CHAPTER 3

Maternal and Child Health Programmes, Provisioning and Health Financing
3.1 Introduction

The development of the health sector in India and the successive implementation of the various progressive programmes and policies led to the growth of the nation's wellbeing. An attempt towards framing the historical evolution of 'health services', programmes and policies, health provisioning and financing in India has been conceptualised to get an overview of the initiatives taken for the welfare of population in general, and of the country's women and children, in particular – as this study deals with the various facets of maternal and child health care services.

3.2 A Historical Background of Development of Health Service

3.2.1 Before Independence

In the pre-independence era (1946), guidelines were available to the then rulers of the country, regarding both short and long term strategies to be followed in planning and development of health services delivery system. After Independence, to manage the affairs of the country and also to frame and adopt a Constitution for its people, an 'Interim Government' was formed. This was a period of turmoil and the time and resources available were too short to plan out for socio-economic development of the country, and to concentrate on social security and welfare measures for the masses. Rather, attention was unavoidably diverted towards restoration of law and order situation and in providing food, clothing, shelter and medical-aid to the up-rooted families affected by the partition of the country.

3.2.2 Post Independence: Constitutional Provisions

Under the Constitution of India, the subjects like public health and sanitation, hospitals and dispensaries are in the State list. The provision of medical and health care services for the community is basically a subject to be dealt by the state governments, exception being the cases of the Union Territories which are under administrative control of the Union Government. At present, the subjects like population control and family planning, maternity benefits, medical education, adulteration of food stuffs and other goods, drugs and poisons, medical profession, vital statistics including registration of births and deaths, lunacy and mental deficiency, etc. (amendments) are in the Concurrent list.

According to the 'Directive Principles of State Policy' of the Constitution of India (Article 47), both Union and State Governments are duty bound to consider the health of citizens as fundamental to national progress. Thus, the Union Ministry of Health and Family Welfare is expected to play a vital role in the governmental efforts to enable the citizens to live a healthier and better life.

In India, the health sector is primarily under the purview of the state governments, with the central government providing broad policy guidelines, technical assistance, and additional resources. In addition, the central government plans, funds, and supports the implementation of a limited
number of ‘national programmes’ in high-priority areas through the states. Presently, family 
planning, maternal health, and new born and child health come under the umbrella of the RCH 
programme. The RCH programme is steered by the Department of Family Welfare in the Ministry of 
Health and Family Welfare led by the Secretary (Family Welfare).

3.2.3 Health Committee Recommendations

The recommendations of the Health Survey and Development Committee (Bhore 
Committee, 1946) to plan, organise and develop health services in the country were available with 
the interim Government. Nearly two and a half years, since the adoption of Constitution, a massive 
exercise of national reconstruction and development, in the shape of Community Development 
Programme, was taken up for implementation under the aegis of Five Year Plan in October, 1952. 
Accordingly, a Primary Health Centre (PHC) was planned to be set up in each Community 
Development Block area comprising of population ranging between 60,000 to 80,000 in a phased 
manner. Further, a provision of barest minimum staff input, consisting the categories of one Medical 
Officer (MO), one dispenser, four Auxiliary Nurse Midwives (ANMs) and two vaccinators for each 
PHC was agreed upon and implemented in actual practice. The functions of such PHCs were to 
render basically preventive services, to undertake clinical work and also to disseminate the 
information to the community, such as where to go for a particular kind of ailment, in case of need. 
These PHCs were a part and parcel of the establishment of Block Development Officers (BDOs).

The prevention of occurrence of malaria was taken up through the National Malaria Control 
Programme for implementation as a plan scheme in 1953 which was later changed to National 
Malaria Eradication Programme (NMEP). In 1954-55 the National Leprosy Control Programme was 
launched. Towards the end of the 1st Five Year Plan, the growth in population was realised as a 
problem of various developmental schemes initiated by the Government. During 1956-58, the 
potential benefit of reduction in fertility was highlighted with the aid of empirical exercises and 
economic arguments that lower fertility would contribute to a decline in the number of children 
needing support, higher rates of savings, capital formation and acceleration in the growth rate of per 
capita income (Coale and Hoover, 1958). As a result, a crash programme of Family Planning was 
launched in the 2nd Five Year Plan (1956), fully financed (100%) by the Government of India with a 
long term perspective.

The Government of India appointed the Health Survey and Planning Committee (Mudaliar 
Committee, 1962) to make an assessment of the progress achieved in the field of medical relief and 
public health problems. The Committee recommended the integration of medical and health services 
and felt that each PHC should not serve more than 40,000 population.

The Government of India also identified Tuberculosis and Trachoma as major public health 
problems and consequently, after a thorough research, National Tuberculosis Programme (NTP) was
launched in 1962. Following this, the National Trachoma Control Programme (NTCP) was launched in 1963, which is presently known as National Programme for Prevention of Blindness (NPPB).

The Chadha Committee (1963) suggested that the Basic Health Workers (BHWs) should look after additional duties of collection of vital statistics and handle the activities of family planning programme. The Family Planning Health Assistants (FPHAs) were to supervise 3 to 4 BHWs.

The Central Council for Family Planning desired to review the organisation, finances, resources of manpower, role of voluntary agencies and training of personnel under the family planning programme. The task being conferred to the Mukherjee Committee (1965), recommended separate staff to undertake exclusively family planning work and also to delink malaria activities from family planning work so that the workers at grass root level could give undivided attention to family planning programme.

Based on the feedback from the states, the family planning programme was reorganised in the year 1965. On the decision of the Central Council of Health, the Mukherjee Committee was appointed once again in 1966 to look into the matter of the maintenance phase of malaria and other mass programmes like family planning, small pox, leprosy, trachoma, etc. The Committee recommended that the Basic Health Services should be realistically planned and oriented towards tasks which are directly related to the most urgent problems and priorities should be periodically reviewed. An integrated approach should pervade the entire health field, not only in respect of programmes but also in organisational operation, supervision and facilities. Community participation should be encouraged; as well as the need for operational research before any mass programme be integrated, particularly laying down the criteria and preparation necessary for such integration.

The Committee on Integration of Health Services (Jungalwalla Committee, 1967) was set up to examine the various problems of health services delivery system including the service conditions of medical and health staff and to suggest measures for elimination of private practice. It recommended that the services should be integrated and no government Medical Officer should normally be allowed to practice in private. The loss of private practice, however, should be adequately compensated.

The Modhak Committee (1970) recommended the need for setting up of research activities and to consider the terrain and topography in place of population while implementing any programme as well as flexibility in staffing as per actual needs, apart from proper planning and implementation of NMEP in urban areas and in large aggregations of labour in construction projects and so on.

The Committee on Multi-Purpose Workers under Health and Family Planning (Kartar Singh Committee, 1973) was set up to examine the prevalent field situations and to recommend feasible corrective measures. According to the recommendation, the available supervisors after training were to be converted as health supervisors (male and female) and available uni-purpose
workers were to be designated as male and female Multi-Purpose Health Workers (MPWs). The Committee also felt that for proper coverage there should be a PHC for 50,000 population comprising of 16 Subcentres depending upon topography and means of communication. Each Subcentre should have a team of a male and female health worker. There should be a male and female health supervisor over 3 to 4 MPWs (male and female) respectively. The Medical Officer of PHC should have the overall charge of all the health supervisors and health workers in the area. The entire structure was to be implemented countrywide in a phased manner during the 5th Plan period.

A Group on Medical Education and Support Manpower (Srivastava Committee, 1975) came out with the recommendation of the development of a ‘Referral Services Complex’ by establishing proper linkages between the PHCs and higher level referral and service centres (taluk/tehsil, district, regional and medical college hospitals), apart from creation of bands of para-professional and semi-professional health workers; establishment of a Medical and Health Education Commission for planning and implementation of reforms. The Committee felt that by the end of the 6th Plan, one male and one female health worker should be available for every 5,000 population. Also, there should be one male and one female health assistant for two male and two female health workers, respectively. The health assistants should be located at the Subcentres and not at the PHCs. As a follow up of the recommendations of Srivastava Committee report, the Community Health Workers (now known as Village Health Guides) Scheme was launched, on an experimental basis, in 1977. It was treated as centrally sponsored scheme and continues to be so up till now. On its recommendations, each Medical College was assigned the responsibility of providing comprehensive and integrated health care to the areas of three blocks (PHCs).

3.2.4 Government Structure for Maternal Health

At the time of India’s independence, health care services in India were scanty, predominantly urban, hospital-based, focussed on curative approach. Gradually, the health care infrastructure was developed to increase access to health services in both rural and urban areas. Beginning in the 1950s, the Government of India began to create the primary health care infrastructure consisting of district hospitals, Community Health Centres (CHCs)/rural hospitals, Primary Health Centres (PHCs), and Subcentres (SCs) in the country. Each of these centres was to provide maternal health care, including antenatal care (ANC), delivery care, and postnatal care. In the 1950s and early 1960s, the primary health care system seemed to be focussed on basic health care, including maternal health, even though the coverage was limited due to their small numbers.

India was the first country amongst the developing nations in the world to initiate a state-sponsored Family Planning Programme (FPP) in 1952 to lower the birth and population growth rates. Since the mid-1960s, the Indian Government has made an attempt to integrate FPP with other programmes such as Minimum Needs (MN), Maternal and Child Health (MCH), and Child Survival and Safe Motherhood (CSSM). An effort to link family welfare and primary health care was made
with steps to alleviate poverty in the country, to reduce infant and child mortality by providing
immunisation against vaccine preventable diseases to all children, and to decrease maternal mortality
through the emergency obstetric support.

After 1966, however, as the family planning (FP) programme became target-oriented, maternal
health services were neglected. This trend was further aggravated by the launch of the
Universal Immunisation Programme in the mid-1980s and Polio Eradication Programme in the mid-
1990s.

In the late 1970s and early 1980s, however, against the pressures of the emergency era (1975 – 77),
there was a mounting concern regarding the quality of the services provided to the people,
which evolved into a commitment to provide more comprehensive Reproductive and Child Health
(RCH) services.

In the 1980s, a major thrust was imparted to the primary health care activities to
operationalise the Alma Ata Declaration. The goals of Health for All by 2000 were articulated. The
significant MCH-related goals were to bring down the IMR to less than 60 per 1,000 live births and
the PMR to less than 35 per 1,000 live births.

Several factors were responsible for bringing about the change in India’s approach to the
FPP. Concern was raised about the narrow range of services offered, and the danger of the
programme becoming target-driven with no concern about the needs of women (Ramachandran,
1996). In addition, the climate created by the International Conference on Population and
Development (ICPD) in 1994 provided the impetus to revamp the programme. The four key
concerns identified in the process were the need for efficient management of the programme,
ensuring quality of care, widening the scope to reproductive health, and using communication and
media for dissemination of information (Singh, 1994). The government slowly started
acknowledging the wider role of the voluntary sector in monitoring, reviewing or evaluating social
service activities in general, and health and family planning services in particular. An effort was
made to understand the reproductive health needs of Indian women, to assess the quality of services
provided to the people, and to bring about changes in the focus of FPP. Research on women’s health
and quality of health care provided the impetus to revamp the programme, which had until then
ignored the broader perspective relating to the health needs of women.

After the ICPD, the evaluation of Family Welfare Programme carried out by the Government
of India with the support of World Bank and other agencies concluded that there is an urgent need of
revision in approach. A Target Free Approach (TFA) was accepted in 1996 for the implementation
of Family Welfare Programme. The introduction of TFA highlighted the fact that the centrally
determined targets, assigned since the mid-1960s, were no longer to ‘be the driving force behind the
programme’. Instead the community demand for quality services was to be the driving force of the
programme (MOHFW, 1996). The new approach envisaged decentralised planning at the level of the
Primary Health Centre (PHC), where grassroots workers would set targets for themselves after an assessment of the needs of clients. To make this programme a people’s programme and to integrate it further with the need of the people, more changes in approach have been suggested. This approach is being evaluated and realised that the term ‘Target Free’ gives wrong impression in the minds of workers. To avoid this, from 1997 onward instead of ‘target free’ a ‘Community Need Assessment (CNA) Approach’ has been accepted.

In spite of the introduction of the TFA, the Auxiliary Nurse Midwives (ANMs) and medical officers were held more and more accountable for performance of FP and immunisation targets and not for maternal health. In spite of specific policy goals for reducing maternal mortality, skilled health staff (doctors and midwives) received no encouragement – nor were they monitored for – conducting deliveries in health facilities. This neglect of maternal care was further compounded by an exclusive reliance on ANC interventions (TT immunisation and Iron and Folic Acid supplementation). Aspects like intranatal care, efforts to address the high-risk cases, and training of TBAs, were neglected. The emphasis on ANC interventions gave programme managers a false sense of security and the absence of major maternal mortality studies in India deserted the problem of maternal mortality to remain unaddressed. Maternal deaths remained unregistered, unaudited and unaccounted for. The implicit message to the health system was that maternal health was apparently not a priority.

There was also a lack of independent advocates for maternal health in the civil society. The efforts of the Federation of the Obstetricians and Gynaecologists (FOGSI), the Indian Medical Association (IMA), and other professional organisations to promote maternal health had only a limited impact. Collaboration among such professional bodies and the government on maternal health issues was weak. Women’s groups that have been very active in blocking new contraceptives had neglected the tragedy of maternal mortality, and political parties and leaders had not played any active role in promoting maternal health. Most international agencies also had typically focussed on FP and child survival (CS) – often neglecting maternal health. As maternal death and disability do not cause any obvious epidemics, even the mass media hardly paid attention to this tragedy. Consumer groups, the judiciary, and members of legislative assemblies and parliament also ignored maternal mortality for many years. Maternal deaths never became an issue or priority among decision makers for several decades.

There seems to be various loose-ends in the execution of the government initiated programmes towards maternal and child health care. The targets or incentives primarily distorted the programme implementation. Achievement of targets had become ends in themselves. Disproportionate large portion of the targets (up to 40%) were achieved in the last three months of the financial year instead of the services being provided evenly throughout the year. The targets were set at the Central and state levels (top down approach) that were never appreciated by the population.
and health workers at large. Significant gaps existed in infrastructure and in out-reach services. Involvement of private sector was also found to be poor. Poor quality of services led to more complications and generated distrust among users. Low budget allocation resulted in gaps in staffing and facility and inadequate package of services. Besides, training and reorientation programmes for the staff was not uniform throughout the country. There was hardly any training on skill development. All these led to the cumulative failure of the successive programme implementations.

3.2.5 Special Programmes for Maternal Health

While recapitulating the evolution of the Maternal Health Programme in India, it can be stated that the Government initiated it in 1951 as a part of the Family Planning Programme. Its efforts have focussed primarily on improving child survival. Maternal health has suffered from relative neglect in this programme. It was realised that there is an urgent need to strengthen maternity care services (Shariff and Singh, 2002). The MCH programme and family planning services were integrated with the 4th Five-year Plan. The MCH programme includes the curative, preventive and social aspects of obstetrics, paediatrics, family welfare, nutrition, child development and health education.

With revitalised global interest in maternal mortality following the Safe Motherhood (SM) Conference in Nairobi in 1987, the United Nations Children’s Fund (UNICEF) - India and the Government of India took the lead in reorienting national programmes toward SM. During the early 1990s, a Child Survival and Safe Motherhood (CSSM) programme was developed with support from the World Bank and other donors. The Government introduced in 1992 the Child Survival Safe Motherhood (CSSM) Programme under the 8th Plan. This was the first systematic effort to address high maternal mortality.

The International Conference on Population and Development (ICPD) was held in Cairo in 1994 and India was a part of it. It went a long way toward recognising women’s concerns in the area of reproductive health. Reproductive and Child Health (RCH) Programme was initiated by the Ministry of Health and Family Welfare in 1996 to ensure the safe motherhood.

3.2.5.1 Child Survival and Safe Motherhood (CSSM), 1992

The Global Safe Motherhood Initiative was launched at an international conference held in Nairobi, Kenya in 1987. Its aim was to draw attention to the dimension and consequences of poor maternal health in developing countries, and to mobilise action to address high rates of death and disability caused by the complications of pregnancy and childbirth. The goal set out by this initiative was to reduce maternal mortality by half by the year 2000, and was later adopted at several United Nations conferences. Safe Motherhood has been universally defined as one of the central components of reproductive health, and countries around the world have initiated local or national efforts to improve and expand maternal health services. There was a need for special intervention in addressing maternal health as it was clearly demonstrated by two key factors, even when many
countries have safe motherhood or maternal and child health (MCH) programmes included in their national health systems. These were the persistently high rates of maternal deaths in many countries – especially when compared to the dramatic declines in infant and child mortality, and the relative lack of investment in services and interventions specially dedicated to maternal or women’s health.

The CSSM programme was implemented in India in a phased manner covering all the districts of the country by the year 1996-97. The aim was to improve the health status of infants, children and women. The CSSM programme had two major objectives: to reduce infant and childhood mortality and to reduce maternal mortality. The key interventions of this programme include: ENC; immunisation for children; management of diarrhoea; management of ARIs and Vitamin A prophylaxis under the CS interventions; and immunisation for pregnant women with TT; prevention and treatment of anaemia; ANC and early identification of maternal complications; delivery by trained personnel (including trained TBAs); promotion of institutional deliveries; management of obstetric emergencies; and birth spacing under SM interventions.

Health of the newborn was recognised as a priority in the early 1990s. For the first time, ENC was introduced into the national programme as a part of the CSSM programme at the conclusion of the UIP. Essential Newborn Care (ENC) was first introduced nationally in the CSSM programme in 1992, and has also been part of the RCH programme since 1997. ENC initiatives consist of strengthening the PHCs, FRUs, and district hospitals, as well as training physicians. The programme seeks to sustain high coverage levels achieved under the Universal Immunisation Programme (UIP) in good performing areas and to strengthen the immunisation services of poor performing areas. The programme also provides for augmenting various activities under the Oral Rehydration Therapy (ORT) Programme, universalising prophylaxis schemes for control of anaemia in pregnant women, control of blindness and initiating a programme for control of acute respiratory infection (ARI) in children.

A number of interventions related to maternal health had also being implemented. Complementary maternal health initiatives consist of antenatal care, promoting institutional deliveries, and operationalising Emergency Obstetric Care (EmOC) at FRUs. Under the safe motherhood component, training of traditional birth attendants (TBAs), provision of aseptic delivery kits and strengthening of first referral units to deal with high risk and obstetric emergencies were taken up. The major causes of maternal mortality includes ante and post partum haemorrhage, anaemia, obstructed labour, hypertensive disorders, abortion and sepsis. A large number of these causes are preventable by promoting institutional deliveries, improving safe delivery practices for domiciliary deliveries and ensuring referral and timely treatment of complications.

