equipments are being provided under NRHM.

TOR VI- Community Processes including ASHA, PRI, VHSC, CBM and NGO

Main Observations

A. ASHA Program

i. The state has initially taken up ASHA program for the tribal and difficult areas only. However later ASHAs were recruited in the non-tribal areas for program specific activities.

ii. In the first phase 2650 ASHAs were recruited in 12 districts. In second phase 4200 additional ASHAs were recruited for malaria program, for home based new-born care and for Leprosy and blindness control programs.

iii. Currently six districts Ariyalur, Karur, Madurai, Thiruvallur, Virudhunagar and Chennai have no ASHA in place.

iv. All ASHAs trained on module 1-5 and training on module 6 and 7 is going on in the state and relevant training for program specific ASHAs such as blood smear collection, IEC, fever surveillance and HBNC is going-on.

v. The activities currently conducted by the ASHAs in the state are: JSY, Female Sterilisation, Male Sterilisation, Home new born care, Reporting of Infant Deaths, VHN Day, PHC monthly meeting, Adolescent Aneamia Control Programme, Immunisation Activity, Vit A and Deworming camp, Disease Surveillance. For these activities ASHA is provided financial incentives. Payment to the ASHA is made directly from PHC to ASHA Bank account.

vi. The formation of State ASHA Mentoring group is in process and Institute of Public Health, Poonamallee is working as State ASHA Resource Centre.

vii. The state has proposed for one supervisor for 10 ASHAs per block which is approved in PIP 2012-13 and is under implementation. ASHA performance is being monitored by the PHC Medical Officers and field health staffs.

viii. Additional Director, State Health Society and Joint Director (PHC), Directorate of Public Health and Preventive Medicine manage the ASHA program at State level.

Table-22 Total ASHAs in Place –Phase I (Tamil Nadu) 2012

District	No. of ASHAs	District	No. of ASHAs
The Nilgiris	**413**	Tuticorin	**66**
Villupuram	**255**	Coimbatore	**62**
Tiruvannamalai	**219**	Namakkal	**47**
Vellore	**206**	Perambalur	**42**
Krishnagiri	**179**	Kancheepuram	**36**
Dindigul	**158**	Kanniyakumari	**36**
Tirunelveli	**156**	Thanjavur	**21**

Ramanathapuram	**152**	Cuddalore	**20**
Dharmapuri	**123**	Sivaganga	**17**
Salem	**111**	Nagapattinam	**16**
Trichy	**101**	Tiruppur	**13**
Pudukottai	**99**	Theni	**7**
Erode	**89**	Tiruvarur	**6**
Total		**2650**	

I. Tirupur District Observation

CRM team met group of ASHA and find out that:

- All the ASHAs have been in service for a period of 1-2 years in tribal areas of Tirupur District and all of them had received their induction training, had received drug-kits and hand bag. Currently all of them were undergoing training in Module 6/7.
- For majority of the ASHAs the desire to serve their own community was the main motivating factor for enlisting as ASHA.
- The services offered by them primarily comprised of safe motherhood messaging and escorting pregnant patients to facilities for institutional deliveries.
- In the field the ASHAs receive support from the VHNs of their respective HSCs, in case they need any information or support.
- The ASHA's find it a challenging task to manage their work responsibilities and domestic work. At several times they carry their children to facilities along with them in the course of their work/trainings. There is opposition from their family members as their remuneration is usually in the range of 500/600 INR which is sufficient only for their own transportation expenses. In spite of their difficulties, majority of the ASHAs reported that they would like to continue working as ASHAs as it gave them an opportunity to serve their own community and also for the fact that the community members treated them with respect.
- Although drug kits had been received, drug availability and replenishment is an issue. Only Tab. Paracetamol readily available with them and the community demand injectable medicines.
- Birth spacing acceptance is limited amongst the tribal community members and even the supply to FP commodities is restricted. This results in several instances of unwanted pregnancies and MTPs.
- The Mobile medical unit visits to the tribal areas are of irregular frequency and occur hardly once in 2/3 months.
- The community mothers visit Udumalpet Government Hospital for seeking health services for simple ailments like fever, cough, cold and vomiting which takes 2-3 hours to reach from their settlements and visit the nearby Amaravathi PHC only for complicated deliveries.

II. Cuddalore District observations:

In the District Coddalore ASHA was selected only for Tribal Areas. Only one batch of 20 ASHAs has been selected for Mangalur Block to cater hard to reach tribal areas. This batch of ASHA has joined the course on 6th August, 2012 and finished the course on 13th August, 2012. Training was imparted up to Vth Module. In the Managalur Block –PHC, Eight ASHAs were participated. During the interaction it was noted that they were trained about Identification of Anaemic patients, T.T., Counselling /motivating to beneficiaries for IFA tablets, Importance of breast feeding, Aware of sex detection tests etc.

	
ASHA speaking about health issues in village-Amravati Block Tiruppur District 5/11/12	Anganwadi Center Periyakurichi Village Cuddalore District 8/11/12

B. VHNSC

i. Village Health Nutrition and Sanitation Committees are known as Village Health Water and Sanitation Committee in Tamil Nadu.

ii. Till now 12618 VHWSC formed in Village Panchayats and 2540 in Town Panchayats.

iii. Village Panchayat president serves as Chairperson and Village Health Nurse function as Member Cum Secretary of the committee at village level. Other three members include AWW (to be nominated by the Chairperson in rotation for one year), Health Inspector, SHC Women Representatives (to be nominated by the chairperson in rotation for one year). For Town Panchayats also the composition is almost the same.

iv. Funds to the VHWSCS are directly released from BPMU in their bank accounts. Bank accounts are jointly operated by Village President and Village Health Nurse at village level and Town Panchayat President and Village Health Nurse at Town level.

v. Main expenditure is done on public Health activity such as sanitation drive, school health activities, ICDS activities, house hold survey etc.

vi. Two day VHWSC training was conducted with the help of SHG/NGOs on maternal and child health and on the rights and responsibilities of people.

