CHAPTER-VIII
PUBLIC HEALTH CARE SYSTEM

The Health care system consists of:

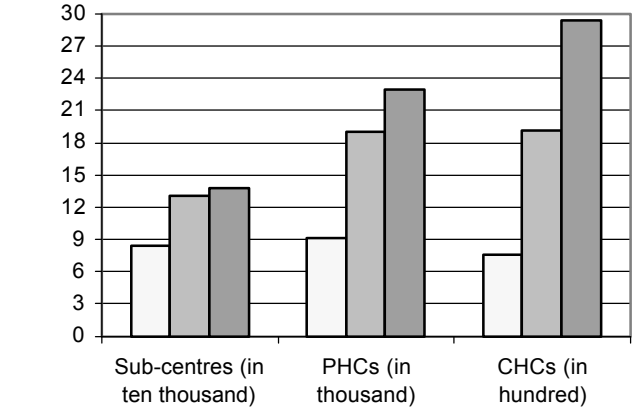
- primary, secondary and tertiary care institutions, manned by medical and paramedical personnel;
- medical colleges and paraprofessional training institutions to train the needed manpower and give the required academic input;
- programme managers managing ongoing programmes at central, state and district levels; and
- health management information system consisting of a two-way system of data collection, collation, analysis and response.

So far the interaction between these components of the system had been sub-optimal. In spite of the plethora of primary, secondary and tertiary care institutions and medical college hospitals there are no well organised referral linkages between the primary, secondary and tertiary care institutions in the same locality. The programme managers and teachers in medical colleges do not link with institutions in any of the three tiers; essential linkages between structure and function are not in place (Annexure - 8.1). Logistics of supply and HMIS are not operational in most states. During the Tenth Plan period, efforts should be made to reorganise health system, build up essential linkages between different components of the system so that there should be substantial improvement in functional status (Annexure - 8.2).

Primary Health Care Services

The primary health care infrastructure provides the first level of contact between the population and health care providers. Realising its importance in the delivery of health services, the centre, states and several government related agencies simultaneously started creating primary health care infrastructure and manpower. This has resulted in substantial amount of duplication of the infrastructure and manpower.

Figure 8.1 - GROWTH OF SUB-CENTRES, PRIMARY HEALTH CENTRES AND COMMUNITY HEALTH CENTRES



Source: IAMR,

The government funded primary health care institutions include:

- the rural, modern medicine primary health care infrastructure created by the states (figure 8.1) consisting of:
  - -Subcentres 137271 (1/ 4579 population)
  - -Primary Health centres 22975 (1/27364 population)
  - -Community Health centers 2935 (1/214000 population)
- subdivisional/Taluk hospitals/speciality hospitals (estimated to be about 2000)
- 5435 rural family welfare centres, 871 urban health posts, 1083 urban family welfare centres, 550 district post partum centres and 1012 sub-district postpartum centres funded by the Department of Family Welfare.
- 22,104 dispensaries, 2862 hospitals under the Dept of ISM&H.
- urban health services provided by municipalities.
- healths care for central government employees provided by Central Government Health Scheme (CGHS).
- hospitals and dispensaries of Railways, Defence and similar large departments providing the health care to their staff.
- medical infrastructure of PSUs and large industries.
- Employee's State Insurance Scheme (ESIS) hospitals and dispensaries providing health care to employees of industries.
- all hospitals - even those providing secondary or tertiary care also provide primary health care services to rural and urban population
- over three-fourths of the medical practitioners work in the private sector and majority of them cater to the primary health care needs of the population.

The state-wise information regarding institutions listed under hospitals and dispensaries in modern system of medicine and ISM&H, rural primary health care infrastructure as well as postpartum centres is given in Annexure-8.3. Health manpower in government primary health care institutions is given in Annexure- 8.4. The vast infrastructure and manpower catering to the primary health care needs of the population is not evenly distributed. The segments of the population whose health care needs are greatest have very poor access to health care.

Sub-Centre

The Sub-centre(SC) is the most peripheral health institution available to the rural population. Even though the sub-centre/population norms at the national level has been met, there are wide inter-state variations. States with poor health indices do not have the required number of sub-centres especially in remote areas. In order to ensure that lack of funds does not hamper the filling up vacancies in the posts of auxiliary nurse midwife (ANM) the Department of Family Welfare has taken up funding of sub-centre ANMs (1.37 lakh) from 1st April 2002. The States should in return take over the funding of the staff of the rural family welfare and post partum centres, who have for the last two decades functioned as a part of the respective institutions in the state. There are a large number of vacancies in the posts of male multi-purpose workers (MMPW) whose salaries are borne by the state government

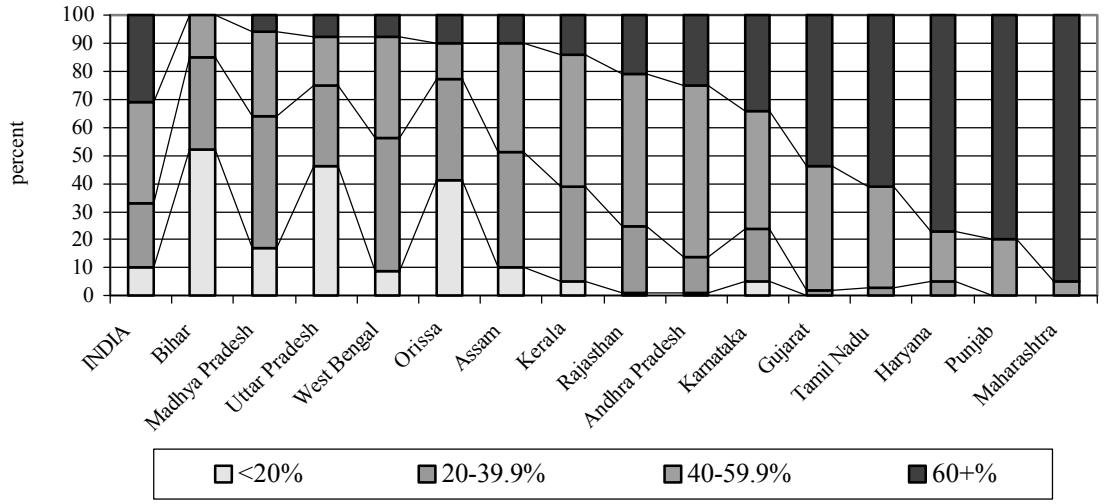
(Annexure- 8.4). Even where they are present, their contribution to the ongoing national disease control programmes, disease surveillance and water quality monitoring is negligible. There are a large number of male uni-purpose workers with insufficient workload in various centrally sponsored disease control programmes. With appropriate skill up gradation these uni-purpose male workers and contractual staff should be able to perform the task of MMPW in improving the coverage and quality of all health programmes.

Primary Health Centres (PHCs)

PHC is a referral unit for six sub-centres. All PHCs provide outpatient services; a majority has four to six in-patient beds. According to the norms they have one medical officer, 14 Para-medical and other supporting staff. At the national level there are more than an adequate number of PHCs and doctors posted at PHCs but the distribution across states is uneven; there are no functional PHCs in many remote areas in dire need of health care.

Facility Survey undertaken by the Department of Family Welfare in 1999 showed that a majority of the PHCs lack essential infrastructure and inputs (Figure-8.2). Only 77 per cent had an infant weighing machine, 65 per

Figure- 8.2 Percentage Distribution of PHCs having all Critical Inputs



Source: Facility Survey-1999, Deptt. of FW

cent had a deep freezer, 16 per cent had a refrigerator, and 60 per cent had an autoclave and steam sterilizer drum. Less than 20 per cent had facility for medical termination of pregnancy (MTP). Essential drugs for the treatment of common ailments were not available in a majority of the PHCs. Only around one-thirds of the PHCs had stock of iron and folic acid (IFA) tablets, 56 per cent had stocks of contraceptives and 61 per cent had vaccines. No more than a third of the PHCs provided delivery cases; in them on an average of 26 deliveries occurred in the last three months before the survey. It is obvious, therefore that PHCs are functioning sub-optimally and are not providing the expected health and family welfare services.

