Health and Family Welfare Department

2.2 National Rural Health Mission

Executive summary

Government of India (GOI) launched the National Rural Health Mission (NRHM) during April 2005. The main objectives of NRHM are to provide accessible, affordable, effective and reliable health care facilities in the rural areas especially to the poor and vulnerable sections of the population. The Mission was implemented in the State by the Karnataka State Health and Family Welfare Society (State Health Society) under the overall guidance of the State Health Mission. An amount of Rs 1,241.96 crore (Central share: Rs 1,169.23 crore, State share: Rs 72.73 crore) was released for the Mission during 2005-09.

A performance audit of NRHM in the State, conducted between February and May 2009, revealed that the Government increased its spending on public health from Rs 1,001 crore during 2004-05 to Rs 2,042.18 crore during 2008-09. The number of sub-centres (8,143) and public health centres (1,679) in the State was also quite in conformity with the norms prescribed by NRHM. The State had also achieved cent per cent success in total immunisation of children against tuberculosis, diphtheria, pertussis, tetanus and polio under the 'routine immunisation programme'.

The performance audit, however, revealed the following deficiencies:

- The State Health Society did not conduct a cent per cent survey of households and health care facilities to identify the gaps in infrastructure and determine extent of interventions needed under NRHM.
- The community participation in planning, implementation and monitoring of the Mission was not ensured due to delay in setting up the village health and sanitation committees and non-involvement of non-governmental organisations in project implementation and deficient functioning of Arogya Raksha Samithis.
- There was delay in creation and strengthening of infrastructure despite availability of funds. The deficiencies in diagnostic, inpatient and emergency services in the rural health centres compelled the patients to visit district hospitals or private hospitals.
- Delays in appointment of the required medical and para-medical staff to rural health centres affected delivery of proper rural healthcare services.
- The accredited social health activists (ASHA) were yet to be involved at community level to realise the Mission objectives of providing the services of trained female community health workers in rural areas.

2.2.1 Introduction

Government of India (GOI) launched (April 2005) the National Rural Health Mission (NRHM) with the main objective of carrying out necessary architectural corrections in the basic healthcare delivery system. The goal of the Mission is to improve the availability and access to quality health care by people especially those residing in rural areas, the poor, the women and children. The Mission adopts a synergistic approach by relating health to determinants of good health *viz.*, segments of nutrition, safe drinking water, sanitation and hygiene. It also aims at mainstreaming all the Indian Systems[9] of Medicine to facilitate healthcare. The plan of action includes increasing public expenditure on health, reducing regional imbalances in health infrastructure, pooling resources, integration of organisational structures, optimisation of health man-power, decentralisation and district management of health programmes, community participation and ownership of assets, induction of management and financial personnel into district health system and operationalising the community health centres into functional hospitals to meet Indian Public Health Standards (IPHS) in each block of the country.

2.2.2 Organisational set-up

At the State level, NRHM functions under the overall guidance of the State Health Mission (SHM) headed by the Chief Minister to consider policy matters related to health sector and review progress in implementation of NRHM. The activities under the Mission are to be carried out through the Karnataka State Health and Family Welfare Society (State Health Society), which was formed (May 2005) by integrating all the societies set up for implementation of various disease control programmes. The State Programme Management Support Unit (SPMSU) acts as the Secretariat to the State Health Mission as well as to the State Health Society (SHS) and is headed by a Mission Director. At the district level, there is a District Health Society (DHS) headed by the District Health and Family Welfare Officer. The executive committee of the DHS is headed by the Chief Executive Officer, Zilla Panchayat (CEO, ZP) who is responsible for planning, monitoring and evaluation of project implementation, besides releasing funds to healthcare centres and local bodies/societies.

2.2.3 Audit objectives

The objectives of the performance audit were to examine whether:

- planning was decentralised and need based;
- funds provided for the Mission activities were efficiently utilised;
- implementation of different components of the Mission was effective to improve access of rural people to affordable and effective primary health care; and

[9] Indian System of Medicine comprising Ayurveda, Unani, Siddha and Homoeopathy systems

- monitoring mechanism ensured timely and effective interventions to realise the Mission goals.

2.2.4 Selection, scope and methodology of Audit

The topic was selected for performance audit in view of its public importance and substantial outlay (Rs 1,065.56 crore) on the project during the last four years.

The performance audit covering the period 2005-09 was conducted during February-May 2009 by test-checking the records of the Secretary to the Government, Health and Family Welfare Department, the Directorate of Health and Family Welfare, the Karnataka State Health and Family Welfare Society, besides test-check of the records of nine District Health Societies (DHS), 27 Community Health Centres (CHCs), 54 Primary Health Centres (PHCs) and 108 Sub-centres (SCs) in selected nine[10] districts in the State **(Appendix-2.7)** by simple random sampling method.

The audit objectives and the methodology of audit were discussed with the Secretary during an entry conference held in March 2009. An exit conference was held (June 2009) with the Secretary to discuss the audit findings and to elicit the response of the Government/Department. The Secretary agreed to examine the findings and take necessary follow-up action.

Audit findings

2.2.5 Financial management

Funds for NRHM were released by GOI to the States through two separate channels *ie.*, through State Finance Department for direction and administration, rural and urban family welfare services, procurement of supplies and services, *etc.*, and directly to the SHS for implementation of the schemes of Routine Immunisation, Information, Education and Communication (IEC), Reproductive and Child Health (RCH), National Disease Control Programmes, *etc*. During the first two years of the Mission period (2005-2012) GOI provided cent *per cent* grants to the States but from the year 2007-08, the States were to contribute 15 *per cent* of the required funds. The States were required to reflect their requirements in a consolidated Programme Implementation Plan (PIP) and funds were provided on the basis of approval of these PIPs by GOI.

The details of funds released by GOI, the matching contribution of the State Government and the expenditure incurred on the Mission during the period 2005-09 are as shown at **Table 2.2**.