The programme was initially approved for a period of seven years with a total outlay of about Rs.11,255 million, with assistance from the World Bank and UNICEF. CSSM aimed at addressing
the major causes of maternal and childhood mortality. However, the service delivery did not improve much for maternal care interventions under the CSSM programme.

3.2.5.2 Reproductive and Child Health Programme (RCH), 1997

The next major landmarks were the ICPD in Cairo (1994) and Fourth World Conference on Women in Beijing (1995). Each of these conferences gave substantial attention to maternal mortality as a visible and reprehensible sign of the historical neglect of women’s health and needs. In the wake of the country’s acceptance of Global Agenda of ICPD, the Government of India launched the Reproductive and Child Health (RCH) programme in 1997. This represented a radical shift in the Government’s policy, as it moved away from sterilisation targets to a decentralised participatory planning process based on community needs assessments. The RCH programme covers an extended range of services for unwanted fertility, maternal health RTI/STI infections, child and adolescent health.

The central role of safe motherhood interventions in reproductive health programmes is supported by various statements included in the Programme of Action of the 1994 ICPD. Reproductive health care as defined at ICPD includes the following safe motherhood components (ICPD, 1994): education and services for antenatal care, safe delivery, and post-natal care; prevention of abortion, management of the complications of unsafe abortion, and safe legal abortion services; referrals for diagnosis and treatment for complications of pregnancy, delivery, and abortion.

World Health Organisation (WHO) has defined reproductive health as:

“A state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity; reproductive health addresses the reproductive processes, functions and systems at all stages of life. Reproductive health therefore implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide, if when, and how often to do so. This definition focuses on right of men and women to be informed of and to have access to safe, effective, affordable, and acceptable methods of fertility, regulation of their choice, and the right of access to appropriate health care services that would enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.”

India is one of the signatories to the recommendation made in the ICPD. These include:

- Holistic reproductive health care should be made available through primary health care system;
- Efforts should be made by all the states to reduce infant mortality by one-third and maternal mortality by 50 per cent by 2000; and
- Need assessment and fulfilment as key elements for improving reproductive health

At the conclusion of the CSSM programme, the RCH programme was initiated in 1997 with major funding from the World Bank. Following the ICPD recommendations, the Government of
India started the process of reorienting the FP and MCH programme into the new RCH programme. The RCH programme integrated the SM and CS interventions of the CSSM programme into the existing but separate FP programme and added RTI/STI interventions. The services were aimed to be client centred, demand driven, high quality, and based on the needs of the community as expressed through decentralised participatory planning and a target-free approach.

India changed the strategy of National Family Welfare Programme to Reproductive and Child Health in 1997 and in 9th Five-year Plan (1997-2002) a total change in implementation was recommended. The salient changes include: full range of Reproductive and Child Health services, Family Planning (sterilisation and immunisation), with more emphasis on quality of care, satisfaction and coverage measures rather than on number of target cases to be achieved. The approach of management was to be decentralised and client’s need based, a shift from the earlier top-down and target driven approach. The attitude towards the client was to be a gender sensitive listening, to assess their need, inform and advice rather than the male dominated, motivated and persuasive attitude; and the accountability now, was shifted to the client, community and health and family welfare staff rather than the Government System.

The World Bank project appraisal documents show that substantial background work and thinking has gone into the development of the RCH project. The key programme elements as indicated in Government of India documents titled ‘Schemes for Implementation’ follow: immunisation; essential obstetric care; EmOC; 24-hour deliveries at PHCs/CHCs; referral transport to indigent families; blood supplies at FRUs; ENC; medical termination of pregnancy; reproductive tract infection (RTI) / sexually transmitted infection (STI); and several other components including promotion of Indian systems of medicine, special programmes for urban slums, tribal areas, and adolescents, research, training, IEC, involvement of NGOs, MIS, supplies and logistics, and minor civil works.

The essential components of Maternal and Child Health are maternal care that includes antenatal, delivery and postpartum services and child survival services for newborns and infants. The major elements of Maternal Health are intervention to promote safe motherhood, pregnancy and delivery services and referral facilities by government/private sector for pregnant women at risk, screening and treatment of infertility and other gynaecological disorders. Child Survival aspects include: essential new born care, prevention and management of vaccine preventable diseases, urban measles campaign, neonatal tetanus elimination, surveillance of vaccine preventable diseases, cold chain system, Polio eradication (Pulse Polio Programme), ARI Control Programme, Diarrhoea Control and ORS Programme, prevention and control of Vitamin A deficiency among children and Baby Friendly Hospital Initiatives (BFHI).

RCH is based on the need of community and availability/capacity of health infrastructure. Each Subcentre, PHC and CHCs/FRUs should prepare an Action Plan. ANMs shall prepare the Action
Plan for Subcentre through CNA approach. The Subcentre Action Plan has certain health indicators which would help in assessing the accessibility, quality and input of the programme. Medical Officer of PHC would compile all the Subcentre Action Plans under that particular PHC. Similarly, CHC/FRU would prepare its Action Plan by compilation of all action plans of PHCs coming under its area of functioning. The requirement for the coming year would be 5–10 per cent higher than the achievement in previous year, in the Action Plan.

Decentralised participatory planning and implementation is to be encouraged at the peripheral level based on perceived needs and clients’ perception. The focus is on the effective accessibility and utilisation of Maternal and Child Health at the various levels of the health delivery system. The strengthening of infrastructure is to be done with quality upgradation of services and more primary health centres and first referral units. Apart from the services provided at the government health facilities, focus should also be given on home based maternal and child health care, training of dais, ANMs, Information Education Communication (IEC), provision of disposable delivery kits to all expectant mothers, ambulance services with the help of local Non-governmental Organisations (NGOs), identification of sub-divisional or district hospitals for referrals, involvement of NGO on IEC, and contractual appointment of doctors or other service staff. Integrated training package comprises of capacity building at districts for planning and implementation, Management of Information System (MIS) and concurrent evaluation. The proper implementation of the programme requires an improved management system wherein certain progressive schemes can be introduced. The services should be provided based on the community needs assessment and the specific provisions are to be actualised where they are mostly needed. There should be regular monitoring and evaluation of services. This would enable optimal utilisation of resources, strengthening of infrastructure and experimentation of innovative approach. Some efforts such as Information, Education and Communication (IEC), training and programme monitoring are nation-wide. Focussed interventions are planned to increase access to health care for particularly disadvantaged groups such as scheduled castes, scheduled tribes and the urban poor. Besides, addressing the issues of quality and informed choice, the RCH project provides a vehicle for continued policy dialogue, continued evaluation and reviews and significant flexibility for implementing recommendations of the evaluations and reviews, through annual and state-specific modifications to implementation of plans.

The RCH programme envisages changes not only at the policy level but also in the management and implementation of the programme. It emphasises on shifting financial priorities from further build-up of infrastructure to increased sustainability and use of existing facilities and also on expanding access by encouraging the use of NGOs and the private sector to fill gaps in the public sector services. Herein, the programme level changes include: district level planning and monitoring that is more responsive to local needs; improved quality of care and increased client
focus; expanded community involvement and responsibility for the FHWs through the decentralised system of government (Panchayati Raj); and improved referral system for the health care seekers. At the service delivery level, the changes include revitalisation of the existing network of rural health facilities through better supplies of drugs and equipment, training and better information and counselling for clients and communities (World Bank, 1997).

The total budget envisaged for this programme is roughly $1.2 billion, $309 million from the World Bank and about $250 million from the European Commission under a sector-wide reform project called the Health and Family Welfare Sector Programme.

The RCH programme has officially started in October 1997 and became operational as a composite of individual schemes with less than ideal linkages, rather than an integrated programme. Given that, the new RCH programme has many components such as FP, maternal health, child health, RTI/STI, the focus on EmOC inevitably has got diluted.

3.2.5.3 Common Minimum Programme (CMP), 2004

Common Minimum Programme (CMP) has been the agreed programme charter of the coalition partners of the present national government of the United Progressive Alliance (UPA) that has taken over in May 2004. CMP has envisaged an increase in public spending on health from 0.9 per cent GDP to 2-3 per cent in the next 5 years with a focus on primary care. A targeted FP programme has been planned to be launched in the 150 high fertility districts and a national health insurance scheme for poor families to be introduced.

3.2.5.4 National Rural Health Mission (NRHM), 2005-12

The National Rural Health Mission (NRHM) has been launched in 2005 throughout the country with special focus on 18 States, including eight Empowered Action Group (EAG) states, the North-Eastern states, Jammu and Kashmir and Himachal Pradesh, with a view to bring about dramatic improvement in the health system and the health status of the people, especially those who live in the rural areas. It aims to address infirmities and problems across rural primary health care. Convergence of the public health approach with primary health care has been one of the principal objectives of this mission. The main aim of the NRHM is to provide accessible, affordable and quality health care to the rural population, especially the vulnerable sections. The Mission seeks to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people, reduction of child and maternal deaths as well as population stabilisation, gender and demographic balance. The Mission is a shift away from the vertical health and family welfare programmes to a new architecture of all inclusive health development in which societies under different programmes would be merged and resources pooled at the district level. In this process, the Mission would help to achieve goals set under the National Health Policy (2002) and the Millennium Development Goals. It seeks to bring down the Maternal Mortality Ratio (MMR) in India from 407 to 100 per 1,00,000 live births, Infant Mortality Rate
(IMR) from 60 to 30 per 1,000 live births and Total Fertility Rate (TFR) from 3.0 to 2.1 within the 7 year period of the Mission (2005–2012).

The objectives of the Mission are:

- Reduction in child and maternal mortality
- Universal access to public services for food and nutrition, sanitation and hygiene and universal access to public health care services with emphasis on services addressing women’s and children’s health and universal immunisation.
- Prevention and control of communicable and non-communicable diseases, including locally endemic diseases.
- Access to integrated comprehensive primary health care.
- Population stabilisation, gender and demographic balance.
- Revitalise local health traditions and mainstream AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy)
- Promotion of healthy life styles.

It would try to achieve the goals by making the public health delivery system fully functional and accountable to the community, by building a skilled workforce; enforcing quality and provision of services at all levels, including referral systems, human resources management, community involvement, decentralisation, rigorous monitoring and evaluation against standards, convergence of health related programmes from village level upwards, strengthen collaboration with other public health programmes, innovations and flexible financing and also interventions for improving the health indicators. These are to be embedded in a strong political commitment, partnerships and well targeted investments.

NRHM seeks to adopt a convergent approach for interventions under the guidance of the district plan which seeks to integrate all the related initiatives at the village, block and district levels. Village level Health and Sanitation Committee would be responsible for the Village Health Plans which would be collated and approved at the Block level. Block Health Plans are to be prepared by an aggregation and consolidation of Village Health Plans, which would be the basis for the District Plan. The District Health Action Plan is proposed to be the main instrument for planning, inter-sectoral convergence, implementation and monitoring of the activities under the Mission. The District Plans would be collated into a State Plan which would be assessed and approved by the Mission at the national level.

The vision of NRHM is to raise public spending on health from 0.9 to 2–3 per cent of GDP, with improved arrangement for community financing and risk pooling; effective integration of health concerns through decentralised management at district, with determinants of health like sanitation and hygiene, nutrition, safe drinking water, gender and social concerns; and to improve access to rural people, especially poor women and children to equitable, affordable, accountable and effective
primary health care. There is a provision for flexible funds so that the States can utilise them in the areas they feel are important. It emphasizes involvement of the non-profit sector, especially in the underserved areas. It also aims at flexibility at the local level by providing for untied funds.

The Mission, in its supplementary strategies, would aim at fostering public-private partnerships for achieving public health goals, regulating the private sector to improve equity and reduce out of pocket expenses, introducing effective and visible risk pooling mechanisms, taking advantage of local health traditions and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care.

**3.2.5.5 Reproductive and Child Health Programme Phase II (RCH II), 2005-2010**

Reproductive and Child Health Programme (RCH II) has been launched in 2005 as a part of the Mission as the prime medium for reducing IMR, MMR and TFR. It is fortunate that India’s SM and child health initiatives strategies are already integrated into the broad umbrella of the RCH programme. It has ensured a spontaneous, controversy-free synergy between the SM and CS strategies. The goals of maternal and newborn health strategies in RCH II are to reduce MMR to less than 100 by 2010, to achieve 80 per cent institutional delivery rate by 2010, to reduce IMR to 30 by 2010 and to reduce NMR to less than 20 by 2010. The importance of RCH II for the future of maternal and neonatal health is immense. RCH II (2005-10) is the stepping stone for the nation’s quest for the NPP (2000) goals for 2010 and the MDGs for 2015.

The health strategy in RCH II envisages a continuum of care from antenatal to postnatal periods, from maternal health interventions to neonatal interventions, and from home care to the facility-based management. A key objective in RCH II is to promote institutional deliveries as enunciated in the NPP (2000). Unlike the CSSM and RCH I programmes, in RCH II, a comprehensive community-based newborn health strategy would be taken to scale.

There is a consensus to incorporate a comprehensive maternal and newborn health strategy into RCH II. Promotion of institutional deliveries and strengthening of EmOC are the key strategies to reduce maternal mortality. One of the major objectives of the NRHM is to reduce maternal and child mortality rates and fertility rates for population stabilisation through quality services and the government would seek to achieve these objectives through the RCH II programme initiatives. The proposed interventions in the RCH II programme are: ANC, skilled care at birth, home-based newborn and post-partum care, community-based management of sick neonates, referral of sick mothers and neonates, and behaviour change communication (BCC) at the home and community level; and strengthening and improving the quality of services provided in the PHCs/CHCs and FRUs and involvement of the private sector at the facility level.

The main strategy for reducing maternal mortality focuses on certain interventions such as safe/institutional deliveries, upgradation of CHCs as First Referral Units (FRUs) for dealing with Emergency Obstetric Care and referral services for mother and child, 24x7 delivery services at the
PHCs, operationalising of Subcentres. Efforts would be undertaken to train Skilled Birth Attendants (SBAs), Staff Nurses and ANMs as well as Medical Officers. Along with these, certain other initiatives like partnerships with voluntary organisations, RCH camps, accreditation of non-profit organisations, would also be undertaken. The Mission provides for appointment of Accredited Social Health Activist (ASHA) in each village and strengthening public health infrastructure, including outreach through mobile clinics. Behaviour change communication (BCC) strategy would aim at promoting early and complete ANC, institutional deliveries, birth preparedness, recognition and early care-seeking for maternal and neonatal danger signs and healthy household practices. Intensified IEC would be pursued to ensure behavioural changes that relate to better child survival and women’s health. Adolescent health is another area of action under the NRHM. For reducing infant and child mortality, programme for Integrated Management of Childhood Illnesses (IMCI) has been extended at the community and facility levels, with focus on both preventive and promotional aspects of health care accelerated immunisation programme. Home-based newborn care with the help of AWWs under the supervision of ANMs using IMNCI protocols has been implemented. Reduction in IMR and MMR would also be closely monitored through social audit, which is being introduced at the Panchayat level.

It has been proposed to involve community-based organisations such as PRIs, women’s groups, and NGOs for all the components of the RCH programme. The TBA is seen as an important community resource. Her reoriented role would be that of a mobiliser and facilitator for institutional deliveries under the Janani Suraksha Yojana (JSY), and of a partner of the AWW and ANM in providing maternal and child health care.

India presents diverse scenarios of reproductive and child health challenges in different parts of the country. Accordingly, RCH II programme recognises a differential approach to programme depending upon the local problems, priorities, and capacities. States are supposed to develop and implement individual RCH II plans within the broad generic framework.

Equity considerations being core issue, the RCH II programme would be specially targeted towards families that are living below poverty line, scheduled caste and scheduled tribe. EAG states with large populations, poor health indicators and high burden would receive special support. The programme also aims to address key health system issues – institutional strengthening, improved fund flow mechanisms, human resources deployment, improved procurement and supplies, and intra- and inter-sectoral convergence in particular.

Apart from the country funds, this phase of the programme would be partially supported by developmental assistance from the World Bank, DFID, and some other donors.

3.2.5.6 Janani Suraksha Yojana, 2003

India is the first country in the world to have officially declared a National Safe Motherhood Day on 11th April, which is the birth anniversary of Kasturba Gandhi. On April 11, 2003, Ministry of
Health and Family Welfare, Government of India in collaboration of White Ribbon Alliance of India (WRAI) declared the first Janani Suraksha Divas (National Safe Motherhood Day) and launched the Janani Suraksha Yojana (JSY), a Maternity Benefit Scheme. It was introduced as a new strategy under the overall umbrella of NRHM. It is an amalgamation of schemes such as the existing National Maternity Benefit Scheme (NMBS), transport money for emergency cases, and referral fees for dais (TBAs). While NMBS is linked to provision of better diet for pregnant women from Below Poverty Line (BPL) families, JSY integrates the cash assistance with antenatal care during the pregnancy period, institutional care during delivery and immediate post-partum period in a health centre by establishing a system of coordinated care by field level health worker.

It aims to promote safe motherhood and improve coverage of institutional delivery. This scheme focuses on the most vulnerable 'below poverty line' (BPL) pregnant women and equips ASHA/ANM with resources for arranging transportation and related logistics. JSY has the main objective of reducing maternal and infant mortality by focusing on promoting institutional delivery and making available quality care during pregnancy, delivery and post delivery by linking delivery care to antenatal check up and neonatal care along with appropriate referral and transport assistance, in BPL groups. Health Worker would be an effective link between the field level government machinery and the poor pregnant women and they would make available the delivery services to the intended beneficiaries, encouraging antenatal care, institutional delivery, adopting small family norms. In addition, ASHA would escort the poor pregnant women and also stay with the women during delivery.