Community Health Centres/First Referral Units

Community Health Centre(CHC) is the first referral unit(FRU) for four PHCs offering specialist care. According to the norms each CHC should have at least 30 beds, one operation theatre, X-ray machine, labour room and laboratory facilities and is to be staffed at least by four specialists i.e. a surgeon, a physician, a gynecologist and a pediatrician supported by 21 para-medical and other staff.

The reported gap in the number of CHCs (about 2000) is more apparent than real. Currently there are over 2000 functioning sub-divisional, taluka and other speciality hospitals below the district hospital. From the Seventh Plan onwards, it has been emphasized that these should be re-organised and brought into the mainstream, given status of CHC and the responsibility of being the referral centre for well defined PHCs and SCs. Many CHCs/FRUs have sub-district post partum centers located within their premises or in the vicinity, but they are not functioning as a part of CHC.

The Facility Survey carried out by the Dept. of Family Welfare showed that though more than 90 per cent of the CHCs have an out patient and in patient facilities and operation theatre, only about one-third had adequate equipments. A majority of the CHCs do not function as the FRUs because they either do not have any specialist or the posted specialists are not from the four specified specialties.

Experiments for improving access to primary health care among tribals:

- Andhra Pradesh – Committed government functionaries are running health facilities in tribal areas
- Orissa – Additional central assistance is provided for mobile health units with a fixed tour schedule. However, this is expensive and difficult to replicate.
- Karnataka, Maharashtra – NGO have `adopted' and are running PHCs in tribal areas

The success of all these experiments is mainly due to the commitment of individuals and credibility of NGOs, which is difficult to replicate.

Tribal Health

In order to ensure adequate access to health care services for the tribal population, 20,769 SCs, 3286 PHCs, 541 CHCs, 142 hospitals, 78 mobile clinics and 2305 dispensaries have been established in tribal areas. In addition, 16845 SCs, 5987 PHCs, 373 CHCs and 2750 dispensaries are located in villages with 20 per cent or more scheduled caste population. Most of the centrally sponsored disease control programmes have a focus on the tribal areas. Under the National Anti Malaria Programme (NAMP) 100 identified predominantly tribal districts in Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa and Rajasthan

Table: 8.1 -Health indices of various social groups

	IMR	U5MR	%Under nutrition
SC	83.0	119.3	53.5
ST	84.2	126.6	55.9
Other disadv	76.0	103.1	47.3
Others	61.8	82.6	41.1
India	70	94.9	47

Source: NHP, 2002

are covered. In spite of all these, the access to and utilisation of health care remain suboptimal and health and nutrition indices in the tribal population continue to be poor (Table-8.1).

Urban Primary Health Care Services

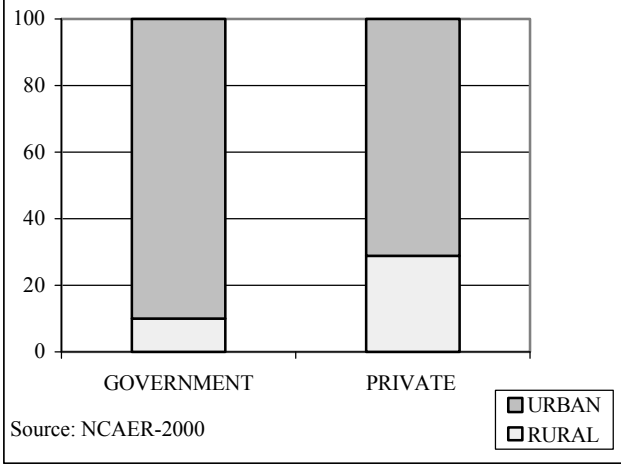
Nearly 30 per cent of India's population lives in the urban areas. Urban population is aware and has ready access to health care. Data from SRS, NFHS (Table 8.2.) and other surveys indicate that health indices of the urban population are better than those of the rural population. However, urban migration has resulted in rapid growth of urban slum; The slum population face greater health hazards due to over-crowding, poor sanitations, lack of access to safe drinking water and environmental pollution. Small scale research studies have shown that health indices of urban slum dwellers in some areas are worse than those of rural population.

Table- 8.2-Urban/rural health indicators

	BPL(%)	IMR	U5MR	% children Under-nourished
Urban	23.6	44	63.1	38.4
Rural	27.1	75	103.7	49.6
Total	26.1	70	94.9	47.0
Source: NFHS-2				

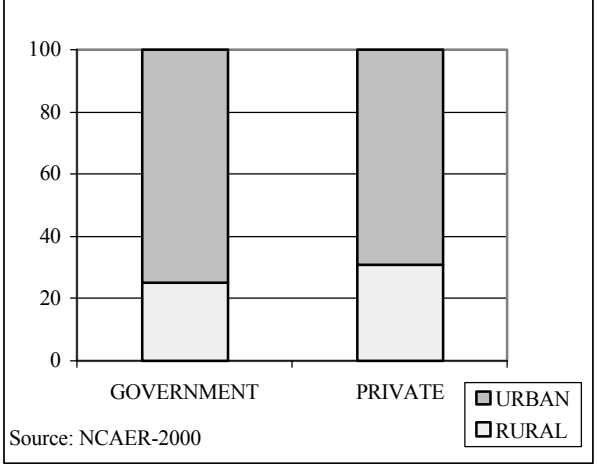
Realising that the available infrastructure is insufficient to meet the health care needs of growing urban population, the municipalities, state governments and the central government have tried to build up urban health care facilities. Majority of the hospitals and beds (Figure-8.3 & 8.4), doctors and para-professionals are in urban areas These urban health facilities especially the tertiary care institutions cater to both the urban and rural population. Unlike the rural health services there have been no efforts to provide well-planned and organized primary, secondary and tertiary care services in geographically delineated urban areas. As a result in many areas primary health care facilities are not available; some of the existing institutions

Figure: 8.3- RURAL & URBAN DISTRIBUTION OF HOSPITAL BEDS: PUBLIC AND PRIVATE



Source: NCAER-2000

Figure- 8. 4 - RURAL & URBAN DISTRIBUTION OF HOSPITALS: PUBLIC AND PRIVATE



Source: NCAER-2000

are under utilised while there is over-crowding in most of the secondary and tertiary care centres. As there is no screening and referral system, the

available equipment and expertise in secondary hospitals are under utilised; in-appropriate use of available diagnostic and therapeutic facilities result in escalating cost of health care without commensurate health benefits.

The Ninth Plan envisaged the development of a well structured net work of urban primary health care institutions providing health and family welfare services to the population within one to three km of their dwellings by re-organizing existing institutions. In addition to funds provided by corporations/municipalities, state government and the central government, externally assisted projects were taken up to achieve the goal. The Planning Commission also provided additional central assistance to some states for undertaking such restructuring. Though there are several small success stories, hardly any progress has been achieved in the overall task of restructuring the urban primary health care linked to secondary and tertiary care and appropriate retraining and redeployment of personnel. One of the major factors responsible for the tardy progress is the multiplicity of agencies funding these institutions.