[10] Bangalore (Rural), Bidar, Bijapur, Chamarajanagar, Chickmagalur, Dakshina Kannada, Dharwad, Tumkur and Uttara Kannada

Table 2.2 : Release of funds and expenditure under NRHM

(Rupees in crore)

Year	Releases from GOI	Releases from GOK	Total	Expenditure	Balance
2005-06	178.70	Not Applicable	178.70	148.99	29.71
2006-07	278.61	Not Applicable	278.61	195.66	82.95
2007-08	275.86	Nil	275.86	262.77	13.09
2008-09	436.06	72.73	508.79	458.14	50.65
Total	**1,169.23**	**72.73**	**1,241.96**	**1,065.56**	**176.40**

Source: State Health Society

2.2.5.1 Unspent balances

The unspent project funds as at the end of 31 March 2009 were Rs 176.40 crore

At the end of 31 March 2009, there was an unspent balance of Rs 176.40 crore with the SHS under the components *viz.*, RCH, NRHM Additionalities[11] and Routine Immunisation Programme being the annual maintenance grants, untied funds to Village Health and Sanitation Committees (VHSC), funds for selection of ASHAs and upgradation of healthcare centres as well as those earmarked for improvement to maternal health, information, education and communication activities, family planning, *etc*. Records revealed that Rs 8.14 crore released (July 2005) by GOI towards untied funds to 8,143 SCs in the State (at the rate of Rs 10,000 per SC) had been retained by the SHS up to 2007-08. The SHS did not furnish any reason for the same. Injudicious action of the SHS to retain the funds adversely affected the activities of the SCs and impeded the conduct of sanitation drives, household surveys, *etc.*, out of the untied funds as prescribed under the NRHM Framework.

In the test-checked districts, the unspent balance was Rs 42.84 crore as given at **Table 2.3**.

Table 2.3 : Unspent balance of NRHM funds in test-checked districts

(Rupees in lakh)

District	Opening balance	Funds received	Expenditure	Amount surrendered	Unspent balance
Bangalore (Rural)	95.04	650.40	391.85	37.80	315.79
Tumkur	131.96	1,692.11	1,177.73	96.68	549.66
Bijapur	302.40	1,272.98	708.27	146.12	720.99
Dharwad	110.21	722.18	393.44	--	438.95
Uttara Kannada	149.47	1,046.71	476.55	12.12	707.51
Bidar	94.27	1,084.75	713.31	100.73	364.98
Chamarajnagar	162.14	814.49	483.53	87.10	406.00
Chickmagalur	135.12	848.56	512.41	17.40	453.87
Dakshina Kannada	205.98	779.06	570.10	88.55	326.39
Total	**1,386.59**	**8,911.24**	**5,427.19**	**586.50**	**4,284.14**

Source: State Health Society

[11] All new activities extending beyond the coverage of the existing schemes are covered by NRHM Additionalities.

The test-checked districts had retained project funds of Rs 42.84 crore as of 31 March 2009

Records revealed that failure of the VHSC and the Arogya Raksha Samithis of healthcare centres at each level to draw up action plans, to meet at regular intervals to identify the healthcare needs and to effectively monitor the implementation of the action plans resulted in accumulation of unspent balances and non-realisation of the intended objectives. The Department stated (June 2009) that this was due to lack of awareness of scheme guidelines among the implementing officers and shortage of human resources and other infrastructure. The reply was not factual as the SHS did not take timely action to constitute the committees at various levels and ensure their functioning by providing timely financial resources, guidance and counselling.

2.2.5.2 Delay in transfer of funds

There was a delay of 50 to 396 days in releasing grants to Village Health and Sanitation Committees

The funds released by GOI to the SHS towards corpus grants, untied grants, annual maintenance grants, *etc.*, payable to the healthcare centres and VHSCs were required to be passed on to them without any delay. Records revealed that the DHS of Bidar and Chickmagalur districts released an amount of Rs 1.56 crore received from the SHS, with delays ranging from 50 days to 396 days. The DHS of both the districts attributed (August 2008) the delay to belated opening of the bank accounts and non-existence of District Programme Management Support Units. The fact, however, remained that the delay in transfer of funds resulted in non-conduct of household surveys, delay in disbursal of cash incentives to beneficiaries of Janani Suraksha Yojane[12] and non-setting up of a revolving fund in VHSCs as discussed in succeeding paragraphs.

2.2.5.3 Non/short release of State share of funds

The state Government did not release its share of Rs 41.65 crore to NRHM during 2007-08 and short released funds by Rs.43.50 crore during 2008-09

The State's share of Rs 41.65 crore against the approved project cost of Rs 277.73 crore for the year 2007-08 was not released. For the year 2008-09, the State's share due was Rs 92.92 crore. Against this, the State Government released Rs 72.73 crore only. Besides, it included Rs 23.31 crore for implementation of State schemes namely 'Prasuthi Araike' and 'Thayi Bhagya' which were not included in the approved PIP for the year. The State's share was thus, effectively Rs 49.42 crore only. The Department contended (June 2009) that these schemes although not included in the PIP were very much a part of the objectives of NRHM. The reply was not justified as the State's share was determined with reference to the project cost only as per the approved PIP.

2.2.5.4 Utilisation certificates

The SHS did not furnish complete details of utilisation certificates (UCs) submitted by it to GOI during the period 2005-09. Test-check of some UCs for specific components of NRHM revealed the following discrepancies:

- SHS issued UCs for an aggregate amount of Rs 21.14 crore during the years 2005-06 (Rs 8.14 crore), 2006-07 (Rs 11.73 crore) and 2007-08 (Rs 1.27 crore) under the component 'NRHM-Additionalities' although

[12] A Scheme to promote institutional deliveries in the State

the society did not spend any amount during 2005-06 and 2006-07 and only Rs 40 lakh was spent during 2007-08.

- SHS issued UCs for an aggregate amount of Rs 4.58 crore during 2006-07 under the component RCH although only Rs 45 lakh had been spent on appointment and training of ASHAs in the State during 2006-07.

- SHS incorrectly included Rs 43 lakh in the UC submitted for the year 2004-05 under the component 'Disease Control Programmes' although this amount was received for the year 2005-06.

The incorrect financial reporting by the SHS to GOI was inherent with the risk of diversion of project funds or even their misappropriation.

2.2.6 Planning

NRHM envisages decentralised planning and implementation arrangement at the village level. However, considering the requirement of extensive capacity building to make villages capable of taking up planning exercise, the Mission did not insist on village plans for the first two years of its tenure (2005-2012) and therefore, Block Health Action Plans formed the basis of District Health Action Plans (DHAPs).

