NATIONAL RURAL HEALTH MISSION

Report of the 2nd Common Review Mission

Visit to Karnataka from 26th November to 3rd December 2008

CHAPTER 1: TEAM MEMBERS WITH ADDRESS

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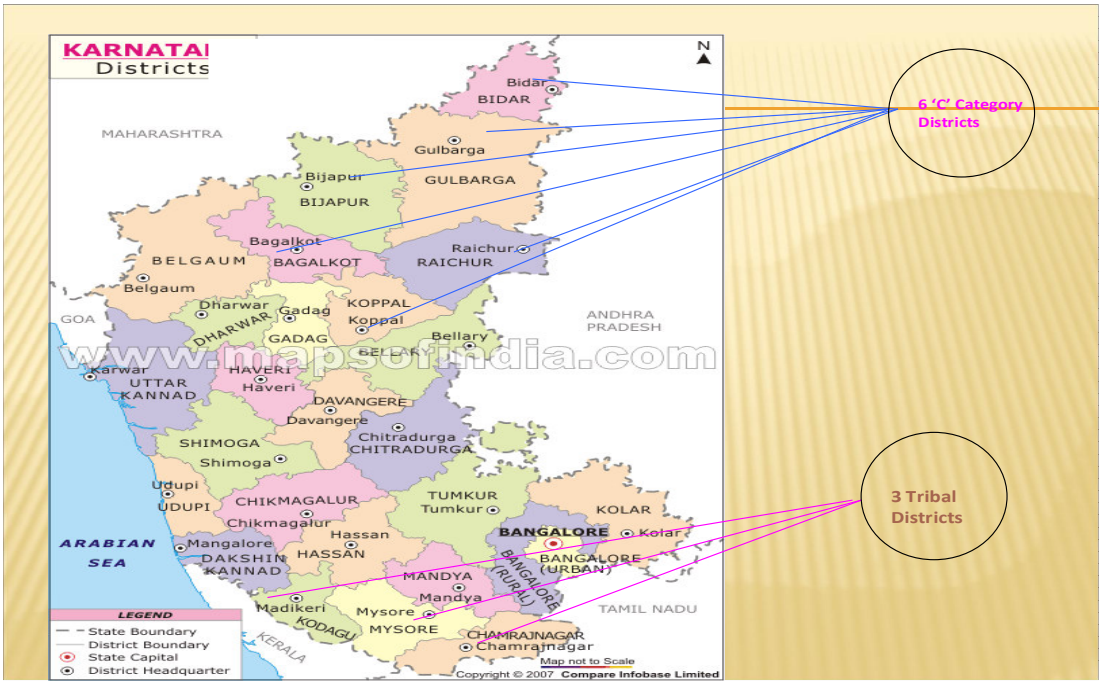
The CRM members were initially briefed on 26th Nov 2008 by Secretary (Health) and his team and again there was a detailed discussion with the officers concerned with Health & NRHM on the 2nd of December 2008 on return from the field visit (**Annexure I**). The presentations made by Secretary(Health) and the State Government are at **Annexures III.** The CRM members formed two teams with 3 members in each team and visited the districts of **RAICHUR & TUMKUR**. The debriefing with the State government was held on 3rd December 2008 when the team presented its findings.

CHAPTER 2: INTRODUCTION

District–wise map of Karnataka

Less developed Category C & Tribal Districts



The state of Karnataka has an area of 191,791 sq. km. and a population of 52.85 million. There are 27 districts, 176 blocks and 29406 villages. The State has a population density of 275 per sq. km. (as

against the national average of 312). The decadal growth rate of the state is 17.51% (against 21.54% for the country) and the population of the state is growing at a slower rate than the national rate.

Base line of Public Health System in the state

i. Infrastructure

Health Institutions in the State / Service delivery Units

Health Institution	Number
Medical Colleges (allopathy)	36
Medical Colleges (AYUSH)	77*
District Hospitals	29
Hospitals	153
Ayurvedic Hospitals	103
Ayurvedic Dispensaries	653
Unani Hospitals	13
Unani Dispensaries	51
Homeopathic Hospitals	20
Homeopathic Dispensary	42
PHCs	1679
Additional PHCs	516
Sub centres	8143
Urban PHCs	17
Urban FWCs	87
HFW Training centres	4

- 31 colleges have been derecognized

Source: State Government of Karnataka

ii. Human Resources

Medical Officers	4817 (5867)
Contract doctors	1048 (28 NRHM)
AYUSH doctors (Regular)	204
AYUSH doctors (Contract)	669 (477 NRHM)
Dental surgeons	229
Staff Nurses	4479 (4717)
Staff Nurses (Contract)	2174 (124 in FRU)
Male Health Workers	4022 (5853)
Female Health Workers	9376 (10255)
LHVs	1067 (1219)
Pharmacists	1798 (2198)
Lab technicians	1711 (2018)
Lab Technicians (Contract)	98 (NRHM)

Source: State Government of Karnataka

iii. Demographic, Socio-economic and Health profile of Karnataka State as compared to India figures

The Total Fertility Rate of the State is 2.1. The Infant Mortality Rate is 47 and Maternal Mortality Ratio is 228 (SRS 2001 - 03) which are lower than the National average. The Sex Ratio in the State is 965 (as compared to 933 for the country). Comparative figures of major health and demographic indicators are as follows:

