

# 7

---

## Health

### INTRODUCTION

7.1. The Eleventh Five Year Plan envisaged an inclusive approach towards health care that encompassed equitable and comprehensive individual health care, improved sanitation, clean drinking water, nutritious food, hygiene, good feeding practices and development of delivery systems responsive to the needs of people. It promised special attention to the health of marginalised groups such as adolescent girls, women of all ages, children below the age of three, older persons, the differently-abled, tribals and scheduled castes. Gender equity was to be an overarching concern.

7.2. The Plan recognised that while total expenditure on health in India (public plus private) as a percentage of GDP was broadly in line with the level achieved in other countries at similar per capita income levels, it was skewed too much in favour of private expenditure. Public expenditure on health in India (Centre plus States combined) was less than 1 per cent of GDP indicating inadequacies in the public provision of critical health services. The Plan therefore explicitly envisaged an increase in public expenditure on health to at least 2 per cent of GDP.

7.3. While recognising that health outcomes depend not just on the access to curative health care, but also on strengthening public health related services particularly access to clean drinking water, sanitation and improved child rearing practices which in turn depend on education and empowerment of women, the Plan took some very important initiatives for increasing the outreach and quality of health services:

- The National Rural Health Mission (NRHM) is a major flagship programme of the Government in the health sector, which aims at inclusive health and improved access to quality health care for those residing in rural areas, particularly women, children and the poor by promoting integration, decentralisation and encouraging community participation in health programmes.
- The Rashtriya Swasthya Bima Yojana (RSBY) is an effort to provide protection to BPL households in the unorganised sector from financial liabilities arising out of health problems that involve hospitalisation.
- Mainstreaming AYUSH into health services at all levels was also an important strategy for the Eleventh Plan.

### ELEVENTH PLAN GOALS

7.4. The monitorable targets for the Eleventh Plan are the following:

- Reducing Infant Mortality Rate (IMR) to 28 per 1000 live births.
- Reducing Maternal Mortality Ratio (MMR) to 100 per 1,00,000 live births.
- Reducing Total Fertility Rate (TFR) to 2.1.
- Reducing malnutrition among children of age group 0–3 to half its present level.
- Reducing anaemia among women and girls by 50 per cent.
- Raising the sex ratio for age group 0–6 to 935 by 2011–12 and 950 by 2016–17.
- Providing clean drinking water for all by 2009 and ensuring no slip-backs.

## MID-TERM APPRAISAL: THE PROCESS

7.5. The Mid Term Appraisal is based on an analysis of sectoral data, review of official documents and other independent reports<sup>1</sup>, consultations with the experts in the field, discussions with nodal departments of the implementing Ministries as well as the departments in State Governments dealing with the subject. It also draws on five regional consultations held by Planning Commission at Guwahati for North-Eastern States, Jaipur for Western States, Bhubaneswar for Eastern States, Chandigarh for Northern States and Bangalore for Southern States. Individuals concerned with healthcare and NGOs were invited to participate in the consultations to provide feedback on performance so far.

7.6. The mid-term appraisal with regard to the health schemes is however, constrained by

2007-08 and therefore, it is too early to judge its impact. Some of the relevant data, for example for MMR and IMR are only available for 2006 and 2008 respectively, which cannot reflect the impact of recent interventions.

## ASSESSMENT OF PROGRESS

7.7. Based on available data, this section presents an assessment of progress towards stated goals and monitorable targets of the Eleventh Plan.

### Public Expenditure on Health

7.8. Total public expenditure on health in the country as percentage of GDP now stands around 1.1 per cent (2009-10). However, health related expenditures like clean drinking water, sanitation and nutrition have major bearing on health and if expenditure on these is counted

**Table 7.1**  
**Public Expenditure on Health as per cent of GDP**

Year	Health			Health & Related Inputs**		
	Centre	State	Total	Centre	State	Total
2005-06	0.29	0.67	0.96	0.53	1.21	1.74
2006-07	0.29	0.67	0.96	0.53	1.21	1.74
2007-08	0.32	0.70	1.02	0.59	1.29	1.88
2008-09	0.35	0.71	1.06	0.63	1.28	1.91
2009-10*	0.39	0.70	1.09	0.66	1.30	1.96

\* Provisional

\*\* Besides expenditure by health and family welfare departments, this includes estimated expenditure on RSBY, water supply, sanitation and nutrition.

the fact that some of the programmes are too new to measure impact in any specific manner. For instance, the National Rural Health Mission which is the most important initiative in the health sector began only in 2005. Its expenditure began to roll out significantly in

the total public health spending reaches around 2 per cent of GDP. Even so, it is strongly felt that public expenditure on health needs to be increased.

7.9. Looking at the contributions of Centre and States (Table 7.1), Centre's health expenditure as percentage of GDP has increased from 0.29 in 2005-06 to 0.39 in 2009-10. This is much faster than the States, where the increase has been from 0.67 to 0.70 over the same period. This pattern also holds good for health related expenditure. States therefore have to substantially increase their health budgets.

<sup>1</sup> These include reports of Comptroller and Auditor General, Common Review Mission, Centre for Health and Social Justice, Centre for Operations Research & Training, International Advisory Panel, Independent Commission on Development and Health, International Institute of Population Sciences, Institute of Economic Growth, Jan Swasthya Abhiyan, National Alliance for Women, National Institute of Health & Family Welfare, People's Mid-Term Appraisal, Planning Commission, Public Health Resource Society, Registrar General of India and Voluntary Health Association of India.

### Maternal Mortality Ratio (MMR)

7.10. To reach the MMR target of 100 by 2012, the required rate of decline from 254 (SRS 2004-06) has to be, on an average, 22 per year. Unfortunately, no data are available on the progress of MMR during the Eleventh Plan period i.e. the period beginning 2007-08. However, earlier data shows that MMR came down from 301 (SRS 2001-03) to 254 (SRS 2004-06), i.e., an average decline of 16 per year. Achieving the Eleventh Plan target clearly requires much faster progress. State wise decline during the pre-Eleventh Plan period varied from an average of 26 per year for Uttar Pradesh/Uttarakhand, 20 per year for Bihar/Jharkhand, 19 per year for Rajasthan, 18 per year for Orissa/ West Bengal to 15 per year for Madhya Pradesh/Chhattisgarh.

7.11. When 52.2 per cent of the deliveries are conducted at home (DLHS-3, 2007-8) and comprehensive obstetric care continues to be a problem in many States, the scope for expanding timely access to quality institutional care is limited, particularly for those living in remote and inaccessible areas. In such a scenario, the MMR goal of 100 is achievable only through appropriate area specific interventions. These should include equipping the Traditional Birth Attendants (TBAs)/Dais for safe delivery-specially in remote and inaccessible areas, universalising access to skilled birth attendants over a period of time and creating better access to emergency obstetric care (both public and private), in case of complications within two-hours travel time.

### Infant Mortality Rate (IMR)

7.12. Although IMR is showing a downward trend, but the rate of improvement here too has to be three times that in the past so as to attain the level expected by the end of Eleventh Plan. All India IMR was 57 in 2006 and 53 in 2008 (SRS), a decrease of 4 in two years. High focus States of NRHM have shown marginally better performance in rural areas, where IMR has decreased by 5 in two years. Tamil Nadu has also shown marginally better performance, a decline of 6 in two years. To achieve IMR of 28 by 2012, the required rate of decrease has to be an average of 6 per year. Intensive and

urgent efforts are required to adopt home-based newborn care based on validated models such as the Gadchiroli model (Eleventh Plan, Vol. II - p 90) and make focused efforts for encouraging breast feeding and safe infant and child feeding practices. While emphasis on early breast feeding is part of ASHAs training, special training on neonatal care for community and facility level health functionaries will facilitate a faster reduction in IMR.