Based on the DHAP, the State Plan had to be prepared by the SHM which was to be submitted for approval to GOI before the beginning of each financial year. NRHM Framework further stipulated that a PIP for the State be prepared annually by the SHS by aggregating DHAPs of each district and got approved by GOI for implementation. For comprehensive planning, a household and facility survey at the level of village, block and district was to be conducted at regular intervals.

2.2.6.1 Non-conducting of household survey

Household survey was not conducted as per NRHM Framework and format

In none of the 7,714 villages of the nine test-checked districts, households were surveyed. The DHAPs were prepared on the basis of the data gathered during the District Level Health Survey (DLHS) conducted by GOI for implementation of RCH programme. The DLHS was based on sample survey of only 1,000-1,500 households in each district and as such could not be as comprehensive and effective as the household survey envisaged in the NRHM Framework. GOI provided untied grants to VHSCs each year to be used, *inter alia*, for conducting household surveys and prescribed that 50 *per cent* of the households should be covered by the year 2007 and 100 *per cent* by the end of the year 2008. However, no action was taken to conduct the household survey as stipulated by GOI. The Secretary stated (June 2009) that since the DLHS survey was in compatibility with the requirements of NRHM, no fresh household survey was conducted. The reply was not justified as the Department, in the absence of hundred *per cent* survey of households could not identify all the gaps in the health determinants such as availability of

drinking water, access to sanitation, data on early childhood development, nutrition, *etc*., and provide for interventions required under NRHM leading to inadequate planning.

2.2.6.2 Non-conducting of facility survey

Survey of healthcare facilities was not conducted to identify the requirements under NRHM

The NRHM Framework also prescribed formats for conducting survey of existing facilities in the Government healthcare centres of different levels in the State. These formats were comprehensive covering availability of every kind of service, the existing manpower (both critical and supporting manpower), physical infrastructure, equipment, drugs, furniture, quality control, investigative facilities, emergency care, *etc*. The Department instead of conducting the survey with reference to the NRHM format, carried out the survey of facilities in the formats devised under DLHS-3 which were not as comprehensive as NRHM formats, as these covered only a few parameters such as availability of operation theatres, labour rooms, blood storage facilities and the specialists/trained staff at SCs, PHCs and CHCs. A large number of parameters such as investigative facilities, inpatient services, emergency care, *etc.,* were not covered and as a result, the State could not provide for them in the project implementation plan as commented at paragraphs 2.2.7.2 to 2.2.7.6. Reasons for not conducting survey of facilities on NRHM formats were not forthcoming.

2.2.6.3 Non-preparation of Block plans and Village plans and lack of community participation in planning

There was delay in setting up Village Health and Sanitation Committees in the test-checked districts

Records of the test-checked 27 CHCs, 54 PHCs and 108 SHCs revealed that the block and village plans had not been prepared and consolidated into DHAPs due to undue delay in setting up VHSCs and Planning and Monitoring Committees at village, block and district levels as envisaged in the NRHM Framework. The State Plan was based only on DHAPs which did not incorporate either block level or village level plans thereby defeating the objective of decentralised planning of the Mission. While the VHSCs of the test-checked districts *viz.*, Chickmagalur, Tumkur, and Dharwad were constituted during 2006-07, these were set up in Bidar, Dakshina Kannada, Uttara Kannada, Bangalore (Rural) and Bijapur districts only during 2007-08. In Chamarajanagar district, the VHSCs were constituted only during 2008-09. As at the end of 31 March 2009, there were only 23,026 VHSCs as against the 29,406 VHSCs targeted under NRHM. The Government issued orders to set up Health Monitoring and Planning Committees at various levels only in February 2009. Due to delay in setting up the VHSCs and planning and monitoring committees and non-preparation of village and block plans, the community participation in planning process was virtually non-existent. The objective of the Mission to have need based and community owned action plans as the basis for all future interventions, therefore, could not be achieved.

2.2.6.4 Arogya Raksha Samithis

The functioning of the Arogya Raksha Samithis was not satisfactory to realise the Mission Objectives

Each health care centre of the level of PHC, CHC and District Hospital was required to have in place a working Arogya Raksha Samithi (Rogi Kalyana Samithi) comprising both official and non-official members to review the functioning of healthcare facilities and to recommend further improvements to the healthcare system. Although Arogya Raksha Samithis (ARS) had been constituted at all the healthcare centres up to PHC level in all the nine test-checked districts yet their functioning (2005-09) was not satisfactory as detailed below:

- As per NRHM Framework, the General Body of each healthcare centre (*ie.,*DHS, CHC and PHC) had to meet once in a quarter and the Executive Committee monthly. As against this, no meeting was conducted by 17 CHCs and 19 PHCs during 2005-09. In the remaining test-checked DHS, CHCs and PHCs, the number of meetings held was short by as much as 97 *per cent*.
- The ARS of 27 CHCs and 51 PHCs did not set up monitoring committees to collect feedback from patients on the quality of the healthcare.
- The public hearings (Jan Sunwai) and the public dialogues (Jan Samwad) were also not conducted by any of the ARS in the test-checked districts as required under the Mission guidelines.

2.2.6.5 Non-involvement of non-governmental organisations

Non-governmental organisations were yet to be involved in project implementation

Non-governmental organisations (NGOs) were identified as critical for the success of NRHM. Efforts were to be made to involve NGOs at all levels of the healthcare delivery system *viz.,* planning, capacity building, delivery of health services, monitoring the project implementation at community level, *etc.* Five *per cent* of the total financial resources allocated to NRHM was to be earmarked to NGOs as grant-in-aid at district and State levels. The Department was supposed to select one Mother NGO (MNGO) in each district to focus and strengthen the NGO's participation in NRHM.

The SHS did not furnish the records relating to identification and selection of NGOs and release of grant-in-aid to these organisations. In the test-checked districts, although MNGOs had been identified in four districts (Uttara Kannada, Dharwad, Chamarajanagar and Bidar), no grant-in-aid had been released to them. In the remaining five test-checked districts, no MNGO was identified. The SHS stated (June 2009) that 14 MNGOs had been identified for 17 districts and Rupees one lakh each had been released (February 2006) to them to conduct baseline survey in the identified villages. But, due to poor quality of baseline survey by these MNGOs, further release of funds was withheld. Action taken to mobilise the NGOs to pro-actively participate in project implementation was, however, not forthcoming.