Health System Reforms at primary health care level during Ninth Plan

Faced with the problems of sub-optimal functioning and difficulties in providing adequate investments for improving health care facilities in the public sector, almost all state governments have initiated health system reforms with public sector institutions playing lead role. The structural reforms relate to reorganisation and restructuring of all the elements of health care so that they function as integral components of the health system. The functional reforms are aimed at improving efficiency by creating a health system with well-defined hierarchy and functional referral linkages; the health personnel would work as a multi-professional team and perform duties according to their position, skills and level of care. The community-based link worker who acts as a liaison between people and health care functionaries and ensures optimal utilization of available facilities should provide the last link. The PRIs should participate in planning programmes and assist in implementation and monitoring. Almost all the states have attempted introduction of user charges for diagnostic and therapeutic procedures in government hospitals from people above the poverty line and use the funds so generated to improve the quality of care in the respective institutions.

Some of the ongoing health system reforms to improve health services include:

- strengthening and appropriately relocating sub-centres/PHCs e.g. Tamil Nadu, Gujarat;
- merger, restructuring, relocating of taluk, sub-divisional and rural hospitals, dispensaries and block level PHCs, integrating them with the existing infrastructure to fill the gap in CHCs e.g. Himachal Pradesh;
- utilizing funds from Basic Minimum Services (BMS), Additional Central Assistance (ACA), Pradhan Mantri Gramodaya Yojana (PMGY) and externally aided projects to fill critical gaps in manpower and facilities; this is being done in all states;

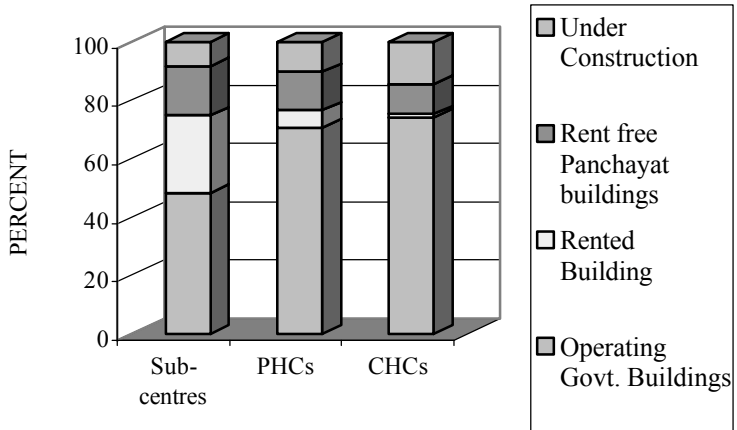
- district-level walk-in-interviews for the appointment of doctors in PHCs; this had limited success – e.g. Madhya Pradesh and Gujarat;
- use of mobile health clinics; this is very expensive and had limited success e.g. Orissa, Maharashtra (for Tribal areas), Delhi (for urban slums);
- handing over of PHCs to NGOs – Karnataka, Orissa; only Karnataka reported success;
- training MBBS doctors in certain specialties (obstetrics, anaesthesia, radiology) in a teaching institution for three to six months and posting them to fill the gap in specialists in FRUs e.g. Tamil Nadu and West Bengal; however, professional associations do not support this;
- improving the logistics of supply of drugs and consumables – e.g. Tamil Nadu, Orissa.

Several states have obtained external assistance to augment their own resources so that the pace of reforms can be accelerated. Funds were provided under PMGY for improving functional status of rural primary health care institutions. Fifty per cent of the outlay was to be used for procurement of drugs and essential consumables and repair of essential equipments. The other 50 per cent was to be used for repair and maintenance of infrastructure in sub-centres, PHCs and CHCs. Under the RCH Programme, funds are provided for minor repair and maintenance of buildings, especially for operation theatres and labour rooms and for improving water and electric supply. Review of the health sector reforms during the Ninth Plan period indicates that on the whole, the content, coverage are poor; pace of implementation is very slow and uneven across the states.

Initiatives during the Tenth Plan

During the Tenth Plan every effort should be made to implement the recommendations of the Seventh, Eighth, and Ninth Plan that all hospitals and dispensaries below district level should be mainstreamed, reorganised, restructured and integrated into the three tier rural primary health care system so that these institutions serve the population in a well defined area and have appropriate referral linkages with each other. The village under each sub-centre, sub-centres under each PHC, PHCs under each CHC/FRU should be defined using Geographical information

Fig 8.5 CONSTRUCTION OF BUILDINGS



SOURCE: RHS BULLETIN, JUNE 2000

System (GIS) mapping, taking into account distances, road linkages and other factors that will improve access. All sub-district institutions with specialists should be recategorised as CHC/FRU and all hospitals and dispensaries without specialists should be merged or recategorised as PHCs. By the end of Seventh Plan most of the states have completed setting up required number of Subcentres and PHCs required to meet the norms for 1991 population (Figure 8.1). About 50% of them were located in their own building and cannot be shifted out(Fig 8.5). Population under each of these primary health care institutions has grown; but it will be difficult to locate new institutions to cater to the additional population in appropriate locations. Therefore the Tenth Plan goals for primary health care institutions for each state should be number of the primary health care institutions required to meet the health care needs of the 1991 population as per the norms (Annexure 8.3). Opening new centers and construction of new centres should be undertaken only under exceptional circumstances.

Ninth Plan recommendations regarding re-organisation of urban primary health care institutions making them responsible for the health care of a population living in a defined geographic area and linking them to existing secondary and tertiary care institutions should be fully implemented during the Tenth Plan.

In order to cope with the growing/changing needs for health care the staffing pattern of both urban and rural primary health care institutions may be suitably modified taking into account the population, their health care needs, the work load, difficulties in delivery of services and distances to be covered. Most of the gaps in critical manpower should be met by re-orientation, skill up gradation and redeployment of the existing manpower. For instance vacancies in the posts of specialists in FRUs should be reduced by integrating the staff of the post partum centres with the FRU staff. As and when required part time or contractual staff including those provided under the national disease control programmes and family welfare programme could be utilised to fill the gaps in manpower. Release of grants under the centrally sponsored schemes should be conditional on filling the vacancies in staff who are critical for improving performance under the national programmes. Mis match between the equipment and personnel should be corrected by shifting equipment to centres which have the personnel to operate it or vice versa.

Available funds should be utilized to make all the existing institutions fully functional by providing needed equipment, consumables, diagnostics and drugs. In addition to funds from the centre, state, externally aided projects, locally generated funds from user charges and donations should be used for maintenance and repair to ensure optimal functional status and improve quality of services.

Secondary Health Care

The secondary health care infrastructure at the district hospitals and urban hospitals is currently also taking care of the primary health care needs

of the population in the city/town in which they are located. This inevitably leads to overcrowding and under utilisation of the specialized services. Strengthening secondary health care services was an identified priority in the Ninth Plan. In addition to the funds they get from the state plan, seven states have taken World Bank loans to initiate projects to build up FRUs/district hospitals. The aim of these projects is to :

- strengthen FRUs to take care of referrals from PHCs/SCs;
- strengthen district hospitals so that they can effectively care for referrals;
- strengthen the referral system and rationalize care at each level to:
  - enable patients to get care near their residence;
  - ensure optimal utilisation of facilities at PHCs/ CHCs; and
  - reduce overcrowding at the district and tertiary care level.

The states have initiated construction works and procurement of equipments. They have reported increased availability of ambulances and drugs, improvement in quality of services following training to health care providers, reduction in vacancies and mismatches in health personnel/infrastructure and improvement in hospital waste management, disease surveillance and response systems. All these states have attempted to levy user charges for diagnostics and therapeutics services from people above the poverty line. Some states have been unable to ensure that the collected charges are retained for use in the same institution and this problem need be speedily resolved.

During the Tenth Plan priority should be accorded to the evaluation of the ongoing World Bank funded secondary health care systems projects in these seven states regarding:

- progress in strengthening of physical infrastructure;
- functional improvement in terms of patient care, organization of referral linkages between CHCs, district hospitals and tertiary care institutions;
- improvement in different components of care - hospital waste management, disease surveillance and response, HMIS etc;
- operationlisation of cost recovery through user charges from people above poverty line while ensuring that people below the poverty line do have access to health services free of cost;
- efforts currently underway to make the programme sustainable so that it remains fully functional after project period.