### Total Fertility Rate (TFR)

7.13. TFR came down from 2.9 in 2005 to 2.6 in 2008 (SRS), a decline of 0.1 per year. With some more effort, it should still be possible to reach the target of 2.1 by 2012. The situation varies across states. Out of the 20 States for which SRS data is available, nine States have already reached the replacement level of 2.1 or less, while four States have TFR greater than 2.1 and less than or equal to 2.5. The problem States are Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand, Chhattisgarh and Assam which have TFR between 2.6 and 3.9. A concerted effort will have to be made by these lagging States, particularly Bihar and Uttar Pradesh, in order to achieve the target by the end of the Eleventh Plan. This involves measures such as addressing the unmet needs for contraception besides reduction in child mortality, greater male involvement, women's empowerment and delaying their age at marriage etc. For this, Departments of Health at Centre and States need to coordinate with other concerned departments.

### Other Monitorable Goals of Eleventh Plan

7.14. Regarding the sex ratio, information for the age group 0-6 years during the Eleventh Plan period is not available to track achievement *vis a vis* the goals. The latest available data on sex ratio for the age group 0-4 shows some improvement from 908 (2004-06) to 914 (2005-07) and further to 915 (2006-08) but clearly this is not satisfactory and much more needs to be done. Schemes for the welfare of girl child, implementation of Pre-Conception and Pre-Natal Diagnostics Techniques (PC PNDT) Act and Behavioural Change Communication (BCC) activities need to be intensified.

7.15. Regarding malnutrition and anaemia, there are reports about efforts being made by different States, though specific information is yet to be available.

7.16. On the goal related to clean drinking water, progress is slightly behind schedule. Out of the 55,067 habitations that did not have access to clean drinking water at the beginning of the Bharat Nirman Programme (2005-06), only 478 remain to be covered (as on 1 January, 2010). However this effort continues to be undermined by slippage which has been a recurring feature of our rural drinking water programme. As uncovered habitations are covered, several that were covered earlier slip back due to increase in population, inadequate source of water supply or falling ground water levels. There has to be a constant effort to cover such habitations on priority basis.

#### Health Infrastructure

7.17. Shortfall of Community Health Centres (CHCs) has decreased from 49.4 per cent in 2005 to 36 per cent in 2008. However, the shortfall of Sub-Centres (SCs) and Primary Health Centres (PHCs) in 2008 has been almost the same as in 2005 (Table 7.2). Four States, Bihar, Uttar Pradesh, West Bengal and Madhya Pradesh alone contribute towards 74 per cent of the overall shortfall of SCs, 70 per cent shortfall of PHCs and 61 per cent shortfall of CHCs. Though consolidation and optimal utilisation of existing infrastructure has been the

focus, much more needs to be done.

#### Health Human Resource

7.18. Shortage of human resources in health has been as pronounced as lack of infrastructure. Table 7.3 presents the extent of progress in reducing the shortfall between 2006 and 2008. The overall shortfall of female Health Workers and Auxiliary Nurse Midwives (ANMs) was relatively low at 10.93 per cent in 2006, but increased to 12.43 per cent of the total requirement for the available infrastructure in 2008. In case of male Health Workers, Radiographers, Lab Technicians and Specialists at CHCs, the shortfalls were very large (54.3 per cent, 53.3 per cent, 50.9 per cent and 64.5 per cent respectively). As for Doctors at PHCs, there was a shortfall of 15.08 per cent. Of the sanctioned posts, a significant percentage viz. 18.8 per cent Doctors at PHCs, 48.6 per cent Specialists at CHCs and 28.3 per cent Health Workers (Male) at SCs were vacant.

7.19. It has been reported that due to contractual recruitments with NRHM funds, States have added 42,633 ANMs, 12,485 MBBS Doctors and 2,474 Specialists. In the last three years under NRHM 26,253 Staff Nurses, 7399 AYUSH Doctors and 3,110 AYUSH paramedics were appointed. Close to one lakh service providers and managers have been contracted into the system across the country. While the data in Table 7.3 (taken from Health Ministry sources) needs to be

**Table 7.2**  
**Shortfall in Health Infrastructure\***

S.No.	Health Facility	As on September 2005				As on March 2008			
		R	P	S	S in %	R	P	S	S in %
1.	Sub-Centre	1,58,792	1,46,026	19,269	12.1	1,58,792	1,46,036	20,486	12.9
2.	PHC	26,022	23,236	4,337	16.6	26,022	23,458	4,477	17.2
3.	CHC	6,491	3,346	3,206	49.4	6,491	4,276	2,337	36.0

\* Based on 2001 population

R: Requirements P: In Position S: Shortfall S in per cent: Shortage in per cent

Note: All India shortfall is derived by adding State-wise figures of shortfall ignoring the existing surplus in some of the States.

Source: Bulletin on Rural Health Statistics (RHS) 2006 and 2008

supplemented by the data on contractual appointments to show the true picture regarding Family Welfare (MoHFW) (including RSBY implemented by Ministry of Labour and

**Table 7.3**  
**Human Resources for Health – Shortages**

Health Personnel	All India	Required (R)	Sanctioned (S)	In Position (P)	Vacant (S-P)	Shortfall (R-P)
Multipurpose Workers (Female)/ANMs at Sub-Centres & PHCs	2006	1,67,657	1,62,772	1,49,695	13,126 (8.06%)	18,318 (10.93%)
	2008	1,69,494	1,43,269	1,53,568	8,800 (6.14%)	21,066 (12.43%)
Health Workers (Male)/MPWs (M) at Sub-Centres	2006	1,44,998	94,924	65,511	29,437 (31.01%)	74,721 (51.53%)
	2008	1,46,036	78,813	60,247	22,281 (28.27%)	79,322 (54.32%)
Health Assistants (Female)/LHVs at PHCs	2006	22,669	19,874	17,107	2,781 (13.99%)	5,941 (26.21%)
	2008	23,458	19,920	17,608	2,664 (13.37%)	6,481 (27.63%)
Health Assistants (Male) at PHCs	2006	22,669	24,207	18,223	5,984 (24.72%)	7,169 (31.62%)
	2008	23,458	23,705	17,976	6,534 (27.56%)	8,831 (37.65%)
Doctors at PHCs	2006	22,669	27,927	22,273	5,801 (20.77%)	1,793 (7.91%)
	2008	23,458	25,086	24,375	4,708 (18.77%)	3,537 (15.08%)
Specialists at CHCs	2006	15,640	9,071	3,979	4,681 (51.60%)	9,413 (60.19%)
	2008	17,104	8,376	4,279	4,068 (48.57%)	11,033 (64.51%)
Radiographers at CHCs	2006	3,910	2,400	1,782	620 (25.83%)	1,330 (34.02%)
	2008	4,276	2,124	1,695	661 (31.12%)	2,280 (53.32%)
Pharmacists at PHCs and CHCs	2006	26,579	22,816	18,419	4,445 (19.48%)	4,389 (16.51%)
	2008	27,734	24,088	20,956	4,282 (17.78%)	7,022 (25.32%)
Lab Technicians at PHCs and CHCs	2006	26,579	15,143	12,351	2,792 (18.44%)	9,509 (35.78%)
	2008	27,734	15,223	12,886	3,308 (21.73%)	14,134 (50.96%)

Note: All India shortfall is derived by adding State-wise figures of shortfall ignoring the existing surplus in some of the States.

the human resources shortfall, *prima facie*, it can be said that the human resources available are not yet in line with the Indian Public Health Service Standards and the expansion that has been made in health infrastructure.