S. No.	Item	Karnataka	India
1	Total population (Census 2001) (in million)	52.85	1028.61
2	Decadal Growth (Census 2001) (%)	17.51	21.54
3	Crude Birth Rate (SRS 2007)	19.9	23.1
4	Crude Death Rate (SRS 2007)	7.3	7.4
5	Total Fertility Rate (NFHS-III)	2.1	2.7
6	Infant Mortality Rate (SRS 2007)	47	55
7	Maternal Mortality Ratio (SRS 2001 - 2003)	228	301
8	Sex Ratio (Census 2001)	965	933
9	Population below Poverty line (%)	20.04	26.10
10	Schedule Caste population (in million)	8.56	166.64
11	Schedule Tribe population (in million)	3.46	84.33
12	Female Literacy Rate (Census 2001) (%)	56.9	53.7

Source: MoHFW Backgrounder

iv. Targets Set for Major Indicators

S.No.	Indicators	Current status	2008-09	2009-2010
1	Reduction in maternal mortality	228 SRS (2001-03)	190	150
2	Institutional deliveries	67.9% (CNAA) 66.9% (NFHS-3)	75%	85%
3	Safe deliveries	71.3% (NFHS-3)	80%	90%
4	Reduction in infant mortality rate	47 (SRS- 2007)	40	30
5	Total fertility rate	2.08 (NFHS-3)	2.04	2.0

v. Special Constraints

Considerable regional disparities exist in health infrastructure and service facilities between South Karnataka and North Karnataka.

The regional inequality becomes clear from the tables given below:

	South Karnataka	North Karnataka	State
I. No. of hospital beds (2001) per lakh population	85	61	80
II. No. of doctors (govt. + private) per lakh population	30	25	28
III. % of habitations with 40 or more LPCD (drinking water)	62	44	56

Source: Karnataka State PIP 2008-09

Region/District/ State	# of Medical Institutions per lakh pop.	# of Govt. doctors per lakh pop.	# of PHCs per lakh pop.	Health Index	Gender related Health Index (GHI)	Human Development Index (HDI)	Gender related Development Index (GDI)
Coastal & Malnad (5 districts)	7.78	13.6	5.84	0.685	0.689	0.552	0.537
Southern Maidan (8 districts)	6.07	11.86	5.26	0.647	0.599	0.473	0.451
Northern Maidan (7 districts)	4.37	10.57	4.01	0.641	0.537	0.433	0.412
Karnataka	5.24	11.00	4.64	0.654	0.546	0.47	0.451

Source: Karnataka State PIP 2008- 09

Health gaps remain despite overall improvements in health indicators, inter-district and regional disparities continue. The five districts of Gulbarga Division (Bidar, Koppal, Gulbarga, Raichur, Bellary) with Bijapur and Bagalkote districts of Belgaum division continue to lag behind. Malnutrition in under-five children and anaemia in women continue to remain unacceptably high. Women's health, mental health and disability care still relatively neglected. Certain preventable health problems remain more prevalent in certain geographical regions or among particular population groups.

vi. List of the facilities visited by the team is given at Annex II

CHAPTER 3: NRHM : An Overview

Health Performance in the State:

Sl No	Year	Proj. pop	No. of Beds	No. of doctors	No. of nurses	Bed pop.ratio	Doctor pop. ratio	Nurse Pop ratio
1	2003-04	54635	43259	5069	4717	1263	10778	11583
2	2004-05	55556	43330	5069	4717	1282	10960	11778
3	2005-06	56497	47217	5069	4717	1197	11146	11977
4	2006-07	57459	51123	5867	6598	1124	9794	8709
5	2007-08	58442	51769	5867	6598	1129	9961	8858

Source: State Government
Note: The no. of beds as given in the consolidated statement and that given in the disaggregated statements are different.

The status of NRHM both physical and financial as of November 2008 is at **Annexure IV.**

The overall resource position is very comfortable as the state of Karnataka has been fortunate to have received and is still receiving resources from diverse sources. These include besides the state budget and NRHM flows, funds/ commodity assistance also from KHSDRP, UNICEF, 12th Finance Commission funds etc. The state has merged the components of the World Bank project and the NRHM which has to a large extent streamlined activities and availability of personnel particularly the programme management staff. The advantage of Zilla Parishad Chairman acting as the CEO in charge of Health sector at the district level has facilitated greater focus on the programme front and lends itself to better monitoring.

Many of the initiatives taken under NRHM are either too recent or still in the pipeline and hence too early for comments regarding their performance. Infrastructure created at least in the districts visited were quite impressive (though in Tumkur the quality was felt to be poor by the team) but there seems to be both shortages of specialists and sub optimal utilization of infrastructure set up. Quality assurance needs focused attention. Untied funds have been used imaginatively and helped improve quality but greater guidance and closer monitoring may help bridge gaps and realize better outcomes. Some of the serious shortfalls that require handling by the higher levels of decision-making remain unaddressed. Community monitoring would require greater focus and planning. Though many PHCs had AYUSH doctors on a full time basis their role needs to clearly defined and orientation about NRHM , its objectives and goals are considered necessary. In fact a lot more appears necessary on the IEC front realize the goals envisaged under NRHM and to promote health-seeking behaviour among the people.