During the Tenth Plan strengthening of the secondary health system and building up referral services should be taken up in other states using the lessons learnt from these seven states.

Tertiary Health Care

Over the last two decades a majority of the tertiary care institutions in the governmental sector have been facing a resource crunch and have not been able to obtain funds for equipment maintenance, replacement of obsolete equipments, supply of consumables and upgrading the

infrastructure to meet the rapidly growing demand for increasingly complex diagnostic and therapeutic modalities. There is a need to optimise facilities available in tertiary care institutions, enhance the quality of services and strengthen linkages with secondary care institutions. Overcrowding in tertiary care hospitals and underutilization of expert care due to the lack of a two way referral system with primary and secondary care levels requires correction. To meet some of the recurring costs and to improve the quality of services in tertiary health care institutions the Ninth Plan suggested levying user charges and establishing pay clinics/pay cabins.

Some states have provided land, water and electricity at a lower cost to private entrepreneurs setting up tertiary care/superspeciality institutions on the condition that they provide outpatient and inpatient care free of cost for people below the poverty line. In an effort to augment the availability of tertiary care, several states (e.g. Rajasthan and Himachal Pradesh) are trying out innovative schemes to give greater autonomy to government institutions, allowing them to generate resources and utilise them locally. Most states have not yet fully documented the extent and impact of their efforts in this direction. Available data suggest that Kerala, Punjab and Haryana have cost recovery ratios of around 10 per cent and more than 80 per cent of the fees for public facility care were paid by the richest 40 per cent of the population both in the urban and rural areas. This may be because this section uses the services more or the quality of care provided to those who pay may be better than to those who are exempt from paying. A review of the existing cost recovery system in states has shown that:

- an appropriate institutional framework for reviewing user charges has not yet been established;
- the level of cost recovery is minimal due to the low structure of fees and inadequate collection mechanisms;
- mechanisms for identifying and exempting the poor from user charges are ill defined; and
- funds collected are not retained at the point of collection in many states.

During the Tenth Plan, the ongoing efforts at cost recovery from people above the poverty line should be encouraged and evaluated; models which improve the access of all segments of the population to appropriate care at an affordable cost should be replicated. One of the major recommendations of the Ninth Plan was that a Technical Appraisal Committee should be constituted in all major government institutions to assess and prioritise the essential requirements for strengthening and up grading of facilities keeping in mind the funds available. Every effort should be made in the Tenth Plan to implement this recommendation, improve autonomy and encourage decentralised planning.

Reorganisation Of Family Welfare Infrastructure

When the Family Welfare Programme was initiated in the early 1970s the infrastructure for providing maternal and child health and family planning services was inadequate at the primary health care level, and sub-

optimal in the secondary and tertiary care levels. In order to quickly improve the situation, the Department of Family Welfare created and funded post-partum centres, urban family welfare centres/ health post and provided additional staff to the then existing PHCs (block level PHC's). In addition, the ANMs in the sub-centres, created after the initiation of the Family Welfare Programme, were also funded by the Department. The Department of Family Welfare also created state and district level infrastructure for carrying out the programmes and setting up training institutions for pre/in-service training of personnel. All these activities were being funded through Plan funds.

Over the last three decades, there has been considerable expansion and strengthening of the health care infrastructure by the State. Family welfare services are now an integral part of services provided by primary, secondary and tertiary care institutions. The staff funded by the Department of Family Welfare under the scheme of rural family welfare centres and post partum centres are state health services personnel functioning as part of the state infrastructure. In view of this, the Ninth Plan recommended that the funding should be taken over by the state Department of Health. States should take over the responsibility of funding post partum centres and rural family welfare centres from 1 April 2002.

Since ANMs are crucial for increasing the outreach of the programme, it is important to ensure that the posts of ANMs are filled and steps taken to ensure that they are available and perform the duties they are assigned. One of the major problems with respect to the ANMs is that while the Department of Family Welfare funded over 97,000 posts, about 40,000 were funded by the state (from non-Plan). The Ninth Plan recommended that this dichotomy in funding should be removed and all the ANMs, as per the norms for the 1991 population should be funded by the Department of Family Welfare. This should be done from 1 April 2002. It is expected that this would ensure that the states do employ the required number of ANMs, streamline their functioning and improve the coverage, content and quality of maternal and child health care.

Improving equitable service delivery

Data from research studies and clinical experience shows that social and economic deprivation lead to poor health outcomes. Poor health, in turn, results in deterioration of economic status partly due to loss of wages and partly due to cost of health care. Specific efforts have been made to focus on health and nutrition interventions so that the vulnerable segments of the population have better access to health and nutrition services and the vicious circle of poverty and ill health is broken. However, in spite of efforts over the last 50 years, better access to public health services continues to elude the poor, whose health care needs are the greatest. While this is true in all states, RHS data brings out some interesting inter-state comparisons. The poorest quintile in Tamil Nadu have better immunisation coverage rates than the richest quintile in Uttar Pradesh suggesting that socio-economic barriers can be overcome through improved awareness and access . During the Tenth

Plan, every effort should be made to improve access to essential primary health care, family welfare services and diseases control programmes totally free of cost. The Centre and the states should evolve and evaluate various options for reducing the financial burden of hospitalisation on the poor.

Quality and Accountability in Health care:

Quality control is a system of supervision and control of all activities in order to detect and correct any undue deviation from pre-defined norms of care. In recent years, there has been increasing public concern over issues of quality both because of increasing awareness of the population and mushrooming of health care institutions particularly in private sector. Ultimately assessment of quality of care does depend upon value judgement but there are determinants and ingredients of quality which can be measured objectively. These include assessment of infrastructure and manpower, process such as diagnosis and treatment or outcome such as case fatality, disability and patient satisfaction. Health care quality evaluation of institution includes safety, effectiveness, patient centredness ,timeliness of interventions ,assessment of the performance of the system should also be in terms of meeting the changing needs of the individuals and population to stay healthy, get better and learn to live with illness and disability. Introduction of effective efficient quality control systems now in India should :

- prevent over use, under use, abuse, misuse of the facilities
- improve effectiveness, efficiency and
- bring in accountability in the health system

Some initiatives have been taken to address quality of care issues. The Consumer Protection Act provides one mechanism for redressal of grievances pertaining to quality of care. Some States have attempted to provide a legal framework for the functioning of private health care institutions on the lines of Bombay Nursing Home Registration Act 1949. Until now these legislative measures have not been effectively implemented mainly because of lack of objective criteria for defining `quality of care' and the possible impact of such regulations on the cost of care.

During the Tenth Plan quality control concepts and tools should be introduced into every aspect of health care so that

- the population and the system (public funded, private and voluntary sector) benefit from the defined and institutionalized norms, accountability and responsibility.
- the goals set in the Tenth Plan for processes and impact in various sectors and programmes are achieved and health indices of the population improve
- the health care needs of the population are met at a cost which is affordable for the individual and the country.

Logistic Support

Ninth Plan strategy
Improve uninterrupted supply of essential drugs, devices, vaccines and contraceptives, adequate in quantity and appropriate in quality.

Under the Family welfare program the central government procures and supplies drugs, equipment kits, contraceptives and vaccines to the states. While the drug kits are supplied at district level, vaccines and contraceptives are supplied at the state or regional level. The states have, so far, not created any specialised or dedicated system for receiving such supplies, storing them in acceptable conditions and distributing them. As a result, there are delays, deterioration in the quality and wastage of drugs. Supplies under the family welfare programme are to the tune of Rs. 500 crore and it is estimated that the losses due to deterioration and inefficiencies may be to the extent of 20 to 30 per cent.