Tiruppur District findings:

There is good awareness of PRI members on the health issues. Panchayat leaders take active participation in the cleaning, fogging of village etc. It has been observed that PRI members also work closely with the ANMs at HSCs.

Cuddalore district findings:

On sample checking of the facilities it was observed that the PRI representatives were neither invited nor participated in the meeting of the RKS (called Patient Welfare Society) created at Block CHCs, PHCs. However, in the DHS meetings the president of PRI body participated. In the VHNSC meetings, the participation of PRI representative had been observed. During the interaction of the Gram Panchayat Pradhan at HSC- Tinuseramedu , Chidambaram Block under District-Cuddalore his active participation with the committee has been noted. He was aware of the fund and discussed about the activities that he had undertaken.

Recommendation:

i. Improve the frequency, periodicity, range and quality of services rendered by MMU's to the tribal areas.
ii. Enhanced incentives to the ASHAs working in the tribal areas.
iii. Provision of uniform for identity and recognition in the community.
iv. Training and activities of program specific ASHAs needs to be monitored clearly to document evidence of this innovative program.

TOR VII-Promotive Health Care, Action of Social Determinants and Equity Concerns

Main Observation

A. Convergence with other Departments

I. A good convergence has been observed between ICDS and Health Department. The following health services are provided in convergence with the ICDS department:
   i. Introduction of Pentavalent vaccination in 2011
   ii. Pulse Polio Immunization
   iii. Vitamin A Supplementation
   iv. Free distribution of sanitary napkins for menstrual hygiene
   v. Eye check-up of children at school level
   vi. Counselling to pregnant and lactating mothers

II. Health Department works closely with ICDS for micro-planning of the health interventions. For day to day convergence the plans are discussed and shared. In the Tribal Block of Tiruppur District it has been identified that Anganwadi Centre is situated next to Bal-Wadi and undernourished children receive nutritious food from the Anganwadi.

III. For the marginalised sections, as was evident from the village FGDs undertaken by the CRM team, the VHSNC members expressed concern and admitted to their continued support and priority in the welfare schemes.

IV. The coverage of water and sanitation programmes in both the districts of Thirupur and Cuddalore was in general adequate. The VHSNCs were found to be vigilant and ensure that the Health Inspectors from the PHCs are visiting their villages for monitoring chlorination at regular gaps.

B. Nutrition Rehabilitation Centers

No Nutrition Rehabilitation Centers for identification of SAM and its management is available in either of the districts visited. Nevertheless, this being an important and critical setup, it needs to be established in the district and more intense identification, monitoring and surveillance of malnourished children must be initiated.

C. Modified School Health Program

The State has modified School Health Program which focuses on prevention, early intervention and strengthening the health status of the children. Here Modified includes the followings.

i. New School Health Card for all children,

ii. Comprehensive Health Education to all children,
iii. Primary Screening by Teachers and First Aid Management at schools,
iv. Counseling Services,
v. Mobility support (Fuel /Hiring),
vi. Hiring of Doctors (In vacant posts) and
vii. Sex wise collection of Morbidity Data

The State has made provision for a dedicated Medical Officer for the School Health Program. Under the School Health Program each child in all government and government added schools are screened for diseases, nutritional deficiencies and for refractive errors. Cases which require treatment are referred to the nearest health centres and rest receives treatment during screening in schools. Free spectacles are provided to the children identified with refractive errors. In addition deworming, anaemia management, dental care and vaccination are also provided through School Health Program in the State.

D. Sex Ratio & PC-PNDT

i. The sex ratio in the Cuddalore district is 984, in Tiruppur 988 and at the state level it is 995, one of the balanced sex ratio in the country.
ii. The PC-PNDT Act implementation was being handled by the Directorate of Medical and Rural Health Services. Although, IEC activities are conducted periodically there is lack of a concerted BCC strategy with multi-stakeholder buy-in.
iii. The PC-PNDT Committees (Appropriate authority, supervisory, advisory) have been formed at state level, district level nodal persons identified. 71 cases are currently being prosecuted. However, follow up actions remains an issue.
iv. Form-F which is a legal requirement is a major issue as there is no uniformity in the format and also several providers interviewed by the team members seemed to be unaware of the necessity of completing it for every obstetric scan. There was no planned periodicity of inspections and they were conducted in an ad-hoc manner.
v. The Vishakha guidelines were also not displayed at facilities.

E. IEC/BCC Strategy

In respect of effective IEC and BCC strategy, the focus and proper display of IEC material at state and district levels seemed weak and lacked efficacy. Old, defaced and faded posters with important information for the communities were noticed especially in the health sub centres. Overall the IEC/BCC strategy needs to be revisited in the State.

F. Civil Registration

In respect of the issuance of birth certificates and transmission of such information to the Registration office it was noticed that the certificates were promptly issued to the mothers but the birth and death data was submitted to the Registration office in the subsequent month. However this process has improved registration of institutional births in the State.

Recommendations:

I. From the PC-PNDT Act implementation perspective, it is critical that uniform F's are introduced to all providers, they are adequately sensitized on the legal requirements and regular mechanisms of monitoring are established to ensure compliance with the Act.

II. A concerted BCC strategy involving all stakeholders needs to be developed and implemented across the state for addressing female feticide

III. There is a need for sensitization of providers on gender issues and VISHAKHA guidelines need to be displayed at all facilities.