Table 3.1 Scale of Financial Assistance (in Rs) under JSY Scheme

<table>
<thead>
<tr>
<th>Category</th>
<th>Rural Area</th>
<th></th>
<th>Urban Area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother's Package</td>
<td>ASHA's Package</td>
<td>Total</td>
<td>Mother's Package</td>
</tr>
<tr>
<td>Low Performing States</td>
<td>500 + 200</td>
<td>600</td>
<td>1300</td>
<td>500 + 100</td>
</tr>
<tr>
<td>High Performing States</td>
<td>500 + 200</td>
<td>700</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


This scheme is 100 per cent centrally sponsored and intended for all women from BPL families, of age 19 years or above. Benefit is available up to two live births, in 10 low performing states namely, Bihar, Chhattisgrah, Jharkhand, Orissa, Uttar Pradesh, Uttaranchal, Rajasthan, Madhya Pradesh, Assam and Jammu and Kashmir, the benefit would be available to the third live birth too, provided the woman on her own accord, chooses to undergo sterilisation, after the delivery. Cash benefit of Rs.500/- per live birth is to be given to all pregnant women (BPL) after registration and at the time of delivery, irrespective of the place of delivery (Table 3.1). Such eligible beneficiaries under the scheme who deliver in health institutions would get an additional cash benefit of Rs.200/- if they belong to rural areas and Rs.100/- if they belong to urban areas of the above-mentioned 10 low performing states. As the scheme is targeting the poor women who would generally be short of cash, it is essential that the cash assistance provided under the scheme is made available to her in the shortest possible time. With a view to quicken the process of disbursement, all ANMs would be
having an imprest of Rs.5000/- to make all payment of cash assistance, out of which the ANMs should keep a contingency amount of at least Rs.1500/- with the ASHA or AWW and replenish thereafter as already stated in the JSY guidelines.

3.2.5.7 Maternal Health Care Elements

Essential maternal care initiatives under the RCH programme on safe motherhood focuses on:

- Early registration of pregnant women at 12 – 16 weeks.
- ANC checkups for at least 3 times: advice on diet, immunisation, hygiene, rest, mental preparation, family planning can be done effectively during the visits.
- Immunisation: TT 2 doses/booster during pregnancy as early as possible.
- Promotion of institutional delivery and provision of safe delivery at home.
- Anaemia control by prophylaxis, clinical diagnosis and treatment including deworming, wherein, pregnant women are provided with Iron and Folic Acid (IFA) tablets: Under the National Nutritional Anaemia Prophylaxis Programme, implemented by the government since 1972, all pregnant women are given iron and folic acid tablets to prevent malnutrition and haemorrhage associated with anaemia. Now the programme is integrated with RCH in which 100 tablets of iron and folic acid (100 mg elemental iron and 0.5 mg of folic acid) during the course of pregnancy and 100 tablets of iron and folic acid (20 mg elemental iron and 0.1 mg folic acid) for children daily for 100 days are given. Clinical anaemia requires two tablets daily both for mother and children.
- Vitamin A Dose: Vitamin-A level less than 30 mcg/dl is inadequate for pregnant mothers. Frank Vitamin A deficiency is easy to identify, however, sub-clinical cases remain a problem for detection. Urinary ammonia nitrogen of more than 0.5 is indicative of inadequate status. Such women should be treated with Vitamin A that is not exceeding 10,000 IU per day till symptoms disappear or levels come to normal. More emphasis on intake of carotene rich food should be given.
- Care at birth: Five cleans - clean hands, clean surface, clean cord tie, clean razor blade and clean cord stump (no applicant).

The pregnancy and delivery services encompass training of dais for safe delivery especially in districts with high proportion of home deliveries. There should be provision of disposable delivery kits to those who plan deliveries at home. The facilities for antenatal care and safe delivery at SCs and PHCs should be there. First Referral Units (FRUs) should provide emergency obstetric care and proper functioning referral linkage must be there. Intranatal care is also very essential to save the mother and child. Five cleans and partograph during delivery are the essential component of intranatal care.
3.2.6 Programmes for Child Care

3.2.6.1 Immunisation Programmes

Vaccine Preventable Diseases (VPDs) were widespread and a major cause of childhood morbidity, mortality and life long physical and mental disabilities, prior to the immunisation programmes. The earliest child health initiative consisted of immunisation with small pox and BCG (anti-tubercular) vaccinations. BCG was the first immunisation started against tuberculosis in 1962 in India that later became the part of Expanded Programme on Immunisation (EPI) started in 1978, which was initiated to protect against six diseases. In 1979 Oral polio vaccine was included in EPI. The programme was revised and renamed as Universal Immunisation Programme (UIP) in 1985 focusing more on infants and pregnant mothers. The measles vaccine was added to this programme in the same year. UIP was later merged with Child Survival and Safe Motherhood Programme (CSSM) in 1992 and with RCH in 1997.

The health ministry is finally planning to introduce a pentavalent vaccine in its national immunisation programme that would combine DPT (diphtheria, pertussis, tetanus) with hepatitis B, pneumonia and meningitis caused by the Hib bacteria (haemophilus influenza type B). India has decided to vaccinate children against pneumococcal disease – the leading cause of illnesses like pneumonia, meningitis, sinusitis, blood and ear infection in children. A high-level expert committee, set up by the health ministry headed by Department of Biotechnology (DBT) secretary Dr. M.K. Bhan, has recommended the use of the pneumococcal conjugate vaccine (PCV) in the country’s routine immunisation (RI) programme. However, because the PCV is highly expensive and also requires a good cold-storage chain network, the ministry plans to start by introducing it in a state which has good RI coverage and good RI infrastructure and high disease burden so that it can monitor the impact of the vaccine and whether it actually brings down mortality. It would be introduced in the country’s national immunisation programme in a year’s time.

3.2.6.2 Integrated Child Development Services (ICDS), 1975

The ICDS scheme of India is the largest child nutrition and development programme in the world. Started in 1975 in pursuance of the National Policy for Children, it now covers 75 per cent of the nation’s community development blocks and 273 major urban slums in all states. Beneficiaries of the programme are children below six years and pregnant and lactating women. The ICDS programme is run by the Department of Women and Child Development of the Ministry of Human Resources Development, in association with the nodal department at the state level – generally the Department of Social Welfare or the Department of Rural Development. The entire expenditure on the programme is centrally sponsored, except for the cost of supplementary nutrition which is borne by the states. The programme covers supplementary nutrition, immunisation, monitoring of weight and height, and in some cases, crèche facilities for a limited period. Its coverage, however, is limited and often the youngest children in the 0-3 years age group get left out of its ambit. The 11th Plan
envisages universalising ICDS and also finding practical ways of reaching out to the children in the 0-3 age group.

3.2.6.3 Child Health Care Elements

Essential New Born Care

More than half of the infant deaths occur in early neonatal period mainly due to birth asphyxia, hypothermia, infection, and low birth weight. For the safety of newborns certain strategies should be adopted. All pregnant women should be ensured of antenatal care and safe delivery practices should be promoted. Essential care to the new born should be provided. Birth weight of all new born should be taken. Facilities and trained manpower for resuscitation of asphyxiated babies should be ensured. Special care of low birth weight babies should be taken. Mother, dais, and health workers should be advised and trained in prevention of hypothermia. Exclusive breastfeeding within one hour of delivery should be provided to the new born and mothers should be advised of child care. Identification and timely referral of newborns ‘at risk’, that has signs of serious illness, to the appropriate health care facilities is also very important.

Prevention and Management of Vaccine Preventable Disease

The main activities of current national immunisation schedule in addition to routine immunisation services against TB, Polio, Tetanus, Diphtheria, Pertussis and measles are represented in Table 3.2.

Table 3.2 Current National Immunisation Schedule including Schedule for Vitamin - A prophylaxis

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Birth</th>
<th>6 weeks</th>
<th>10 weeks</th>
<th>14 weeks</th>
<th>9 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Vaccination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCG</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Polio</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPT</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Booster Doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPT + Oral Polio</td>
<td>18 months to 24 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DT</td>
<td>5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus Toxoid</td>
<td>At 10 years and again at 16 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin A</td>
<td>9, 18, 24, 30 and 36 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pregnant Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus Toxoid (Pregnant Women)</td>
<td>1st Dose: As early as possible during pregnancy after 1st trimester</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2nd Dose: 1 month after 1st Dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Booster: If previously vaccinated within 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1In all institutional deliveries and in all endemic areas
2In pilot areas. A dose at birth is recommended for babies born in health care institutions
Vaccination schedule may get modified if newer vaccine is introduced in future under National immunisation programme

Urban Measles Campaign

Measles is a highly contagious viral disease occurring in overcrowded areas where poor people live and coverage of measles vaccination is poor. These areas are needed special vaccination drive initiated by UNICEF in 1998, the main focus of which is on covering all unprotected children up to 3 years.
Elimination of Neonatal Tetanus

Neonatal Tetanus is still a common problem in many districts. Fortunately this disease can be eliminated by immunising all women in reproductive age group with tetanus toxoid. The national programme of Elimination of Neonatal Tetanus is included as a component of RCH. The interventions are coverage of all pregnant women with two doses of tetanus toxoid; extensive IEC efforts to promote clean deliveries; providing disposable delivery kits; community based surveillance of neonatal deaths and investigation and control measures in case of neonatal deaths.

Polio Eradication: Pulse Polio Programme (National Polio Surveillance Project)

The World Health Assembly passed a resolution in May 1998 to eradicate the dreaded polio from the face of the Earth. With the intention to complement the routine immunisation achievements, in 1995 India took a giant step closer to eradicating polio, through the strategy of National Immunisation Days – Pulse Polio Immunisation. It would increase immunisation levels in areas with low coverage which would be beneficial for the eradication of polio. Now the whole country is organising two days one month apart to immunise all children less than 5 years through Pulse Polio Programme since 1995. Polio is caused by poliomyelitis three types of polio viruses – Type I poliovirus is predominantly isolated in children with paralysis. It is estimated that for every child with paralytic polio, at least 100 other children are affected who have either no symptoms or have only non-specific symptoms of a mild illness. Oral polio vaccine is effective in preventing polio.

To interrupt transmission of polio infection in the community, extra doses of OPV is administered simultaneously, as a pulse to all children 0 - 5 years on the two fixed dates in the whole community or country. The term ‘pulse’ has been used to describe this sudden, simultaneously, mass administration of OPV on a single day to all children 0 - 5 years of age irrespective of their previous polio vaccination status. Pulse Polio immunisation replaces the wild virus with vaccine virus and thereby eradicates the harmful ‘wild’ virus in the community. The effect is maximised during the low transmission season of polio that is from December to January.

The four basic strategies to eradicate Polio are:
1. Routine Immunisation: Immunise every child aged below 1 year with at least 4 doses of oral polio vaccine.
2. National Immunisation Days (NIDs) / Pulse Polio Immunisation (PPI) Programme: Conducted by giving additional doses of OPV, 4 - 6 weeks apart to every child aged below 5 years. Intensification of the Pulse Polio Immunisation program can be done by adding rounds, house-to-house ‘search and vaccinate’ component to the fixed post approach. To reach the un-reached during Pulse Polio Immunisation Days, Intensified Pulse Polio Immunisation has been proposed and just after the National Immunisation Days, the immunisation team would go for
house to house to check whether the child has received pulse polio vaccine and if not given then the child must be given a dose.

3. **Surveillance of Acute Flaccid Paralysis (AFP):** To identify all reservoirs of wild poliovirus transmission, reporting units (RUs) form the backbone of surveillance network. These are hospitals, paediatricians, doctors, and medical/health establishments in Government or private sectors who are likely to see a case of Acute Flaccid Paralysis (AFP). The work schedule of the reporting units comprises of AFP case notification and investigation, stool specimen collection and transportation, outbreak response immunisation (ORI), active case search in the community, 60-days follow-up examination, cross notification and tracking of cases, data management and analysis, case classification and feedback.

4. Conduct extensive house-house immunisation mopping-up campaigns in the final stages in focal areas where wild poliovirus transmission persists.

**Hepatitis B Vaccine**

Introduction of Hepatitis B vaccine has been recommended by many experts and the Committee on Immunisation (1999). A pilot project for assessing the feasibility of Hepatitis-B vaccine in the Universal Immunisation Programme has been launched in 32 districts and slums of 15 metropolitan cities. It has been initiated in West Bengal. First dose may be given at birth in institutional deliveries. Otherwise three doses are given together with OPV and DPT doses in the dose of 0.5 ml (10mcg) intramuscularly.

**Prevention and Control of Vitamin A deficiency among children**

For Prophylaxis, new Vitamin A schedule of 5 doses is recommended under the National Programme for Prophylaxis against Blindness in Children caused due to Vitamin A deficiency that is now integrated with RCH programme, starting at 9 months with measles as a first dose (1 lakh IU) then at 15 months a second dose (2 lakh IU), then every 6 monthly (2 lakh IU) till the age of 3 years. For treatment, one dose of 2 lakh IU and second dose with same amount 4 weeks later is recommended according to the programme. However, WHO recommended another dose that should be given on second day after the first dose so there is a total of 3 doses. At all level of health delivery the child should be advised to consume Vitamin A rich food.

Every health workers should be able to diagnose Vitamin A deficiency. The sign and symptoms are night blindness, Xerophthalmia (drying of conjunctiva and cornea), Bitot’s spot (accumulation of foamy, cheesy material on the conjunctiva), Corneal Xerosis / ulceration, Keratomalacia (melting or wasting of the cornea) and Corneal scar.

**Cold Chain System**

The cold chain is a system of transporting and storing vaccines at recommended temperatures from the manufacturers to the point of use. The cold chain is essential as vaccine loose their potency if exposed to temperature above 8°Celsius and to sunlight. For vaccines like DPT, TT and DT the
recommended temperature is 2° to 8° Celsius and on freezing they also lose their potency. Vaccines have a limited shelf life and must be used within the expiry date. The principal of First-in, First-out (FIFO) should be followed to avoid expiry.

3.3 Health Sector in Five Year Plans

The country took to the model of Five-year planning for development in key sectors including health in the 1950s. The Planning Commission of India, which steers the five-year plans, is chaired by the Prime Minister. In the Five-year Plans, the Health Sector has been divided in the sub-sectors: Water supply and sanitation; Control of Communicable diseases; Medical education, training and research; Medical care including hospitals, dispensaries and primary health centres; Public health services; Family Welfare; and Indigenous systems of medicines.

The ‘Health Division’ of the Planning Commission and the ‘Planning Bureau’ in the Directorate General of Health Services are the two nuclei which coordinate the health planning activities at the Government of India level. Besides, the ‘Evaluation and Intelligence Division’ and ‘Central Bureau of Health Intelligence’ are two other wings in the Ministry of Health and Family Welfare to collect, compile and analyse data on health and family welfare programmes for the purpose of monitoring and evaluation.

As regards the Five-year Plans, particularly from 1st to 4th Five-year Plans, planning in health sector was essentially confined to varying increase in the allocation of resources under certain heads namely; hospital and dispensaries, control of communicable diseases, medical education and research, rural health programmes, family planning programme, environmental sanitation and water supply, indigenous systems of medicines and other programmes. However, the emphasis has been changing from Plan to Plan depending upon the perceived needs of health planners/administrators and also on other technical considerations.

The 5th Five-year plan included a new element of ‘Minimum Needs Programme’ which consisted of components of health, family planning and nutrition to cover the past shortcomings and to launch a frontal attack on poverty. While, the 5th Five-year Plan (1974-79) was still under implementation, the first political statement in the form of ‘National Population Policy’ was made in 1976. This was followed by the enunciation of ‘Towards a New Health Policy’ for the country in 1977, the content of which paved the way for the Government of India, to become signatory to ‘Alma-Ata Declaration, of Health for All by 2000 A.D, in 1978.

The major shift in 6th Five-year Plan was in terms of increased allocation to rural health and communicable diseases while showing a marginal increase in other sectors of health. The 6th Plan also prescribed physical targets of the institutions to be established under rural health services. These were:

- Village Health Guide; 1 for every 1,000 population
- Trained Dai; 1 for every village, and more so, 1 for every 1,000 population
- Subcentre; 1 for 5,000 population in plain areas and 1 for 3,000 population in tribal and hilly areas
- Primary Health Centres; 1 for every 30,000 population in plain areas and 1 for 20,000 population in tribal and hilly areas
- Upgradation of PHCs; existing PHCs to be converted into Community Health Centre, 1 for each Community Development Block area.

The unaccomplished targets of the 6th Plan period spilled over to the 7th Plan period and except for the target of CHCs, others were to be achieved by the end of 7th Plan period (1985–90).

The Government introduced in 1992 the Child Survival Safe Motherhood (CSSM) Programme under the 8th Five-year Plan.

During the 9th Five-year Plan in 1997, the concept of Maternal and Child Health was merged with the Reproductive and Child Health Programme after the initiatives were re-examined in the ICPD in Cairo in 1994.

The RCH programme activities are an offshoot of the broad strategic approaches enunciated in the 10th Plan recommendations. The 10th Plan specified country and state level goals for NMR (26 per 1,000 live births), IMR (45 per 1,000 live births) and MMR (200 per 1,00,000 live births) decline by the year 2007. The 10th Plan Steering Committee on Family Welfare called for the operationalising of appropriate ENC in all settings.

Table 3.3 represents the health programmes over the various plan periods.

<table>
<thead>
<tr>
<th>Year</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951-56 1st Plan</td>
<td>Family Planning Programme adopted by Government of India first of its kind in the world</td>
</tr>
</tbody>
</table>
| 1961-66 3rd Plan | * Extension education approach  
* Department of Family Planning created in Ministry of Health  
* Created Target Oriented Approach  
* Lippies loop introduced |
| 1969-74 4th Plan | Family planning services under Primary Health Centre  
* All India Hospital Post Partum Programme  
* Medical Termination of Pregnancy (MTP) Act, 1971 |
| 1974-79 5th Plan | Renaming Family Planning to Family Welfare  
* Community involvement  
* Child Marriage Restraint Act 1978 |
| 1983 | National Health Policy |
| 1980-85 6th Plan | Strengthening of Maternal and Child Health  
* Strengthening Family Welfare |
| 1985-90 7th Plan | Further inclusion of various programmes under MCH |
| 1992-97 8th Plan | Child Survival and Safe Motherhood Programme (CSSM) |
| 1993-94 | National Development Committee Report  
* International Conference on Population and Development (ICPD), Cairo, 1994 |
| 1996 | Target Free Approach  
Review of Safe Motherhood Component of CSSM |
| 1997-02 9th Plan | Reproductive and Child Health (RCH)  
(CSSM plus STI and RTI components) |

Presently, the 11th Five-year plan is under implementation. The 11th Plan provides an opportunity to restructure policies to achieve a new vision based on faster, more broad-based and inclusive growth. A key element of the strategy for inclusive growth is an all out effort to provide the mass of people the access to basic facilities such as health, education, clean drinking water etc. It would seek to reduce disparities across regions and communities by ensuring access to basic physical infrastructure as well as health services to all. While in the short run these essential public services impact directly on welfare, in the longer run they determine economic opportunities for the future. Governments at different levels have to ensure the provision of these services. At the same time it is important to recognise that better health is the necessary pre-condition for sustained long-term growth. Based on the National Common Minimum Programme adopted by the Government in the middle of the 10th Plan, these steps are be further strengthened and consolidated into a strategy for the 11th Plan.