CHAPTER 4: FINDINGS & RECOMMENDATIONS

1. Case load handled by the Public System:

The state has furnished district-wise details of in-patients and out-patients for the period 2002 to 2006 calendar year-wise which is given in the table below:

(in lakhs)

Year	Inpatients	Outpatients	Total
2002	21.37	244.95	266.32
2003	22.26	255.16	277.42
2004	23.19	265.79	288.98
2005	24.15	276.87	301.02
2006	13.42	242.29	255.71

In 2006, there is a severe decline in both in-and out-patients according to the data furnished. The state government indicated that this may be on account of incomplete data furnished in 2006 which needs to be examined and the position corrected.

Institutional deliveries have picked up after the introduction of the NRHM as is clear from the trends since 2005. In percentage terms, Institutional deliveries have increased from 60% in 2005 and 63% in 2006 to 68% in 2007 and 79% in the current year. This enhanced percentage in Institutional deliveries coincides with the implementation of the demand generation strategies like JSY scheme and the schemes introduced by the State Government, i.e. Madilu (post-natal care kit for BPL and SC/ST women for 1st two live births), Prasuthi Ariake Yojana (ante-natal care benefits for 1st 2 pregnancies among BPL women), and Thai Bhaigya (Chiranjeevi scheme).

JSY beneficiaries have been steadily increasing as shown in the table below:

JSY BENEFICIARIES

	Total births	Deliveries		
		home	institution	total
2005-06	9,01,260	20,400	30,142	50,542
2006-07	9,09,631	99,369	1,33,778	2,33,147
2007-08	8,92,329	86,082	1,97,898	2,83,980
2008-09 (upto to Sept.)	4,66,205	51960	151400	2,03,360

18

Source: State Government of Karnataka

- Use of Sub-centres for curative care was minimal, though preventive services were made available. Overall, sub centre work needs attention in light of increasing institutional deliveries and women getting referred to PHC/taluka levels. ANMs with the support of ASHA can further improve the quality of outreach work.
- Caseload at PHCs: OPD figures suggest substantial increases PHCs. They now appear to cater to 30-40 patients per day on average (Tumkur and Raichur), as compared to 20-30 last year. Use of PHCs for deliveries has increased, over the past two years, with the introduction of JSY (and Madilu). Still, there is scope for further increase in workload, especially in PHCs that have 2 MOs and 3 Staff Nurses.
- Caseload at FRUs: The General Hospital at Sindhanoor, which served as a FRU, was under utilized. Although this 100-bedded facility had 12 specialists, there were only 5-10 inpatients. Moreover, only 40 deliveries were conducted during one month prior to the team's visit.
- Caseload at District and Taluka Hospitals, Patients flocked to taluka and district hospitals for curative care in OPDs and as in-patients. In Tumkur, doctors frequently complained about their long hours of work, excessive workloads and poor pay scales.
- No information was made available Bed Occupancy rates for this indicator. (delete)

2. Preparedness of health facilities:

The State Government is making concerted efforts to improve the health facilities created with funds that have come in from different sources. Availability of untied funds has made a significant difference to the preparedness of health facilities at all level. Funds have been released and utilized in a timely manner. Processes (e.g. e-banking) are in place. The field visit shows that though facilities generally have adequate space and support in terms of equipment, utilization of facilities is relatively low. This was evident in the CHC and the PHCs visited by the team in Raichur district.

- District hospital Raichur gave a depressing picture. Both labour room & Maternity wards are in a deplorable condition. The 250-bed hospital has inadequate bed sheets, torn mattresses, poor lighting facility and no warmer in labour room. Funds to the tune of Rs.5 Lakhs given in NRHM additionally were not spent. 66 staff nurses posts to be filled.
- Sindhanoor General Hospital an FRU is a 100 Bed Hospital . Despite being an FRU basic requirements like gloves were not available. The toilet had no door .
- Chronic problems (such as unavailability of specialists and blood storage units in facilities below the District Hospital, in some places even frequent power shutdowns) limit the preparedness of health facilities to deal with obstetric emergencies, even in a place like Tumkur.
- Policy on vehicle and driver needs to be reviewed, particularly for facilities in remote and inaccessible areas.

3. Quality of services provided:

- Staff nurses availability improved, considerably especially to handle JSY clients, Doctors being recruited on contractual basis particularly in Category C districts at the PHC level.
- Drugs largely available at the facilities, barring Misoprostol, Inj mag Sulph, Zinc tablets.
- Untied funds are being used imaginatively for client convenience at many facilities; plants, TV, CD players, waiting halls.
- Introduction of the Quality Assurance Programme in Tumkur district has helped identify and remove bottlenecks at the facilities, thanks largely to availability of untied funds.

- Major gaps in the purchase of equipment, in training and staff availability (lab technicians, nurses in particular in Taluka and District Hospitals and pharmacists) continue to limit overall quality of care.
- Open and dirty toilets at PHCs (Kalamal Raichur) and SGH, and TH (Tumkur).
- Antibiotics being prescribed from outside At some of the facilities thouigh state supplies a wide range of antibiotics.
- Organising health camps (including camps enabling access to tertiary care for school children – school health programme) is a welcome move in improving access to care.

4. Utilization of diagnostic facilities and effectiveness:

Under the KHSDRP, 7 regional diagnostic labs had been established at Bagalkot, Bellary, Bidar, Chitradurga, Hubli, Mandya and Tumkur districts. Buildings and equipment also provided under the project but specialist manpower to be provided by the state was not available crippling their functioning. Presently only 4 are functioning.

Districts visited showed that facilities available within the facilities are being used.