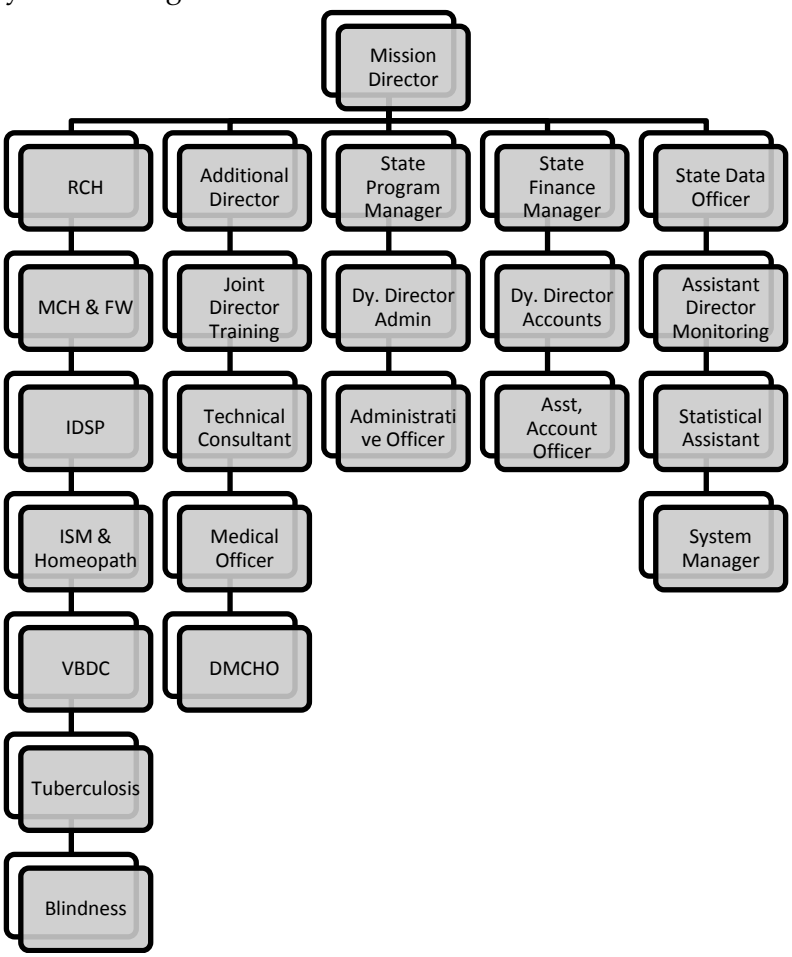
TOR VIII- Program Management, Logistics, integration and institutional capacity

Main Observations

A. Program Management Units: Structure and function

I. State:

A good integration of the NRHM is seen with the Directorate of Public Health &Preventive Medicine and Directorate of Medical & Rural Services. There is no separate staff recruited for State Program Management Unit and from the regular service; program officers are managing the components of the NRHM. At state level Mission Director Heads the State Health Society and for overall coordination of the program State has one State Program Manager supported by the Deputy Director Admin and administrative officers. State Data Officer looks after HMIS and is supported by Assistant Director Monitoring, Statistics Assistants and System Managers.



For each vertical program state has separate program officers. Joint Director Finance heads the finance division. The team comprises of one deputy director, one account officer, one

superintendent supported by two assistants and four data entry operators. The state has proposed separate wings for Maternal Health, Child health, MCTS and Quality Assurance for which government orders is awaited.

Other than this structure, there are three directorate which looks after primary, secondary and tertiary services. Directorate of Public Health & Preventive Medicine looks after HSCs, PHCs and CHCs in the State. Directorate of Medical & Rural Services looks after all district and sub-district hospitals, and Directorate of Medical Education looks after Medical colleges. Directorate of Public Health & Preventive Medicine manages the public health cadre and the PHCs & HSCs. The directorate also manages the Mobile Medical Units (Hospital on Wheels).

Directorate of Medical & Rural Services manages secondary care hospitals-DH, SDH, Dispensaries, and Women & Child Hospitals etc. Also supports the staff functioning in these facilities for secondary care.

II. District:

At district level, district collector heads the district health society. There is no provision of program management unit at district level. Deputy Director Health Services acts as District Program Manager. There is no provision of district accounts manager and each district has one account superintendent, who is supported by two account assistants and one data entry operator from NRHM. Currently four account assistant and 24 data entry operator posts are vacant in the districts. Assistant director from State bureau of Health Intelligence manages M&E activities with support from one Data Entry Operator from NRHM. In addition entomologist and District Maternal & Child Health Officer also help in program implementation and monitoring. Medical Superintendent looks after District Hospitals however Joint Director Medical & Rural Services heads all hospitals in the district.

III. Block:

Block Medical Officer acts as Block Program Manager and implements NRHM activities with the help of other regular staff. There is no separate M&E and accountant officer at block level. Pharmacist is given incentive of Rs. 500/month to look after accounts. In each hospital one accounts officer is appointed. However all records are managed by Pharmacists.

IV. Capacity Building

All program officers have received training on NRHM; in addition all medical officers have received skilled-based training. All officers given administrative responsibility are provided 15 days induction training at regional centers on administration.

There is requirement of District Program Manager to coordinate the program and manage all components, as acting DPM is from Directorate of Public Health and is concerned mainly for PHC & CHC and not looking after Hospital which in turn is looked after by Joint Director from Directorate of Rural & Medical Services.

V. Supervision, Monitoring & Feedback Mechanism

Tamil Nadu has strong supportive supervision and monitoring system in place.

i. At state level program officers conducts supervisory visits to different districts on Friday and Saturday every week. At district level deputy director and entomologist conducts supportive visits to facilities three days in a week.

ii. At district level, district Collector also conducts monthly review meetings with joint director, deputy directors, Medical Superintendents, Chief Medical Officer and all other staff heads, which helps in monitoring, supervision and problem solving at district level.

iii. Every month a meeting is being conducted by the State program officers with all districts through video-conferencing to understand the program progress and solve problems. Each district is encouraged to give feedback on these meeting. Similar monthly meetings are conducted at block level for review and monitoring.

iv. Rogi Kalyan Samiti meetings are also done twice a year.

v. In addition various committees from assembly also conducts supervisory visits and review meetings.