The Department of Family Welfare, in collaboration with different external funding agencies working in different states, has formulated logistic projects for each of the major states. It envisaged that a specialised agency should be created in each state which should manage warehouses at the regional level for each cluster of five to eight districts. These warehouses should receive an indent from each hospital in the area and should ensure delivery of supplies within 15 days through a contracted transporter. To ensure efficiency, the state government agency should be paid only on the basis of a per centage of supplies it handles. The logistics project has already been initiated in some states.

During the Tenth Plan, efforts should be made to ensure that facilities which are being created , handle all the drugs/vaccine/devices provided by the central government and state governments for all health care institutions. The progress of this programme and the problem encountered should be monitored and appropriate mid-course corrections instituted.

Initiatives To Address The Needs Of Underserved Population

Access to health care is poorer in the States like Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan. The Empower Action Group (EAG) constituted in the Department of Family Welfare reviews the available infrastructure, performance of the health system and health indices and suggest steps for improving access to health care so that there is rapid decline in fertility and mortality. During the Tenth Plan special efforts should be made to upgrade the capacity of health system in these states/districts to meet all the felt needs for care so that there is rapid decline in both fertility and mortality. This is an essential step if the ambitious goals for decline in fertility and mortality set in NPP 2001 are to be achieved because these states/districtrs contribute to over 50% of the country's mortality and fertility.

Tribal population (except in the northeastern states); majority of tribal population face problems in accessing essential health care services and have poor health indices, Department of Family Welfare has already initiated several programmes with focusing meeting the health care needs of tribal population. These should be continued during the Tenth Plan. Special efforts should be made to address the health needs through area specific programmes. Increasing involvement of NGOs and tribal community in all activities is envisaged.

Urban slum population has been shown to have poor maternal and child health indices. In many slums immunization coverage is very low and children are undernourished. The Department of Family Welfare and Department of Health have been investing in improving urban primary health care infrastructure and ensuring that they are linked to existing secondary and tertiary care institutions. The IPP V, VIII and Urban RCH Pilot Projects have build up capacities of urban health system in several cities. Efforts to rationalise urban health care and improve efficiency so that reproductive care needs are fully met within available infrastructure should be continued during the Tenth Plan period.

Strategies for Increasing Efficiency

A vast infrastructure for delivery of health and family welfare services has been created over the last three decades based on uniform norms for the entire country. Evaluation studies have shown that they are functioning suboptimally because of

- mismatch between structure and function;
- lack of skill upgradation training to update their knowledge skills and programme orientation
- absence of proper medical hierarchy with well defined functions;
- lack of first line supervision and mechanism to bring about accountability;
- absence of referral system and lack of functional FRUs.

Under the RCH Programme DOFW has invested heavily in training of Programme Managers in managerial aspects for effective implementation of RCH programme including decentralised district-based planning, implementation, monitoring and mid-course corrections. Skill upgradation of all categories of the health care professionals and paraprofessionals is envisaged for improving the quality of screening and management of persons with complications including referral as and when required. It is expected that these efforts should promote effective functioning of the infrastructure and improve efficiency. These efforts to make the health system effective and efficient should continue during the Tenth Plan period .

Though all states have shown some improvement in access to health care the health and demographic indices over time, the rate of change has been very slow in some states. Efforts during the Ninth Plan to provide more funds to these states/ districts to improve infrastructure and manpower, and making schemes for implementation more flexible to enable private, voluntary sector participation has not succeeded in

accelerating the rate of change in access to health care or improvement in the health indices. During the Tenth Plan, efforts should be made to improve efficiency by undertaking task analysis, assigning appropriate duties/ tasks to designated functionaries and training them to act as a multi-professional team. In such a chain, the first link should be provided by the village-based workers who will act as a liaison person between the people and health functionaries and ensure utilisation of available facilities. The Panchayati Raj Institutions should participate in the planning and assist in the implementation and monitoring of the programme. The ANM should administer vaccines, screen infants, children and pregnant women, identify and refer the "at risk" persons to appropriate institution. The medical officer at PHC should undertake PHC-based planning and monitoring of the Health and Family Welfare programmes and provide curative services, organise and supervise preventive and promotive health and family welfare-related activities and develop a viable, functional referral systems. The specialists in CHC should provide appropriate emergency care and care for referred patients, participate in the development of the CHC based RCH programmes, monitor the activities and initiate midcourse corrections. If this pattern of functioning is followed, the community, the link worker and the health functionaries should be performing the tasks that they are best suited to do and the implementation of the programme should improve because of linked effective functioning of the entire system.

Involvement Of PRI In Family Welfare Programme

According to Article 243 G of the 73rd Constitutional Amendment Act, states are required to devolve adequate powers and responsibility to the PRIs in order to make them effective institutions of local self government. Funds and personnel have to be made available to the PRIs for planning and implementation of schemes pertaining to various sectors. The PRIs can play a critical role in ensuring area specific microplanning, monitoring of the implementation of the national, state level and district specific programmes, ensuring accountability and improving inter-sectoral coordination. However, in many states, there have been no concrete steps to involve PRIs in the planning and implementation of state sector or centrally sponsored schemes.

The Ninth Plan envisaged the involvement of PRIs for:

- ensuring inter-sectoral coordination and community participation in planning, monitoring and management of the RCH programme.
- assisting states in supervising the functioning of the health care related personnel including ANM, MMPW and AWW.
- ensuring coordination of activities of workers of different departments such as health, family welfare, ICDS, social welfare and education etc. functioning at the village, block and district levels.
- improving the acceptance of the Family Welfare Programme through increased community participation.

There are immense differences between states in the involvement of PRIs in the Family Welfare Programme. States like Kerala have embarked on decentralised planning and monitoring programmes utilising PRIs and have devolved powers and finances to PRIs. Rajasthan, Andhra Pradesh and Haryana have implemented their own models for the involvement of the PRIs in the health sector. In other states, the involvement is mainly in planning and monitoring without devolution of power and finances. In some states, the PRIs have not yet started participating in the programme. There is a need to continuously review the situation and initiate appropriate interventions.

The real challenge to health services lies in effectively delivering the needed services in the remote and inaccessible areas where the services provided by the government machinery are the weakest and the private sector and NGOs are non-existent. During the Tenth Plan, it is envisaged that mature PRIs with intelligent, service-oriented members should play a key role in making the programme a people's programme and improving access to its services. The health committee of the gram panchayat can plan locally, identify area-specific unmet needs for reproductive health services and ensure that efforts are made to meet them. It can also be entrusted with the task of monitoring the attendance and performance of health care personnel. The PRIs can play a vital role in programme advocacy and monitoring the availability, accessibility and quality of services in government PHCs, NGOs and private practitioners and the cost of services provided by the latter. The PRIs should have the advance tour programmes of the ANM and male multipurpose worker and lists of nearest functioning PHCs with a doctor, nearest FRU/CHC with a peadiatrician, obstetrician, surgeon or physician where persons with complications and those requiring emergency care could be referred. They should monitor the funding of emergency transport provision as well as dispersal of funds under the Balika Samridhi Yojana and the Maternity Benefit Scheme. The active role and supervision of the PRIs is also crucial for ensuring 100 per cent registration of births, deaths, marriages and pregnancies at the village level.

Role of PRIs in the Tenth Plan

The National Population Policy 2000 has given high priority to decentralized planning of involvement of PRIs in programme implementation to achieve the task of population stabilization. The real challenge of family welfare programme lies in meeting the unmet needs of the population in districts with high IMR and high fertility especially in the remote, inaccessible, hilly, tribal and desert areas where the services provided by the government machinery are the weakest and private/NGOs Sectors are non-existent. If the mandate of providing health, maternal, child and family welfare services is shared by the PRIs in such areas, the two can work in a complementary mode to strengthen the existing network and to supervise the execution of the programmes. Thus the major role of the PRIs is greater involvement and responsibility in ensuring effective implementation of the existing programmes.