2.2.7 Creation and strengthening of infrastructure

The NRHM Framework provided for creation of new infrastructure for health care centres and strengthening the existing ones conforming to Indian Public Health Standards (IPHS)[13] so as to improve accessibility and quality of health care delivery services. This involved upgradation of 21 District hospitals, 53 Taluk level hospitals and 29 CHCs to IPHS besides renovation and expansion of four CHCs, construction of 85 ANM (Auxillary Nursing Midwives) sub centres and 94 PHCs aggregating to 286 works.

2.2.7.1 Upgradation and construction of healthcare centres

There was undue delay in taking up upgradation/ construction of healthcare centres

The Department took up the upgradation/construction/expansion of 286 healthcare centres during the period February-November 2008 at a cost of Rs 112.51 crore. These were entrusted to different agencies for completion by May-August 2009. Out of these, 48 works had been completed at a cost of Rs 8.48 crore at the end of March 2009 and the total expenditure incurred (including works in progress) was Rs 24.87 crore up to the end of May 2009.

Records revealed that there was undue delay in taking up the upgradation/ construction works although funds had been released by GOI consistently during the period 2005-08. The Secretary attributed (June 2009) delay to belated tendering process.

A joint inspection by audit of the health care centres in the test-checked districts (108 SCs, 54 PHCs, 27 CHCs and nine DHs) revealed 63 instances of SCs and PHCs running without a proper building, 23 PHCs without an operation theatre and 36 PHCs without any vehicle (including ambulance) to provide emergency transportation facility to patients.

PHC, Araluguppe (Tumkur District) running without proper building (March 2009)

Untreated bio-medical wastes discarded in Injection Room at CHC, Sirsi (Uttara Kannada District) (March 2009)

One hundred and twenty four SCs/ PHCs/CHCs did not have separate utilities for men and women, 59 SCs and PHCs were not provided with labour rooms, 47 SCs and PHCs did not have water supply, 119 SCs/PHCs/CHCs did not have any facility for scientific disposal of bio-medical wastes and 180 SCs/ PHCs/CHCs did not have residential quarters for the staff **(Appendix-2.8)**.

[13] IPHS is a novel concept to fix benchmarks of infrastructure including manpower, equipment, drugs, quality assurance through introduction of treatment protocols

The Department stated that it required a lot of funds to upgrade the healthcare centre to IPH standards. The reply was not justified as the Department had not conducted a detailed survey of existing facilities to identify the gaps in healthcare facilities at all levels; taken timely action to utilise the available funds to create the infrastructure; assessed the cost to achieve IPH standards and apprised GOI for further release of funds.

2.2.7.2 Deficiencies in inpatient services

Only 37 out of 54 test-checked PHCs had a bed strength varying from one to six

As per the NRHM Framework, each PHC was to be provided with six beds and CHC with 30 beds for inpatient services. It was, however, observed that in only 37 out of test-checked 54 PHCs, inpatient services were available with bed strength varying from one to six. Similarly, out of the 27 test-checked CHCs, only 23 CHCs had 30 bed strength and in the remaining CHCs it varied from 10 to 25 beds. Consequently, the patients were forced to visit either district hospitals or private hospitals for health care. No reply was received as to reasons for not providing adequate facilities.

Deficiencies in inpatient services at PHC, Hulsoor (Bidar District) (March 2009)

2.2.7.3 Deficiencies in operation theatres

As per the NRHM Framework, operation theatre (OT) in each CHC was to be provided with equipment such as cardiac monitor, ventilator, high pressure steriliser, nitrous oxide cylinder, defibrillator, fumigation apparatus, oxygen cylinder, hydraulic operation table, *etc.* It was observed during a joint inspection of 27 CHCs that while cardiac monitors were functioning in only three CHCs, the ventilators were working in only five CHCs. The status of the availability and working of the various OT equipment in the CHCs is detailed in **Appendix-2.9**.

2.2.7.4 Lack of labour rooms in PHCs

Eleven out of 54 test-checked PHCs in the audited districts did not have labour rooms. Consequently, the intended objective of increasing institutional deliveries could not be achieved by these PHCs.

2.2.7.5 Deficiencies in diagnostic services

Basic diagnostic services were not available at the test-checked PHCs/CHCs

The NRHM Framework provides for essential laboratory services at PHCs and CHCs. At the PHC level, the service should include laboratory service for routine urine, stool and blood tests, blood grouping, bleeding time and clotting time, diagnosis of reproductive track infections (RTI)/sexually transmitted diseases (STD), sputum test for tuberculosis, blood smear examination for malaria, rapid tests for pregnancy, *etc.*

It was observed during the test-check of 36 PHCs that routine urine, stool and blood test services were not available in 17 PHCs, sputum test services not in 26 PHCs, blood smear test services for malaria not in four PHCs, diagnostic services for RTI/STD not in 46 PHCs and 33 PHCs did not have blood grouping services. No ultra sound facilities were available in 24 CHCs. The primary health care services could not thus, be effectively delivered at the grassroot level.

2.2.7.6 Deficient emergency services

There were deficiencies in providing emergency health services too, at the test-checked CHCs

In test-checked CHCs, deficiencies in the following services were also noticed:

- emergency obstetric care was not available in 7 CHCs.
- safe abortion facilities were not available.
- no blood storage services were available in 26 CHCs
- no paediatric services were available in 14 CHCs.

Although the above services were to be ensured by the CHCs as per the NRHM Framework, no action was taken to meet the requirements. Thus, the patients were forced to approach district hospitals or private hospitals. The Department cited paucity of funds to provide these services without furnishing details of action taken to secure funds.

Box 2.3

Non-operationalisation of Mobile Medical Units

Under NRHM, one Mobile Medical Unit (MMU) was to be provided in each district to serve unserved/under-served areas with the aim of taking healthcare to the doorstep of the needy people. Such MMUs comprised two components *viz*., a passenger vehicle to transport the medical and paramedical staff and another unit fitted with essential diagnostic/ operational equipment and laboratory facilities.

Based on PIP of the State for the year 2006-07, GOI released (September 2006) Rs 11.73 crore for purchase of 26 MMUs. The Department purchased (December 2007) only 26 passenger vehicles at a cost of Rs 1.47 crore and Rs 10.26 crore were kept (October 2006) in fixed deposits. The Mission Director (MD) outsourced (February 2009) running of mobile health clinics in the rural areas to NGOs in 12 districts and advanced Rs 1.61 crore to the respective DHS for this purpose. The MD neither obtained the approval of GOI for outsourcing this job nor considered the availability of passenger vehicles already purchased for the purpose. Consequently, the expenditure (Rs 1.47 crore) incurred on passenger vehicles was unproductive and the intended objective of rendering healthcare services in the remote areas could also not be realised. Besides, GOI funds of Rs 8.65 crore remained unutilised for nearly two years.