VI. Financial and administrative delegations

i. Administrative powers

In the state transfers and postings are being done by the directorates, however temporary deployment they can be done by the Joint Director and Deputy Directors as per the requirement. DPM can only recruit drivers and no other recruitment can be done at district level. Most of the procurements are done through TNMSC. However in terms of urgent procurement of drugs and supplies, districts and facilities have flexibility to procure from state listed firms directly.

ii. Financial powers

At SHS, the Mission Director has been delegated with powers to issue sanction orders for all programmes included in the approved State PIP. The State Programme Manager has been delegated to issue sanction orders up to Rs.50,000. At DHS, the DDHS has been delegated with full powers to sanction the expenditure in accordance with the norms for the approved activity. At CHCs / PHCs, sub centres, VHWSCs, the functionaries concerned like BMO, MO, VHN, have been delegated with powers to incur expenditure in accordance with norms. In Tamil Nadu, Electronic fund transfer system is used for fund transfer to Districts and other implementing units through ICICI bank. Similarly, from District to Blocks and PHC level, fund is being transferred electronically.

VII. Vacancy

i. There is lack of technical support staff at block level and at the facility level.

ii. At block level one accountant and one M&E officer is required.

iii. At facility level one Data Entry Operator is required to be in place.

iv. All specialists in the hospitals are playing dual role of specialist as well as of administrators, which affects their both tasks.

v. Limited staff with specialization in public health available at district and block level.

B. Procurement- Drugs & Equipments

i. TNMSC does all medical procurements in the state which includes-medicine, equipments, Laboratory material and other supplies including veterinary medicines.

ii. TNMSC selects the agencies through transparent tendering process. Each district has a warehouse where medicine is stored.

iii. Each facility is given a dedicated amount of money and a passbook. Facility medical Officer based on the need of the medicine submits the request to the warehouse. Warehouse gives the medicine and deducts the amount in passbook. On need basis warehouse sends the drug request to the TNMSC and after approval medicines are directly delivered to the warehouse by the agencies. Strong quality control and logistics management is being done when the drugs is received at the warehouse.

iv. TNMSC has developed rigorous procedures for procurement, testing, blacklisting, and enlisting of blacklisting etc., which makes it very strong and successful.

v. For AYUSH department, State manufacturing unit Tamil Nadu Medical Plant Farms & Herbal Medicine Corporation Limited (TAMPCOL) supplies medicine. Facilities place their request to the District Officer and after approval TAMPCOL supplies the medicine to the facilities directly.

vi. Under AYUSH it has been made mandatory to procure medicines from TAMPCOL however TNMSC does through selection of L1 providers each year.

C. Accreditation of private providers

For JSY: No private sector accreditation of private providers done in the state so for. JSY incentive is given for delivery in government facilities only and JSY monitoring is being done through reports and timely inspections. Payment of JSY is released to the beneficiary through checks.

For Family Planning: The state has accreditation of private providers for family planning operations. Services are being monitored by the Directorate of Family Welfare and District level officers.

D. Clinical Establishment Act

The State is in process of implementation of Clinical Establishment Act. However there is no institutional mechanism created for the implementation of the act so far.

E. PPP Policy

Some of the supportive services in the state are outsourced to the private agencies. These include biomedical waste management, sanitation, security, housekeeping and food (at PHCs). 'Tamil Nadu Transparency in Tenders Act, 1998 and rules 2000' acts as guidelines for standardization of procurement of services in the state.

Recommendations

I. One District Program manager to coordinate with different cadres.
II. One Administrator trained in Hospital Administration at all facilities.
III. One Accountant and M&E officer at block level and one Data Entry Operator at facility level.
IV. All administrative and managerial staff needs refresher training.

TOR IX- Knowledge Management

Main Observations

A. Training Institutes

i. State does not have State Institute of Health & Family Welfare (SIHFW) and trainings are being conducted by the regional training institutes and other training centers available with medical colleges and district hospitals.

ii. The skill based trainings are being conducted at the medical colleges, district hospitals and in few sub-district hospitals; however the knowledge-based trainings are conducted at the six regional training institutes and Institute of Public Health Poonamallee.

iii. Six regional training institutes act as training centers for cluster of three-seven districts. The six institutes are: Health and Family Welfare Training Centres at Egmore, Madurai and Gandhigram, Health Manpower Development Institutes at Villuppuram and Salem, Regional Institute of Public Health, Thiruvarangulam.

iv. The Institute of Public Health, Poonamallee is recognized as a national collaborative training centre with National Institute of Health and Family Welfare, New Delhi for training programmes organized by the Reproductive and Child Health Programme and the National Rural Health Mission.

v. Each regional center is attached with 2 medical colleges for faculty support. TOT happens at the regional centers and these trainers then train the trainees at the district level.

vi. Training institutes have some issues with infrastructure and manpower however the infrastructure updation is ongoing and the vacancies are filled with contractual arrangements.

vii. **Training follow-up:** For training support and follow-up district and block training teams are available in each district under the supervision of Medical Officer which helps in training need assessment, supportive supervision and follow-up on training skills utilization.

a) Knowledge-based trainings

i. The state has mandatory induction program of 15days on administration for all people given administrative responsibilities. In addition leadership and motivation trainings have also been taken up on pilot basis in two districts.

ii. For accounts and HMIS/MCTS trainings district level computer training institute is used as training site.

b) Skill based trainings

i. The state has made good progress in the training health workers at all levels.

ii. The trainings which will be kick-started this year are- LBW protocols, NBSU and SAM/MAM case management & RTI/STI.

iii. The state had proposed Training on Emergency Transport of Maternal and New Born Emergencies in this year PIP however wasn't approved.

iv. Skill lab training has been initiated in the state and MOs and staff of level II MCH centre (42) are on priority basis being trained on MNH.