The health of a nation depends upon the health and well being of its women. The 11th Plan would recognise the pivotal importance of women’s holistic health. It would focus on reducing the incidence of anaemia and malnutrition among adolescent girls to break the cycle of ill-health and maternal and infant mortality. The monitorable targets of the 11th Plan on health are to reduce infant mortality rate (IMR) to 28 and maternal mortality ratio (MMR) to 1 per 1,000 live births, to reduce Total Fertility Rate to 2.1, to provide clean drinking water for all by 2009 and ensure that there are no slip-backs by the end of the 11th Plan, to reduce malnutrition among children of age group 0-3 to half its present level and to reduce anaemia among women and girls by 50 per cent by the end of the 11th Plan.

Achievement of health objectives involves much more than curative or even preventive medical care. A comprehensive approach is needed which encompasses individual health care, public health, sanitation, clean drinking water, access to food and knowledge about hygiene and feeding practice. This is a difficult area because of the nation’s socio-cultural complexities and also regional diversities. Therefore, policy interventions have to be evidence based and responsive to area specific differences. With concerted action, including, enabling pregnant women to have institutional deliveries and receive nutritional supplements; connecting PHCs and CHCs by all weather roads so that they can be reached quickly in emergencies; (accessibility to hospital should be measured in terms of travel time, not just distance from nearest PHC); providing emergency obstetrics care facilities within 2 hours travel from every habitat as an important new social intervention; and providing home-based neo natal care including emergency life saving measures etc., the nation can be on track to reach the Millennium Development Goals for IMR, MMR and for combating diseases by the end of the 11th Plan.
To improve the primary health care system, the 11th Plan would lay emphasis on integrated district health plans and block specific health plans, which would ensure involvement of all health related sectors and emphasise partnership with NGOs. The NRHM has already been launched to ensure quality health care in rural areas. The next step is to extend this to make it a Sarva Swasthya Abhiyan that also covers the health needs of the urban poor, particularly the slum dwellers by investing in high calibre health professionals and appropriate technology.

Energising health systems involves additional government expenditure. The existing level of government expenditure on health in India is just under 1 per cent which is unacceptably low and effort is to be made to increase the total expenditure at the Centre and the states to 2-3 per cent of GDP. This is to be accompanied by innovative financing mechanisms which motivate performance. The quality of publicly supplied healthcare depends on how healthcare providers are paid. Providers are to be paid only if they actually perform a service or satisfy the customer (the patient or the village health committee). Such systems linking payment to performance would increase accountability and would be encouraged.

The 11th Plan seeks to experiment with different systems of private-public partnership, like, to explore the possibility of an entitlement system for pregnant women to have professionally supervised deliveries. This would empower them to exercise choice, as well as create competition in the health service sector. Also, contracting out well-specified and delimited projects such as immunisation can help enhance accountability. This does not mean that the state would withdraw from the health sector.

The problems regarding health expenditure by the poor are best handled by health insurance. Community Based Health Insurance (CBHI) is emerging as a promising concept and it has shown that well managed pre-payment systems with risk pooling are effective in protecting the poor from impoverishment due to high medical costs during catastrophic health events. CBHI initiatives based on some individual contributions to the premium, plus a government subsidy, deserve to be supported as they would improve the quality of healthcare and expand the healthcare interventions as per requirements. Alternative approaches such as comprehensive risk pooling packages through the public system and through accredited private providers also needs to be experimented with.

Steps are also being taken to link rural sanitation with the rural health mission. The Central Rural Sanitation Programme launched in 1986 was modified as Total Sanitation Campaign in 1999 changing the earlier supply driven, high subsidy and departmentally executed programme to a low subsidy, demand driven one, with emphasis on hygiene education. The cost norms for individual household toilets are already being revised and a solid waste management component is being included in the programme. These measures coupled with a focused IEC campaign would significantly increase sanitation coverage in the 11th Plan. With sufficient allocation of funds in the
11th Plan, the MDG goal for sanitation can be met by 2010 and full coverage achieved between 2012 and 2015.

3.4 Policy Perspectives on Maternal and Child Health

3.4.1 National Health Policy (NHP), 1983

The Government of India came out with a draft National Health Policy (NHP) in 1979 and this was approved by the Central Council of Health and Family Welfare in 1981 and received endorsement of Parliament in 1983. The National Health Policy envisaged the need for a planned and time bound action plan to handle the tasks of malnutrition; prevention of food adulteration and maintenance of quality of drugs; water supply and sanitation; environmental protection; immunisation; maternal and child health; school health and occupational health. The policy also recognised the importance of health education, health management, information system, strengthening of medical industry, development of state-wide health insurance schemes and sharing of cost of health services by the community with its paying capacity. It also highlighted the need for inter-sectoral cooperation as well as coordination between the health and the related sectors like drug and pharmaceuticals, food and agriculture, water supply and drainage, housing, education, social welfare, rural development, etc. It spelled out the goals for health sector (various health indicators targets like IMR, CDR, MMR, Life Expectancy at Birth, CBR, TFR, utilisation of basic health services specially Maternal and Child Health care services and immunisation etc.) to be achieved by the year 1990 and 2000.

The national commitment of ‘Health for All by 2000 A.D.’ got duly reflected in the NHP. The accomplishment of this goal required creation of an organisational design at the sub-systems level (below the district) with district as an administrative unit and focal point where the policies and strategies, planned at policy planning level, are translated into actions.

Consequently, the drafts of National Population Policy, National Medical and Health Education Policy and National Nutrition Policy were formulated in 1981, taking note of the commitment of ‘Health for All’ goals. A Revised Strategy for National Family Welfare Programme was formulated by the Ministry of Health and Family Welfare in 1987.

3.4.2 Millennium Development Goals (MDGs), 2000

The most recent initiatives towards population and development are the Millennium Development Goals (MDGs) drafted in the United Nations Millennium Summit in September 2000. India is a signatory to the Millennium Declaration and is thereby committed to the achievement of Millennium Development Goals by 2015. Here they have reaffirmed their commitment to working towards a world in which sustainable development and eliminating poverty would have the highest priority. The MDGs and targets grew out of the agreements and resolutions of world conferences organised by the UN in the past decade (UNFPA, 2001). The goals had been commonly accepted as a framework for measuring development progress. Improvement of maternal health and reduction of
child mortality are among the major goals targeted in the MDGs. The time-bound targets are generally intended to be achieved before 2015. However, the MDGs initiatives proposed to be fulfilled within the demarcated timeframe needed an evaluative study and recommendations of an appointed Task Force. The principal recommendations of the Task Force on Child Health and Maternal Health are:

- Health systems, particularly at the district level, must be strengthened, with priority given to strategies for reaching the child health and maternal health goals.
- Financing to strengthen health systems would require considerable additional funding.
- The health workforce must be developed according to the goals of the health system with the rights and livelihoods of the workers addressed.
- Sexual and reproductive health and rights are essential to meeting all the MDGs, including those on child health and maternal health.
- Child health interventions should be scaled up to 100 per cent coverage.
- Maternal mortality strategies should focus on building a functional primary health care system, from first referral-level facilities to the community level.
- Global mechanisms like poverty reduction strategies and funding mechanism should support and promote actions that strengthen equitable access to quality health care and not to undermine it.
- Information systems are an essential element in building equitable health systems.
- The MDG targets and indicators for the child health and maternal health (Goal 4 and 5) should be modified as follows:

  Goal 4 and Goal 5 sets the target to reduce the under-five mortality rate by two-thirds and maternal mortality ratio by three-quarters, between 1990 and 2015. The recommendations are to ensure faster progress among the poor and other marginalised groups, universal access to reproductive health services by 2015 through the primary health care system, coverage of emergency obstetric care, proportion of desire for family planning satisfied, and to incorporate neonatal mortality rate and prevalence of underweight children under-5 years of age in their indicator list along with under-five mortality rate, infant mortality rate, and proportion of 1-year old immunised against measles; and adolescent fertility rate, contraceptive prevalence rate, and HIV prevalence among 15 – 24-year old pregnant women along with maternal mortality ratio and proportion of births attended by skilled health personnel.

  In order to accomplish the targeted goals of the MDGs, India has implemented several strategies. Under the mandate of National Common Minimum Programme (NCMP) health care has several commitments, for instance, provision of primary health care, with special care to women and girl child, control of communicable diseases and HIV/AIDS, apart from others like, provision of drugs at reasonable prices, national health insurance, strengthening of rural health infrastructure and
access to quality health care. The National Rural Health Mission (NHRM) has also been launched to meet these visions.

3.4.3 National Population Policy (NPP), 2000

The National Population Policy (NPP), announced in the year 2000, is the over-arching policy framework for family planning, maternal health, and newborn and child health plans and programmes. According to the NPP (2000), the overriding objective of economic and social development is to improve the quality of people’s lives, enhance their well being, and provide them with opportunities and choices to become productive members of society. The immediate objective of the NPP (2000) is to address the unmet needs for contraception, health care infrastructure, and health personnel, and to provide integrated delivery for basic reproductive and child health care services. In pursuit of these objectives, in order to achieve the national socio-demographic goals by 2010, the NPP calls for the reduction of the Infant Mortality Rate to less than 30 per 1,000 live births by the year 2010. Achieving this goal would require reducing the NMR to about 20 per 1,000 live births. The NPP also aims to reduce the MMR to less than 100 per 1,00,000 live births by the year 2010. The NPP goals for the year 2010 also include of achieving an institutional delivery rate of 80 per cent and a rate of 100 per cent for deliveries by trained persons. Apart from these, it also aims to convene 100 per cent registration of births, deaths, marriage, and pregnancy. It would seek to converge with the implementation of related social sector programmes so that family welfare becomes a people-centred programme.

3.4.4 National Health Policy (NHP), 2002

The NHP (2002) sets out a new policy framework to achieve public health goals in the socio-economic circumstances currently prevailing in the country. The approach would increase access to the decentralised public health system by establishing new infrastructure in deficient areas and upgrading the infrastructure of existing institutions. The NHP (2002) expresses concerns about the inequity of health care by highlighting the major rural-urban differences, the poor achievements in states with high proportions of people living below the poverty line, and the gap that exists between scheduled caste, scheduled tribes, and others.

Under the policy, the central government would emphasise growth in the aggregate public health investment through a substantially increased contribution by the central government. The contribution of the private sector is also expected to be enhanced, particularly for the population group that can afford to pay for the services, and there would be an increased sectoral share of allocation to primary health care. At present, public spending on health is very low and stagnant – 0.9 per cent of GDP. It is proposed to increase health expenditure by the government to 2.0 per cent of GDP by the year 2010, to increase state sector health spending from 5.5 per cent to 7 per cent of GDP by the year 2005, and to further increase state spending to 8 per cent by the year 2010. The NHP (2002) also sets out an increased allocation wherein 55 per cent of the total public health
investment shall be for the primary health sector, 35 per cent for the secondary health sector, and 10 per cent for the tertiary sector.

3.5 Health Services Development: A Review

The India Country Report has highlighted some of the achievements and targets of the MDGs. The achievement until 2000 and goals as per the 10th Five Year Plan document over most of the socio-economic parameters, which were enshrined in the MDGs, are revealed in this report. According to the report, the present (2000) situation of IMR and MMR are 70 and 407 respectively. The respective goals targeted for 2007 are 45 and 200, and for 2012, 28 and 100.

Since the inception of the NRHM, some of the initiatives framed in the plan have already taken shape. Among them are the launching of the Reproductive and Child Health Programme II (RCH – II) and Janani Surakshya Yojana (JSY). The Polio eradication programme intensified cases reduced from 134 in 2004-05 to 63 (up to now). Accelerated implementation of the routine immunisation programme has also been taken up. Apart from these, the ground work for Hepatitis vaccine and introduction of Japanese Encephalitis vaccine to all states has been completed. Auto Disabled Syringes has been introduced throughout the country. The total amount of funds to the extent of 26.14 per cent that is, Rs.1811.74 crore have been released under NRHM outlay.

Five hundred and forty districts are covered under the Central Rural Sanitation Programme and Total Sanitation Campaign. The programme has a population coverage of 22 per cent in 2001, which is expected to increase to about 35 per cent by the end of the 10th Plan. The Nirmal Gram Puraskar, a reward scheme for 100 per cent open defecation free communities, has been a motivating factor and is picking up momentum as can be seen from the number of communities competing for the Puraskar.

There can be no denial of the fact that considerable thought process has gone in restructuring the health services delivery system. No doubt, there have been progressive achievements in health indicators but the fact remains as on today, not every household in the country is able to avail the minimum health care services. It is because either it does not have the means or the services are not near the doorstep.

In order to achieve the proclaimed goals set before the nation, the country should follow a health strategy concentrating on the main interrelated areas of advocacy for the concept of maternal and child health, and for political commitment towards maternal and child health. The country should also provide for an ‘enabling’ environment, for wide participation and for increased resources for maternal and child health programmes. Research and action to support promotion and protection of maternal and child health, prevention of specific reproductive health problems, and care and rehabilitation for all when needed should be taken care of. Attention should also be focussed on the special reproductive health needs and concerns of women and children, underserved groups such as
adolescents, on the roles and responsibilities of men, and on such population groups as refugees and displaced people.

3.6 Provisioning of Health Care Services

The health system in India is a mix of the public and private sectors, with the NGO sector playing a small yet important role. The aspect of provisioning of maternal and child health care services pertains to the health facilities under these two sectors – government (public sector) as well as private set up (private sector). The schematic diagram in Fig. 3.1 represents the nature of health care delivery system in India. In India, the health care delivery system comprises of public sector including Government run hospitals, dispensaries and health centres and private sector under which comes those run by Non-governmental organisations (NGOs), organised private sector and informal private sector (conforming to faith healers and herbalists).

This section primarily deals with the nature of health facilities functioning in our country, infrastructural facilities provided by the public sector, the private sector and their performance as per the programme guidelines. The nature of financing in the health care services, by the government, private providers and external assistance in the health care sector with special reference to family welfare and maternal and child health care have also been included here.
Fig. 3.1 Health Care Delivery System in India – Flow Chart

Health Care Delivery System in India

Public Sector  Private Sector System of Medicine  Indigenous Agencies  Voluntary Organisations

- Private Hospitals, Polyclinics, Nursing Homes and Dispensaries
- General Practitioners and Clinics
- Ayurveda
- Unani
- Homeopathy
- Unregistered Medical Practitioners

Primary Health Care  Hospital Health Centres  Hospital Insurance Schemes  Other Agencies

- Community Health Centres
  - Rural Hospitals
  - District Hospitals
  - Specialised
  - Medical Colleges
  - Super-specialised Centres

- Hospital Insurance Schemes
  - ESI
  - CGHS
  - Mediclaim
  - NMBS
  - JSY
  - Defence Services
  - Railways

Village Levels

- Village Health Guides
- Trained Dais
- Anganwadi Workers
- Community Health Volunteers
- Village Health Volunteers
- ICDS Schemes

Source: M. Kataria and O.P. Goel, NIHFW, New Delhi
3.6.1 Public Health System

In India the health sector is within the domain of individual states. The central government lays down policy guidelines, supplements resources, provides technical assistance, funds and implements several national programmes through the states in high priority areas.

At the central level, the Ministry of Health and Family Welfare consists of the Department of Health and the Department of Family Welfare. The Department of Health looks after medical and nursing education, research, communicable diseases (such as malaria, HIV, TB and guinea worm disease), non-communicable diseases, central government health services and drug policy. The Department of Family Welfare is responsible for family planning, safe motherhood, newborn, child health and adolescent health.

Each state has a directorate of health services, with programme managers for individual public health programmes (such as the RCH programme) and for administering state-run facilities. Medical colleges are generally under a separate directorate of medical education.

The basic unit of providers of maternal and child health care services are the Primary Health Centres (PHCs) in the rural set up with the Subcentres (SCs) working at the grassroots level. The Alma Ata Declaration of 1978 emphasised the attainment of ‘Health for All’ by 2000 AD and India being a signatory committed to achieve this through the Primary Health Centre approach. The year 1952 saw the initiation of the PHCs in India which have graduated changes to accommodate the increasing demands for health care services. During the various plan periods in the earlier phases, the expansion of the health care facilities gained prominence which in the later phases (8th Five year Plan onwards) shifted towards the consolidation of existing health infrastructure rather than on expansion. It have been mentioned in the plan documents that “the thrust has been on qualitative improvement in the health services through strengthening of physical facilities like provision of essential equipment, supply of essential drugs and consumables, construction of buildings and staff quarters, filling up of vacant posts of medical and paramedical staff and in-service training of staff”.

The rural health system in India is well structured. A SC is the most peripheral setup of the health care infrastructure. Each SC is staffed by a female multipurpose health worker, better known as the Auxiliary Nurse Midwife (ANM), and a male multipurpose health worker. The salaries of ANMs are provided by the central government throughout the country. A SC covers a population of 5,000, generally spread over 4-6 villages. In tribal and hard-to-reach areas, a SC covers a smaller population. A PHC caters to a population of around 30,000, overseeing 6-8 SCs. A PHC is staffed by one or two general physicians, a lady health visitor (LHV) and one or more headquarter ANM. A PHC is expected to have a Medical Officer and 14 paramedical and other staff. It acts as a referral unit for 5-6 Sub-centres. It should have 4-6 beds for patients. For every 3-4 PHCs there is a provision for Community Health Centres (CHCs), which total 4.045 nationwide. Its manpower strength includes four medical specialists (Surgeon, Physician, Gynaecologist and Paediatrician)
supported by 21 paramedical and other staff. It also should have 30 in-door beds with one Operation Theatre (OT), X-ray, labour room and laboratory facilities. A total of 1,762 Block Primary Health Centres (BPHCs), CHCs, Sub-district and District Hospitals (DHs) nationwide have been designated as First Referral Units (FRUs) with provision of a paediatrician, obstetrician, anaesthetist and several general physicians, nurses and paramedics. There are 2-4 FRUs in each district. Generally, there are one or more multi-speciality hospitals at the district headquarters.