- LTs are largely in place with requisite equipments and reagents.
- At TH (Lingsugur), 50 xray and 75 USGs are done per day.
- Water testing (H2S) are being carried out at facilities. This can go down in the lst.
- Lab investigations for ANC clients at PHCs are not being done.
- No RTI/STI testing done except HIV screening at ICTC; mobile camps are ok for testing but the quality of counselling needs attention.
- Serious shortage of Radiologists in TK district limiting the effective use of equipment.
- Utilization of diagnostic equipment (BP instrument, weighing machine) by ANMs (particularly by the older ones) is low.

5. Drugs and Supplies:

A State Drugs, Logistics and Warehousing Society has been established that acts as an official procurement agency to meet all requirements of health and family welfare department. Indents are collected from the different districts through a system of indent books, at the start of the year. These indents are thereafter consolidated to assess the State need. Tenders are invited and the Society fixes a rate contract for the items required. As and when demand arises, indents are

placed on the RC holders and drugs are obtained and sent directly to the 14 warehouses. The Primary Health Centres, Community Health Centres and District Hospitals collect their requirements from these fourteen District Drug Warehouses. Construction activity has been taken to set up fourteen additional District Drug Warehouses in the remaining districts, so that ultimately one warehouse serves one district.

- Use of untied funds to procure drugs in short supply has helped.
- Very Sound procurement and SCM system, effective and no stock outs, programme supplies are also being taken up.
- No. of drugs to be supplied at different level of facilities needs to be reviewed, irrational drugs especially fixed dose combinations should be taken out.
- ASHA kits replenishments?? Is it possible to link through this system.
- Tracking excess and expired drug stocks at facilities??

6. Health Human Resources Planning:

Medical doctors, para-medics and nursing facility reasonably available in the facilities visited. Basic facilities for meeting JSY demands needs to be strengthened. Bench marking facility to IPHS standards will be a far cry.

To fill in the gaps in human resources, the State Government has appointed Specialists, MBBS doctors, staff nurses, ANMs and Lab Technicians on contractual basis. In FRUs insourcing have been advocated on a case to case basis with provision for monthly retainer fees or fixed remuneration to be approved by the District Health Society. 15 FRUs have hired sub-specialists. MBBS doctors trained in Emoc and life saving anesthetic skills have been posted to designated FRUs. In the case of 6 critical districts, 73 doctors have been contracted to work at the PHCs. Staff nurses at FRUs and PHCs and ANMs at sub-centres have also been taken on contract.

- Signs of improvements in availability of HR. Availability of NRHM resources for contracting-in services of specialists at District levels (by paying up to Rs.50,000 per month) has helped in some cases.
- No clear-cut human resources strategy in health sector.
- Critical shortage still remains and needs to be addressed partially through redeployment but to a greater extent through contractual appointments and partnering with the private sector.
- ANM training centre(RC) needs immediate attention; staff, training aids.

- DTCs: high vacancy rates, no training plans based on the district needs, no inputs in PIP
- Explore possibilities of increasing the number of candidates admitted to the ANM programmes in the existing Institutions. Also career path of ANMs need relook.
- Doctors (and specialists, in particular) complain that they are "over-worked and under-paid" compared to their counter parts in CGHS and Karnataka State Medical Colleges and in other state government services.

7. Infrastructure Development:

- State pooling resources from different sources – KHSDRP, NRHM, State Budget etc for building up infrastructure including planning for human resources.
- Physical layout and design of PHCs/Taluka Hospitals and newly constructed sub-centres are impressive. Also, there is sufficient of land available for further expansion of services.
- Quality of civil works even in recently constructed/renovated buildings is poor.in SCs/PHCs in Tumkur. QA needs to be strengthened.
- Facility surveys undertaken and gaps identified.
- Engineering cell with Dept facilitating smooth civil construction, though quality of construction is a matter of concern, as pointed earlier.
- TN experiment of bio-medical engineers for ensuring quality and proper maintenance may be explored.
- Efforts required for optimising facilities created. (**give examples**)

8. (a) Arogya Samitis formed & functioning:

- User fees that are routinely collected are adding to resource availability for improving facilities.
- The Panchayati Raj system is on board: the District CEO is in charge of development sectors, including health. Lower down, members of the Panchayat are members of Arogya Samitis at different levels.
- Convergence visible & effective in Raichur &Tumkur.
- Closer monitoring may improve outcomes.

(b) Empowerment for effective decentralization and local action:

In Karnataka, the public health system at the district level falls under the purview of the panchayat system. Apart from the district hospital and its staff, the DHO, the THO and all facilities from the taluka-level downwards are funded and administered through the panchayat system. This is an

excellent system that can make health services more accessible and accountable; yet, health administrators complain of indifference to health among panchayat leaders and members, which results in delayed decision making and consequently delayed spending on health. Political interference can also seriously challenge health department guidelines on a number of issues.

Efforts to decentralize health service delivery further through the NRHM have resulted in committees at different levels, even though many of these especially at the village level are fairly new. IDHAP plans were also created in all districts at the beginning of the financial year (2008-09) though it is not clear how many of these plans were integrated into the state's PIP.

In Tumkur, untied funds from the sub-centre upwards are channeled and used mainly for improving the quality of existing facilities and its drug supply. In many cases, facility improvement drawing from untied funds followed a Quality Assurance assessment. Although there are no specific complaints of delays and roadblocks to fund-use from the PHC-level upwards, non-cooperation from panchayat members at the sub-centre level can – and has – delayed spending in some cases.