v. Multi skilling task shifting training programmes are organized for medical officers in life saving anaesthesia skills and obstetrics for a period of six months to improve the availability of specialist services in rural areas particularly in Primary Health Centres.

vi. Ultra sonogram training is given to PHC doctors for detection of congenital deformities during pregnancy in PPP mode through MediScan ultrasound agencies.

vii. Skill Birth Attendant Training, Training on Integrated management of Newborn and Childhood Illnesses, Immunization training are organized for improving the mother and child care services in Primary Health Centres.

viii. The Multi Purpose Health Worker (Male) training course is conducted in medical colleges and Regional Training Centres. During 2012-13, it is proposed to train 600 candidates.

ix. Three new ANM training schools at Theni, Namakkal and Sivaganga districts are being established in Tamil Nadu with assistance from the Government of India.

x. ANM training has been started during the current year for filling up of the existing vacancies of Village Health Nurses and Auxiliary Nurse Midwives.

Table -23 TN Training Status as on October 2012

S. No	Type of Training	Training target of the year	Achievements till now
1.	General IMNCI	Backlog being covered	2329
2.	AMTSL	3500	1278
3.	SBA	2714	197
4.	EMOC	32+16	13+14
5.	LSAS	48	81
6.	BEmONC	370	787
7.	Integrated Refresher Training	300	1138
8.	ARSH	MO-900 SN-1500	1025 3028
9.	Managerial Skills	1800	385

Table-24 TN Training Institutes Details 2012			
S. No	**Type of Training**	**Training Sites (No.)**	**Type of Training sites**
I.	**RCH Trainings**		
	I. Child Health		
1.	Pre-IMNCI	14	Medical College
2.	General IMNCI	6	Regional Training Institute
3.	F-IMNCI	19	Medical College & Govt. Hospital
4.	HBNC	30	Districts
5.	LBW Protocols	Under Planning in all SNCUs	
6.	NBSU	Under Planning in 8 SNCUs	
7.	SAM/MAM	Under Planning in 2 SNCUs	
	II. Maternal Health		
8.	AMTSL	33	Medical College & Dist. Hospital
9.	SBA	25	MCH & District Hospital
10.	EMOC	5	Medical College
11.	LSAS	11	Medical College
12.	BEmONC	12	Medical College
	III. Family Planning		
13.	IUCD insertion training	Al DH, SDH and Block PHC	
14.	PPIUCD	10	Medical College Hospitals
15.	NSV	30	1 centre for District-MCH / DH
16.	Contraceptive update	30	4 batches in each districts
17.	Mini Lap	48	MCH and DH
18.	Laparoscopic	5	MCH -2 and DH-3
19.	MVA	8	Medical College
	IV. Other RCH		
20.	RTI/STI	Under planning	
21.	Blood Storage	30	All District Blood Banks
22.	Integrated Refresher Training	6	Regional Training Institutes
23.	ARSH	6	Regional Training Institutes
24.	Gender Sensitization	6	Regional Training Institutes
II.	**NRHM**		
25.	USG training for Congenital anomaly	30	CHC in the districts
26.	Skill based training for Lab Technician	5	Medical Colleges
27.	Skill based training for Pharmacist	5	Regional Training Centres
28.	VHSC members	30	Districts
29.	Managerial Skills	6	Regional Training Institutes
30.	Accounts	30	Districts
31.	Tally	1	IPH, Chennai
32.	Bio-Medical Waste Management	9	MCH
33.	HMIS	30	District Elcot centre

34.	MCTS	30	District Elcot centre
35.	Leadership and motivation	2	Regional Training Institutes
36.	MCH Skill Lab Training	6	Regional Training Institutes

B. Technical Support Partners

The government of Tamil Nadu has received support from the DANIDA in the past for IEC activities, Training, capacity building, Strengthening of HMIS and improving medical supplies at HSC & PHCs. However this project is over now. Currently the State receives support from World Bank and UNICEF. The major focus of the support is infrastructure development and capacity building.

World Bank supports Tamil Nadu Health Systems Project (TNHSP) implementation with a support of Rs. 597.15 crores. Areas supported by the TNHSP include- Child health, Indigenous people health, Health system performance, Population and reproductive health and injuries and non-communicable diseases. The project will function till 2013.

C. Knowledge Resources

a. Survey & Studies:

Tamil Nadu State has conducted surveys/ studies on various public health issues as per the requirement. Following surveys are conducted in the state post NRHM period. Findings of these surveys/studies are used for strategizing program activities or introducing some new programs.

Table-25 Details of Survey/Studies conducted in the Tamil Nadu

S. No.	Survey/ Study/ reports	Year	Department
1.	Contraceptive prevalence in Tamil Nadu	2005	Directorate of Family Welfare
2.	Vital Events Survey	2009	Directorate of Public Health
3.	Analytical report on deaths arising out of sterilization procedure in Tamil Nadu	2008-09	Directorate of Family Welfare
4.	Analytical report on retention rate of IUCD acceptor.	2011	Directorate of Family Welfare
5.	Non-communicable diseases survey	2010-11	Directorate of Public Health/ TNHSP
6.	Breast Cancer and CA Cervix Screening Survey	Proposed 2012-13	Directorate of Public Health/ TNHSP

b. Information Systems

The state has a rich history of ICT innovations in health care and currently more than 20 different information systems are being used by different programs. Some of the state information systems compliment the national information systems with additional functions for local requirements i.e.

i. PICME: is a local version of MCTS application. Weekly PICME data is updated in state MCTS application.

ii. HMIS: State HMIS which is used for aggregate data reporting from PHCs & CHCs is a local system which compliments National Web Portal. However the local system has various additional forms to support local requirements.

iii. DHIS: acts as bridge between state HMIS and National Web Portal. The system also provides various analysis functions which are not available in both the systems.

iv. Effective Disease Surveillance Information System: is local system for IDSP and reports data both for IDSP and for Malaria program requirement.