The District Hospital forms the apex body in the hierarchy of health care system in a district which provides specialised health care services to people on subsidised costs. As per the norms of the Indian Public Health Standards (IPHS) every district is expected to have a District Hospital. Some of the health facilities have been identified as FRUs by the government which have been supplied with necessary equipment and kits to enable them to meet any emergency related to the health care of the mother, particularly emergency obstetric care (EmOC). The health personnel of PHCs and SCs are advised to refer patients requiring EmOC to the designated FRU of that area. FRUs are supposed to be fully equipped with adequate manpower, materials, drugs and kits. The CHCs are also first referral units where referral cases from lower level health care facilities are sent. The CHCs have to take care of the referral cases apart from their usual health care activities. In West Bengal the BPHCs are treated as CHCs. The major responsibility of delivering preventive, curative

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and promotive health care and family welfare services in an area lies with that of the PHCs. This includes the delivery of reproductive and child health care services, such as, antenatal care and immunisation in addition to routine inpatient and out patient services. Compared to DHs or subdivisional hospitals, PHCs are accessible to a larger population as per IPHS norms. Besides the easy accessibility and availability of PHCs, for the effective delivery of services, the PHCs should have essential infrastructure, staff, equipment and supplies. SCs are the most peripheral health institutions catering to the health care needs of the rural population. The number of different facilities varies from district to district due to the differences in the population in each district as well as due to the differences in adherence to population norms.

Subcentres are peripheral contact points between the Primary Health Care system and the community. A PHC, on the other hand, is the first contact point between the village community and the Medical Officer. CHCs are basically referral centres for PHCs approximately at the rate of 1:4. Tables 3.4a and 3.4b provides the summary of the details of the health infrastructure as per the IPHS norms with the designated providers at each level of the health care providers along with their mandated activities and the suggested norms of health personnel as per the population size.

### Table 3.4a The Health Infrastructure

<table>
<thead>
<tr>
<th>Facility</th>
<th>Norms/Numbers</th>
<th>Designated Providers</th>
<th>Mandated Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained Dai</td>
<td>1 for each village</td>
<td></td>
<td>• Maternal Care&lt;br&gt;• Delivery Care&lt;br&gt;• Child Care</td>
</tr>
<tr>
<td>Village Health Guide</td>
<td>1 for each village per 1,000 population</td>
<td></td>
<td>• Maternal Care&lt;br&gt;• Delivery Care&lt;br&gt;• Child Care</td>
</tr>
<tr>
<td>SC</td>
<td>1 for 5,000 population; 1 for 3,000 in difficult and tribal areas</td>
<td>• Auxiliary Nurse Midwife (ANM)&lt;br&gt;• Male Multipurpose Health Worker</td>
<td>• Outpatient counselling/care&lt;br&gt;• Deliveries (some)&lt;br&gt;• Outreach services</td>
</tr>
<tr>
<td>PHC</td>
<td>1 for 30,000 population; 1 for 20,000 in difficult and tribal areas 4 – 6 Beds</td>
<td>• General Doctor&lt;br&gt;• LHV&lt;br&gt;• ANMs</td>
<td>• Outpatient care&lt;br&gt;• Deliveries at some</td>
</tr>
<tr>
<td>CHC</td>
<td>1 for 1,20,000 population; 1 for 80,000 in difficult and tribal areas 1 for 4 – 5 each PHC 30 Beds</td>
<td>• General Doctors&lt;br&gt;• Sometimes Paediatrician or Obstetrician&lt;br&gt;• Nurses or ANMs</td>
<td>• Outpatient care&lt;br&gt;• Deliveries at some&lt;br&gt;• Some inpatient care&lt;br&gt;• Care of sick neonates at some</td>
</tr>
<tr>
<td>FRU</td>
<td>1 for 500,000 population 30 Beds</td>
<td>• General Doctors&lt;br&gt;• Obstetrician&lt;br&gt;• Paediatrician&lt;br&gt;• Anaesthetist&lt;br&gt;• Nurses</td>
<td>• Outpatient care&lt;br&gt;• Deliveries at many&lt;br&gt;• Comprehensive EmOC at some&lt;br&gt;• Inpatient care of sick neonates at many&lt;br&gt;• Many have newborn care corners</td>
</tr>
<tr>
<td>District Hospital</td>
<td>50 – 200 Beds</td>
<td>• General Doctors&lt;br&gt;• Obstetrician&lt;br&gt;• Paediatrician&lt;br&gt;• Anaesthetist&lt;br&gt;• Nurses</td>
<td>• Outpatient care&lt;br&gt;• Deliveries&lt;br&gt;• Comprehensive EmOC at some&lt;br&gt;• Inpatient care of sick neonates&lt;br&gt;• Many have newborn care corners</td>
</tr>
</tbody>
</table>

### Table 3.4b Suggested Norms for Health Personnel

<table>
<thead>
<tr>
<th>Category of Health Personnel</th>
<th>Norms Suggested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>1 per 3,500 population</td>
</tr>
<tr>
<td>Nurses</td>
<td>1 per 5,000 population</td>
</tr>
<tr>
<td>Health Workers (Female, formerly ANMs)</td>
<td>1 per 5,000 population</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>1 per 10,000 population</td>
</tr>
<tr>
<td>Laboratory Technicians</td>
<td>1 per 10,000 population</td>
</tr>
<tr>
<td>Community Health Workers</td>
<td>1 per 1,000 population</td>
</tr>
</tbody>
</table>


#### 3.6.1.1 Key Functionaries at the Grassroots Level

##### 3.6.1.1.1 Auxiliary Nurse Midwives (ANMs)

ANMs form the backbone of the rural primary health care system. They operate from a SC, typically covering a population of 4-6 villages. They receive training for a period of around 18 months after completing schooling up to class 12. An ANM is expected to stay at the SC, but more often she commutes to her area of work from her home in a nearby town. The present activities of an ANM are to register pregnant women from three months of pregnancy; to provide care to pregnant women; to give advice on nutrition to expectant and nursing mothers; to distribute IFA tablets to pregnant and nursing mothers; to immunise pregnant mothers with TT vaccine; to refer cases of complicated pregnancy and cases with medical and gynaecological problems; to conduct deliveries at SCs and homes; to supervise deliveries conducted by TBAs wherever called in; to refer cases of difficult labour and newborns with complications; to provide postpartum care; to spread message of family planning to couples, to motivate them for family planning individually and in groups; to vaccinate infants in her area with DPT, polio, BCG and measles vaccines; to record and report births and deaths occurring in her area; to test urine for albumin and sugar and check the haemoglobin in antenatal cases; and to identify women leaders and participate in the training of women leaders. In the decades after the 1960s family planning and later immunisation became their major activities because of the national thrust in these areas. This led to the neglect of other priorities, including skilled assistance at deliveries.

Many ANM posts remain unfilled due to a variety of reasons. In 2000, of the 144,012 posts, 22,371 (15.5%) were unfilled. An ANM is originally expected to cover a population of 5,000, but with increases in population, many of them are looking after 8,000-10,000 individuals. The result has been an enormous increase in workload.

##### 3.6.1.1.2 Traditional Birth Attendants (TBAs)

A TBA is a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or through an apprenticeship to another TBA. A trained TBA is one who has received a short course of training through the modern health sector to upgrade her skills. Since the TBAs often belong to lower castes, traditionally their roles are limited to assisting the family during delivery and for a variable part of the postpartum period (which is considered to be
unclean). Their typical role includes assisting in labour, often in an advanced stage, in the delivery of the baby and placenta and in immediate care of the mother and the neonate. Their work also includes bathing and massage of the mother and the newborn, washing clothes, cleaning the house and observing rituals depending on local customs. The TBAs receive remuneration from the family in cash or kind in recognition of the services they render. The training of the TBAs was promoted by international agencies in the 1970s. The Government of India launched a TBA training programme in the Second Five Year Plan with the objectives of training them in their profession and on how to use their influence in the community. TBAs are an important community resource and care providers. They can play a critical role in newborn health by undertaking care delivery practices and by catalysing healthy family practices, including early and exclusive breastfeeding, warmth, prevention of sepsis and detection of danger signs. They may be able to influence behaviours because of the trust many families have in TBAs.

3.6.1.1.3 Accredited Social Health Activists (ASHAs)

A trained female community health worker ASHA is being provided to each village in the ratio of one per 1,000 population. ASHAs would reinforce community action for universal immunisation, safe delivery, new born care, prevention of water-borne and other communicable diseases, nutrition and sanitation. She also helps the villagers to promote preventive health by converging activities of nutrition, education, drinking water, sanitation and so on.

3.6.1.1.4 Anganwadi Workers (AWWs)

AWWs, each of whom covers the population of an average village (about 1,000) as an honorary worker, are the key functionaries of the Integrated Child Development Service (ICDS) programme. The AWW lives in the village, has middle school or higher education, receives pre-service training and is paid an honorarium of Rs 1,000 per month. She is assisted by a helper. The AWW operates from the premises provided by the community (the Anganwadi). Her primary responsibility is nutrition, non-formal education and health education. The supplementary nutrition component of the ICDS includes supplementary feeding of children and pregnant and lactating women, vitamin A supplementation and prevention and control of anaemia in children and women. Early childhood care and preschool education are the other two critical components of ICDS. A recent addition is a scheme for school drop-out adolescent girls (11-18 years). The Anganwadi is the local site for providing immunisation and conducting health checkups of children and antenatal checkups of women by the ANM. At the village level, AWW works closely with the ANM who, in turn, depends on her for conducting immunisation and antenatal checkups at the village level.

Not all the villages have a provider from the health department. The ANM is located in one out of the 4-6 villages that she covers. In many parts of the country, ANMs do not stay at SCs because of reasons of insecurity, lack of living quarters, family constraints and at times for no
genuine reason at all. Most villages, however, have traditional births attendants and unqualified village practitioners. An Anganwadi worker (AWW) is located in most villages.

Nursing personnel forms the backbone of perinatal-neonatal care at first referral units, community health centres, district hospitals and other institutions. Newborn nursing has not yet emerged as a nursing speciality. Moreover, there is a lack of resource materials and training capacity for nurses, especially those working at district and sub-district government facilities. Apart from these key functionaries, all nurses working in maternal and neonatal care areas receive ongoing in-service training to update them in recent advances in midwifery and neonatal care.

WHO advocates for promoting skilled birth attendants (SBAs), including midwives and doctors but not trained TBAs, in order to reduce maternal mortality. This is a major departure from training TBAs. The functions of SBAs include providing care for normal pregnancy, delivery and the postpartum period, and providing emergency care for complications with appropriate referral for further treatment if needed. The delivery could take place at home or in an institution. SBAs include doctors, midwives and nurses with midwifery training. The proportion of institutional deliveries is low due to the fact that programme priorities, in the past and present, have emphasised family planning and immunisation as their main work and neglected delivery care and so these hospitals and health centres do not provide skilled care for deliveries. India has a large number of PHCs, CHCs and Rural Hospitals (RHs) that can also provide delivery care apart from a huge cadre of ANMs educated and trained in midwifery. Priorities should be reoriented so each level of health infrastructure offers maternity care as one of its basic services.

Even though the government health infrastructure in India is well planned, the quality of actual operations ranges from mostly dysfunctional facilities in some states to reasonably well functioning systems in other states.

3.6.2 Private Sector Health Services

India has a vast, varied and vibrant private sector health system. More than 80 per cent of qualified medical doctors are in private practise. Private facilities range from small clinics run by an individual to multi-speciality corporate hospitals of international standards. Unfortunately, the formal private sector remains confined to urban areas and has not percolated into the rural hinterland of India. In villages, low quality ‘informal’ private health care is provided by untrained, unqualified registered medical practitioners (RMPs), often referred to as ‘quacks’. Conservative estimates put their numbers at 1.25 million, almost all of whom have solo practices located in outpatient settings. There has been talk of involving village practitioners like RMPs to deliver care to sick women and children. It is true that RMPs are often the only providers at the village level who have some key

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skills (including giving antibiotic injections), but they fall outside the recognised and lawful health system and their ability to provide rational, safe and ethical services is questionable.

A large proportion of private sector hospitals are small establishments, with 85 per cent of them having less than 25 beds each (the average number is 10). Between 1974 and 1996, while there was a phenomenal growth in the number of hospitals in the private sector, the overall increase in hospital beds in the private sector was small. This is an indication of the growth of small hospitals and nursing homes in the private sector. The small hospitals in the private sector, also called 'nursing homes', are generally owned by one person. Very few of the private hospitals are in the tertiary sector (1 to 2%) and they are generally owned by trusts or corporate houses. A majority of private hospitals, including private nursing homes, are located in urban or periurban areas.

The growth of corporate hospitals is due to the demand for development of a health care market in which investment in state-of-the-art medical technology can give a good return. The industry under the organised sector has always taken a lot of interest in the Family Welfare programme. Although the private sector accounts for a significant portion of the health system facilities, human resources and expenditure in India, no adequate mechanism has been developed for monitoring and regulating the private health sector.

3.6.3 Non-Governmental Organisations (NGOs) and Voluntary Sector

In India, it is estimated that about 7,000 voluntary agencies are involved in health-related activities. There are wide interstate variations. NGOs often provide a limited range of services localised to a small geographical area. Some of them implement government programmes, while others run basic health care or integrated services. Many NGOs provide services to patients with specific diseases like leprosy; others focus on training, surveys, social marketing and behaviour change communication (BCC) activities. NGOs and private sectors are involved in monitoring, implementation of programme, training of dais, ANMs, etc., information, education and communication (IEC), mobility of essential obstetrics care, audit of services delivery, management support to institutions at state and national level and organising community polls.

Several voluntary organisations are working in the field of population and reproductive health. The NGOs have the advantage of flexibility in procedures, can develop rapport with the local populations and also enjoy credibility with local people. Under the RCH programme, NGOs exist at various levels:

- **Small NGOs**: At the village, panchayat and block level, small NGOs are being involved basically for advocating RCH and family welfare practices and general counselling. At the same time, individual NGOs are also being encouraged to propose innovative programmes. Small NGOs with limited resources are being assisted through mother NGOs.

- **Mother NGOs**: NGOs with substantial resources and proven competence are being selected as mother NGOs. So far, 99 mother NGOs (MNGOs) have been identified to screen, select, guide
and monitor the work of small, field NGOs in specified districts. Some of them at national level are entrusted with the job of pre-appraisal, appraisal and evaluation work of other NGOs.

- **National NGOs**: A panel of 4 National NGOs has been selected under the RCH programmes to make verification of credentials of mother NGOs and assess the performance of mother NGOs.

  The main problems faced by NGOs include: poor synergy between government and NGOs; limited financial management; the technical and managerial capacity of NGOs; paucity and uncertainty of funds; and delays in the flow of funds from the government. Recently, the central government has streamlined the system of NGO involvement for reproductive and child health care services (State of India’s Newborn, 2004).

The Non Governmental Organisations are critical for the success of NRHM. With the mother NGO programme scheme, 215 MNGOs covering nearly 300 districts have already been appointed. Their services are being utilised under the RCH-II programme. The Disease Control programmes, the RCH-II, immunisation and pulse polio programme, the Janani Suraksha Yojana (JSY) make use of partnerships of variety of NGOs. Efforts are being made to involve NGOs at all levels of the health delivery system. Besides advocacy, NGOs would be involved in capacity building at all levels; monitoring and evaluation of the health sector; delivery of health services; developing innovative approaches to health care delivery for marginalised sections or in underserved areas and aspects; working together with community organisations and Panchayati Raj Institutions (PRIs); and contributing towards the monitoring of the right to health care and service guarantee from the public health institutions.

3.6.4 Other Health Systems

Apart from the public health system delineated above, there are other government agencies, such as the Indian Armed Forces, the Indian Railways and other paramilitary forces that have their own health systems and hospitals. These systems cater to the health care needs of their respective employees and their families.

One of the largest and most widespread of these other health systems is that of the Indian Armed Forces. This integrated health system consists of various levels of care, from the primary to the most advanced tertiary care. The Armed Forces have well-established protocols for the transfer of patients from a lower facility to a more advanced one. Their hospitals range from simple health posts to very large tertiary care hospitals with neonatal intensive care units. These hospitals are spread out all across the country, even in the more remote areas. The Armed Forces also has certain speciality hospitals dedicated to special problems, like that for limb prosthesis and spinal injuries. The Armed Forces medical system is meant only for military personnel.

3.7 Maternal and Child Health Care Delivery Services under NRHM and 11th Plan

As has already been mentioned, the National Health Policy have identified the health care through preventive, promotive and rehabilitative health services to people thereby modifying the
system from mere medical care while emphasising on the provisioning of services. It has been surveyed that in India, the public sector has remained the prime source of maternal and child health care such as immunisation, antenatal care, family planning services and also of contagious disease control. In rural India, health care services are provided through a network of integrated health and family welfare system wherein the health programmes have undergone restructuring and reorientation over the time as per the objectives of the health policies.

3.7.1 Maternal and Child Health Care under NRHM

The NRHM has been constitutionalised in order to bring about holistic development of the health care delivery services in the rural areas of India. The Health System in India is oriented towards curative health. Under the NRHM programme due emphasis is ensured to preventive and promotive health. Improvement in the health outcomes in the rural areas is directly related to the availability of trained human resources. Government supports new contractual posts but the existing vacancies have to be filled up by the respective states. The targets envisaged in the Mission are:

- Upgrading all CHCs to Indian Public Health Standards.
- Increase utilisation of FRUs from bed occupancy by referred cases of less than 20 per cent to over 75 per cent.
- Engaging 4,00,000 female ASHAs.
- Appointing two ANMs per Subcentre.
- Appointing three staff nurses in each PHC to ensure round the clock services in every PHC.
- Appointing seven specialists and nine staff nurses in every CHC.