Meetings of the District Health Societies take place regularly, despite low involvement of Panchayati Raj representatives, due to the fact that the meetings are convened by the CEO of the Zilla Panchayat (and not the elected leader), and because the quorum gets filled by officials from a number of public sector institutions (such as the Karnataka Electricity Board, etc.). Moreover, the assignment of a state health officer as District Nodal Officer has helped regularize meetings at the district level.

9. ASHA:

- 2150 ASHAs are in place mainly in C category districts that include Raichur but not Tumkur. They engage in different tasks, including accompanying clients for Health Day as was observed in Raichur.
- The training programme for ASHAs is well-designed, with effective trainers and logistics taken care. The ASHAs have ID cards, which give them a distinct identity in the community.
- The system will need to invest in creating adequate support systems for the ASHAs to generate and maintain their interest.
- ASHAs have not been given any communication aids.
- Although the ASHA worker is yet to be introduced to Tumkur district, concerns have already been raised about potential conflict with regard to incentives between ASHA/AWW/ANMs.

10. Systems of financial management:

The State Government of Karnataka has delegated administrative and financial powers to the State and District level Programme Officers in February, 2008 adopting the guidelines issued by the Union Government. The State Government intends to close the account held by them with the ICICI due to certain operational difficulties and have opened accounts with the State Bank of Mysore and State Bank of India. While there is one account for NRHM, separate accounts have been opened in respect of Disease Control Programmes with the same Bank. These accounts have been opened in the name of State Health Society and the District Health Societies. At the State level, the Chief signatories operating the account are the Mission Director, NRHM, Chief Finance Officer, NRHM and the concerned State Programme Officer. At the DHS level, the signatories are the District Heath and F.W. Officer, the concerned District Programme Officer and the District Programme Monitoring Officer.

- FMG constituted on the Central pattern.
- Electronic transfer of funds from state to district through RGTS. From district to sub-district levels, funds presently being disbursed through cheques & development of software under process.
- 6500 accounts opened in SBH &SBI to facilitate e moding and transfer.
- Separate accounts for SHS and DCPs in the same bank.
- Single audit report at the state.
- Concurrent audit in place in 6 districts.
- Matamari PHC in Raichur district was the only PHC amongst the health facilities visited at Raichur where records were very well maintained and a printed NRHM cash book was in use. The register clearly maintained opening balance, details of receipts (under different heads like JSY, FWC, untied grants) & the particulars of payment made activity-wise alongwith dates of receipt and expenditure.
- Receipt and utilization of untied grants maintained.
- NRHM record keeping has added work for the ANM and MOs considerably.

11. HMIS and its effectiveness:

The State Government has in place detailed formats for capturing data on performance indicators, non-clinical services entry, staff position, equipment availability and its usage. The details collected

are fairly extensive. Besides this, the State also has Public Health Management System for collecting details at the levels of the PHC, the Taluka Health Office and the District Hospital. This captures information on a monthly basis.

The State also has done a GIS mapping of the districts of Mandya & Tumkur inclusive of the locations of the health facilities, availability of manpower etc.

- Web based system introduced on pilot basis in Tumkur to be extended to other districts.
- Detailed formats exist capturing data on performance indicators, non-clinical service entry, staff position, equipment availability and usage.
- Public Health management formats presently collecting extensive information.
- Possible for Taluka and PHC level info through web.
- Need to harmonise HMIS in light of NRHM requirements in the new HMIS format.
- Training of nodal officers critical to ensure quality data.
- Need for juxtaposing data collected on GIS mapping being done the performance indicator data and Public Health Management data for better planning and decision making.

12. Community Processes under NRHM:

- Community processes are new in the state. Community monitoring, which is being piloted in selected villages in four districts (including Tumkur and Raichur), was started as recently as May 2008.
- Community monitoring through VHSCs is being piloted in four districts – Tumkur, Raichur, Gadag, and Chamrajnagar. This initiative is implemented by four NGOs (Karuna Trust, Community Health Cell, BGVS, AID India), with the Karuna Trust taking on overall responsibility for coordination. During the CRM team's visits to Tumkur and Raichur, VHSC members were being trained in a number of places over 3 days as a one-time effort. In a few places, the VHSCs had also begun an initial round of work.
- Careful thought needs to go into the training of VHSC members as multiple groups already exist in the village (or do so on paper). Ideally, training should be seen as a means to gain consensus about the social determinants of health, the need for community participation in health, and the role and responsibilities of the VHSC; processes which take time, but which should be factored into the PIP. Without adequate preparatory work, VHSCs will exist only as long as there are untied funds to be spent.

- In Tumkur, there was considerable attrition in attendance over 3 days of training, resulting in uneven information among members, and an inability to understand and carry out background work needed for community monitoring. Moreover, the mode of training was not participatory, leading to top-down and ineffectual communication.
- The tool that forms the bases for community monitoring – the village report card – needs to be drastically simplified if it is to be effective in terms of strengthening and sustaining the VHSCs (or other groups that can keep an eye on the VHSCs). The forms that need to be filled for each question in the report card are too elaborate and, at times, faulty. Consequently, they may never empower VHSC members or generate the type of information that can lead to positive or effective community actions. Overall, therefore, the design of community monitoring needs to be revamped.
- There is evidence of PRIs' effective say in use of untied funds and in Arogya Samitis, though capacity building of Samiti members on the use of resources is needed but has not taken place. Public participation in RKS and in health societies is limited to the involvement of officials in Tumkur.