In a glaring instance, one of the passenger vehicles allotted to District Health and Family Welfare Officer, Bijapur was used for other official purposes and during elections by the Zilla Panchayat in disregard of the Mission requirements.

2.2.8 Human resources management

There was acute shortage of human resources at the test-checked health centres

The NRHM Framework provided that each SC was to be run with two ANMs (female) and a multipurpose worker (MPW-Male). The Mission aimed to ensure two ANMs at 30 *per cent* of the SCs by 2007 and 60 *per cent* by 2008 with the second ANM being appointed on contract basis. While the ANMs were to be paid out of Central grants, the MPWs were to be paid by the State Government. The PHC being the first point of interaction of the rural population with a doctor was to be manned by a medical officer. Besides, one AYUSH[14] doctor was to be appointed on contract basis to each PHC. The CHCs, first referral units for the rural population were to be provided with seven specialist doctors and nine staff nurses, besides support staff such as pharmacists and lab technicians.

The NRHM Framework also provided for appointment of medical and paramedical staff on contract basis so as to fill gaps in human resources for delivery of expected health care services by the SC/PHC/CHC/District Hospitals.

Records of healthcare centres in the test-checked districts revealed shortages of medical/para medical staff;

- There was no General Physician in 16 CHCs and General Surgeon in 12 CHCs.
- There were no Gynaecologists and Obstetricians in 8 CHCs.
- The posts of Paediatrician and Anaesthetist were vacant in 14 CHCs.
- There was no regular ANM in 10 PHCs.
- 27 PHCs did not have the required number of staff nurses.
- The post of Pharmacist was vacant in eight PHCs.
- The post of laboratory technician was vacant in 12 PHCs.
- The post of MPW was vacant in 76 SCs.

No action was taken to fill up the vacancies either through regular recruitment or on contract basis during the period 2005-09. The Department in reply stated (June 2009) that the recruitment was underway to remedy the situation. The delay in appointment of the medical and paramedical staff to the rural health care centres affected delivery of proper rural healthcare services.

Box 2.4

Idle anesthesia machines in CHC

Forty anaesthesia machines (Boyle's apparatus) were procured (January 2007) by the SHS at a cost of Rs 73.63 lakh and supplied to 40 CHCs although there was no sanctioned post of anaesthetist in these CHCs. Consequently, the machines were idling for nearly three years resulting in an unfruitful expenditure of Rs 73.63 lakh.

[14] Ayurveda, Unani, Siddha and Homoeopathy systems of medicine

2.2.8.1 Appointment of Accredited Social Health Activists (ASHA)

The accredited social health activists were not involved at community level to realise the Mission Objectives

The NRHM Framework envisages appointment of a trained female community health worker called ASHA in each village in the ratio of one per thousand population (or less for large isolated habitations). ASHA was expected to act as an interface between the community and the public health system. ASHA would facilitate preparation and implementation of the Village Health Plan under the leadership of the VHSC. She would be trained on pedagogy of public health and given a drug kit containing generic AYUSH and allopathic formulations for common ailments to be dispensed among the rural population at their door step. The NRHM Framework envisaged appointment of 50 *per cent* of the required number of fully trained ASHAs by 2007 and 100 *per cent* by 2008.

Records revealed that GOI released (December 2006) Rs 2.93 crore to the SHS for appointment and training of 39,125 ASHAs in the State. As against the required 39,125, only 12,335 ASHAs had been appointed and trained during 2008-09 at a cost of Rs 45 lakh and the balance Rs 2.48 crore was lying unspent with the SHS. The reasons for undue delay in selection and training of ASHAs were not forthcoming. The Department in reply stated (June 2009) that action would be taken to meet the target during the year 2009-10. The delay in the selection of ASHAs had thus, impeded the pace of project implementation.

2.2.9 Evaluation of Health Indicators

The NRHM Framework prescribed National targets for reducing maternal mortality rate (MMR), infant mortality rate (IMR), total fertility rate (TFR) as well as increasing cure rate of different endemic diseases covered under various National disease control programmes. The States were also required to set similar targets for achieving reduced MMR, IMR and to increase institutional deliveries, routine immunisation of children, *etc*., by the year 2010.

2.2.9.1 Maternal mortality ratio and Infant mortality ratio

The RCH programme aims at reducing the MMR rate to 90 per lakh deliveries and IMR to 30 per thousand live child births by the year 2010. The status of MMR and IMR in the State as at the end of the year 2008-09 stood at 228 and 50 respectively.

Factors such as ante-natal care, tetanus toxoid immunisation, iron folic acid administration to expectant mothers and institutional deliveries at the healthcare centres were essential to achieve the prescribed reduction in MMR and IMR.

Ante natal care

There was a wide gap in the total number of pregnant women and those who received antenatal care for safe motherhood in the test-checked districts

Ante natal care (ANC) aimed at safe motherhood and provided for registering all pregnant women at the nearest Government healthcare centres before they attained 12 weeks of pregnancy and provide them with four rounds of ante natal checkup.

Records revealed that out of 9.58 lakh pregnants who were registered for ANC in the test-checked districts, only 4.70 lakh received the prescribed four rounds of ante natal checkup. The Department did not keep track of the remaining registered pregnant women to ensure completion of all the prescribed rounds of checkup and to ensure their safe motherhood.

Tetanus Toxoid immunisation

Under the NRHM Framework, all the pregnant women were to be administered two doses of tetanus toxoid. There was, however, a shortfall in immunising the pregnant women as only 9.60 lakh pregnant women were immunised against a target of 10.56 lakh due to short supply of vaccines by GOI.

Iron folic acid administration

There was shortfall in achieving the targets for immunisation of pregnant women and administering iron tablets to them

All pregnant women were to be administered 90 or more iron folic acid tablets during the course of pregnancy. Although 10.10 lakh pregnant women were registered for iron folic acid (IFA) administration in test-checked districts, the number who actually received the required number of IFA tablets was only 5.02 lakh resulting in 5.08 lakh pregnant women going without IFA tablets although iron deficiency was considered to be the serious cause of maternal deaths. The Department did not ensure that the remaining pregnant women received the required number of IFA tablets essential for safe motherhood.