### ASSESSMENT OF MAJOR SCHEMES

7.20. The performance of the major schemes and programmes of the Ministry of Health &

Employment) over the Eleventh Plan period is described below:

### National Rural Health Mission

7.21. Performance of NRHM as per available timeframe reveals progress in certain areas, but this falls short of the targets set. This is not surprising since the programme has been in

operation for only a few years. Some important achievements as on 31.01.10 are as follows:

- 7.49 lakh Accredited Social Health Activists (ASHAs) have been selected though the total number of those who have completed all training modules is low. Against the target of 6 lakh fully trained ASHAs by 2008 there are 5.19 lakh ASHAs positioned with drug kits, but their training is still to be completed. Only about 1.99 lakh ASHAs have completed all five modules and 5.65 lakh have completed up to fourth training module.
- 4.51 lakh Village Health and Sanitation Committees (VHSCs) have been set up against the target of 6 lakh VHSCs by 2008. The operational effectiveness of the VHSCs, however, needs considerable improvement.
- 40,426 Sub-centres (SCs) have been provided two ANMs against the target of 1.05 lakh SCs by 2009. 8,745 SCs are without even a single ANM.
- 8,324 Primary Health Centres (PHCs) are functional on 24X7 basis and 5,907 of them have three Staff Nurses against the target of 18,000 PHCs by 2009.
- 3,966 Community Health Centres (CHCs) are functional on 24X7 basis. However, information regarding the target of strengthening 3250 CHCs with seven specialists and nine staff nurses by 2009 is not available. In any case, the number of CHCs/Sub-Divisional Hospitals or equivalent, which have been upgraded to First Referral Unit (FRU) has increased from 750 (as on 31 March 2005) to 1934 (as on 31 December 2009).
- 510 out of total 578 District Hospitals (DHs) have been strengthened to act as FRUs.
- 29,223 Rogi Kalyan Samitis (RKSs)/Hospital Development Committees have been constituted at PHC/CHC/DH levels against the target of 37,100 RKSs by 2009.
- State & District Societies are in place except at the State level in West Bengal. District Programme Managers and District

Accounts Managers are in position in 581 and 579 districts respectively.

- 356 Districts have operational Mobile Medical Units (MMUs) against the target of 600 MMUs by 2009 (one for each district). In addition, boat clinics in Assam & West Bengal, emergency transport system in Andhra Pradesh, Gujarat, Karnataka, Goa, Uttarakhand, Assam and Rajasthan, GPS enabled MMUs in Gujarat, Haryana and Tamil Nadu are operational.

**7.22.** Even though a large number of MBBS doctors, AYUSH doctors, specialists, ANMs and other paramedics have been appointed on contractual basis, under NRHM, a possible shortcoming is that as contractual appointments are facilitated, the States tend to decrease their sanctioned posts. It must therefore be ensured by the States that they will, in the long run, bear the expenditure for such contractual appointments.

**7.23.** To address the human resource challenge, besides short-term training in anaesthesia and emergency obstetric care, States are adopting innovative measures. These include incentives for working in difficult areas, mandatory rural service to qualify for post-graduation, walk-in interviews, three year rural health practitioner course, selection of local women for ANM training and district specific appointment of health personnel.

**7.24.** As a result of increased expenditure and interventions made under NRHM, some improvements have been reported in the form of increased service utilization at OPDs, increase in the number of institutional deliveries and increased use of emergency transport and ambulances provided under the programme. Providing quality health care to remote, inaccessible areas is the most difficult task and all around enhanced effort needs to be made during the remaining period of the Eleventh Plan. (Box 7.1)

### **Disease Control Programmes under NRHM**

**7.25.** Many disease control programmes have been subsumed under NRHM. Official statistics suggest commendable performance in some programmes but not in others. The

**Box 7.1****Major Eleventh Five Year Plan Recommendations: Yet to be Implemented**

The following policy recommendations of the Eleventh Plan are yet to be implemented and need to be considered under the NRHM:

- Adopting home-based new born care like the Gadchiroli model for reducing the IMR.
- Adopting skilled attendance at birth for home deliveries and emergency obstetric care within two hour travel time for reducing the MMR.
- Utilising the services of RMPs available round the clock as Sahabhaagis in NRHM as an interim measure.
- Use of indigenous low cost technology, for example water purifiers based on Ganiyari Model in Bilaspur, could be encouraged to kick start health and sanitation interventions in an affordable way in the remotest areas.

achievements in terms of prevalence rate/cure rate/mortality are as under:

*Good Progress*

- **Tuberculosis:** Target of overall cure rate of 85 per cent has been achieved during the first two years of the Eleventh Plan.
- **Blindness:** In 2007-08, as against a target of 50 lakh cataract operations, 54.05 lakh operations were carried out. The following year, 58.1 lakh cataract operations were conducted as against the target of 60 lakh.
- **Leprosy:** The overall target of reducing leprosy prevalence rate from 1.8 per 10,000 in 2005 to less than 1 per 10,000 has been achieved. As many as 510 (81 per cent) districts have achieved the target during the first two years of Eleventh Plan.
- **Dengue:** The overall reduction was 56.52 per cent during the first two years of the Eleventh Plan. The Plan had aimed at mortality reduction by 50 per cent by 2010, and sustaining that level until 2012.
- **Malaria:** Against the target of malaria mortality reduction by 50 per cent by 2010, and an additional 10 per cent by 2012, the overall reduction was 45.22 per cent during the first two years of the Eleventh Plan.

*Poor Progress*

- **Kala-azar:** Against the target of Kala-azar mortality reduction by 100 per cent by 2010 and sustaining the elimination until 2012, the overall reduction was only 21.93 per

cent during the first two years of the Eleventh Plan. Majority of deaths due to kala-azar are from three high-focus States of Uttar Pradesh, Bihar and Jharkhand. Their weak health infrastructure in these States is the likely cause of unsatisfactory performance.

- **Filaria/Microfilaria:** Against the target of filaria/microfilaria reduction by 70 per cent by 2010, 80 per cent by 2012 and elimination by 2015, the overall reduction was only 26.74 per cent during the first two years of the Eleventh Plan. For achieving a better coverage of annual mass drug administration in the population at risk; it is important that before initiating the round, a good rapport is established with the community through BCC activities. In addition, States not covered in the earlier round (Bihar and Tamil Nadu) should also be included.

**7.26.** Immunisation under the NRHM is one of the key interventions to prevent six vaccine preventable diseases i.e. tuberculosis, diphtheria, pertussis, tetanus, polio and measles. The latest District Level Household Survey (DLHS-3, 2007-08) shows that the percentage of children in the age group 12-23 months fully immunised (BCG, measles and three doses of DPT and polio) has increased from 45.9 per cent during 2002-04 (DLHS-2) to 54.1 per cent in 2007-08 (DLHS-3) – See Table 7.4. This represents an increase of over 8 per cent in 4-5 years.

**7.27.** Assam has shown phenomenal improvement from 16.0 per cent immunisation

**Table 7.4**  
**Immunisation Status**

	Per cent of Children Fully Immunised	
	DLHS-II (2002-04)	DLHS-III (2007-08)
Andhra Pradesh	62.0	67.1
Assam	16.0	50.9
Bihar	20.7	41.4
Chandigarh	53.5	73.0
Chhattisgarh	56.9	59.3
Dadar & Nagar Haveli	84.2	57.3
Daman & Diu	56.1	84.5
Delhi	59.2	67.6
Goa	76.9	89.8
Gujarat	54.0	54.9
Haryana	59.1	59.6
Himachal Pradesh	79.3	82.3
Jammu & Kashmir	31.7	62.5
Jharkhand	25.7	54.1
Karnataka	71.3	76.7
Kerala	78.5	79.5
Lakshdweep	61.0	86.1
Madhya Pradesh	30.4	36.2
Maharashtra	70.9	69.1
Meghalaya	13.5	33.7
Mizoram	32.6	54.5
Orissa	53.3	62.4
Puducherry	89.3	83.5
Punjab	72.9	79.9
Rajasthan	23.9	48.8
Sikkim	52.7	77.8
Tamil Nadu	91.4	81.8
Tripura	32.6	38.5
Uttar Pradesh	25.8	30.3
Uttarakhand	44.5	62.9
West Bengal	50.3	75.8
<b>All India</b>	<b>45.9</b>	<b>54.1</b>

in 2002-04 to 50.9 per cent in 2007-08. Other States that have shown significant improvement are Jammu & Kashmir (from 31.7 per cent to 62.5 per cent), Jharkhand (from 25.7 per cent to 54.1 per cent), Rajasthan (from 23.9 per cent to 48.8 per cent), Sikkim (from 52.7 per cent to 77.8 per cent), West Bengal (from 50.3 per cent to 75.8 per cent), Mizoram (from 32.6 per cent

to 54.5 per cent), Bihar (from 20.7 per cent to 41.4 per cent), Uttarakhand (from 44.5 per cent to 62.9 per cent). Union Territories of Daman & Diu, Chandigarh and Lakshdweep also have shown commendable improvement. On the other hand, Tamil Nadu and Maharashtra which had been performing well, registered a decline in coverage from 91.4 per cent to 81.8 per cent and from 70.9 per cent to 69.1 per cent respectively.