Table-26 List of Information Systems used for Routine Reporting in the Tamil Nadu (2012)

S. No.	Information System	Purpose	Managed By
1.	National Web Portal	Aggregate data reporting from facilities.	Statistics Division MoHFW/ Vayam Technologies Ltd
2.	MCTS	Mother & Child tracking.	Statistics Division MoHFW/ NIC
3.	DHIS-2.0	Aggregate facility data reporting & analysis	Directorate of Health & Family Welfare/ HISP India
4.	HMIS- CHC, PHC	Aggregate data reporting from PHCs and HSCs.	Directorate of Public Health [DPH]/TCS
5.	HMS- Hospitals	Patient-wise data reporting from Hospitals. Able to generate aggregate numbers to feed HMIS data.	Directorate of medical and rural health services [DMS]/TCS
6.	HMS-Medical Colleges	Patient-wise data reporting from Medical Colleges. Piloted in two districts.	Directorate of medical education [DME]/TCS
7.	HRMIS	Human Resource data –individual details, training, deployment, leave, transfer etc	TNHSP/TCS
8.	PICME	Maternal Child Tracking data	Directorate of Health & Family Welfare/NIC
9.	MediScan	Online tele-radioscan for auditing scan and diagnosis of congenital anomalies	Directorate of Medical And Rural Health Services [DMS]
10.	Outreach Camp reporting system	Information System for reporting of outreach data.	NIC, DMS,
11.	Maternity Benefit Scheme Monitoring System	Dr.Muthulakshmi Reddy Maternity Benefit Scheme Monitoring Information System	NIC, DMS,
12.	Civil Registration System	Vital events reporting	NIC

13.	Medical Camps reporting system	Varumun Kappom Thittam – Medical camps	NIC, DMS
14.	TNMSC	IT system for procurements – requirements, tender, responses, short listing, purchase etc.	TNMSC
15.	TN state AIDS control society	TN has its own MIS for AIDS. Will switch to National System (SIMS) from NACO.	TN-SACS
16.	National leprosy eradication program	National system for tracking leprosy	National Leprosy Program
17.	Monitoring system under blindness control	National system for tracking Blindness beneficiaries.	National Blindness Control Program
18.	State health transport corporation application	Hospitals run by TN State transport department	State health transport corporation
19.	Directorate of drug controller	IT system for procurement, monitoring and control of drugs	TNMSC
20.	TN Dr MGR	Medical university has paper based research data and its own IT systems	TN Dr MGR university
21.	Hospital Information System from Corporations	Municipal Hospitals for urban health in Chennai	Corporation of Chennai
22.	health centres reporting system	Health centres run by municipalities in other cities	Municipal administration
23.	State bureau of Health intelligence Application	National system	Central Bureau of Health Intelligence
24.	Mobile Medical Unit	Routine OPD, Lab, Referral reporting from MMU	Directorate of Health & Family Welfare
25.	Effective Disease Surveillance Information System	Routine reporting on selected diseases.	Directorate of Health & Family Welfare
26.	EMRI	Emergency transport tracking system	Directorate of Health & Family Welfare/GVK-EMRI
27.	Epi Centre-National RNTCP data reporting application	Data reporting for tuberculosis.	Directorate of Health & Family Welfare
28.	Tally 9EPR	Entry of financial transactions and budget tracking	NRHM, FMG

Under Tamil Nadu Health Systems Project (TNHSP), the state has established State Health Data Resource Centre [SHDRC] to integrate most the data sources and build a data ware house for data driven planning, monitoring and evaluation. SHDRC has done an initial

assessment of different data sources but a detailed analysis of data elements is planned for developing the Architecture for integrating everything.

a. Process of data collection and reporting

i. **At HSC:** In both the districts visited by CRM team it was found that VHNs (ANMs) were using the system very easily for mother and child tracking. VHN writes details in her register about each pregnant women and child she comes across. She enters these details in the PICME software at PHC, using her user ID & password and generates work plan for each month. From here she generates aggregate numbers of service delivery and submits it for PHC for HMIS reporting.

ii. **At PHC/CHC:** PHC enters all its performance data in HMIS software which includes HSC aggregate data. HMIS application has 14 different forms to be filled by the Staff Nurse/Health Inspector at different frequency.

iii. **At Hospitals**: At hospital, HMS is used for patient-based reporting using unique IDs. In all hospitals no additional staff is hired for the data entry and reporting. All data entry work is being done by the hospital staff itself.

iv. Primary Registers have been provided at all HSCs and PHCs under DANIDA project (1980) and is in continuous supply. A technical working group has been created to update the registers and reports as per the requirement.

b. IT infrastructure:

i. All PHCs/CHCs had computer with internet access wherever required data card is also provided in addition.

ii. In DH/SDH dedicated LAN is used for connectivity.

iii. Similarly all health unit districts have been provided with computer and broadband connection.

iv. TN-SWAN is exclusively used for e-transfer of funds.

c. HR for HMIS:

i. There is no dedicated human resource recruited separately for HMIS. Only at district level one Data Entry Operators is provided.

ii. Statistical cadre staff looks after the HMIS and related issues and block, district and state level and trained in use of computers.

iii. Data entry person is notified through Government Order for each level of facility.

d. Use of data:

i. The state monthly disseminates performance of facilities and districts on its website.

ii. In addition Directorate of Family Welfare publishes a monthly bulletin on Family Welfare Performance in Tamil Nadu.

iii. In monthly meetings routine data is used to review performance of VHN (through PICME), PHC/CHC (through HMIS), and Hospital (through HMS).

iv. HMS also provides additional function to identify performance of each doctor and specialist. These statistics are used in the monthly meetings to review the performance of the facilities.

v. Data review is conducted weekly at PHC, monthly at district and quarterly at state. In addition Health Secretary and Health Minister conduct quarterly review

e. Training & Capacity Building:

i. In three training institutes compute centers have been created for training. In addition each district has a government computer training centre (ELCOT).

ii. All facility staff has received 2-3 days of training on the use of computer and on the HMIS application. All service providers undergo computer training to facilitate entry of data by themselves at hospitals.