Institutional deliveries

The SHS did not furnish information regarding the target fixed for institutional deliveries, total institutional deliveries registered in the State during the period 2005-09 and the action taken to achieve the target in case of shortfall. However, in the test-checked districts, the details of targets and achievements for institutional deliveries are as at **Table 2.4**.

Table 2.4: Details of targets and achievements for institutional deliveries

District	No. of pregnant women registered at Government Healthcare Centres	Target for institutional deliveries (2005-09)	Achievement (2005-09)	Domiciliary deliveries	Percentage of institutional deliveries
Bidar	1,54,151	96,947	73,354	38,592	75.66
Bangalore (Rural)	1,21,921	1,03,633	76,438	3,363	73.76
Bijapur	2,09,860	86,271	NF	77,527	NA
Uttara Kannada	90,195	77,840	71,561	8,038	91.93
Chickmagalur	56,081	NF	38,519	5,802	NA
Chamarajanagar*	NF	NF	NF	NF	NA
Dharwad*	1,41,325	NF	74,459	9,095	NA
Dakshina Kannada	75,157	69,108	66,833	2,275	96.70

Source: State Health Society

NF = Not furnished, NA – Not applicable

*** Chamarajanagar and Dharwad districts did not furnish the details of targets fixed.**

There was a shortfall in the institutional deliveries ranging from 3.30 to 26.24 *per cent* in the test-checked districts

The targets fixed for institutional deliveries in Bidar, Bangalore (Rural), Bijapur and Uttara Kannada districts were unrealistic in as much as they were less than the number of pregnant women registered in the Government healthcare centres by 13.70 to 58.90 *per cent*. There was a shortfall in institutional deliveries ranging from 3.30 to 26.24 *per cent* in the test-checked districts.

In the absence of operation theatres, labour wards, equipment, specialists in Obstetrics and Gynaecology, Anaesthesia, *etc*., delay in appointment of ASHA, filling up vacant posts of ANM and constitution of planning and monitoring committees at village level coupled with inadequate coverage for ante-natal care, it was dificult to conclude that the objective of institutional deliveries had been attained in the State.

Box 2.5

Shortfall in disbursement of cash incentives under Janani Suraksha Yojane

The NRHM Framework provides for payment of cash incentives immediately after the delivery of first and second child, at the rate of Rs 500 and Rs 700 for institutional deliveries. Records of test-checked CHCs and DHS of Bidar and Dharwad districts revealed that against 38,186 cases of institutional deliveries involving below poverty line beneficiaries during 2008-09, the Department paid cash incentives in only 34,028 cases and the remaining beneficiaries were denied the benefits on grounds of non-availability of fund and non-production of proper documents. The inaction of the Department was not justified as the cash incentives had to be paid as per Mission Framework within seven days of delivery after verifying the bonafides of the beneficiaries. Failure to take timely action resulted in denial of the benefits.

2.2.9.2 Family planning

The NRHM Framework launched a number of initiatives under family planning (FP) while continuing existing methods to achieve the goal of population stability and reduction in total fertility rate by the year 2012. The FP included terminal method to control total fertility rate and spacing method to improve couple protection ratio. While the terminal method included vasectomy for males and tubectomy (including Laparoscopy) for females, the spacing method included using oral pills, condoms and inserting intrauterine contraceptive devices.

There was a shortfall in achieving family planning targets by 6.8 *per cent* to 98.77 *per cent* in the test-checked districts

Records in the test-checked districts revealed that against a target of 1.08 lakh conventional tubectomies during the period 2005-09, the achievement was one lakh indicating a shortfall of 6.8 *per cent*. Under laparoscopic tubectomy, as against a target of 1.87 lakh cases during the period 2005-09, the achievement was only 1.02 lakh indicating a shortfall of 45.46 *per cent*. Under vasectomy, the achievement was only 765 as against a target of 62,020 cases during 2005-09 indicating an acute shortfall of 98.77 *per cent*. Although specific reasons for shortfall were not furnished by the implementing officers, delay in appointment of ASHA, continued vacancies in the post of ANM and non-existence of Planning and Monitoring Committees at village level as well as

non-involvement of NGOs in project implementation were largely responsible for shortfall in achievement of the goals prescribed under family planning.

2.2.9.3 Routine immunisation

The targets under oral polio vaccine and DPT were over achieved during 2005-08

Immunisation of children against six preventable diseases *viz.,* tuberculosis, diphtheria, pertussis, tetanus (DPT), polio and measles was envisaged under the routine immunisation programme. The Department had set annual targets for immunisation against each of these six diseases. In addition, GOI had launched 'pulse polio' programme to eradicate polio and ensure zero transmission by the end of 2008. The details of targets and achievements at the State level during 2005-08 were as at **Table 2.5**.

Table 2.5: Targets and achievements under routine immunisation

	Targets (2005-08)	Achievement (2005-08)*	Excess/shortfall
BCG (Tuberculosis)	32,34,363	33,25,618	(+) 91,255
DPT	21,60,424	21,84,665	(+) 24,241
Oral Polio Vaccine (OPV)	32,34,363	32,69,677	(+) 35,314
Measles	32,34,363	31,22,694	(-) 1,11,669
Pulse Polio (GOI programme)	Targets and achievements not furnished by SHS		

Source: State Health Society
*** Details of targets and achievements for 2008-09 were not furnished by the Department**

While there was a shortfall in the achievement of targets in respect of measles (3.46 *per cent*), the targets under administration of BCG, Oral Polio Vaccine and DPT were over achieved by 2.82 *per cent*, 1.09 *per cent* and 1.12 *per cent* respectively.

In the test-checked districts, it was observed that the Pulse Polio Programme was a success throughout the period 2005-08 with an achievement ranging from 99.15 *per cent* to 101.52 *per cent*.

2.2.9.4 Administration of Vitamin 'A' solution to children

Shortfall ranging from 7 to 37 *per cent* in administration of Vitamin 'A' to children

The NRHM Framework emphasised administration of Vitamin 'A' solution to all children less than three years of age to protect them against blindness due to vitamin 'A' deficiency. This required administration of first dose of Vitamin 'A' solution at 9 months of age and second dose along with DPT/ OPV and subsequent three doses at every six months interval.