**7.28.** As per the Delivery Monitoring Unit (DMU) Report of NRHM, 70.3 per cent children are fully immunised till 31 December 2009. However, the gaps in immunisation coverage, particularly in the high focus States of NRHM, need to be addressed along with the issues of cold chain for improving the effectiveness of immunisation programmes.

**7.29.** Whereas, Eleventh Plan aims to eradicate polio, new polio cases in 2006, 2007, 2008 and 2009 numbered 676, 874, 559 and 752 respectively. Majority of these were from Uttar Pradesh and Bihar. Total sanitation needs to be intensified in the affected districts, along with planned rounds under the Pulse Polio Immunisation Programme. Impact of such special immunisation programmes on routine immunisation also needs to be evaluated.

#### **Qualitative Feedback of NRHM: Voices from the Field**

**7.30.** The deficiencies noticed during field visits as well as those pointed out during regional consultations, need to be rectified. Feedback on some of the fundamental issues regarding healthcare is given below:

#### *Basic Health Services*

**7.31.** Despite the intent to improve the health infrastructure particularly at the primary level, gaps persist in terms of human resources, drugs and equipment. While there has been a substantial improvement in the appearance of health facilities due to availability of flexi-funds under NRHM, the improvement in services has not been uniformly commensurate. People still incur substantial out-of-pocket expenses for purchasing medicines from the market and

there is need for provision of generic drugs which cost less. The health centres labelled as 24X7, generally provide facilities only for deliveries. People spend large amounts of money on travelling long distances to access basic health services. Though Mobile Medical Units are becoming operational, their number and outreach is limited. The local Rural Medical Practitioners (RMPs), who are available round the clock close to peoples' homes, continue to provide their services as usual.

### *Disease Programmes*

7.32. Disease control programmes have received varied degrees of attention and have differed in performance. Tuberculosis (TB) has been receiving attention but Multi-Drug Resistant TB has become a public health challenge. Malaria remains largely unreported and is under-estimated. In a large number of cases, reports of the diagnostic tests are not provided or are made available after considerable time lag (Box 7.2). Medicine supply is not regular and people have no choice but to buy them from the market. Technically, HIV/AIDS control is not an integral component of NRHM. However, there is a felt need for better awareness, counselling services and testing facilities. It was also suggested that HIV/AIDS control programme be integrated with the NRHM facilities at the block/community level.

**Box 7.2**  
**The Road Not Taken: Practice in the Hinterlands**

The Eleventh Five Year Plan document highlighted a good practice of reducing turnaround time for test results, which could be replicated throughout the country. Jan Swasthya Sahyog (JSS) have trained village health workers in tribal areas of Bilaspur (Chhattisgarh) for taking blood smears. These are labelled and neatly packed in small soap cases, which are handed over through school children to bus drivers. On their way, the drivers drop the smears at the Ganiyari hospital run by JSS. Here they are immediately tested and the reports are sent back through the same buses on their return trip. This courier system has been operational in 21 villages in the area for several years and has saved many lives.

### *Decentralisation*

7.33. The implementation of NRHM has initiated measures for decentralisation (such as district level programme implementation plans and village level health and sanitation committees) but progress has been varied across States. Paucity of local capacity for decentralised planning and decision making, based on an informed prioritisation of needs and effective interventions, is hindering this process. In the absence of such capacity, interventions are largely designed on the basis of a general framework and priority matrix. This is provided by the Centre or the State without adequately taking into account district specific features such as geographic diversity, remoteness, disease profile, cultural differences, availability of health services and potential for involving local partners. There has not been sufficient effort to prepare the community for its involvement.

### *Accredited Social Health Activists (ASHAs)*

7.34. The appointment of locally recruited women as Accredited Social Health Activists (ASHAs) who would link potential beneficiaries with the health service system is an important element of the NRHM. The good part is that 7.49 lakh ASHAs have been appointed; but several issues still need to be resolved. Not only is there a lack of transparency in the selection, ASHAs are often inadequately trained. Besides, their only focus seems to be on facilitating institutional deliveries. The ASHA who accompanies the expectant mother faces considerable hardship because she has nowhere to stay for the duration of confinement as institutional accommodation facilities are non-existent. They also often experience long delays in payment of incentives.

### *Village Health and Nutrition Day (VHND)*

7.35. An important activity of NRHM, Village Health and Nutrition Day is to promote regular community-oriented health and nutrition activities. The event is held on a fixed day every month to sensitise the community and is popularly known as 'Tika Karan Divas'. However, implementation is ad-hoc in most villages of the high focus States. Surveys

revealed that only a few pockets in some States like Tamil Nadu, Andhra Pradesh, West Bengal and Assam were aware of VHND. The other drawback of the programme was that it often restricted itself to immunisation and ante-natal check up are done on the day. There is no nutrition education. To have the desired impact, VHNDs need to be implemented with the full intended content of activities and with regularity. This can be achieved through more active involvement of NGOs and community based organizations.

#### *Janani Suraksha Yojana (JSY)*

7.36. Launched to promote institutional deliveries, JSY provides cash incentive to expectant mothers who opt for institutional delivery. Poor women from the remote districts in Bihar, Orissa and other States are reported to be visiting institutions to avail JSY benefits. However, except for parts of Southern States, most public health institutions are not well equipped for conducting deliveries at the community or even at the block level. The beneficiaries are often asked to purchase gloves, syringes and medicines from the market. The general view, endorsed by visits to the field is that the health centres and sub-divisional hospitals remain understaffed and are poorly run and maintained. A very large number are unhygienic and incapable of catering to the patient load. Women who deliver at the health facility are discharged a few hours after delivery. Sometimes, deliveries take place on the way to the health facility or even outside the locked labour rooms. Lack of co-ordination and mutual understanding between the ANM and ASHA results in the suffering of pregnant women.

7.37. The scheme is also facing operational problems in the payment of incentives to the beneficiaries as well as ASHAs. The payments are delayed by three to four months (at times even a year in some States) and often made only after repeated visits by the claimants. There are complaints of unauthorised deduction by the disbursing functionaries. While cheque payments reduce leakages, they further delay the process. Due to lack of identity card or proof of address, many women are unable to open bank accounts and therefore cannot avail

the benefits. Recognising these shortcomings, most States have initiated steps to undertake systemic corrections and streamline the processes.

#### *Committees/Societies Under NRHM*

7.38. Although committees and societies have been set up at the State and district health facilities, these do not ensure substantive involvement of the community –or panchayati raj members. Rarely is there any record of the Rogi Kalyan Samiti meetings. Village Health and Sanitation Committees (VHSCs) are virtually unknown, even most of the sarpanchs are unaware of them. Besides, many States have still to constitute VHSCs and fund them.

#### *Mainstreaming AYUSH*

7.39. NRHM has mainstreamed AYUSH into the rural health services by co-locating AYUSH personnel in primary health care facilities resulting in increase in utilization of AYUSH treatment. AYUSH practitioners are also used to fill in the position of Allopaths in Primary Health Centres particularly in States that have a substantial shortage of MBBS doctors. While this is a positive development, efforts have to be made for training AYUSH practitioners in public health.

#### *Maternal & Child Health*

7.40. Despite positive feedback, there are a number of shortcomings in the system that inhibits pregnant women from seeking institutional care. For instance, there is no privacy for the examination of pregnant women either at the Anganwadi Centres or the Health Camps, and the ANMs rarely pay household visits. Despite the incentive for institutional deliveries under JSY, women prefer the local dais. Sometimes, even many of those living near a public health facility, prefer dais because of the bad experiences at these facilities they know from hearsay. It must be emphasised however that for every one of these observations, there are equal number of reports of women receiving good quality institutional care and prompt treatment for complications.