The expected outcomes at Community level under the NRHM provisions would be:

- Anganwadi centre as the focal point for all health and nutrition services – ASHA and AWW working as team leaders of the Village Health Team.
- Organise village level health education activities.
- AWW and ASHA to encourage and plan for institutional delivery and facilitate referral care, mapping of facilities and help in accessing transport through community organisations, self help groups (SHGs).
- AWW and ASHA to be present at all home deliveries as second attendant to provide care and advice for the new born.
- AWW and ASHA could motivate newly married women and women who have had a recent delivery to use family planning; anganwadi centre (AWC) as depot for pills and condoms; AWW and ASHA to facilitate referrals for other methods.
- AWW and ASHA for immunisation, special social mobilisation campaigns.
- AWW and ASHA to work with community as members of the Village Health and Sanitation Committee for preparation of Village Health Plans.
- Facilitate referrals to appropriate health facilities particularly for institutional deliveries, RTI/STI, domestic violence, abortion, gynaecological and other morbidity.
- Availability of trained community level workers at village level, with drug kits for generic ailments.
- Fixed Health day at Anganwadi level on a fixed day/month for provision of immunisation, ante/post natal checkups and services related to mother and child health care, including nutrition and family planning.
- Availability of generic drugs for common ailments at Subcentre and hospital level.
- Access to good hospital care through assured availability of doctors, drugs and quality services at PHC/CHC level and assured referral-transport-communication systems to reach these facilities in time.
- Improved access to universal immunisation through induction of Auto Disabled Syringes, alternate vaccine delivery and improved mobilisation services under the programme.
- Improved facilities for institutional deliveries through provision of referral transport, escort and improved hospital care subsidised under the JSY for the below poverty line families.
- Availability of assured health care at reduced financial risk through pilots of Community Health Insurance under the Mission.
- Availability of safe drinking water.
- Provision of household toilets.
- Improved outreach services to medically underserved remote areas through mobile medical units.
- Increase awareness about preventive health including nutrition.

### 3.7.2 Decentralisation and Convergence under NRHM

The NRHM proposed to provide necessary flexibility to the States to take care of the local needs and socio-cultural variations. States would decentralise planning and implementation arrangements to ensure that need based and community owned District Health Action Plans become the basis for interventions in the health sector. The PRIs, right from the village to the district level, would have to be given ownership of the public health delivery system in their respective jurisdiction. Other vibrant community organisations and women’s groups would also be associated in communitisation of health care. Empowering those who are vulnerable, through education and health education, giving priority to areas/hamlets/households inhabited by them; running fully functional facilities; exemption for below poverty line families from all charges; ensuring access; risk pooling; human resource development/capacity building; recruiting volunteers from amongst them are the important strategies under the Mission.

Convergence with all departments that influence outcomes of wider determinants of health is necessary for improved health indicators. District level Zila Parishad framework allows convergent action of all departments under one umbrella. State and national levels should allow more flexibility
and more untied financial resources to districts for them to forge solidarity of diverse departments. Women and Child Department, Education and Literacy Department, Panchayati Raj and Rural Development Department, Water and Sanitation Department, other interventions in health care like HIV/AIDS, AYUSH, etc. need to be better integrated with interventions for health care.

Apart from these, other initiatives at the various level of health care delivery system like village, SC, PHC, CHC and Sub-divisional/District level are also being proposed under the NRHM. These are:

**Village level:** A revolving fund would be set up at the village level for providing referral and transport facilities for emergency deliveries as well as immediate financial needs for hospitalisation. For those villages which are away from the SC, a TBA with requisite educational qualification would be identified for training and support. She would assist the ANM at the SC. ASHAs willing to play this role would be given preference. In places where even an ANM's services are not reaching and there is no accredited ASHA available, the RMPs would be identified for training so that they could upgrade their skills and get accredited. Efforts would also be made to regulate quacks and untrained dais.

**Subcentre level:** One ANM at a SC has been found to be inadequate to attend to the complete needs of maternal and child care in any village. It is therefore proposed to extend the funding support from the central government for two ANMs per SC. Construction of buildings would be taken up as a Mission activity. The new buildings would be of an area of around 500 sq. feet and in addition would have staff quarters for the ANMs. The states would also be supported in their efforts to renovate the existing buildings. The SC building could also be utilised for dispensing OP services by any health provider. Adequate provision of medicines would be made, not only pertaining to RCH but also of other communicable diseases. SCs also would be utilised in providing information on HIV/AIDS and help villagers access referral services at the PHCs. SCs would co-ordinate outreach activities especially to underserved areas. It would also pay special attention to the health status of the marginalised.

**PHC level:** The PHC should be available for 24 hours with nursing facilities. Select PHCs, especially in large blocks where the CHC is over one hour of journey time away, may be upgraded to provide 24 hour emergency hospital care for a number of conditions by increasing number of Medical Officers. Construction of buildings would be taken as a Mission activity. Currently, the PHCs have a space of 4000 sq. feet. Looking at the utilisation of space of the PHCs, it is felt that the constructed area is on the higher side. The new buildings would therefore be of an area of around 1600 sq. feet. The balance space would be utilised for the construction of staff quarters for all the three staff nurses. Provision for labour rooms and space for new born care are being provided. In order to make the PHC functional for 24 hours, it is proposed to increase the number of staff nurses in the PHCs to three. There would also be a LHV. All of them would have both basic emergency
obstetric care and sick neonatal and child care skills. It would be for the states to decide on the configuration of the PHCs to meet IPH Standards and offer 24X7 services including safe delivery. Besides, providing of services relating to RTI and STI, PHCs would also facilitate counselling, laboratory testing for HIV/AIDS while protecting the confidentiality of the patients.

**CHC level:** Under the Mission, the CHCs are conceived as the first major curative health service providers addressing 80 per cent of all ailments requiring out-patient services or hospitalisation. The Centre would support the entire capital expenditure for the construction of new CHCs and the renovation of the existing CHC buildings. In some places, there are multiple health facilities being controlled by different agencies. As a result, because of the manpower and equipment shortage, none of the facilities function in an optimal manner. The states would be asked to merge these facilities existing at the CHC headquarter for better cohesion. Under the RCH-II, upgradation of CHCs as FRUs is being attempted to provide for basic Emergency Obstetric Care for women and ARI treatment for children.

**Sub-division/District level:** Sub-divisional and District Hospitals would also be provided support to upgrade their infrastructure. Many of the areas are inaccessible in the states, even if fully functional facilities have been provided for. Outreach activity would therefore be an important activity of the Mission. Many of the states are already providing outreach services through ambulances under RCH-II programme. The provision of one mobile medical unit to each district of the country would be initially made effective. The mobile units would consist of two vehicles – one equipped with the necessary diagnostic facility and the other for carrying the medical and paramedical staff. The mobile unit would help in providing healthcare services to far flung areas of the district. This mobile unit would be attached to the district hospital/CHC. In especially difficult districts where mapping and public notifications show a large number of underserved remote areas, more mobile hospitals may be sanctioned accordingly.

The following chart (Fig. 3.3) depicts the illustrative structure of the health care system under the NRHM.
3.7.3 Public-Private-Partnership under NRHM

The rural public health care system in many states and regions is quite unsatisfactory leading to pauperisation of poor households due to expensive private sector health care. Indian public spending on health is amongst the lowest in the world, whereas its proportion of private spending on health is one of the highest. More than Rs. 100000 crores is being spent annually as expenditure of households on health in the private sector, which is more than three times the public expenditure on health. The private sector health care is unregulated and hence the cost of health care increases making it unaffordable for the rural poor. The supplementary strategies of the Mission include promotion of public private partnerships for achieving public health goals.

Under NRHM, Task Forces are set up with experts, institutional representatives and NGOs. The RCH-II has development partners including UN agencies. The Immunisation and Polio Eradication Programmes effectively make use of partnerships with WHO, UNICEF, the Rotary International, NGOs, etc. The JSY has also factored in accreditation of private facility for promotion of institutional delivery. The NRHM attempts to provide people friendly regulation framework that promotes ethical practice in the non-governmental sector. It also encourages non-governmental
health providers to provide quality services in rural areas to meet the shortage of health facilities there. The NRHM recognises that within the non-governmental service there is a large commercial private sector and a much smaller but significant not-for-profit sector. The not-for-profit centres, which are identified as setting an example of pro-poor, dedicated community service, would be encouraged and used as role model, benchmark, site of community centred research and training to strengthen the public health system and improve the regulatory frameworks for the non-governmental sector as a whole. It has already been recognised that the private practitioners have been constantly working for promotion of family welfare programme and practitioners of Indian System of Medicine (ISM) are formally trained for the family welfare programme.

NRHM seeks partnership with non-governmental health care providers through better regulation and transparent systems of accreditation for quality health services at agreed costs and norms. Partnerships that enhance utilisation of publicly owned health facilities would be encouraged to ensure full utilisation of existing infrastructure. Given the NRHM commitments regarding maternal and child health, partnerships with the non-governmental sector to increase institutional deliveries and to facilitate improvement of standards in the government and non-governmental systems would be attempted. Many non-governmental organisations play an important role in advocacy for a right to health care and for effective community action. Some others are service delivery NGOs and many good hospitals in our country are run by Trusts. Many of these hospitals are excellent in the process of capacity building of health functionaries. NRHM would support linkages with these institutions. To ensure better accountability and thrust for capacity building, the NRHM would support co-option of NGOs in Block and District teams and would facilitate setting up of grants-in-aids system for NGOs at the national, state and district levels. Given the Panchayati Raj framework for decentralised participation, NRHM would seek the partnership with NGOs within the umbrella of the Panchayati Raj framework. NGOs can considerably improve advocacy for right to health care at the local level.

3.7.4 Maternal and Child Health Care under the 11th Plan

Achieving the 11th Plan targets for health requires a greatly expanded role for the state in these areas. This is because access to essential public services such as health, education, clean drinking water, and sanitation is not an automatic outcome of rising incomes. It calls for deliberate public intervention to ensure delivery of these services. It is in this context that the NRHM has been launched in order to improve the access and availability of quality health care, sanitation, and nutrition. Achievement of these targets also requires a conscious effort in capacity mobilisation of the state at various levels to provide such services through public action. This can be supplemented wherever possible by private effort, but there can be no doubt that even after allowing for the scope for expanded supply by the private sector, the bulk of the responsibility would fall on the public sector. For this reason, plan expenditure in health would have to increase substantially. However,
mere increases in expenditure would not suffice unless accountability is also improved. For locally
delivered health services, more active supervision by the PRIs can make a difference. For tertiary
health care, other methods of monitoring performance and enforcing accountability are necessary.
Both the centre and the states have to cooperate in finding ways to improve monitoring and enforce
accountability. Measures to bring about effective devolution by PRIs would help improve local
involvement and accountability. Civil Society organisations can play a major role in assisting PRIs
in this area.

At present, our healthcare system suffers from a severe shortage of trained personnel. One
way of overcoming the difficulty of recruiting qualified doctors to serve rural areas is to make
greater use of trained paramedical personnel. There is a strong case for reintroducing the two year
licentiate course in medicine, which existed earlier but was abolished. There is also a need to devise
ways of training and accrediting the rural health providers (popularly called RMPs) and permitting
them to provide select services under the supervision of a licensed medical practitioner.

In the area of health, there continues to be large gaps in the most basic services such as
mother and child care, clean drinking water, and access to basic sanitation facilities. The poor do not
have even minimum access. While both education and curative health services are available for
those who can afford to pay, quality service is beyond the reach of the common people. Other
privately provided services are of highly variable quality. In this situation, access to essential
services can only be through public financing. In most cases this means public provision or
partnership with non-profit and civil society organisations.

A major institutional challenge is that even where service providers exist, the quality of
delivery is poor and those responsible for delivering the services cannot be held accountable. Unless
such accountability is established and cutting edge service providers trained, it would be difficult to
ensure significant improvement in delivery even if large resources are made available. NRHM is an
ambitious programme for providing primary health services. The programme indicates the priority
being given by the government to rural development. While making these provisions for rural India,
the basic amenities must also be provided to the growing number of poor in urban areas. There is
also a divide between those who have access to essential services such as health, education, drinking
water, sanitation etc., and those who do not. Inadequate access to these essential services directly
limits the welfare of large sections of our population, and also denies them the opportunity to share
the benefits of growth fully. Indeed, inadequate attention to human resource development limits the
growth process itself. A key element of 11th Plan strategy is to provide essential education and health
services to those large parts of our population who are still excluded from these.
3.8 Provisioning of Health Care Services in West Bengal

The nature of provisioning of health care delivery services under the various plans and programmes in the previous sections has revealed the norms within which the health care delivery institutions must function. In the following section, the prevailing situation of the provisioning of health care delivery services in the state of West Bengal has been assessed.

The total number of hospitals under the public and private sectors in West Bengal (2007-08) are 13,919, out of which there are 10,356 SCs, 924 PHCs, 253 BPHCs, 96 Rural Hospitals, 34 State General Hospitals, 45 Sub-divisional Hospitals, 15 District Hospitals and 9 Medical College Hospitals (Table 3.5). There are 68 hospitals belonging to other departments of the State Government and 54 hospitals under the provision of Government of India. About 2,001 hospitals are there under the private and NGO sector while 31 hospitals are run by local bodies. The total number of beds served by all these hospitals is 1,00,019, out of which almost 32,458 are served by private sector undertakings and 11,150 by the Medical College Hospitals. The distribution of medical institutions and sanctioned number of beds in the districts of West Bengal has been represented in Appendix Table A.3.1 and A.3.2.

Table 3.5 Medical Institutions in West Bengal:

<table>
<thead>
<tr>
<th>Hospitals/Health centres under Department of Health &amp; Family Welfare</th>
<th>No.</th>
<th>Total No. of Beds (Sanctioned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical College Hospital</td>
<td>9</td>
<td>11150</td>
</tr>
<tr>
<td>District Hospital</td>
<td>15</td>
<td>7402</td>
</tr>
<tr>
<td>Sub-divisional Hospital</td>
<td>45</td>
<td>9248</td>
</tr>
<tr>
<td>State General Hospital</td>
<td>34</td>
<td>3899</td>
</tr>
<tr>
<td>Other Hospitals</td>
<td>33</td>
<td>7737</td>
</tr>
<tr>
<td>Rural Hospitals</td>
<td>96</td>
<td>3669</td>
</tr>
<tr>
<td>Block Primary Health Centre</td>
<td>253</td>
<td>4924</td>
</tr>
<tr>
<td>Primary Health Centre</td>
<td>924</td>
<td>6598</td>
</tr>
<tr>
<td>Subcentres</td>
<td>10356</td>
<td>0</td>
</tr>
<tr>
<td>Hospitals under other Departments of State Government*</td>
<td>68</td>
<td>6028</td>
</tr>
<tr>
<td>Hospitals under Local Body</td>
<td>31</td>
<td>960</td>
</tr>
<tr>
<td>Hospitals under Government of India*</td>
<td>54</td>
<td>5946</td>
</tr>
<tr>
<td>Hospitals under NGO/Private</td>
<td>2001</td>
<td>32458</td>
</tr>
<tr>
<td>Total</td>
<td>13919</td>
<td>100019</td>
</tr>
</tbody>
</table>

* Includes Government undertaking organisations

Source: Health on the March, 2007-08

For the analysis of the pattern of distribution of the various health institutions in the rural and urban setup in West Bengal, Lorenz Curve and Gini’s Coefficient have been applied. These methods help in assessing the nature of concentration thereby revealing the inequality existing in the pattern of distribution of the health care delivery institutions. The data (Appendix Table A.3.1) shows more concentration of public as well as NGO/private hospitals and hospital beds in Kolkata district. This skewed distribution pattern for the urban district of Kolkata has been affecting the normal
distribution pattern of the other districts. So Kolkata district has not been considered while computing for Lorenz curve and Gini’s Coefficient for the number of public, NGO/private and total hospital beds.

In case of number of public hospitals and public hospital beds, they are almost uniformly distributed vis-à-vis the distribution of population (Fig. 3.4 and 3.5).

**Fig. 3.4**

Lorenz Curve Showing Public Hospitals against Population Size
Districts of West Bengal, 2007-08

![Lorenz Curve for Public Hospitals](image)

Source: Health on the March, 2007-08

**Fig. 3.5**

Lorenz Curve Showing Public Hospital Beds against Population Size
Districts of West Bengal, 2007-08

![Lorenz Curve for Public Hospital Beds](image)

Source: Health on the March, 2007-08

However, the distribution of number of NGO/private hospitals as well as hospital beds reveal a relatively more concentrated pattern of distribution in West Bengal showing an expanded inequality curve (Fig. 3.6 and 3.7). This is quite evident from the fact that most of the private sector health institutions serve the urban areas where they have greater profit making opportunities due to
the presence of people who have the purchasing power of the expensive private sector health services, thereby neglecting the rural counterparts.

Fig. 3.6

Lorenz Curves showing NGO/Private Hospitals against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

Fig. 3.7

Lorenz Curves showing NGO/Private Hospital Beds against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

The effect of both the private and public sector in the health care delivery services gets revealed in the overall picture wherein the nature of distribution of total number of hospitals and hospital beds shows a more uniform pattern. The inequality in the distribution pattern of the NGO/private hospitals and hospital beds gets nullified by the more uniform pattern of public sector health institutions (Fig. 3.8 and 3.9).
Fig. 3.8

Lorenz Curve Showing Hospitals against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

Fig. 3.9

Lorenz Curve Showing Hospital Beds against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

However, there is not much of a difference in the distribution of RHs, BPHCs and PHCs and their corresponding number of hospital beds as well as that of the distribution of the Subcentres (Fig. 3.10, 3.11 and 3.12).
Fig. 3.10
Lorenz Curve Showing Hospitals (RH, BPHC, PHC) against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

Fig. 3.11
Lorenz Curve Showing Hospital Beds (in RH, BPHC, PHC) against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

Fig. 3.12
Lorenz Curve Showing Subcentres against Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08
The number of hospital beds in rural areas also shows a uniform distribution as against the corresponding population size (Fig. 3.13). However, the number of hospital beds serving the urban population shows a relatively concentrated distribution against the corresponding population size (Fig. 3.14). In urban areas the public and private health systems complement each other.

**Fig. 3.13**

Lorenz Curve Showing Hospital Beds (in Rural Areas) against Rural Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

**Fig. 3.14**

Lorenz Curve Showing Hospital Beds (in Urban Areas) against Urban Population Size
Districts of West Bengal, 2007-08

Source: Health on the March, 2007-08

The Gini’s Coefficient gives the numeric values from which the degree of concentration of the distribution of health institutions can be assessed. Herein, the values are relatively more in the distribution of NGO/private hospitals (0.124) and number of hospital beds in urban areas (- 0.136) revealing higher inequality in case of their service deliveries. In case of the public sector institutions the values of Gini’s Coefficient are much lower (Table 3.6).