13. Assessment of NGO partnership:

- The state government has pro-actively involved NGOs even prior to NRHM. 49 PHCs are outsourced to NGOs, reported to be showing mixed results.
- For the NRHM, the state government has involved NGOs in training of VHSC members and community monitoring (Karuna Trust, BGVS, AID-India and Community Health Cell), in the training of ASHAs (Karuna Trust and Narayan Hrudalaya) and in PNDT.
- The MNGO scheme is being revised. Composite proposals are being appraised and approvals are being processed.

14. Systems in place for out-reach activities of sub-centres:

- Outreach activities by ANMs in subcentres have got streamlined due to fixed monthly out-reach plans. These fixed tour plans and regular Village Health and Nutrition Days are resulting in improved immunization coverage; though services delivered need to become more comprehensive and their quality strengthened.
- Sub-centres do not have a second ANM/MPWs. (In Tumkur, there was only one ANM in each subcentre).

- Mobile Health Units have become operational under KHSDP, and Mobile Medical Units are being planned.
- EMRI (108) services in partnership with Satyam is being planned out across the entire state.
- The State is training Health Workers (Male) who can work instead of the second ANM in category C districts. This is a welcome step.

15. Thrust on difficult areas and vulnerable social groups-

In order to improve the maternal and child heaalth parameters and retain the staff in the most remote areas, 219 PHCs have been identified as most remote PHCs. The doctors and staff nurses are given an incentive of Rs.5000/- and Rs. 3000/- per month respectively. To encourage institutional delivery among the vulnerable social groups, the State has initiated schemes like Prasuthi Ariake, Madilu, and Thai Bhagaya.

- Conscious effort made by the state government to address regional inequities by prioritizing C category and tribal districts is commendable.
- Several initiatives have been taken to focus on serviced delivery; rents, remote area allowances.
- Need to link HMIS with GIS to review service delivery in remote areas.
- Differential IEC strategy to reach out resulting in behaviour change.
- Available ambulance services to target these areas.

16. Inter-sectoral convergence:

- Good convergence with NACP 3 and ICDS in VHND.
- Water quality monitoring being undertaken.
- Innovative schemes for promoting PPP for vector surveillance.
- Effective strategy to combat malnutrition and anemia in women is needed.
- No evidence of engagement of other sectors in PC-PNDT act implementation.

17. Effectiveness of Disease control programme:

- Review of data and observations from field suggest good progress on the DC programmes. API has reduced, deaths are low.
- Convergence of NVBDCP, TB & HIV/AIDS noticed at PHC/CHC levels.

- Most positions are filled, DMCs are functioning and Microscopes purchased using NRHM funds.
- Vision centers are functional.
- IDSP working very well, reports are being sent in time.

18. Performance of RCH:

The state government has since the launch of NRHM strengthened infrastructure and put in place demand generation strategies as mentioned earlier. The status in respect of functionalisation of FRUs and 24x7 PHCs is given in the table below:

Year	Functionalization of FRUs	Functionalization of 24X7 PHCs
2005-06	Situation analysis undertaken	Issuing guidelines to hire 3 staff nurses.
2006-07	54 CHCs were made FRUs with blood storage facilities and hiring of specialists	23 PHCs having 3 staff nurses and a night watchwoman to assist deliveries.
2007-08	54 CHCs were made FRUs with blood storage facilities and through in-sourcing of specialists wherever vacancies existed.	389 PHCs with 3 staff nurses and conducting more than 10 deliveries including deliveries at night.
2008-09	103 FRUs functionalized	734 PHCs have been made 24X7.

- PHC/Taluka hospitals have shown distinct improvement in the physical facilities required to deliver RCH services in places like Tumkur where the Quality Assurance Programme has been introduced. However, the technical competence and sensitivity of health workers to gender and other bases for social difference need to be considerably strengthened.
- Newborn care and management of sick newborns at peripheral facilities need attention.
- SBA training, MTP and mini lap/NSV training needs quality assurance.
- Training in EmOC and LSAS for Medical Officers has shown good progress, though coverage needs to be widened.
- Child health supplies are available, as are IMNCI trainings.
- Access to untied funds ensures that they are better equipped to handle the increasing load created by demand generation schemes (such as JSY, etc.).
- Special efforts of the government to simplify certification of the BPL status have improved the coverage of JSY payments.

- Introduction of e-banking over the past four months has markedly improved the efficiency of JSY payments in Tumkur and Raichur. The Mission could not, however, investigate the extent to which cheque payments to beneficiaries reduced corruption.
- Planning is underway for the introduction of Holographic maternity cards. This may improve continuance of antenatal care, especially when pregnant women move to and from their natal homes, or migrate to a third location for work.
- Improvements in Immunization coverage are visible.
- Early Initiation of breast feeding among deliveries that take place in institutions.
- Early discharge after institutional delivery is very common.
- No partograph, mixed on AMTSL, routine episiotomy common practice.
- High CFR in DH (RC) NICU and high MMR,
- Postnatal care remains a neglected area, even though a significant proportion of pregnancy-related deaths take place after delivery.
- Important steps have been taken to strengthen the notification and investigation of maternal deaths via incentives to people who notify the death within 24 hours, and a revised verbal autopsy form. However, the maternal death audits have not begun to take place even in Tumkur where the autopsy form was pre-tested. Moreover, the autopsy form itself will require revision if lessons are to be learnt from which health system improvements can be made.
- Family Planning services are largely limited to laparoscopic procedures. There was no provision of mini lap services, or NSV. Uptake of spacing methods was also limited.
- Access to MTP services is poor: only few facilities provide such services, and those that do mainly adopt invasive methods.
- IEC efforts need to be considerably improved if they are to spread awareness at all, or change attitudes. Bold and innovative approaches are required to promote positive health actions and behaviours using different media and vehicles.