7.41. NRHM has been able to provide an extensive network of transport facilities in States that have established emergency transport systems. On the other hand, there is very little awareness about the Integrated Management of Neonatal and Childhood Illnesses (IMNCI) strategy. In the event of illness of either the mother or the neo-nate, RMPs (some times even local quacks) are consulted. Home-based new born care based on Gadchiroli model and other community based innovations have yet to be made an integral part of the child health strategy.

#### *Family Planning*

7.42. Government programmes on family planning are known all over the country. However, very few are aware of the monetary compensation that is due in the event of failure of sterilization or side effects of Intra-Uterine Device (IUD). Women find it difficult to get compensation and if they do, it is only through interventions of an active NGO or the Court. At many places, where condoms are available, there are no oral contraceptives. Supply of oral contraceptive Mala-D, which is one of the most popular forms of contraception, is irregular. With no co-ordination amongst various agencies, the huge demand for contraception remains unmet. This necessitates a forward effort on improving supply of contraceptives and related services. Nine States have already achieved a total fertility rate (TFR) of 2.1 or less but in seven it remains higher than the national average. Much greater effort needs to be made in these seven States.

#### *Safe Abortion/Medical Termination of Pregnancy*

7.43. It is of concern that provision of safe abortion facilities has not received much attention and even the ASHAs are unaware of facilities which the rural poor could have accessed. This calls for immediate attention.

#### **Rashtriya Swasthya Bima Yojana (RSBY)**

7.44. Launch of RSBY by Ministry of Labour & Employment in 2007 has been an important step to supplement the efforts being made to provide quality health care to the poor and

underprivileged population. It provides cashless health insurance cover up to Rs.30,000 per annum per family. The premium is paid by the Centre and State Governments on a 75:25 sharing basis with the beneficiary paying only a registration fee.

7.45. Twenty-five States are in the process of implementing the RSBY and till February 2010, more than 1.25 crore biometric enabled smart cards have been issued for providing health insurance cover to more than 4 crore people, from any empanelled hospital throughout the country. Around 4.5 lakh persons have already availed hospitalisation facility. The scheme is now being gradually extended to the non-BPL category of workers as well. Linkages with RSBY in public sector hospitals need to be strengthened.

#### **National AIDS Control Programme (NACP)**

7.46. The NACP goal was to halt and reverse the epidemic in India over the five years period of the Eleventh Plan. This was to be done by integrating programmes for prevention, care, support and treatment, as well as addressing the human rights issues specific to people living with HIV/AIDS (PLWHA).

7.47. Although the achievement of physical targets under the programme is satisfactory, MoHFW has yet to introduce a HIV/AIDS Bill to protect the rights of children, women and HIV infected persons and avoid discrimination at work place. A National Blood Transfusion Authority is to be established during the remaining period of the Plan. Voluntary blood donation has to be encouraged further to bridge the gap in demand and supply of blood.

7.48. The objective to reduce new infections by 60 per cent in high prevalence States so as to obtain reversal of epidemic and by 40 per cent in the vulnerable States in order to stabilise the epidemic, can only be substantiated through independent evaluation studies. These need to be undertaken.

7.49. Expenditure under National AIDS Control Programme including STD control during 2007-08 and 2008-09, has been 112.60 per cent and 91.91 per cent of the approved

outlays respectively. During the current financial year (2009-10), the anticipated expenditure based on RE is 89.10 per cent of the approved outlay.

### **National Cancer Control Programme (NCCP)**

7.50. In view of high cost of treatment of cancer, 'Health Minister's Cancer Patient Fund' with a corpus of Rs. 100 crore was set up in 2008-09. The revised strategy has since been prepared, which aims at early diagnosis and treatment by decentralizing such function to districts. Currently, the NCCP continues on the pattern of Tenth Plan.

7.51. The overall expenditure in NCCP is very low, 33 per cent and 28 per cent respectively of the approved outlays for 2007-08 and 2008-09. The anticipated expenditure based on RE is 50 per cent of the approved outlay for 2009-10. During the rest of the Plan period, the restructured programme will have to be implemented to meet commitments for the Eleventh Plan.

### **Tobacco Control Programme**

7.52. The Tobacco Control Programme initiated in the Eleventh Plan, aims to help implement the provisions of 'Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003' and also to bring about greater awareness about the harmful effects of tobacco consumption. All provisions of the Act, have been implemented including ban on smoking in public places, health warnings on unit packs of cigarettes and other tobacco products including pictorial warnings, except regulation of nicotine and tar contents in tobacco products. The district level programme, however, is yet to be implemented in most of the districts. Compliance with provisions of the Act is still a major challenge as the personnel in different parts of the State and District Administration lack sensitisation to the significance of this programme. Cessation services to encourage quitting tobacco are inadequate. Expenditure under the programme registered an improvement during 2008-09 with 112.87 per cent expenditure as against 34.95

per cent during 2007-08. The anticipated expenditure in 2009-10 has again fallen; based on RE it is 56.67 per cent of the approved outlay.

### **National Mental Health Programme (NMHP)**

7.53. Despite enhanced allocations for the implementation of NMHP as per commitments made in the Eleventh Plan, the programme has lagged behind. It was divided into two parts.

7.54. Part I of NMHP relates to human resource development, spillover schemes and continuing 123 District Mental Health Programmes (DMHPs). At least 11 centres of excellence of mental health and neurosciences are expected to be established within the Plan period by upgrading existing mental health institutions plus strengthening a number of institutions for human resource development.

7.55. The Part II of the NMHP which is yet to be launched relates to comprehensive expansion of DMHPs from existing 123 districts to 325 under served districts. This has to be done based on the findings of evaluation study conducted by the Indian Council of Market Research.

7.56. Expenditure under the programme is very low, 20.81 per cent and 33.26 per cent respectively of the approved outlays for 2007-08 and 2008-09. During 2009-10, the expenditure is likely to be 78.57 per cent of the approved outlay (as per RE figures). During the remaining period of Eleventh Plan, NMHP will need to be expanded to provide the much needed basic mental health services to people and to integrate these with NRHM.

### **Human Resources for Health**

7.57. A key objective of the Eleventh Plan is to address the problem of shortage of basic education infrastructure and human resources for health. The process of establishment of ANM and Nursing Schools/Colleges and Paramedical Institutions has begun. There is a shortage of 1.93 lakh ANMs in the government sector alone. Of the 633 districts in the country, 246 districts do not have any ANM school. During the remaining period of Plan, 132

Auxiliary Nursing Midwifery schools are being set up in the high focus States of Bihar, Chattisgarh, Himachal Pradesh, Jharkhand, Jammu & Kashmir, Madhya Pradesh, North Eastern States, Orissa, Rajasthan, Uttarakhand, Uttar Pradesh and other districts in the country which do not have ANM schools.

**7.58.** The shortfall of nurses is mainly in the Northern and North Eastern States. There is no general nursing and midwifery school in 292 districts of the country. In order to meet the shortage of general nursing and midwifery in the country, 137 general nursing and midwifery schools are being set up predominantly in the high focus States. Further, Regional Institutes of Para Medical Sciences (RIPS) are to be set up during the Plan followed by Pharmacy Schools/Colleges.

**7.59.** Various measures undertaken to tackle the shortage and adequate training of human resources have yet to show result. The approval of the Medical Council of India for the short term rural health care course is expected to expand the pool of medical practitioners. The existing gaps in human resources and inequalities regarding facilities for medical, nursing and paramedical education in the deficit States should be analysed further to initiate remedial action during the remaining Plan period.