Records revealed that during the period July 2005-January 2008, the achievement varied from 63 *per cent* to 93 *per cent*. The shortfall was attributed to migration of labour class parents at the time of administration, inaccessibility of beneficiaries due to rainy seasons, *etc,*. However, no details were available with the implementing officers in support of the reasons for shortfall.

2.2.9.5 National Vector Borne Disease Control Programme

The National Vector Borne Disease Control Programme (NVBDCP) aimed at controlling vector borne diseases such as malaria, filaria, kala azar, dengue, chikungunya, Japanese encephalitis, *etc*., in endemic areas through close surveillance, controlling mosquito breeding and providing treatment facilities at health centres. The programme stipulated to achieve an annual blood examination rate of 10 *per cent* to detect/diagnose the incidence of vector borne diseases and an annual parasitic incidence of less than 0.5 per thousand population.

Records revealed that in the State the annual blood examination rate was 18.90 *per cent* and 16.8 *per cent* for the years 2005-06 and 2006-07. But the annual parasitic incidence was 1.2 per thousand and 0.9 per thousand for 2005-06 and 2006-07 respectively. The details of achievement during 2007-09 were not furnished by the SHS.

2.2.10 Management Information System

The NRHM Framework envisaged developing a computer based Management Information System (MIS) at each DHS and reporting monthly to the SHS. The computerisation of health care centres up to block level and networking under the Integrated Disease Surveillance Project (a component under NRHM) were necessary for reporting through the MIS. Besides, the Mission envisaged an elaborate system of monitoring the implementation of various programmes at all levels *viz*., the State Health Society, District Health Society, Block level and Village level Planning and Monitoring Committees. The Mission also provided for a State Programme Management Support Unit (SPMSU), District Programme Management Support Units (DPMSU) and Block Programme Management Support Units to facilitate Management of health care services by professionals and by providing technical support in the fields of accounting, MIS, human resource management, *etc.*

Records revealed:

2.2.10.1 Non-computerisation of CHCs

Computerisation of CHCs and setting up the PMSUs had not been achieved

None of the 27 test-checked CHCs was computerised during the period 2005-09. Reasons for non- computerisation of CHCs were not forthcoming.

2.2.10.2 Non-setting up of PMSUs at Block level and under-staffing of PMSUs at District and State level

PMSUs had not been set up at block level in 27 test-checked CHCs even at the end of March 2009 and the PMSUs at the district and State level were understaffed. Consequently, factual correctness of financial reporting was affected. The Department did not furnish any information on the action taken in the matter.

2.2.11 Conclusion and recommendations

2.2.11.1 Planning

The launching of the National Rural Health Mission without conducting a survey of the households and existing facilities was defective as the Department could not accurately assess future interventions required and fix realistic financial and physical targets. Lack of community participation in preparation of village and block plans for project implementation defeated the objectives of decentralised planning intended to ensure a health system more responsive to the needs of the local community. The functioning of ARSs and the involvement of NGOs were also not effective further impacting the community participation.

Recommendation: The SHS should ensure survey of households and facilities as per NRHM Framework to identify all the gaps in the health care facilities and to include them in the future project implementation plans. Expeditious action should be taken to set up the planning and monitoring committees as well as village health and sanitation committees throughout the State. The functioning of ARSs and involvement of NGOs also needs to be improved.

2.2.11.2 Unspent project funds and defective UCs

There were huge unspent balances under various components of NRHM representing untied funds to VHSCs, funds for upgradation/expansion of healthcare centres, appointment of ASHAs, reduction of maternal and infant mortality, *etc.*, leading to delay in realisation of intended objectives. The incorrect financial reporting by SHS through defective UCs carried the inherent risk of diversion or even misappropriation of funds.

Recommendation: The State Government should provide the VHSCs with untied funds and suitable guidance and counselling for their functioning. Upgradation/expansion of healthcare centres as well as appointment and training of ASHAs should be expedited to create necessary healthcare infrastructure and to provide trained female community health workers in rural areas. The PMSUs should be set up in each block and staffed adequately to ensure correctness of financial reporting by the unit officers.

2.2.11.3 Deficiencies in healthcare services

The deficiencies in diagnostic services, inpatient services, emergency services and lack of labour rooms and operation theatres in healthcare centres at village and block/community level compelled the patients to approach district/private hospitals defeating the objectives of providing accessible and affordable healthcare facilities to the rural poor under NRHM.

Recommendation: A time bound programme should be drawn up to identify the gaps and create basic health infrastructure at all levels to render primary healthcare services especially in rural areas.

2.2.11.4 Shortage of staff and poor health indicators

Shortage of medical and paramedical staff together with lack of essential equipment and buildings for the healthcare centres resulted in denial of primary healthcare to the rural people. Evaluation of health indicators indicated poor achievement in reducing maternal mortality and institutional deliveries.

Recommendation: Expeditious action should be taken to fill the existing vacancies in all the health care centres in a time bound manner. Government should ensure that antenatal care is provided to all expectant mothers to ensure safe motherhood and reduction in infant mortality.

2.2.11.5 Monitoring

Computerisation of healthcare centres upto the block level and networking was yet to be achieved to develop a computer based Management Information System at each DHS.

Recommendation: A time bound programme should be drawn up to commission the MIS at DHS utilising the available financial resources.

The matter was referred to Government in July 2009; reply had not been received (December 2009).