- The Health Committee of the Gram Panchayat, which may be preferably headed by an elected women panchayat member, should be geared to promote gender sensitive, multi-sectoral agenda for population stabilization that should "think, plan and act locally and get the support from the states and the Centre. These committees may identify area specific unmet needs for reproductive health services and prepare need based, demand driven, socio demographic plans at the village level for providing responsive, people centred, and integrated basic reproductive and child health care.
- It is of utmost importance that all the village level functionaries like the Patwari, Gram Sewak, ANM, Anganwadi Worker, School Teacher, etc., should be made directly responsible to the Village Panchayat so that the latter can not only maintain a supervisory influence but also play a positive role in integrating the services of the various departments at the services delivery level for synergising of energy and effort. Simply put the Gram Panchayat should be entrusted with a task of monitoring the attendance and performance of services given by these officers and should also be empowered to take disciplinary action in case or erring officials.
- The programme of family welfare and population stabilization can be successful only when it is seen by the people as their programme and not a Government agenda. The PRIs can play a vital role in programme advocacy.
- Since 33% of membership of PRIs has been reserved for elected women candidates, the involvements of PRIs in the agenda for empowerment of women through issues like universalization of primary education, ensuring conformity to legal requirement for age of marriage, promoting female participation in paid employment, mobilization of the community against malpractices like dowry and son preference etc., are of vital importance for the success of the family welfare programme.
- The PRIs can also involve civil society in monitoring the availability, accessibility and affordability of services and supplies in Govt. primary health centers. Similarly NGOs and private practitioners should be monitored for quality content and cost of services provided.
- The PRIs should have the advanced tour program of the ANM, MMPW; they should also have a list of nearest functioning PHC with a Doctor, nearest FRU/CHC with a Peadiatrician, Obstetrician, Surgeon or Physician where persons with complications and those requiring emergency care could be referred. They should monitor the funding of emergerncy transport provision as well as dispersal of funds under BSY and Maternity Benefit Scheme.
- The PRIs should maintain the list of community midwives, trained birth attendants, village health guides, Panchayat Sewa Sahayakas, primary school teachers and anganwadi workers who should be entrusted with various responsibilities in the implementation of integrated services delivery.
- Active role and supervision of the PRIs is also crucial for registration of births, deaths, marriages and pregnancies at the village level.
- The PRIs should oversee the services provided by the ANM and the anganwadi worker to pregnant women, new born and infants. The anganwadi should become the hub of the mother and child activities at the

village level. A fortnightly camp should be organized at the Anganwadi Centre where the concerned member of the village health committee should be present. In this case :

- ANM should immunize children, provide antenatal check up and examine children with grade III/IV under-nourised children and treat common infections;
- AWW should inform the PRI and get their help to provide take home food to children with grade III/IV under nutrition and then care; and pregnant women weighing below 40 Kg who should continue food supplementation.
- Counselling for family planning, health sanitation and other related issues would also be done at such camps.
- Tthe PRIs should be actively associated in overseeing the delivery of health care for women and children at the village level.

All these can be taken up wherever the Panchayati Raj Institutions are mature and their members are intelligent, service oriented and committed to the public agenda.

Intersectoral Coordination

Inter -sectoral coordination, especially between the Departments of Health, Department of ISM&H, Women and Child Development, Human Resource Development, Rural Development, Urban Development, Labour, Railways, Industry and Agriculture is critical for increasing the coverage of the Family Welfare Programme and improving implementation. Some of the areas where inter sectoral coordination is envisaged during the Tenth Plan include:

- involvement of the extension workers of these departments in propagating IEC messages pertaining to reproductive and child health care to the population with whom they work;
- efforts to improve the status of the girl child and women, improving female literacy and employment, raising the age at marriage, generating more income in rural areas, improving nutritional status of women and children;
- coordination among village-level functionaries - anganwadi workers, TBAs, Mahila Swasthaya Sangh, Krishi Vigyan Kendra volunteers and school teachers - to achieve optimal utilisation of available services.

Suggested areas of convergence of services with Department of Education include:

- inclusion of educational material relating to health, nutrition and population in the curriculum for formal and non-formal education;
- involvement of all zilla saksharata samitis in IEC activities pertaining to the RCH programme;

- involving school teachers and children in Class V and above in growth monitoring , immunisation and related activities in the village at least once a month as a part of socially useful productive work;

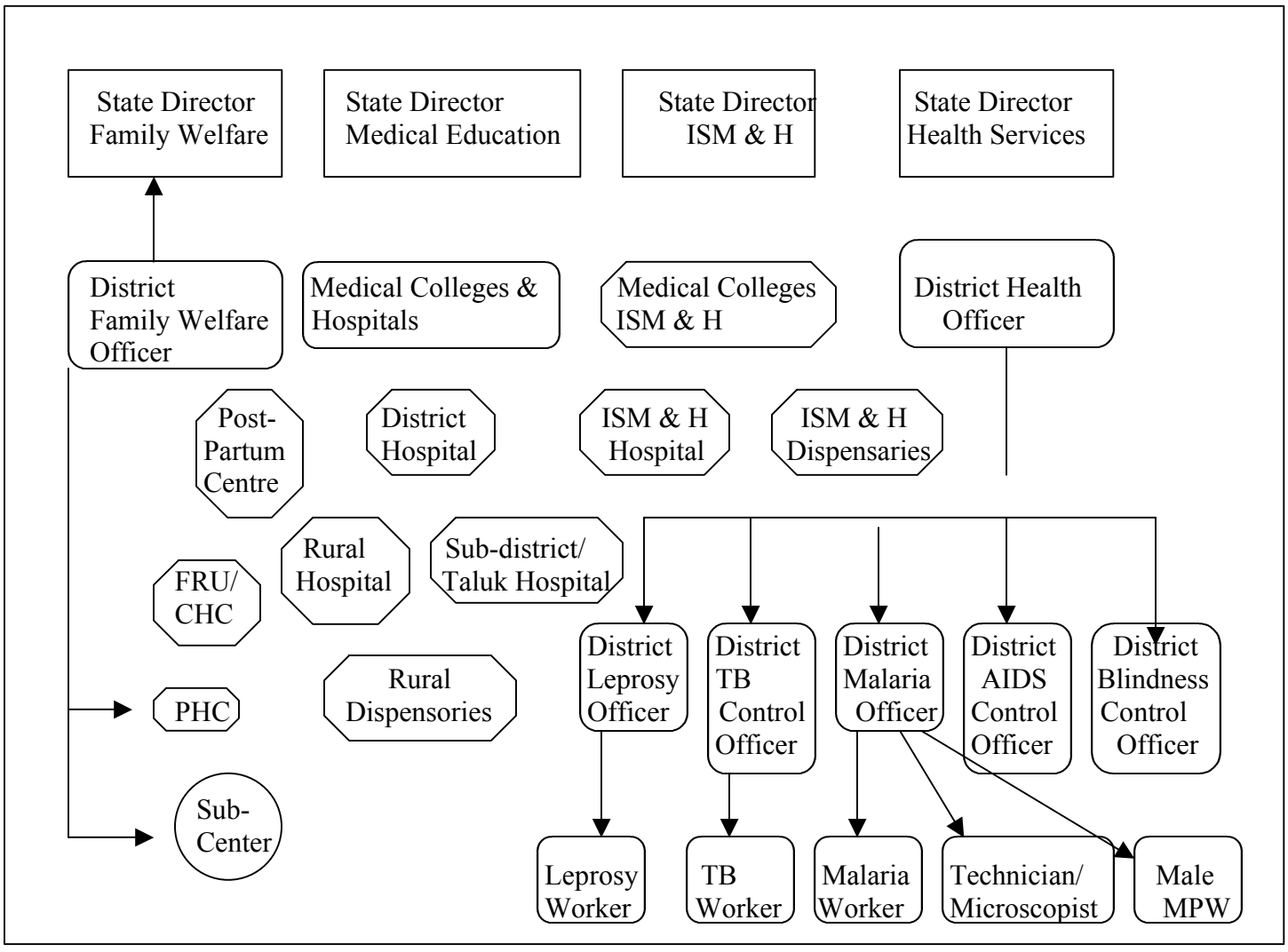
Convergence of services with the Department of Women and Child Development include :