#### **Pradhan Mantri Swasthya Suraksha Yojana (PMSSY)**

**7.60.** The PMSSY envisages substantial expansion of central and state government medical institutions. Phase 1 of PMSSY envisages establishment of six new AIIMS like institutions at Patna (Bihar), Bhopal (Madhya Pradesh), Bhubaneswar (Orissa), Jodhpur (Rajasthan), Raipur (Chhattisgarh) and Rishikesh (Uttarakhand). The original estimate of each institute was Rs. 332 crore and the latest estimate is about Rs. 820 crore. For these new 'AIIMS like institutions', construction of medical colleges and hospital complexes and construction of residential complexes have been taken up as separate activities. Construction of housing complex at all six sites has commenced and work for medical colleges

and hospital complexes is likely to start in the second quarter of 2010-11.

**7.61.** The second component of PMSSY Phase 1 includes upgradation of 13 State Government medical college institutions. These are at Government Medical College, Jammu (Jammu & Kashmir); Government Medical College, Srinagar (Jammu & Kashmir); Kolkata Medical College, Kolkata (West Bengal); Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow (Uttar Pradesh); Institute of Medical Sciences, BHU, Varanasi (Uttar Pradesh); Nizam Institute of Medical Sciences, Hyderabad (Andhra Pradesh); Sri Venkateshwara Institute of Medical Sciences, Tirupati (Andhra Pradesh); Government Medical College, Salem (Tamil Nadu); Rajendra Institute of Medical Sciences, Ranchi (Jharkhand); B.J. Medical College, Ahmedabad (Gujarat); Bangalore Medical College, Bangalore (Karnataka); Grants Medical College & Sir J.J. Group of Hospitals, Mumbai, (Maharashtra) and Medical College, Thiruvananthapuram, (Kerala). The outlay provided is Rs.120 crore per institution, of which Rs. 100 crore would be borne by the Central Government (for SVIMS, Tirupati, it is Rs.60 crore) and the remaining amount will be contributed by the respective States. The State Governments will also provide the resources (human resources and recurring expenditure) for running the upgraded facilities. Upgrading of two State Government medical college institutions is over. Another four are expected to be upgraded by July 2010, two by December, 2010 and the remaining in 2011.

**7.62.** Phase II of PMSSY, approved recently, provides for the establishment of two new AIIMS like institutions in Uttar Pradesh and West Bengal and upgrading of six State Government medical college institutions at Government Medical College, Amritsar (Punjab); Government Medical College, Tanda (Himachal Pradesh); Government Medical College, Nagpur (Maharashtra); Jawaharlal Nehru College of Aligarh Muslim University, Aligarh (Uttar Pradesh); Government Medical College, Madurai (Tamil Nadu) and Pandit B.D. Sharma Postgraduate Institute of Medical Sciences, Rohtak (Haryana).

7.63. Overall expenditure under PMSSY had shown improvement in 2008-09 with expenditure of 92.86 per cent as against 58.33 per cent in 2007-08. However, the anticipated expenditure based on RE figures in the current year (2009-10) is only 47.21 per cent of the approved outlay for 2009-10.

### Redevelopment of Hospitals /Institutions

7.64. The process of redevelopment of hospitals/institutions (Box 7.3), under the Central sector is at different stages of completion. Redevelopment of the All India Institute of Medical Sciences is yet to be taken up in a comprehensive manner. The overall expenditure under the scheme has been over 100 per cent of the approved outlay for 2007-08, 2008-09 and the same is expected during 2009-10 as well.

### District Hospitals

7.65. During the Eleventh Plan, upgradation of District hospitals is envisaged as a key intermediate strategy, till the vision of health

care through PHCs and CHCs is fully realised.

7.66. The scheme has two components – ‘Strengthening of Maternal Health and Child Health wing/hospital and other wings in District Hospitals’ (this component has since been subsumed under NRHM) and ‘Up-gradation of District hospitals into teaching hospitals in underserved areas’. The latter component has since been bifurcated into two; i) ‘Up-gradation of State Medical Colleges’ with an outlay of Rs.1350 crore for the Plan period for meeting the shortage of specialists, which is soon expected to be initiated as a new scheme, and ii) ‘Up-gradation of District hospitals into teaching hospitals in underserved areas through Public Private Partnership’ with an initial outlay of Rs.150 crore, for which the proposals have yet to be formulated by MoHFW. This must be expedited.

### Assistance to States for Capacity Building in Trauma Care

7.67. Under this scheme, trauma care facilities of 140 identified State Government hospitals located along the golden

#### Box 7.3 Redevelopment of Hospitals/Institutions

**Lady Hardinge Medical College & Smt. S.K. Hospital and Kalawati Saran Children(KSC) Hospital, New Delhi:** Comprehensive Redevelopment Projects comprise of 3-4 phases. Phase I during the Plan, involves increasing existing bed strength of Smt. S.K. Hospital from 877 to 1397 (additional 520 beds) and increasing bed strength of KSC Hospital from 370 to 420 (additional bed strength of 50).

**Regional Institute of Medical Sciences (RIMS), Imphal, Manipur:** Upgradation involves repair/renovation of hospital building, construction of academic complex, new OPD building, nursing & dental wings, hostel accommodation etc.

**Lokapriya Gopinath Bordoloi Regional Institute of Mental Health, Tezpur, Assam:** Upgradation involves construction for the main hospital building, residential quarters, hostels, mortuary, incinerator building, sewerage treatment plant, renovation of existing building, procurement of equipments & machinery and additional human resources.

**Regional Institute of Paramedical & Nursing Sciences, Aizwal, Mizoram:** Upgradation involves construction of new academic building, library cum examination hall, hostel, purchase of lab. instruments, computerization etc.

**Safdarjang Hospital & College, New Delhi:** The redevelopment plan includes upgradation of specialties and superspeciality departments and to increase the bed strength from 1531 to 3000.

**Post Graduate Institute of Medical Education & Research, Chandigarh:** The upgradation involves modernization of Nehru Hospital, modernization of research block, advanced cardiac centre, advanced trauma centre, advanced eye centre, advanced mother centre, Institute of Paramedical Sciences, renovation of hostels for doctors & nurses and augmentation of equipments.

**Jawaharlal Institute of Post Graduate Medical Education & Research, JIPMER, Puducherry:** Comprehensive Redevelopment project comprises of construction of teaching block, 400 bedded women and children hospital, upgradation of existing departments, construction of new hostel complex and procurement of equipments.

**All India Institute of Medical Sciences (AIIMS), New Delhi:** Comprehensive proposal yet to be submitted by the Ministry of Health & Family Welfare.

quadrangle/north-south corridor and east-west corridor are under different stages of up-gradation. The network for trauma care and emergency management is expected to be fully operational by the end of Eleventh Plan. The National Programme on Burn Injuries is also to be launched within the existing budgetary provisions for the Department of Health & Family Welfare. During 2007-08 and 2008-09, the expenditure has been 90.10 per cent and 91.95 per cent of the approved outlay respectively. For 2009-10, the anticipated expenditure based on RE is lower at 66.12 per cent.

## AYUSH

7.68. Though AYUSH personnel are being co-located and co-posted at the health facilities under NRHM for mainstreaming, yet the infrastructure status of AYUSH rural dispensaries and hospitals is generally deplorable. For creating public awareness about the strengths of AYUSH, major campaigns have been launched through mass media. However, these still need to be

complemented by the services under the system.

7.69. There has been steady and systematic progress for conservation and cultivation of medicinal plants. During the balance plan period, support will have to be given to farmer clusters. A start has been made to support common quality control facilities in eight AYUSH industry clusters in different regions. To ensure internationally acceptable standards for AYUSH, a Pharmacopeial Commission is being established as envisaged in the Plan. Steps have also been taken to establish a Council for International Cooperation to promote AYUSH in foreign countries. However, the progress has been slow on projects related to reforms in AYUSH undergraduate and postgraduate education, AYUSH and Public Health, Revitalisation of Local Health Traditions, cataloguing and digitisation of manuscripts and AYUSH IT network. Overall expenditure of the Department of AYUSH has been gradually picking up during the Plan period (see Table 7.5).