	
Data Entry at Pharmacy GH Kangeyam Tiruppur District 5/11/12	Staff Nurse Generating Monthly reports DH Cuddalore 8/11/12

Issues & Challenges

I. **Multiple systems**: There are multiple information systems in use which are functioning parallel to each other. For each requirement a new system has been created. Some of the systems duplicate the efforts of health staff e.g. PICME and HMIS. However there are gaps in computerisation of important programs such as Blood Banks, Training etc.

II. **Area wise reporting**: HMIS system is area-wise reporting based on the family health register. The system was designed for HSC level reporting; later option of consolidated as well as granular data entry was given from PHC level. Area wise reporting helps in taking care of the entire population in the area however leads to duplication in the HMIS and performance monitoring of each facility becomes impossible.

III. **Multiple forms**: HMIS has about 700 forms, but the users are encouraged to use limited forms. Currently at PHC, 14 forms are required to be filled in different frequency. Some of the data elements used in different forms are similar, leading to duplication of efforts in data entry.

IV. **Lack of integration**: Systems are not integrated and works as silos, limiting the systems capacity to show comprehensive picture. All systems lack analysis function and were

developed for the monitoring purpose only. Systems do not enable local users for data analysis and use of information.

V. **Flexibility to the users**: Systems are developed as applications for single purpose and no flexibility is available for the users to make their own forms, reports and analysis. No flexible data entry and report generation features are available in any system.

VI. **Limited analysis function**: No-to-very-limited analysis functions are available in all application. In HMIS & HMS only one month report can be generated and no annual analysis can be done. No dashboard function is available and very limited indicator based reports are available only in hospital information system.

VII. **Limited data reporting from private sector and urban area**: There is hardly any evidence of private sector data reporting seen during the visits. Similarly reporting from urban areas in the information systems found limited.

Recommendations

I. Integration and Data Analysis – TN is well positioned to build a state level health information exchange [HIE]. The SHDRC move to integrate various data sources for data warehouse and data analysis is the right direction. However it should be made clear that integration should be done through inter-operability of different system rather through manual integration of reports.

II. Comprehensive capacity building & change management is required for improving adoption of the existing systems.

III. It is also recommended that each system needs to relook at its reporting system and remove duplication and process errors through business process reengineering.

IV. It is also important that each facility should publish its annual/ monthly performance in the facility premise for transparency and accountability.

V. Refresher training for older nurses and ANMs can be taken up by the State.

VI. Evaluation studies to be undertaken to know the gaps in training and its effectiveness.

VII. There is also a need to create web based interactive training module for health professionals.

TOR.X Financial Management especially flow, accounting and absorption

Main Observations

I. A decreasing trend of fund utilization has been noted under many activities. Highest expenditure was on NRHM (71.81 Crores) and lowest expenditure was on NLEP (0.27 Crores).

Table-27 Fund Utilization Tamil Nadu			
Particulars	**Utilization up to Sept-2011 in 2011-12**	**Utilization up to Sept-2012 in 2012-13**	**% of Utilization in 2012-13 up to Sept-2012**
RCH	Rs. 86.44 Cr	Rs.59.24 Cr.	14%
MFP	Rs. 119.51 Cr.	Rs. 71.81 Cr.	14%

Table -28 Statement of Expenditure as on 30.9.2012 (Rs. in Crores)				
S.No	**Name of the Activity**	**SHS**	**District**	**Total**
1	RCH	**25.50**	**33.74**	59.24
2	NRHM	**32.51**	**39.30**	71.81
3	Immunization	**0.15**	**3.94**	4.09
4	IDSP	Breakup details not available as on date.		0.69
5	NVBDCP			7.45
6	NPCB			8.36
7	NLEP			0.27
8	RNTCP			5.38
	Total			157.29

II. **Audit Process:** As per GOI guidelines, a statutory auditor has been appointed and audit report for the year 2011-12 has been sent to GOI.The State has laid the copy of Statutory Audit of 2010-11 in the G.B. meeting. Concurrent audit of SHS have not been initiated for the F.Y. 2012-13. It is also noted that Concurrent Auditor for the year 2012-13for Cuddalore district has not been selected till date. It will defeat the purpose of Concurrent Audit if not implemented on time. CAG audit has been undertaken and the CAG audit report for the year 2008-09 received. Action taken report submitted to the Ministry. The follow up of the same is yet to be submitted.

III. At SHS, the Mission Director has been delegated with powers to issue sanction orders for all programmes included in the approved State PIP. The State Programme Manager has been delegated to issue sanction orders upto Rs.50,000/- At DHS, the DDHS has been delegated with full powers to sanction the expenditure in accordance with the norms for the approved activity. At CHCs / PHCs, sub centres, VHWSCs, the functionaries

concerned like BMO, MO, VHN, have been delegated with powers to incur expenditure in accordance with norms.

IV. In Tamil Nadu, Electronic fund transfer system is in vogue for fund transfer to Districts and other implementing units through ICICI bank. Similarly, from District to Blocks and PHC level, fund is being transferred electronically. Regarding all financial transactions are entered in the Customized version of Tally ERP.9 up to District level and in Kancheepuram and Kanyakumari Districts tally ERP.9 has been installed in 22 Block PHCs on pilot basis. During 2012-13, it is proposed to install Tally ERP.9 customized version at 363 Block PHCs. There are certain problems in Tally ERP.9 which have been communicated to M/s. Tally Solutions Pvt. Ltd., for taking remedial measures.