Appendix 2.7
(Reference: Paragraph 2.2.4, Page 32)
Details of sample units selected for audit

Sl.No	District	CHC/Block	PHC	Sub Centre
1.	Bidar	Basavakalyan	Rajeshwar	Rajeshwar -I
				Kowdiyala
			Hulsoor	Hulsoor -2
				Mirakkal
		Humnabad	Hallikhed	Hallikhed -2
				Chitakota\Hillapur
			Dubbalgundi	Dubbalgundi
				Shedola
		Bhalki	Halbarga	Choladapaka
				Hadahalli
			Nittur	Nittur-B
				Kosama
2.	Dharwar	Navalgund	Morab	Morab-C
				Kalawada
			Shalawadi	Tuppadakurahalli
				Ballarawada
		Kundgol	Yeliwala	Betadura
				Malali
			Gudageri	Kalasa-A
				Kalasa-B
		Kalaghatagi	Mishrikote	Ugnikeri
				Kuruvinakoppa
			Bommigatti	Bommigatti
				Tavarageri
3.	Dakshina Kannada	Bantwal	Vamanapadava	Chennai Thody
				Ajjibettu
			Benjanapadavu	Thankabelluru
				Badagabelluru
		Sullia	Sullia	Sullia-B
				Sullia -C
			Aranthodu	Sampaje
				Gonadka
		Mangalore	Adyar	Bajal- A
				Bajal- B
			Ambalagaru	Ambalagaru
				Perannur-B
4.	Chickmagalur	Mudigere	Nandipura	Handi
				Hesagol
			Kalasa	Karagadde
				Samse
		Koppa	Koppa	Andagaru

Sl.No	District	CHC/Block	PHC	Sub Centre
				Surya Devastana
			Jayapura	Balalukoppa
				Koge
		Kadur	Panchanahalli	Panchanahalli - Rural
				Viyaradagere
			Chowla Hiriyur	Chowla Hiriyur
				Bislere
5.	Tumkur	Kunigal	Kunigal	Kunigal -A
				Kaggere
			Yediyur	Nagasandra- B
				Gunagara
		Tiptur	Araluguppe	Rajathadipura
				Bidiregudi
			Halkurke	Halkurke
				Sarthavalli
		Sira	Baragur	Lakkanahalli
				Baragur
			Kallambella	C.B Agrahara
				Brahamasandra
6.	Chamrajnagar	Kollegal	Palya	Palya
				Kollanur
			Kamgere	Kongrahalli
				Singanellur
		Chamrajnagar	Santhemarahalli	Kavudawadi
				Yediyur
			Udigaly	Tammadahalli
				Shivapura
		Yelandur	Yelandur	Yelandur -A
				Yelandur- B
			Honnur	Duggahalli
				Kestur-A
7.	Bangalore-Rural	Nelamangala	Margondanahalli	Kereketaganur
				Arebommanahalli
			Hasiruhalli	Hasiruhalli-A
				Hasiruhalli-B
		Hosakote	Anugondanahalli	K.K.Agrahara
				Gundur
			Mugbala	Mugbala
				Begur
		Devanahalli	Sadahally	Sadahally-Rural
				Sadahally - Urban
			Aradesanahalli	Jalige
				Hegganahalli
8.	Karwar	Bhatkal	Balaki	Balaki
				Mudabhatkal

Sl.No	District	CHC/Block	PHC	Sub Centre
			Shirali	Shirali I
				Shirali II
		Sirsi	Heggadekatte	Samkande
				Devenalhalli
			Hulekal	Kakali
				Varaahalli
		Kumta	Bankikodla	Bankikodla
				Nadumaskeri
			Santhegute	Santhegute
				Marur
9.	Bijapur	B.Bagewadi	Wadawadagi	Wadawadagi
				Salawadgi
			Kolhar	Kolhara
				Hanamapura
		Sindhagi	Kalkeri	Kalkeri-B
				B.B.Ingalgi
			Malghana	D.Navadgi
				Yaragola
		Muddebihal	Nalatwad	Bijjur
				Hiremurla
			Kalagi	Kalagi-A
				Charchinakal

Appendix 2.8
(Reference: Paragraph 2.2.7.1, Page 38)
Inadequate physical infrastructure at health centres

Sl. No.	Particulars	Sub Centre	Primary Health Centre	Community Health Centre
1.	Total numbers audited	108	54	27
2.	Centres running without a building	53	10	Nil
3.	Centres having no government building	28	3	Nil
4.	No. of health centres where cleanliness was poor	41	6	Nil
5.	No. of health centres where required number of vehicles/ ambulance was not available	NA	36	2
6.	No. of health centres where Citizen's Charter was not displayed prominently in local language	45	13	1
7.	No. of health centres where suggestion/complaint box was not kept prominently	68	15	1
8.	No. of health centres where separate utilities for men and women not present	89	32	3
9.	No. of health centres where operation theatre/minor operation theatre not present (where applicable)	Not applicable	23	Nil
10.	No. of health centres where labour room not present (where applicable)	48	11	Nil
11.	No. of health centres where separate ward for male and female not present (where applicable)	Not applicable	14	NA
12.	No. of health centres where waiting rooms for patients was not present/not in good condition	NA	24	9
13.	No. of health centres with no provision of water supply	42	5	Nil
14.	No. of health centres with no provision of storage of water	94	25	Nil
15.	No. of health centres with no facility of sewerage	Not applicable	7	2
16.	No. of health centres with no facility of medical waste disposal	60	45	14
17.	No. of health centres with no electricity connection/power supply	55	1	Nil

Sl. No.	Particulars	Sub Centre	Primary Health Centre	Community Health Centre
18.	No. of health centres with no working facility of standby power supply/generator	Not applicable	39	2
19.	No. of health centres with no telephone connection	102	9	Nil
20.	No. of health centres with no computer	Not applicable	47	8
21.	No. of health centres with no accommodation facilities for attendants of admitted patients	Not applicable	Not applicable	22
22.	No. of health centres where accommodation facilities for staff was not present/occupied	45	20	Nil
23.	No. of health centres where accommodation facilities for staff was partially present/occupied	57	31	27

Appendix 2.9

(Reference: Paragraph 2.2.7.3, Page 39)

Deficiency in operation theatres

	Number of CHCs where equipment was present and functional	Number of CHCs where equipment was present but not functional	Number of CHCs where equipment was not present
Cardiac Monitor for OT	3	Nil	24 (89%)
Ventilator for OT	5	Nil	22 (81%)
Vertical High Pressure Sterilizer 2/3 drum capacity	16	6	5 (19%)
Shadow less lamp pedestal for minor OT	19	3	5 (19%)
Dusting machines	5	1	21(78%)
Nitrous oxide cylinder 1780 ltrs 8 for one Boyles Apparatus	17	1	9(33%)
EMO Machine	4	Nil	23(85%)
Defibrillator for OT	3	1	23(85%)
Horizontal High Pressure Sterilizer	19	4	4(15%)
Shadow less lamp ceiling track mounted	18	2	7(26%)
OT care/fumigation apparatus	24	1	2(7%)
Oxygen cylinder 660 litres 10 cylinder for one Boyles apparatus	18	Nil	9(33%)
Hydraulic operation table	19	1	7(26%)