**Table 7.5 Department wise Allocation of funds and Actual Expenditure \***

(Rs. in crore)

S.No.	Departments	2007-08	2008-09	2009-10 @	2010-11
1	<b>D/O Health &amp; Family welfare</b>				
	<b>(a) NRHM</b>				
	Funds allocated	10,890.00	11,930.00	13,930.00	15,440.00
	Actual Expenditure	10,380.25	11,260.18	13,377.75	-
	% utilisation	<b>95.32</b>	<b>94.39</b>	<b>96.04</b>	-
	<b>(b) Health (Non-NRHM)</b>				
	Funds allocated	2,985.00	3,650.00	4,450.00	5,560.00
	Actual Expenditure	2,183.71	3,008.22	3,825.25	-
	% utilisation	<b>73.16</b>	<b>82.42</b>	<b>85.96</b>	-
	<b>(c) Total</b>				
Funds allocated	13,875.00	15,580.00	18,380.00	21,000.00	
Actual Expenditure	12,563.96	14,268.40	17,203.00	-	
% utilisation	<b>90.55</b>	<b>91.58</b>	<b>93.60</b>	-	
2	<b>D/O AYUSH</b>				
	Funds allocated**	488.00	534.00	734.00	800.00
	Actual Expenditure	382.54	471.12	680.00	-
	% utilisation	<b>78.39</b>	<b>88.22</b>	<b>92.64</b>	-
3	<b>D/O Health Research (New Department)</b>				
	Funds allocated	-	420.00	420.00	500.00
	Actual Expenditure	-	390.56	400.00	-
	% utilisation		<b>92.99</b>	<b>95.24</b>	-
4	<b>D/O AIDS Control ( New Department)</b>				
	Funds allocated	-	-	***	***
	Actual Expenditure	-	-		
	% utilisation				

@ Actual Expenditure figures for 2009-10 are the Revised estimates (RE) figures.

\* Including releases to States

\*\* Including AYUSH's contribution towards NRHM as Rs.120 crore each for 2007-8 as well as 2008-09, Rs.197 crore for 2009-10 and Rs. 232 crore for 2010-11.

\*\*\* Provision of Rs.1100 crore for 2009-10 and Rs.1435 crore for 2010-11 for National AIDS Control including STD Control under the Department of H&FW available for the new Department

Source: Ministry of Health & Family Welfare

## Health Research

7.70. The Department of Health Research (DHR) was established in the Ministry of Health & Family Welfare on 18 September 2007. Activities of Indian Council of Medical Research (ICMR), a component under the ongoing scheme of Medical Education, Training & Research are now subsumed under DHR. Against the agenda set during Eleventh Plan, ICMR has 1,346 extramural projects (645 new) under the extramural research programme through funding to medical colleges, research institutes and universities. As many as 98 extramural projects including 24 new are under progress or have been initiated in the North East region. Under the programmes for development of indigenous diagnostic reagents, raw materials and vaccines for H1N1, three molecular assays have been developed. Study on climate change and vector-borne diseases has found that vector distribution has been changing which leads to transmission in new areas. A study to develop capacity building of primitive tribes for health care has been operational in 15 districts of seven States of the country. Under the study, link persons (one Tribal Welfare Volunteer and one Dai Volunteer) have been identified for every 500 population and trained respectively for treatment of minor ailments and safe delivery. As part of project evaluation, these have been found to be potentially useful for future health care interventions.

7.71. The Department has proposed nine schemes for the remaining period of Eleventh Plan for which detailed proposals are to be submitted. Indian Council of Medical Research (ICMR) is an on-going scheme while the other eight are new. These are:

- Promotion, co-ordination and development of basic, applied and clinical research;
- Promotion and guidance on research governance issues;
- Inter-sectoral co-ordination in medical, biomedical and health research;
- Advanced training in research in medicine and health;

- International cooperation in medical and health research;
- Matters relating to epidemics, natural calamities and development of tools to prevent outbreaks;
- Matters relating to scientific societies and associations, charitable and religious endowments in medicine and health research areas; and
- Coordination in the field of health research with governments, organisations and institutes.

7.72. While these are important, health systems research, particularly operations research, needs both national attention and funding support. Zoonotic diseases must also be prioritised among emerging infections, with appropriate linkages to veterinary, agricultural, forestry (wildlife) and environmental research systems.

7.73. With the development of sophisticated tools of modern biology, a better understanding of complex interplay between the host, agent and environment is emerging. This is resulting in a new generation of knowledge where bio-markers and the immunological as well as the genetic basis of disease assume great significance. This scientific knowledge is to be used further by the Department along with other departments like the Department of Bio-Technology and the Council for Scientific & Industrial Research to develop drugs, diagnostics, devices and vaccines that could find a place in the health system of the country. A vibrant interface is required to be developed between the research community, the industry and the delivery systems for health care.

7.74. Since the Department of Health Research (DHR) was created after the commencement of the Eleventh Plan, there was no separate plan allocation for the Department, apart from the allocation for ICMR, which was transferred to the new Department. The Plan allocation for ICMR was Rs. 4306 crore. The expenditure against the allocations made to DHR has been good till now (Table 7.5). Based on the progress, allocations for the remaining period of the Eleventh Plan will be made for the Department.

## Others

7.75. Eleventh Plan is committed to initiating certain other schemes for which budgetary provisions have been made. The schemes which have not picked up after initiation during this Plan are e-Health (including Telemedicine) (see Box 7.4) as well as the National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases (CVDs) and Strokes. There is a need to integrate this programme with the National Cancer Control Programme and the Tobacco Control Programme, because of the common determinants and convergent pathways for prevention.

7.78. Details of schemes addressing the nutrition status and health related issues are given in other Chapters.

## FINANCING AND EXPENDITURE OF THE H&FW PLAN SCHEMES

7.79. The Gross Budgetary Support (GBS) envisaged for the Eleventh Plan for Department of H&FW and AYUSH was Rs.1,36,147 crore and Rs.3,988 crore respectively, making a total of Rs.1,40,135 crore for the Ministry of H&FW. Two new departments, namely, Health Research and AIDS Control have been created during this period.

7.80. The expenditure by the Department of

### Box 7.4 Telemedicine

The country already has the advantage of a strong IT fibre backbone and indigenous satellite communication technology with trained human resources in this regard. With enhanced efforts, telemedicine could help to bring specialised health care to the remotest corners of the country. Telemedicine is likely to provide the advantages of tele-diagnosis, especially in the areas of cardiology, pathology, dermatology and radiology besides continuing medical education (CME). It will also be of immense use for diagnostic and consultative purposes for patients getting treatment from the secondary level health care facilities and below. Models for empowering frontline workers with IT enabled connectivity should also be evaluated and modified appropriately.

7.76. The schemes which are yet to be properly designed and launched by the Ministry of Health & Family Welfare are the National Centre for Disease Control, Advisory Board for Standards, Programme for Blood & Blood Products and Health Care of Older Persons. Models should be evaluated and developed for delivery of urban health care, especially focusing on establishing an efficient primary health system and providing adequate coverage to the urban poor. Since rural and urban health care converges at the secondary and tertiary levels, and both are parts of the same supervisory and management structure at the State Government level, the Ministry could contemplate establishing an Integrated National Health Mission.

7.77. Provision has also been made in the Eleventh Plan to initiate certain pilot projects (Box 7.5).

H&FW in the first three years of the Plan under NRHM has been 95.32 per cent, 94.39 per cent and 96.04 per cent respectively of the funds allocated, whereas under non-NRHM it has been lower at 73.16 per cent, 82.42 per cent and 85.96 per cent respectively (Table 7.5). Overall expenditure for the Department has been 90.55 per cent, 91.58 per cent and 93.60 per cent respectively in 2007-08, 2008-09 and 2009-10. Department of AYUSH has been able to spend 78.39 per cent, 88.22 per cent and 92.64 per cent of the funds allocated for the respective years. As newer initiatives take time to become operational the initial fund utilisation is low.

7.81. Under NRHM, utilisation of funds by States has shown improvement but the situation is still not satisfactory. As per calculations based on MoHFW's data, utilisation of funds by all States increased from 59.03 per cent (2005-06) to 64.97 per cent (2008-09). In

### Box 7.5 Pilot Projects

**Sports Medicine:** Construction work at Safdarjung Hospital, New Delhi is under progress and is expected to be completed by May, 2010 for the establishment of Sports Injury Centre in a time bound manner keeping in view the ensuing Common Wealth Games, 2010.