- involvement of anganwadi workers in the compilation of births and deaths and the identification of pregnant women;
- involving anganwadi workers in weighing babies as soon as possible after delivery and referring neonates with weight below 2.2 kg to centres where a paediatrician is available;
- utilising the services of the anganwadi worker in improving the coverage of Massive Dose Vitamin A in children when they are 18 months, 24 months, 30 month and 36 months and improving the compliance among pregnant women under iron-folic acid medication;
- identification of undernourished pregnant and lactating women and pre-school children to ensure that they get priority in food supplementation programmes under the ICDS and appropriate health care from ANMs and doctors;
- promoting the cultivation of adequate quantities of green leafy vegetables, herbs and condiments in coordination with the PRIs and agricultural extension workers and ensuring that these are supplied to anganwadis on a regular basis to improve micro-nutrient content of food supplements.

The anganwadi worker can assist the ANM in organising health check ups of women and children and immunisation in the anganwadi. She should act as depot holder for iron and folic acids tablets, ORS, condoms and disposable delivery kits . She should be provided with a list indicating the nearest facility to which women and children could be referred so that she can help in organising emergency referral.

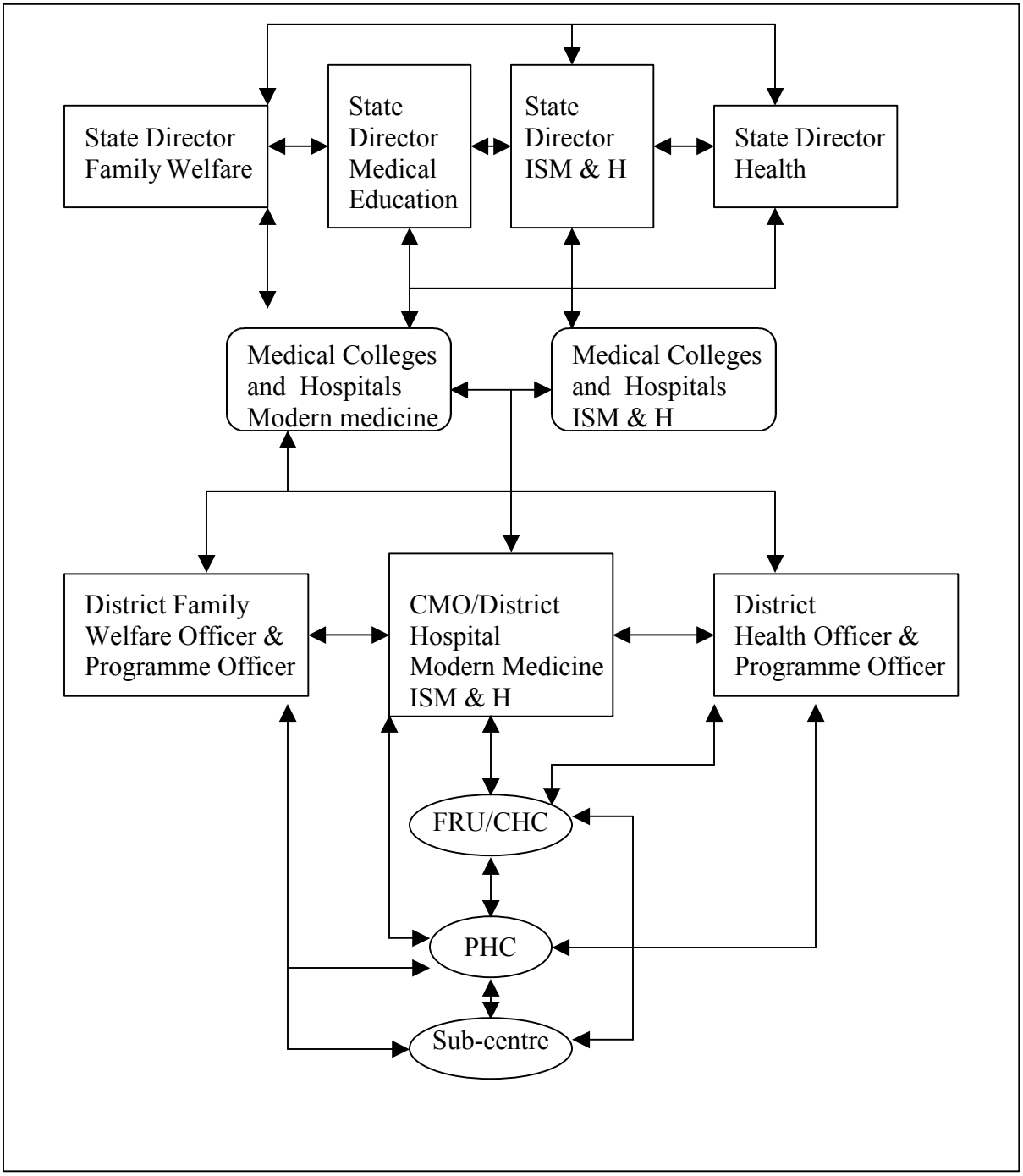
Annexure –5. 8. 1

CURRENT STATUS OF HEALTH CARE INFRASTRUCTURE



Annexure –5.8. 2

REORGANISATION AND LINKAGES PROPOSED IN THE HEALTH CARE INFRASTRUCTURE



Annexure-8.3

STATE WISE/ SYSTEM WISE NUMBER OF HOSPITALS AND DISPENSARIES UNDER MODERN SYSTEM AND ISM & H

		RURAL HEALTH CARE INFRASTRUCTURE									DISPENSARIES**			HOSPITALS**				Urban Family Welfare Centres**		Post Partum Centres**	
	STATES/ UTs	Sub centres			Primary Health Centres			Community Health Centres			Modern System of Medicine @		ISM & H @@	Modern System of Medicine @		ISM & H @@					
		Reqd. 1991	In Position	Goal for the 10th Plan	Reqd. 1991	In Position	Goal for the 10th Plan	Reqd. 1991	In Position	Goal for the 10th Plan	DISPENSARIES	Beds	DISPENSARIES	HOSPITALS	Beds	HOSPITALS	BEDS	UFWC	Health Posts	District level	Sub-district level
1	ANDHRA PRADESH	10242	10568	*	1707	1386	321	427	219	208	134	0	1930	3133	69778	22	1249	131	-	28	55
2	ARUNACHAL PRADESH	220	273	*	37	65	*	9	20	*	11	0	46	262	2476	1	15	6	-	-	1
3	ASSAM	4356	5109	*	726	610	116	181	100	81	325	42	409	268	12661	6	260	10	-	11	30
4	BIHAR	11547	10332	1215	1961	1642	319	490	87	403	427	96	831	328	29090	14	1385	42	-	37	54
5	CHHATISGARH	4692	3818	874	704	545	159	176	150	26											
6	GOA	138	172	*	23	19	4	6	5	1	33	0	115	105	3848	6	245	-	-	4	-
7	GUJARAT	6168	7274	*	1028	1044	*	257	253	4	7255	9289	583	2528	63417	55	2476	113	28	33	55
8	HARYANA	2482	2299	183	414	402	12	103	64	39	130	126	454	80	7230	7	850	19	16	13	20
9	HIMACHAL PRADESH	973	2069	*	162	302	*	40	65	*	173	169	1081	63	5463	18	355	89	-	11	22
10	JAMMU & KASHMIR	1176	1700	*	196	337	*	49	53	*	610	0	445	67	8202	4	235	12	-	11	6
11	JHARKHAND	4278	4462	*	676	561	115	169	47	122											
12	KARNATAKA	6431	8143	*	1072	1676	*	268	249	19	797	1163	642	293	38479	178	8400	87	-	39	64
13	KERALA	4325	5094	*	721	944	*	180	105	75	53	164	3523	2107	97840	182	4031	-	-	22	60
14	MADHYA PRADESH	7430	8835	*	1316	1193	123	329	229	100	256	2	2363	363	18141	47	1810	63	99	47	75
15	MAHARASHTRA	10533	9725	808	1756	1768	*	439	351	88	8143	1622	486	3115	78920	160	18618	74	278	52	69
16	MANIPUR	344	420	*	57	69	*	14	16	*	42	0	10	17	1626	3	75	2	-	3	1
17	MEGHALAYA	464	413	51	77	85	*	19	13	6	21	0	5	9	1828	0	0	1	-	3	1
18	MIZORAM	122	346	*	20	58	*	5	9	*	13	130	2	12	1021	0	0	1	-	2	4