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Table 3.6 Gini’s Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gini’s Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Public Hospitals</td>
<td>-0.070</td>
</tr>
<tr>
<td>Public Hospital Beds</td>
<td>-0.035</td>
</tr>
<tr>
<td>Number of NGO/Private Hospitals</td>
<td>0.124</td>
</tr>
<tr>
<td>NGO/Private Hospital Beds</td>
<td>0.086</td>
</tr>
<tr>
<td>Number of Hospitals (Total)</td>
<td>0.039</td>
</tr>
<tr>
<td>Hospital Beds (Total)</td>
<td>0.0004</td>
</tr>
<tr>
<td>Number of Hospitals (RH,BPHC,PHC)</td>
<td>-0.087</td>
</tr>
<tr>
<td>Hospital Beds (RH,BPHC,PHC)</td>
<td>-0.084</td>
</tr>
<tr>
<td>Number of Subcentres</td>
<td>-0.080</td>
</tr>
<tr>
<td>Number of Hospital Beds (Rural)</td>
<td>-0.029</td>
</tr>
<tr>
<td>Number of Hospital Beds (Urban)</td>
<td>-0.136</td>
</tr>
</tbody>
</table>

Source: Computed from data in Health on the March, 2007-08

The National Health Profile report of 2007 reveals the statistics of health infrastructure at the national and state level. From the Appendix Table A.3.3, it can be seen that there are only 99 Rural Hospitals in West Bengal as against 284 hospitals in the urban areas, showing a very strong urban-bias. There are 14,089 population per doctor in West Bengal. The number of population per government hospital in West Bengal is 2,24,869, almost double the number of the national figure. However, the number of population per government hospital bed is much lower in West Bengal (1,734) than that of the all India figure (2,339). In West Bengal, there are 6,113 government allopathic doctors, 56,293 ANMs, 47,114 GNMs, 11,655 LHVs and 89,630 pharmacists. The rural habitations of the state of West Bengal are universally covered by water supply under the Rural Water Supply Programme, 2006.

The infrastructural facilities available in the health care delivery services in West Bengal have been represented in Appendix Table A.3.4. There are 10,356 SCs, 922 PHCs and 346 CHCs (CHCs are termed as BPHCs in West Bengal). There are 66 FRUs spread all over the state among which 51 are at the Sub-division level and 15 are at the district level. As per the 10th Plan targets, all 2,230 SCs have been established while only 247 out of 332 CHCs have been established and the PHCs have not fulfilled any of the targeted numbers in West Bengal.

The SCs are currently provided on the population norm of 1 per 5,000 in general areas and 1 per 3,000 in tribal areas. Going by the population of 2001, the requirement increases to 12,101 and deficit increases to 1,745. Of the existing SCs, only 29.59 per cent are in government buildings. If we further exclude those buildings which are currently functioning from Panchayats and other voluntary society buildings, 7,120 additional buildings need to be constructed. Against a requirement of one ANM (funded by the GOI) and one MPW (funded by the states) positions of as many as 456 and 4,482 respectively are vacant. About 46.39 per cent of the SCs in West Bengal are working without any male health worker and 4.40 per cent are functioning without any female health worker/ANM. About 20.0 per cent of the SCs provide quarters for the ANMs, almost 92.0 per cent do not have regular supply of water, 38.0 per cent are not electrified and about 9.0 per cent are not connected by all-weather motorable approach road.
The PHCs are currently provided on the population norm of 1 per 30,000 in general areas and 1 per 20,000 in tribal/desert areas. Going by the population of 2001, the requirement goes up to 1,993 and the deficit increases to 1,071. All the PHCs are functioning in government buildings in West Bengal while 122 more buildings are under construction. The PHCs are expected to have two doctors. However, even if one doctor alone is considered, there are 111 (12.04%) vacancies which clearly imply that many of the PHCs are without doctors. About 82.21 per cent of the PHCs are functioning with one doctor and only 5.10 per cent with two doctors and an insignificant of 0.65 per cent with three doctors. As per the IPHS norms, there are 499 vacancies in case of female health assistants/LHVs and 946 vacancies in case of male health assistants. The laboratory technicians are not present in 27.87 per cent of the PHCs while about 7.16 per cent are functioning without pharmacists. About 44.0 per cent PHCs have got labour rooms, 91.0 per cent have 4 to 5 beds, only 11.0 per cent have 24 hour delivery services, 22.0 per cent are not electrified, 12.0 per cent do not have regular supply of water and 91.0 per cent are not connected by all-weather motorable approach road displaying a dismal picture.

The CHCs are currently provided on the population norm of 1 per 1,20,000 in general areas and 1 per 80,000 in tribal/desert areas. Going by the population of 2001, the requirement goes up to 498 and the deficit increases to 152 in West Bengal. All the CHCs (BPHCs) are functioning from government buildings. All the CHCs have obstetrician and gynaecologist as per the IPHS norm. There is a requirement of 346 each in the category of surgeons and physicians in the CHCs as none of the CHCs have any of them. There is vacancy of 68 paediatricians in the CHCs all over West Bengal. There is a vacancy of 68 total specialists in CHCs and there is a shortfall of 760 specialists including surgeons, obstetricians and gynaecologists, physicians and paediatricians. There is vacancy for 68 radiographers in the CHCs all over the state while the positions of 273 pharmacists, 382 laboratory technicians and 86 Nurse Midwife/Staff Nurse are vacant at the PHCs and CHCs combined. However, in case of Nurse Midwife/Staff Nurse, there is a shortfall of 2,486. There is a vacancy of 300 posts for the Block Extension Educator.

In West Bengal, the average number of rural population served by a SC is 5,576, by a PHC is 62,634 and by a CHC is 1,66,904. The average rural area covered by a SC is 8.25 sq. km, while that of PHC is 92.65 sq. km and CHC is 246.90 sq. km. The average radial distance covered by a SC is 1.62 km, by a PHC is 5.43 km and by a CHC is 8.86 km. The average number of villages covered by a SC is 4, while that by a PHC is 44 and it is 118 in case of a CHC. The number of SCs per PHC in West Bengal is 11 which is quite high as per the IPHS norms. However, there are 3 PHCs per CHC in West Bengal. The proportion of male health assistant per male health worker is 1:9, while for the females (LHV:ANM) the proportion is 1:8. The average rural population covered by a male health worker is 11,153 and by a female health worker is 5,833.
In the district of Hugli, there are 660 SCs, 60 PHCs and 17 CHCs (BPHCs) while in Murshidabad the corresponding figures are 832, 70 and 27 for SCs, PHCs and CHCs (BPHCs).

There is a vast disparity in the number of population per bed among the districts of West Bengal, the coefficient of variation being 42.75 (Appendix Table A.3.5). In case of rural areas of the districts, the coefficient of variation for population per bed is 36.99 while for that of the urban areas, it is 57.13. Thus, apart from inter-district disparity, there is also a stark rural-urban difference in case of number of population per bed. Kolkata has only 188 population per bed, while it is as high as 2,519 in case of Uttar Dinajpur. In Hugli, there are 3,711 population per bed in rural areas and 409 in urban areas while the corresponding figures are 4,914 and 306 in Murshidabad. However, in the overall, number of population served per bed in these two districts shows a large gap; it is 993 for Hugli and 1,687 for Murshidabad, which is a little less than a double of that of Hugli. The graph in Fig. 3.15 represents the number of population per bed for rural and urban areas in the districts of West Bengal.

**Fig. 3.15**

**Population Per Bed**

**Districts of West Bengal, 2007-08**

Source: Health on the March, 2007-08

The graphical representation (Fig. 3.16) of Appendix Table A.3.6 depicts the number of population per doctor and per nurse in West Bengal over the years 1981 to 2007. The population per nurse used to be much higher than that of the doctors in the earlier years which in the present years have declined significantly. Now, as per 2007 records, the number of population per nurse (1,628) is much lower compared to that of the population per doctor (1,868).
Appendix Table A.3.7 represents the rural-urban difference in the number of population per bed and their percentage change over the decades (1983 – 2007). There used to be a huge rural-urban difference in case of population per doctor in the previous decades and the gap has now, over the
years, narrowed down (Fig. 3.17). Although the change was quite gradual and often negative over the years, the maximum percentage change have been recorded in the years 1999, 2004, 2006 and 2007 (Fig. 3.18).

Fig. 3.18

![Percentage Change in Rural - Urban Difference in Population per Bed](image)

Source: Health on the March, 2007-08

The analysis of the RCH-RHS II and Facility Survey Report (2002-04) at the all India level and West Bengal has been represented in the following section. This will help to compare the health statistics provided by the government records and those represented in these two survey reports.

The Appendix Tables A.3.8 and A.3.9 summarises the availability of health facilities within the surveyed villages and also provides the information on the distance of the villages from the nearest health facility in India and West Bengal. From the tables it can be depicted that the SCs mostly serve the majority of the rural population within the villages at both the national (42.4%) and state levels (48.2% in West Bengal). In case of PHCs, the proportion of rural population served most are those within a distance of less than 5 km (31.0% and 36.6% respectively). In case of CHCs or Referral Hospitals, the distance increases to more than 10 km radius in serving most of the rural population, (52.4% for India and 34.6% for West Bengal). Similar pattern follows in case of Government Hospitals (63.7% for India and 72.0% for West Bengal) and Private Hospitals (48.1% for India and 56.1% for West Bengal).

A contrasting picture prevails in case of ISM health facility wherein in India the majority of the rural population served by them falls within the distance radius of more than 10 km (41.4%) while for that of West Bengal it is mostly within the village (29.4%). In India, most of the rural population served by Government Dispensary falls in the distance radius of more than 10 km.
(48.6%), while on the contrary, the proportions of rural population served by them do not vary much in terms of distance and ranges (within 9.0% to 15.0% in West Bengal). The proportions of rural population served by the Private Clinic ranges between 20.0 and 30.0 per cent both in case of India and West Bengal without varying much within all the distance categories.

In Appendix Table A.3.10, the proportion of rural population who live in the villages served by various health professionals are represented for India and West Bengal. In India, about 84.0 per cent of rural inhabitants live in villages that have an Anganwadi (a nursery school for children aged 3 – 6 years) and about three-fourth of the rural households are in villages where Anganwadi workers are available. The corresponding figures for West Bengal are 87.2 and 79.5 per cent respectively. In India, about one-third of the rural residents live in villages that have a private doctor, about a quarter live in villages visited by a doctor, about 16.0 per cent with homeopathy doctors, about 30.0 per cent are served by village health guide, a little less than two-fifth by TBA and about 23.0 per cent by traditional healer. More than half of the rural population live in villages that have a Dai. While in West Bengal, about one-fifth of the rural residents live in villages that have a private doctor, about 15.4 per cent live in villages visited by a doctor, about 35.6 per cent with doctor practicing homeopathy, about one-third are served by village health guide, a little less than two-fifth by TBA and about 35.9 per cent by a traditional healer. A little less than two-third of the rural population lives in villages that has a Dai.

The proportions of rural household population served by various public health care facilities and health professionals within the villages are represented in the Appendix Table A.3.11 for India, West Bengal, Hugli and Murshidabad. It can be seen that a little more than two-fifth of the rural population are served by SCs within the villages in India, which are about a little less than half proportion in West Bengal and Hugli and almost 60.0 per cent in Murshidabad. In case of PHCs within the villages, it is 15.7 per cent of rural population of India, with 9.8 per cent in West Bengal, a mere 3.2 per cent in case of Hugli while a contrastingly high 23.3 per cent in case of Murshidabad. This is because the PHCs in Hugli are located mostly outside the village areas and within the demarcation of Census towns. Almost about 50.0 per cent and above of rural household population are served by any government health facility within the resident villages for India, West Bengal, Hugli and Murshidabad. In India, more than two-fifth of the rural population live in villages with doctors wherein the share of West Bengal is 31.5 per cent, that of Hugli is 63.9 per cent and 47.5 per cent in Murshidabad. Quite a contrast is visible in case of proportions related to rural population living in villages with TBA for Hugli and Murshidabad where the corresponding figures are 23.0 and 61.1 per cent respectively. This is due to the fact that the proportion of institutional delivery is more in Hugli wherein the requirement of a TBA is low. However, the proportions are almost similar in case of Anganwadi workers within the villages serving the rural population in Hugli (86.9%) and Murshidabad (88.1%).
Appendix Table A.3.12 represents the adequacy of all types of health facilities in a hierarchical order in terms of infrastructural facilities, staff positions, supply of kits and equipments and training (in case of PHCs only) in India and West Bengal (based on RCH Project Phase II Facility Survey, 2003). In case of all the health facilities each category with at least 60.0 per cent of the critical inputs is taken as adequately equipped in that particular aspect. Apart from these, the percentage of health facilities (DHs, FRUs and CHCs) which have attended to referred cases during the three months immediately preceding the survey are also being represented.

In India, about 92.7 per cent of the District hospitals have adequate infrastructural facilities, while about 79.5 and 84.1 per cent have adequate staffs in position and equipments available. While it is quite alarming to note that only about 44.9 per cent of DHs have sufficient supply of kits. In West Bengal, all the DHs are adequate in infrastructural facilities with about 87.5 per cent of them having adequate availability of equipments. Three-fourths of the DHs in West Bengal have sufficient number of staffs in position. But only about a little higher than one-third of them have adequate supply of kits. In India, about 37.5 per cent of DHs have attended to referred cases during three months preceding the survey which is only a quarter in case of West Bengal.

In case of the First Referral Units, the situation of infrastructure is much better than that of other components with 75.8 per cent being adequately equipped in India. The condition is very discouraging in case of adequacy with staffs in position and supply of kits in India wherein the proportions are only in about one-third of the FRUs recording about 37.0 and 31.6 per cent respectively. However, about three-fifths of the FRUs in India are adequately equipped with equipments. In West Bengal, about 84.7 per cent of the FRUs have adequate infrastructure and only about 28.2 and 17.6 per cent of them have sufficient staffs in position and supply of kits respectively. Here, about half of the FRUs are adequately equipped. At the national level, only four FRUs out of ten have attended to referred cases during three months preceding the survey. The corresponding figure is only three out of ten in case of West Bengal.

In India, about a little less than two-thirds of the CHCs are amply equipped with respect to infrastructure. The situation of staffs in position and supply of kits is poor with a proportion of only 14.2 per cent of the CHCs being adequately equipped in staff and about a quarter being sufficient in supply of kits. A little less than one half of the CHCs has adequate equipments. In West Bengal, about a little more than two-fifths of the BPHCs have infrastructural adequacy. However, the conditions are rather dismal in case of sufficient staffs in position (1.2%) and adequacy of equipments (3.6%). The supply of kits is also adequate in about 12.0 per cent of BPHCs in West Bengal. A little less than 46.4 per cent of the CHCs in India have attended to referred cases in West Bengal.

A little less than one-third of the PHCs in India have proper infrastructure, while about four in every ten PHCs are adequate in equipment and supply of kits. A little less than one half of the
PHCs in India has sufficient staffs in position and about one-fifth of the PHCs are adequate in training. However, the situation is quite disheartening in case of West Bengal where only about 12.0 per cent of the PHCs have proper infrastructure, and less than 10.0 per cent of PHCs are adequate in staffs in position, equipment and training. Supply of kits is adequate in about 23.0 per cent of PHCs in West Bengal. Thus we can highlight the fact that the situation of PHCs, in terms of adequacy in terms of all the critical inputs with special reference to infrastructure and training, is far from satisfactory.

At the national level, about three-fourth of the SCs cover less than six villages and the remaining one-fourth cover more than six villages. In case of West Bengal, about four-fifth of the SCs covered less than six villages. About 47.6 per cent of the SCs have the nearest village located within a radius of one kilometre and around 11.5 per cent have the farthest villages located beyond a distance of 10 km and more in India, which are 73.2 and 6.2 per cent respectively in West Bengal. At the national level, about 74.2 per cent of the SCs are located at less than one km distance from the PHCs and the remaining SCs are located at a distance of more than 10 km. In West Bengal, however, almost 87.6 per cent SCs are located at less than one km distance from the PHCs and it is only 12.4 per cent where the SCs are located at a distance of more than 10 km.

In India, about 45.2 per cent of SCs operate from their own government buildings whereas in West Bengal, it is only about 13.6 per cent. The proportion of SCs housed in government buildings which are having tap water supply is only 21.1 per cent in India whereas the remaining SCs have their water supply from other sources like tube well, hand pump, bore well and others; while in West Bengal, almost 89.5 per cent of SCs have their water supplies from other sources and only 8.8 per cent have tap connections. About 43.2 per cent of the SCs operating from government buildings in India have electricity facility; in West Bengal this figure is only 14.0 per cent. About three-fourth of the SCs have a toilet facility in India compared to 64.9 per cent in West Bengal.

About 58.7 per cent of the SCs at the national level have a sanctioned post of male health worker. Out of those, only 67.7 per cent are filled. In West Bengal, though about 93.3 per cent of SCs have sanctioned post for male health worker, only 53.6 per cent of SCs have their male staff in position. The role of female health worker is very important in the SCs. In India, 95.1 per cent of the SCs have a female health worker in position out of the 96.7 per cent sanctioned posts. However, in West Bengal almost 99.0 per cent of SCs have sanctioned post for female health worker and 98.6 per cent of those SCs have their staff in position.

As per the norms, the presence of the ANMs all 24 hours at the SCs is essential for the people to avail the health services. Accordingly to facilitate this, the government has directions on providing quarters to the ANM at the SCs, if not so then the ANM should stay somewhere else. For the country as a whole, in about 22.5 per cent of SCs, the ANMs are living in the quarters attached to the SCs, while in about 15.9 per cent of SCs, the ANM stays in her own house in the village where
the SC is located. In West Bengal, the respective figures are only 0.2 and 7.2 per cent depicting an unsatisfactory situation. At the national level, only in 21.7 per cent of the SCs, the ANM stay in the SC area and in about 39.7 per cent of the SCs, they stay outside the SC area. However, in West Bengal, in most of the SCs the ANM stay outside the SC area (87.8%), while only in 4.3 per cent of the SCs the ANMs stay in the SC area.

The ANMs are to make home visits in the SC's area to meet the needy people particularly, adolescent girls, pregnant women, children, and others to provide advice, RCH and other health services which form their prime duty and responsibility. The situation in India is quite rational where the ANMs have made home visits during two weeks preceding the survey in about 95.7 per cent of the SCs and the corresponding figure is about 94.5 per cent in West Bengal.

The status of in-service training of at least one staff of the SCs with focus on IUD, CDD/ORT, UIP, CSSM, RCH and ARI is quite serious at all India level as well as at the state level where only a few SCs are having their staffs trained for the above-mentioned specialisation. The percentages range between 11.0 and 19.0 per cent in case of India and between 11.0 and 14.0 per cent in case of West Bengal. A negligible proportion of 1.2 per cent of SCs' staff received training for IUD insertion in India while none of the staff of SCs are trained for IUD in West Bengal.