**Deafness:** The pilot programme comprising of capacity building of PHCs, CHCs and District Hospitals, IEC as well as provision of supplies for treatment & rehabilitation of hearing disorders launched in 25 districts of ten States and one Union Territory, will be expanded to 203 districts covering all the States/UTs by 2012 in a phased manner by including about 45 new districts each year.

**Leptospirosis:** Pilot project is under implementation in identified districts of Gujarat (four), Kerala (two) and Tamil Nadu (two) to strengthen diagnostic labs & patient management facilities, train human resources and create awareness regarding timely detection and appropriate treatment of patients.

**Human Rabies:** The project to prevent human deaths due to rabies and reducing the transmission of disease in animals has been launched in five cities viz. Ahmedabad, Bangalore, Pune, Madurai & Delhi. Training is being provided to health personnel and labs are being strengthened for diagnosis of rabies. To be effective, the programme must also engage animal husbandry and veterinary agencies for providing technical support to Municipal and District authorities, to prevent animal to animal, and animal to human transmission as well as strengthen surveillance systems.

**Medical Rehabilitation:** Eleven medical colleges have been identified during 2007-08 to 2009-10 for setting up of Department of Physical Medicine & Rehabilitation for meeting the needs of persons suffering from various disabilities. The project will provide training for medical rehabilitation services at various levels.

**Oral Health:** AIIMS, New Delhi has conducted a study on assessment of safety profile for dental procedures and components of the project will include oral health education by involving health workers, school children, teachers and mass media.

**Fluorosis:** The project launched in six districts viz. Nellore (Andhra Pradesh); Jamnagar (Gujarat); Nagaur (Rajasthan); Nayagarh (Orissa), Ujjain (Madhya Pradesh) & Dharmapuri (Tamil Nadu) is for assessing the intake of fluoride and imparting training to medical doctors and paramedics for early diagnosis of fluorosis.

**Organ Transplant:** Yet to be initiated.

case of high focus States, the utilization level has increased from 56.35 per cent (2005-06) to 62.11 per cent (2008-09). In the non-high focus States; the increase is from 62.62 per cent to 69.23 per cent during the same period, indicating relatively higher utilization than in high focus States.

7.82. There is large amount of unspent balance with States under NRHM. Unspent amount of Rs 8,639.12 crore is lying with States against an amount of Rs.40,820.46 crore released during the period from 2005-06 to 2009-10 (MoHFW's Data Sheets on NRHM as on 31 January 2010). This could be due to poor

budget planning, further release by the States to the districts for which the expenditure has not been reported, poor absorptive capacity of the system and delays in execution of civil works. All such lacunae need to be examined in order to take corrective measures.

### THE ROAD AHEAD

7.83. A determined effort needs to be made in the last two years of the Eleventh Plan to meet Plan targets. Most of the institutional arrangements under NRHM are in place but the processes required to achieve the outcomes need to be strengthened. Special efforts need

to be made for the excluded/vulnerable areas and groups. Rather than mechanically establishing health facilities on the basis of population norms, there is need to re-visit these; as most of the neglected groups reside in far flung areas or are difficult to reach. The area covered by a Sub-Centre should be co-terminus with the jurisdiction of Gram Panchayat. Besides, the Community Health Centres should be located at Block headquarters so that there is convergence of services and also an environment for health personnel to stay there.

**7.84.** An effective health care delivery system can only be achieved if the programmes are administered judiciously and implemented in transparent and efficient manner. The role of governance is crucial as are technical and social audits. If all available resources are properly utilised and quality governance is provided by the local leadership, we may be able to achieve many of the health targets of the Eleventh Five Year Plan.

**7.85.** Issues related to human resources for health as envisaged in the Eleventh Plan have still not been adequately addressed. Besides improving governance and accountability, the existing measures being taken to meet the shortage of ANMs/Nurses, other Paramedics, Doctors, Specialists etc, need to be supplemented with measures such as opening of new training institutions, public-private partnerships etc. The need for expanding paramedical human resources, particularly the non-physician health providers, is to be both explicitly recognised and acted upon. The health system needs public health specialists at all levels. In the long run, every State could have a public health cadre like Tamil Nadu, which is integrated with the health department hierarchy at all levels.

**7.86.** The policy of integrating AYUSH into NRHM has at least four implications. The first is training AYUSH personnel in public health and epidemiological perspectives on which their exposure is negligible. The second is developing an informed code of conduct for cross referrals based on an understanding of the strengths and limitations of modern medicine and AYUSH respectively. Third is to

draw up the scope and limitations of rational cross medical practice and train medical personnel accordingly. The fourth implication is for introducing integrative medicine modules both as part of CME (Continuing Medical Education) for doctors working in NRHM and in the professional medical education curriculum of all systems of medicine. All these four implications need to be operational for the integration to become fruitful.

**7.87.** As there are large unspent balances with the States under NRHM, the MIS of the Ministry of the Health and Family Welfare should go beyond allocations and capture the situation and expenditure at the grass-roots level. For this, it is necessary to institute an online monitoring system.

**7.88.** There is equal need to upscale community monitoring for accountability and improving access for the poor and deprived (Box 7.6).

**Box 7.6**  
**Upscale Community Monitoring**

The first phase of community monitoring under NRHM was implemented in partnership with NGOs. It covered 1600 villages in 35 districts of 9 States. During this process, Village Health and Sanitation Committees were trained by NGOs to prepare Village Health report cards and PHC report cards using traffic lights (red, yellow and green) to assess the services that they have been receiving. These report cards were shared at public events (Jan Sanwai). Follow up has shown improvement in service delivery through changes in colour of traffic lights reflected by them.

**7.89.** Appropriate matching contribution towards NRHM by all States and Union Territories during the Eleventh Plan must be ensured and a path should be paved for higher contribution by the States during the Twelfth Plan.

**7.90.** Integrated Disease Surveillance Programme (IDSP) should form the backbone of information systems for providing rapid response to infections and must be the basis for monitoring and evaluation of all disease control programmes. Besides, the IDSP has to be

developed through public-private partnership to act as a platform for integrating disease and risk factor relevant information. This will contribute to building a comprehensive health information system to inform the policy makers and the concerned programme managers.

7.91. There is a need to exploit new opportunities in health care delivery offered by telemedicine and rural telephony. The programmes should be 'consumer based' and not 'provider based'. It is essential that health programmes are structured on the basis of feedback from household surveys, which better indicate the extent of community satisfaction as compared to purely departmental statistics.

7.92. An independent national data collection process for mapping of health and nutritional status at frequent intervals is needed to identify states and districts with greater public health problems. This will facilitate planning and execution of area specific strategies. Besides the Annual Health Survey being initiated, National Nutritional Monitoring Bureau (NNMB) could be expanded to all the States as suggested in the Eleventh Plan.

7.93. NRHM has set in motion a fairly comprehensive process of reforms. However,

the deficiencies pointed out here need to be corrected. The Government is committed to curtailing out-of-pocket expenses of the poor to keep their health expenditures under control. In this regard, it is pertinent to mention that the time is ripe for a paradigm shift from being a 'pure provider of services' to 'providing a choice of services' by creating a regulated quasi-market for health care through carefully tailored public-private partnerships. This will ensure that the poor, as much as the rich, can exercise a degree of choice in utilisation of health care services. Towards this end, RSBY and other health insurance schemes initiated by a few States need a closer look so that appropriate models can be evolved and implemented nation-wide.

7.94. A shift in approach is required towards 'area specific interventions' rather than 'universalisation of programmes/schemes' to achieve the desired goals.

7.95. Finally, the total allocation of plan and non-plan resources for health for the Centre and States combined remains low compared to the target of taking it to 2-3 per cent of GDP. A very strong effort will be needed in the last year of the Eleventh Plan and mainly in the Twelfth Plan to achieve this goal.