19	NAGALAND	325	302	23	54	46	8	14	9	5	17	68	2	29	1158	0	0	-	-	1	1
20	ORISSA	6374	5927	447	1062	1352	*	265	157	108	1197	282	1104	273	11980	13	473	10	8	19	60
21	PUNJAB	2858	2852	6	476	484	*	119	105	14	1469	5503	629	220	14921	17	956	23	64	19	35
22	RAJASTHAN	7484	9926	*	1247	1674	*	312	263	49	268	134	3689	219	21387	102	1631	61	90	35	100
23	SIKKIM	85	147	*	14	24	*	4	2	2	147	0	2	1	300	0	0	1	-	1	2
24	TAMILNADU	7424	8682	*	1237	1436	*	309	72	237	512	278	396	408	48780	229	2187	65	100	32	87
25	TRIPURA	579	539	40	96	58	38	24	11	13	612	0	96	29	1866	2	30	9	-	1	3
26	UTARANCHAL	1764	1609	155	265	257	8	66	30	36											
27	UTTAR PRADESH	20573	18576	1997	3458	3551	*	865	280	585	1750	5729	2239	735	47278	1843	11496	81	150	72	147
28	WEST BENGAL	10356	8126	2230	1726	1262	464	431	99	332	571	0	1153	399	53732	19	1007	111	-	27	55
29	ANDAMAN & NICOBAR ISLANDS	45	100	*	7	18	*	2	4	*	138	0	7	10	901	0	0	-	-	1	-
30	CHANDIGARH	13	13	0	2	0	2	1	1	0	33	0	9	1	500	3	185	3	10	2	-

Annexure-8.3

STATE WISE/ SYSTEM WISE NUMBER OF HOSPITALS AND DISPENSARIES UNDER MODERN SYSTEM AND ISM & H

		RURAL HEALTH CARE INFRASTRUCTURE									DISPENSARIES**			HOSPITALS**				Urban Family Welfare Centres**		Post Partum Centres**	
	STATES/ UTs	Sub centres			Primary Health Centres			Community Health Centres			Modern System of Medicine @		ISM & H @@	Modern System of Medicine @		ISM & H @@					
		Reqd. 1991	In Position	Goal for the 10th Plan	Reqd. 1991	In Position	Goal for the 10th Plan	Reqd. 1991	In Position	Goal for the 10th Plan	DISPENSARIES	Beds	DISPENSARIES	HOSPITALS	Beds	HOSPITALS	BEDS	UFWC	Health Posts	District level	Sub-district level
31	DADRA & NAGAR HAVELI	40	36	4	7	6	1	2	1	1	3	6	2	3	115	2	0	-	-	-	-
32	DAMAN & DIU	12	21	*	2	3	*	1	1	0	28	0	1	3	150	1	5	-	-	-	-
33	DELHI	190	42	148	32	8	24	8		8	490	0	236	77	19345	17	1322	69	28	9	5
34	LAKSHADWEEP	7	14	*	1	4	*		3	*	0	0	6	2	70	0	0	-	-	-	-
35	PONDICHERRY	58	80	*	10	39	*	3	4	*	12	0	21	29	3136	0	0	-	-	3	-
36	CGHS	-	-		-	-	-	-	-	-	241	-	79	-	-	1	25	-	-	-	-
37	CENTRAL RESEARCH COUNCILS		-		-	-	-	-	-	-	-	-	85	-	-	39	930	-	-	-	-
38	M/o RAILWAY	-	-		-	-	-	-	-	-	-	-	162	-	-	0	0	-	-	-	-
39	M/o LABOUR	-	-		-	-	-	-	-	-	-	-	157	-	-	0	0	-	-	-	-
40	M/o COAL	-	-		-	-	-	-	-	-	-	-	28	-	-	0	0	-	-	-	-
	TOTAL	134108	138044	8181	22349	22928	1714	5587	3077	2562	25911	24803	23028	15188	665639	2991	60251	1083	871	538	1012

* INDICATES SURPLUS INFRASTRUCTURE, INFORMATION AVAILABLE AS ON AUG.2002; @ FOR THE PERIOD 1.1.1998; @@ FOR 1.4.1999; ** INFORMATION AVAILABLE FOR UNDIVIDED BIHAR, MP & UP

NOTE :- - = NIL INFORMATION.

= INFORMATION FOR THE CURRENT YEAR HAS NOT BEEN RECEIVED, HENCE REPEATED FOR THE LATEST AVAILABLE YEAR.

FIGURES ARE PROVISIONAL

SOURCE: HEALTH INFORMATION OF INDIA, ISM&H IN INDIA AND D/O FAMILY WELFARE; FIGURES ARE PROVISIONAL

Annexure - 2. 8.4

MANPOWER REQUIREMENT IN RURAL PRIMARY HEALTH CARE INSTITUTIONS

	Category of manpower	Requirement for Census 1991	In position as on 30.06.2000	Number sanctioned	Gap
					37684
1	2	3	4	5	6
1	Specialists	22348	3741	6579	18607
	(4/CHC)				
2	Doctors at PHCs	22349	25506	29702	3157*
	(1/PHC)				
3	Block Extension Educator/				
	Health Educator	22349	5508	6534	16841
	(1/PHC)				
4	Pharmacist	27936	21077	22871	6859
	(1/CHC+1/PHC)				
5	Lab. Technician	27936	12709	15865	15227
	(1/CHC+1/PHC)				
6	X-ray Technician/				
	Radiographer	5587	1768	2137	3819
	(1/CHC)				
7	Nurse Midwife	61458	17673	22672	43785
	(7/CHC+1/PHC)				
8	Health Assistant (M)	22349	22265	26427	84
	(1/PHC)				
9	Health Assistant (FM)	22349	19426	22479	2923
	(1/PHC)				
10	Health Worker (M)	134108	73327	87504	60781
	(1/SC)				
11	Health Worker (FM)	156457	134086	144012	22371
	(1/SC+1/PHC)				
	TOTAL	525226	337086	386782	191297
	* indicates surplus and has not been added to the gap.				
	Source :- RHS Bulletin, June, 2000 (Ministry of Health & FW)				