V. Audited accounts along with UCs up to 2011-12 for RCH, NRHM, Immunization and other vertical schemes have been sent to Government of India. The GOI takes into account the unspent balance available and only the net requirement (Total Resource Envelope less unspent amount available) is being provided by the Government of India and Government of Tamil Nadu as State share of NRHM.

VI. No training on Financial Management has been taken place during the 2012-13, except Training on Tally.

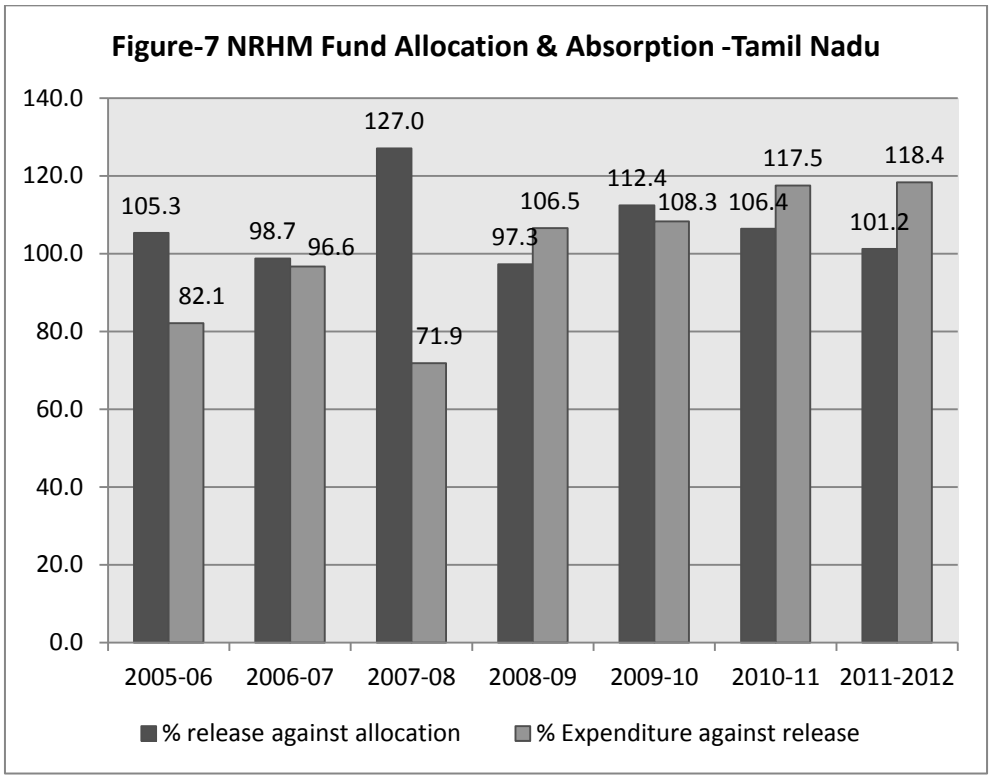
VII. Fund flow-Grant in aid is being received from GOI to SHS A/c through electronic fund transfer. Based on requirement, fund is being released to the District Health Society Accounts through electronic fund transfer. From District Health Societies to CHCs, PHCs and VHWSCs fund is transferred. Block FMR is prepared by the Accounts Superintendent in consultation with the Pharmacist and Staff nurses who maintain the accounts for PWS and JSY respectively. At District level, Expenditure is booked based on the Block FMRs and at State level, FMR from the Districts are collected and expenditure is booked.

VIII. Mission Director is conducting regular monthly review meetings of the Deputy Director of Health Services to review the financial performance of the District Health Societies. Apart from this, financial performance is being reviewed periodically through video conferencing. Further, the Mission Director and the second level officers are going to Districts every week for inspection of physical as well as financial performance at DDHS and PHC level. Monthly review meetings also conducted at State level for the District Health Unit officials of Administrative Officers / Accounts Coordinators / Accounts Superintendents to monitor the financial performance and reporting.

IX. Income tax: E-TDS for salary (24Q) and Non salary (26Q) is being filed periodically. Unspent balances under RCH-I has been remitted to GOI. EAG scheme is not applicable to Tamil Nadu. Interest earned against NRHM funds is accounted separately. During the year funds have been diverted from one pool to another.

Positive Findings

I. E-Transfer of funds was being taken up to Block level.



II. SHS had regularised the placing of Statutory Audit Reports in the GB meeting. Report of 2010-11 was placed and planning to place the same for 2011-12.

III. SHS, DHS and Block CHC, PHC, HSC staff has developed positive attitude to improve the Financial Management.

Areas of Improvement:

I. The Positions of the District Accounts Managers is vacant in 30 Districts.

II. The State needs to create the position of the Block Accountants and action plan for filling up of the vacant positions. Presently, those were being managed by the Block Medical Officer, as they were designated for the purposes.

III. Frequent diversion of funds from one pool to another at State Health Society level.

IV. Internal Audit Mechanism needs to be strengthened.

V. Concurrent Audit needs to be regularised. At SHS and DHS-Codallore, Concurrent Audit has not been initiated.

VI. No-payment to beneficiaries for last two months under JSY in most of the facilities of DHS-Codallore.

VII. Delay under the disbursement of funds at DHS level.

VIII. Decrease in Financial Absorption capacity under the two major pools (RCH and MFP) in respect of last year.

IX. AMG funds have been given to Non functional HSCs.

X. No PRI participation in most of the RKS/PWS meetings.
XI. Financial Management System of the visited District-Coddalore needs to be improved, as proper books of accounts were not maintained, mismatch of expenditure with the reports, non booking of expenditure etc.

Recommendations:

I. The position of District Accounts Manager needs to be filled up.
II. Create to position of Block Accountants with defined action plan to fill up the positions.
III. Payment to JSY beneficiaries on camp basis.
IV. Defined Action plan to improve the Fund Absorption capacities.
V. Improve community participation in RKS/PWS meetings.
VI. Improve Internal Audit Mechanism.
VII. Avoid diversion of funds.