19. Assessment of Programme Management Structure:

- SPMU & DPMU are in position. Appointment of BPM in process.
- Merger of program management functions under NRHM & KHSDRP is an important step that can enhance efficiency.
- SPM & DPM at State and district levels are supportive to SHS & DHS. The data are up-to-date, performance is monitored vis-à-vis targets.
- Impact studies can be undertaken, and success stories disseminated.

Summary of Findings

1. It is too soon to comment on the impact of many of the initiatives under the NRHM, as they were either introduced only recently, or are in the pipeline.

2. The health sector in Karnataka has been the beneficiary of several rounds of World Bank and other funds for reforms. NRHM has given a further boost to these on-going efforts at health sector reforms.

3. Use of untied NRHM funds to fix physical deficiencies in health centres has helped 'improve quality' in places like Tumkur where the Quality Assurance Programme is in place. Consequently, many centres have dramatically improved their quality score. However, service quality assurance needs separate and focused attention.

4. The major challenge for Karnataka is not so much in creating or improving physical infrastructure. The real challenge lies in addressing serious issues of human resources.

5. Community monitoring would require greater focus and planning. Establishing effective processes for community monitoring through the setting up of VHSCs is crucial. The State government has partnered with some well-known NGOs to implement the community monitoring plan. However, refinements are needed in the NRHM guidelines to simplify the process and build better mechanisms of accountability for eliciting responses.

6. The role of the full-time AYUSH doctor, recruited in many PHCs, needs to be fully clarified. Greater efforts should be made (more effective IEC should be formulated) to encourage people to utilize Ayush doctors/ services available at PHCs/Taluk hospitals.

7. IEC efforts need to be strengthened considerably through innovative ideas and use of multiple media if the NRHM goals – especially to promote health seeking behaviour among the people – are to be realized.

Suggestion/Recommendations:

1. Analyse the Factors responsible including human resources for better and optimal utilization of physical infrastructure created. Need for drawing up a detailed strategy for development of human resources – specialists, para-medics and nurses.
2. Orientation of MOs and AYUSH doctors on the goals and objectives of NRHM to make it more participatory.
3. Explore the possibility of appointing bio-medical engineers on the lines of Tamil Nadu Government for quality assurance monitoring.
4. Community monitoring to be careful planning and tools being used redesigned.
5. Shortcomings noticed in the Maternal Health Programme and focused earlier needs to be addressed.
6. Maintenance of NRHM accounts as seen in Matmari PHC in Raichur district may be replicated at all facilities.

Activities for possible replication in other States

1. Suvarna Arogya Chaitanya School Health Programme where health problems of school children are being treated through a network of public and private hospitals.
2. NRHM cash register
3. Format being adopted for JSY beneficiaries which indicate information like name of the beneficiary, spouse's name, date of delivery, whether normal or caesarean, location, photograph of the beneficiary, amount given and signatures of the beneficiary alongwith date of receipt of money. 2 registers are maintained – a master register for all deliveries falling within the purview of the PHC/CHC as the case may be and an individual register for the deliveries that have taken place at that facility.
4. Appointment of a senior officer from the Department of Health & F.W. as a nodal officer of a district. This nodal officer visits the district on a regular basis and has a check-list of activities which he monitors and on return to the State Hqrs. prepares a report to be acted upon. This check-list reflects both the financial and physical status. The functions of the DPMU, DHS and the District Mission are captured. In these visits, individual activities like availability of human resources, maternal deaths, infant deaths, functioning 24X7 PHCs, functioning of FRUs, Voluntary Blood donation, specialist health camps, Suvarna Arogya Yojana, Urban Health Centres etc. are also monitored. (format enclosed at Annexure)

Names (with designations) of State Officials with whom CRM interacted.

1. Sri. Madan Gopal, Secretary to Govt. Heath & Family Welfare Dept
2. Sri. Srinivasachari, Commissioner, Health & Family Welfare Services
3. Dr. Usha Vasunkar, Director, Health & Family Welfare Services
4. Dr. Sumeda Desai, Director, SHIFW
5. Dr. Prakash, Director, AYUSH
6. Dr. Jagasetty, Drug controller, Karnataka
7. Dr. Mohan Raj, Project Director (RCH), Directorate of Health & F.W. Services (Nodal officer for Tumkur District.)
8. Dr. Preema, Addl. Project Director, Aids Prevention Society
9. Dr. Shivabasavaiah, Addl. Director, Karnataka Drugs Logistics.
10. Dr. P.K.Srinivas, Lead Consultant, Nodal officer for Raichur District.
11. Dr. Prakash, Joint Director (Medical)
12. Dr. Palekar, Joint Director (HET)
13. Dr. Annapurna, Joint Director (Blindness Control)
14. Dr. KumaraSwamy Lal, Joint Director (TB)
15. Dr. Deenamani, Joint Director (Lep.)
16. Dr. Shapeti, I/C Joint Director (H & P)
17. Dr. Heera.B.Raikar, Joint Director (M & F)
18. Dr. Cheluvaraju, Joint Director (CMD)
19. Dr. Halakatti, Joint Director, KHSDRP
20. Sri. Guttal, Joint Director (IEC)
21. Sri. Chacko, Demographer
22. Sri. Nandakumar, Chief Finance Officer, NRHM
23. Dr. Ramesh, Deputy Director (Medical) and Nodal Officer for Deafness Control Programme.
24. Dr. Vasudeva Murthy, Deputy Director (IDSP)
25. Dr. Siddaiah, Deputy Director (Lep)
26. Dr. Karur, Deputy Director (Mental Health)
27. Dr. Bendigeri, Deputy Director (Training Officer), Directorate of Health & F.W. Services
28. Dr. Jagaroop Sing, Deputy Director (Nut)
29. Dr. Ravi Shankar, Deputy Director (F.W.)
30. Dr. Dhanya Kumar, Deputy Director (MCH)
31. Dr. Amrutheshari, Deputy Director (IUD)
32. Dr. Prakash, Deputy Director, KHSDRP
33. Dr. Sridhar, Deputy Director, KHSDRP
34. Dr. Nagaraj, Deputy Director, KHSDRP
35. Sri. Shankar, Deputy Director, Demography
36. Dr. Ramesh Babu, Research Officer (RCH)
37. Dr. Rudrappa, Consultant for Demography
38. Dr. Neena nanda, Consultant for MH
39. Mr. K.P.Bhatt, Consultant for M&E
40. Smt. Vasuki, Consultant for PIP
41. Dr. Sadana, Consultant for Child Health
42. Smt. Rajeshwari, Legal Consultant for PC & PNDT
43. Dr. Sanjay Jhon Deodar, Consultant for NRHM

Annexure II

Visit to 2nd Common review Mission: Karnataka

26/11/2008
Visit to EMRI (Morning)
Visit to Narayana Hrudayalaya (Morning)
State Presentation to CRM team about NRHM (After Noon)

Health Facilities visited (Tumkur District)

Sl. No.	**Name**	**Address/Location**	**Level (SC/PHC/ CHC /other)**	**Name of the Person in Charge**
	27/11/2008			
	Travel from Bangalore to Tumkur			
1	District Health & F.W. Office	Tumkur		
2	Nittur	Tumkur Taluk & District	24x7 PHC	
3	Somalapura	Tumkur District	Sub Centre	
4	Chelur	Tumkur District	24x7 PHC	
	Return to Tumkur and Halt			
	28/11/2008			
1	Biligere	Tumkur District	PHC	
2	Thimmalapura	Tiptur Taluk	SC (PHC Honnavalli)	
3	Tiptur	Tiptur Taluk	General Hospital	
4	Tumkur	Tumkur	District Hospital	
5	Tumkur	Tumkur	ANM Training Centre	
	Halt at Tumkur			
	29/11/2008			
1	Chikkamalur	Madhugiri Taluk,	Anganawadi Centre (PHC Goudi)(VHSC Capacity building)	
2	Kodigenahally	Madhugiri Taluk,	PHC	
3	Gundagal	Madhugiri Taluk	Sub Centre (PHC Kodigenahalli)	
	Travel back to Bangalore			

Health Facilities visited (Raichur District)

Sl. No.	Name	Address/Location	Level (SC/PHC/ CHC/other)	Name of the Person in Charge
	27/11/2008			
1	Matamari	Raichur	PHC	
2	Raichur	Raichur	General Hospital	
3	Raichur	Raichur	ANM Training Centre	
4	Raichur	Raichur	Dist. Health & F.W. Office.	
	28.11.2008			
1	Kallur	Raichur	PHC	
2	Kurdi	Raichur	PHC	
3	Sindhanur	Sindhanur	General Hospital	
	29/11/2008 (Group A- Smt. Ganga Murthy, Dr. Deokinandan, Dr. P.K. Srinivas, RCH Officer & District Programme Management Officer)			
1	Mallat	Raichur Dist	Sub Centre	
2	Kavithal	Raichur District	CHC	
3	Lingasugur	Lingasugur	General Hospital	
4	Meganapur	Raichur	Sub Centre	
5	Mudgal	Raichur	CHC	
6	Hatti	Raichur	PHC	
7	Sirwar	Raichur	PHC	
	29/11/2008 (Group B- Dr. Dinesh Agarwal, District Health & F.W. Officer, District Surveillance Officer)			
1	Ruwari		NGO's Meeting with VHS & AWW	
2	Raichur	Raichur	Asha Trg. Centre	
3	Raichur	Raichur	Drugs Logistic	
4	Kalmala	Raichur	PHC	
	30/11/2008			
1	Ganadhal	Raichur	PHC	
2	Idapnur	Raichur	Sub Centre	
3	Raichur	Raichur	Meeting with District Level Programme Officers	
	01/12/2008			
1	Raichur	Raichur	Visit – Urban Maternity Health Centre	
2	Raichur	Raichur	District Level Programme Officer Meeting	

1st Dec 2008 - Travel back to Bangalore

2nd Dec 2008 - Meeting with officers concerned with DCPs, HMIS, Financial & Programme Management, Procurement, IEC etc.

3rd Dec 2008 - Debriefing with Commissioner (Family Welfare)