The supply status of contraceptives and vaccines for reproductive and child health care services depicts a very satisfactory picture. At the national level, above 90.0 per cent of the SCs have a regular supply of contraceptives including condoms, oral pills, IUD and other, vaccines like, IFA (large), Vitamin A, ORS and also the Disposable Delivery Kit (DDK). West Bengal also have reasonable proportions of around 90.0 per cent in most of the supply items except for that of DDK which scores of about 69.0 per cent only.

There are certain equipments which are essential for providing RCH services at the SCs which includes kits like Kit A, Kit B, Kit C and equipments comprising of needle, syringe, immunisation card and eligible couple registers. In India, 97.0 per cent of the SCs received Kit A and 99.4 per cent of those SCs have utilised them. About 95.2 per cent of the SCs have got supply of Kit B and 98.8 per cent of those SCs have utilised them. The situation is quite similar in case of West Bengal for availability and utilisation of Kit A and Kit B. However, the availability of Kit C in India as well at the state level is quite unsatisfactory. Only 26.0 per cent of the SCs in India have received Kit C although the utilisation is more or less satisfactory. But in case of West Bengal, only 1.4 per cent of the SCs have received Kit C and none of them have utilised it. Thus it can be highlighted that Kit A and Kit B are more or less equally available at the SCs, but the availability of Kit C is less compared to Kit A and Kit B. At the national level, there are adequate availability of needles and syringes with regular supplies in more than 90.0 per cent of the SCs wherein in West Bengal, the proportions are about 83.0 and 77.8 per cent for adequacy of needles and syringes at the SCs respectively. The immunisation card and eligible couple register are the important ledgers to

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maintain the immunisation and eligible couple records respectively. In India, about 91.9 and 85.3 per cent of the SCs have adequate stock of immunisation cards and eligible couple registers respectively whereas the corresponding figures are around 84.6 and 86.1 per cent in West Bengal.

All the SCs are supposed to deliver various services in the area of maternal and child health care, family planning and others. As per the performance of the SCs in India during the three months preceding the survey, about 75.0 per cent of the SCs have performed IUD insertions, about 86.8 per cent of the SCs have distributed condoms and about 92.2 per cent of SCs have distributed oral pills as part of the family planning services. About 96.6 per cent of the SCs in India have registered ANC cases and an equal proportion of cases have been provided with ANC and PNC services separately. Deliveries have been conducted in more than four-fifths of the SCs in India. About 90.9 and 95.1 per cent of SCs have provided immunisation services to children and infants respectively. At the national level, a little less than four-fifths of the SCs also have treated cases of ARI and Diarrhoea.

In case of delivery of family planning services in West Bengal, only about a quarter of the SCs have conducted IUD insertions while the distribution of condoms (90.2%) and oral pills (83.3%) are more or less satisfactory. Under the heads of maternal care, about 92.6 per cent of SCs have registered ANC cases and have also provided ANC services and 91.4 per cent of the SCs have provided PNC services. However, only 10.0 per cent of the SCs have conducted delivery unlike the corresponding national proportion. About 93.0 per cent of SCs in West Bengal have provided immunisation services to children and infants while about 90.7 per cent of the SCs also have treated children with ARI and Diarrhoea.

Thus it can be highlighted that the provisioning of health care services in West Bengal has performed satisfactorily in some cases while much is needed to be done to strengthen the infrastructural facilities of health institutions for the rural areas to meet the needs of the people.

3.9 Financing of Health Services

The health system of a country deserve the highest priority to improve the health of the population as they provide the critical interface between life saving and life enhancing interventions and the people who need them (Deepa and Vinish, 2004). The Government of India and the states spend less than one per cent of the nations Gross Domestic Product (GDP), or about three per cent of all government spending, on health. Although not quite as large as the world average of 5.5 per cent of GDP spent on health, it still sounds significant. In India, the total health expenditure has been 5.3 per cent of the GDP in 1997 and 5.1 per cent in 2001 (World Health Report, 2003). This indicates a marginal decline in the proportion of health expenditure as a percentage of GDP. Ninety per cent of the health finance is routed through the state (provincial) governments since the Indian Constitution specifies that a large number of health related activities fall within the ambit of individual states (GOI, 1996; Reddy and Selvarajau, 1994). Also, the central government spends most of the
remaining share with local governments such as municipalities accounting for about 2.5 per cent (World Bank, 1995).

Over the various five-year plan periods, the share of the government investment outlay in the health sector has increased from 3.4 per cent during the 1st Plan (1951-56) to 6.5 per cent in the 11th Plan (2007-2012) as per the records (Appendix Table A.3.14). The proportional share in the family welfare has also increased from 0.1 per cent in the 1st Plan to 1.83 per cent during the 10th Plan. However, during the 11th Plan, in 2005, the two separate departments of health and family welfare have been merged.

The total expenditure on health as a percentage of GDP has been 5.3 per cent in 1997 and 4.8 per cent in 2003 (Appendix Table A.3.15). About 24.8 per cent of the total share of expenditure on health is provided by the government and a large proportion of 75.2 per cent being provided by the private sector in 2003. However, the public expenditure share has proportionally increased over the years with marginal decease in the private sector share since 1997. Government expenditure on health as a percentage of total government expenditure has been 3.2 percent in 1997 and 3.9 percent in 2003. Out of the total expenditure on health, 1.6 per cent has been provided by external resources in 2003.

Poor patients depend heavily on public health services because the cost of treatment of illness is higher in private health care facilities. The patients with higher levels of income use private health care facilities because of better quality. However, other studies suggest that only 35.0 per cent of the patients seek care from public facilities for major illness and largely depend on private health care facilities, irrespective of their level of income (Selvarajau, 2003). Private health spending, i.e., out-of-pocket expenditure in India is one of the highest in the world and indicates an inefficient way to finance healthcare that leaves people highly vulnerable.

The per capita public expenditure on health has increased over the decades and there has been a giant leap during the 1985-86 where it almost doubled from the previous years (Appendix Table A.3.16). Since then, there has been an increase in the amount in almost geometric progression and it has been Rs 214.62 during 2003-04. But considering the proportional progress in the economy of the country, the share is quite a meagre one.

Private household health expenditure as a percentage of total expenditure on health has been 84.0 per cent in 1997 and 82.0 per cent in 2001. On average, a household spends 250 rupees per capita per annum on health services. Health expenditure is 40.0 per cent higher in urban households than in rural households. Health expenditure is also positively related with overall household expenditure (Shariff, 1995).

Appendix Table A.3.17 presents the trend in household health expenditure in India in different domains. The growth rates in household expenditure have been maximum under the heads of in-patient care in rural areas (18.84%) and postnatal care (17.49%). In India, patients from both
rural and urban areas overwhelmingly choose public facilities (Government hospitals, Community Health Centres and Primary Health Centres) for inpatient care. However, it is quite alarming to note that the proportional change in the growth rate of household expenditure during child birth (5.32%) has been the lowest. There have also been significant changes in the share of household expenditure in antenatal care and immunisation.

Poor public health expenditures remain the predominant cause of the unsatisfactory performance of the health system, though serious deficiencies in efficient utilisation of available resources also contribute substantially to poor health outcomes. The declared policy, for the state to provide free universal health care to the entire population, is totally divorced from ground realities. India has one of the highest levels of private financing, and out-of-pocket expenses, estimated to be as high as 97.0 per cent. On account of its diverse socio-economic conditions and health outcomes, India's health financing strategy needs to be state-specific, even while following the broad framework of the national strategy.

Under the provision of the NRHM, the revitalisation of the existing infrastructure of the public health delivery system needs to be addressed along with fresh construction or renovation wherever required. This involves simultaneous modifications in manpower planning as well as infrastructure strengthening. The Mission has planned to provide IPHS at all levels, that is, SC, PHC/CHC and DHs. It has proposed provisions for untied funds at PHC/CHC/district levels along with funds meant for taking up innovative schemes at district/State/Central level. The funds would be released as untied funds to the Rogi Kalyan Samitis (approved by Cabinet) as 100 per cent grant by Government of India (GOI) during 2006-07, while it would be in the ratio of 2:2:6 with regard to State/Internal/GOI from 11th Plan onwards. The Mission also ensures the availability of requisite equipments and drugs at all the public health care facilities which would be progressively decentralised. The improvement of outreach activities in un-served and underserved areas specially inhabited by vulnerable sections through provision of Mobile Medical Units (MMU) in every district has been proposed, which would also serve the Anganwadi centres.

Appendix Table A.3.18 represents the approved 10th Plan outlay (yearwise) by the central government for various sectors under the health department like health, family welfare and programme initiatives like NRHM and AYUSH. A total of Rs 10,668.61 crores of funds has been allocated for the NRHM programme for the year 2007-08, an increase from Rs 7,189.20 in the initial years of the NRHM programme implementation (2005-06).

The funds under the NRHM budget head would flow through the integrated Health Society at the state and the district levels. The norms under which the funds would be allocated by the centre to the states and by the states to districts would be developed on the basis of population, disease burden, health indicators, state of public health infrastructure and so on.
The financing through the NRHM budget head would provide the much needed funds to the district level to facilitate better health outcome. At the cutting edge, that is district level, convergent action within the umbrella of the Zila Parishad is expected to improve efficiency, effectiveness and outcomes of interventions in sectors like health, development of women and child, drinking water, sanitation, youth and adolescent, and the school education. Local specific decentralised action involving community organisations and PRIs, is expected to provide a thrust for outcome based approach to this vital sector. However, in view of the fact that the current public health expenditure is a paltry 1.0 per cent of the GDP, the quantum jump is indeed timely. Moreover, this is in line with the NCMP which seeks to increase the public health expenditure to 2 – 3 per cent within the next five years. The above target however cannot be achieved unless the states also set up their expenditure on health very significantly as they together contribute almost four-fifth of the current expenditure. It would be the aim of the NRHM to increase the share of central and state governments on health care from the current 20:80 to 40:60 sharing in the long run. With this in view, it is proposed that under the Mission, 100 per cent grants be provided to states in the remaining period of the 10th Plan. During the 11th Plan period the states would be expected to contribute 15.0 per cent to make the share of the Central Government 85.0 per cent. From the 12th Plan onwards the relative share of the Centre and the States could be a sustainable 75:25. There should be regular monitoring and review of the progress of the scheduled framework of NRHM for effective implementation and success of the Mission.

Appendix Table A.3.19 provides the details of the plan outlay and expenditure for family welfare during the 10th Plan and the initial years of the 11th Plan according to the different scheme heads. In the 10th Plan, a total of Rs 26,159.00 crores has been allocated for family welfare; around Rs 6,551.05 crores has been actually spent under the various heads of family welfare out of the total budget estimate of Rs 9,920.18 crores in 2006-07. The total budget estimate is Rs 9,766.60 crores for the various schemes of family welfare in 2007-08. A total of Rs 9,663.00 crores has been allocated for the rural family welfare services (Subcentres) in the 10th Plan; the budget estimate has been Rs 1,556.68 crores in 2006-07, out of which the actual expenditure has been Rs 977.12 crores. For the year 2007-08, the budget estimate for rural family welfare is Rs 1,939.00 crores. However, the proportion of funding in the budgets under the 10th Plan for the urban family welfare services is quite low in comparison to its rural counterpart. For routine immunisation and Pulse Polio Immunisation, the allocation has been Rs 1,505.02 crores and 3,110.00 crores respectively under the 10th Plan. The actual expenditure in 2006-07 under routine immunisation has been Rs 228.83 crores for which the budget estimate has been Rs 345.00 crores. For Pulse Polio Immunisation, actual expenditure has been Rs 1,064.60 crores in 2006-07 for which the budget estimate has been Rs 1,049.00 crores. For the year 2007-08, the budget estimates are Rs 317.00 crores for routine immunisation and Rs 1,341.48 crores for Pulse Polio Immunisation. Under the RCH flexible pool for State PIPs, Rs
3,094.70 crores has been allocated in the 10th Plan, out of which the actual expenditure has been Rs 1,427.03 crores in 2006-07 wherein the budget estimate has been Rs 3,648.90 crores; for 2007-08, the budget estimate is Rs 1,725.00 crores. Under the Mission flexible pool, Rs 2,069.36 crores has been the actual expenditure in 2006-07 for which the budget estimate has been Rs 1,943.18 crores; and in 2007-08, the budget estimate is Rs 3,155.32 crores which is quite high compared to the previous year. For RCH training, Rs 250.00 crores has been allocated in the 10th Plan; however, only Rs 1.84 crores has been utilised in 2006-07 out of the budget estimate of Rs 7.38 crores. In 2007-08, the budget estimate is Rs 6.00 crores for RCH training.

Apart from the plan outlay for family welfare, the general health section comprises of the plan and budgetary allocations for the development and maintenance of government hospitals and dispensaries and for medical education, training and research. In the 10th plan, out of the total outlay of Rs 5,436.20 crores under the various purely central schemes, Rs 567.00 crores has been allocated for hospitals and dispensaries and Rs 2,953.60 crores for medical education, training and research (Appendix Table A.3.20). In 2006-07, the actual expenditure has been Rs 708.37 crores for hospitals and dispensaries and Rs 1,518.16 crores for medical education, training and research. The approved outlays under the 11th Plan are Rs 646.25 crores for hospitals and dispensaries and Rs 1,448.04 crores for medical education, training and research in 2007-08.

For RCH implementation and flow of funds, the states that have established their ability for expenditure and utilisation of funds, based on their performance, are provided funds through State Finance Department at present. Otherwise, funds are rooted through a State Committee on Voluntary Action (SCOVA), a registered society with the State Chief Secretary as chairman and State Health Secretary (Family Welfare) as vice-chairman. This provides flexibility in fund utilisation on various activities like those of contractual staff and experts.

The Government have approved all the state/UT’s Programme Implementation Plans for implementation of RCH Phase – II from the year 2005-06. The approved Project Implementation Plans for the RCH programme Phase – II for 2005-06 for the state of West Bengal has been Rs 95.50 crores (Family Welfare Statistics in India, 2006).

The budgetary allocation under the health sector during the 10th Plan in West Bengal has been Rs 1,03,618.00 lakhs (4.76%) out of the total outlay of Rs 21,76,734.30 lakhs for all the states (Appendix Table A.3.21). The approved outlay for 2006-07 has been Rs 44,289.68 lakhs under the health sector. The actual expenditure under the health sector in West Bengal has been Rs 15,392.06 lakhs in 2004-05 and the revised estimate has been Rs 18,590.41 lakhs in 2005-06.

In 2007-08, the total on-budget outlay for the health sector in West Bengal is Rs 1,964.09 crores out of which the expenditure is estimated to be Rs 1,802.51 crores\(^3\). The off-budget estimate in 2007-08 is Rs 654.19 crores, the fund of which is released on the basis of the performance of the

\(^3\) Departmental Budget Document, Demand No. 24, Budget Publication No. 17, Government of West Bengal.
districts of West Bengal; and the estimated expenditure is Rs 312.71 crores. Under the RCH programme, the allocation of on-budget is Rs 138.09 crores and the expenditure is Rs 170.67 crores in 2007-08 which is utilised for establishment expenditure and running costs. Out of the off-budget allocation of Rs 190.89 crores, the actual expenditure is Rs 106.07 crores in 2007-08 which is utilised for the various components of RCH programme and flexible pool PIPs.

The proportion of public expenditure out of total expenditure on health has been 23.4 per cent in 2001-02 in West Bengal, higher than that of national level of 20.8 per cent (Appendix Table A.3.22). The per capita health expenditure has been Rs 775 in West Bengal (2001-02) and the public share has been Rs 181 while the private share has been Rs 593, implying a major gap between the two. There is a great demand of increasing the public share of expenditure on health so that all the section of the people can utilise the health care services. Thus it can be highlighted that the financing of health care sector needs proper revitalisation and its monitored evaluation will result in effective utilisation of the funds allocated in the various sectors.

3.10 Health Insurance

In India, where the poor and even the middle classes have no risk-pooling mechanisms, the spending in private health care is essentially out-of-pocket at the point of service. The private health system works for profit. Not surprisingly, poor households purchase less curative health care from the private sector than the richer ones. More than 40.0 per cent of hospitalised persons borrow money or sell assets to cover expenses. Yet because of the low level of public sector contributions to health in India, 80.0 per cent of total health spending is comprised of private expenses – one of the highest levels in the world. However, health insurance and risk-pooling systems are virtually nonexistent in India, and the poor, therefore, cannot access care in the private health system. The best future course would be to provide social health insurance to the poor so that they can access available health care in general and especially maternal and child health care.

Household expenditure on health care in India has been more than Rs. 1,00,000 crores in 2004 – 05. Most of it has been out-of-pocket and has been incurred during health distress in unregulated private facilities, leading to the vicious circle of indebtedness and poverty. As a matter of fact, in a country over a billion people, barely 10 million are covered under the private health insurance schemes. In order to reduce the distress of poor households, there is an imperative need for setting up effective risk pool systems. Involvement of NGOs and community based organisations as insurance providers and as third party administrators can help to generate more confidence in the risk pooling arrangement being pro-people and in the interests of poor households. Innovative and flexible insurance products need to be developed and marketed that provide risk pooling from government and non-governmental facilities.

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In order to harness the expanding network of private health services for maternal and perinatal-neonatal care, its access to the poor has to be ensured through state funding, health insurance or risk-pooling systems. Some innovative models of such approaches in the NGO sector (SEWA, Gujarat; Ambikapur, Health Association, Orissa) and in the co-operative sector (milk cooperatives in Gujarat and Karnataka) have shown the way forward. The Self Employed Women’s Association (SEWA) is a trade union of self-employed poor women. It has started a package of health, life and asset insurance for its members in the last 10-12 years. This scheme is innovative in the sense that it covers maternity costs which most commercial insurance do not entertain. It is clear that the national goal of reducing maternal mortality has not been reflected in health insurance so far. The persisting high MMR is a strong public health concern that justifies the extension of insurance benefits to delivery.

The 10th Plan has allocated Rs 150.00 crores for Family Welfare linked Health Insurance Plan; only Rs 2.37 crores has been utilised in 2006-07 out of the budget estimate of Rs 10.00 crores. For 2007-08, the budget estimate is Rs 11.00 crores (Appendix Table A.3.19).

The NRHM recognises that in order to reduce the out-of-pocket expenditure of the rural poor, there is an imperative need for setting up effective risk pooling systems. State specific, community oriented innovative and flexible insurance policies need to be developed and disseminated. Effective and visible risk pooling and social health insurance to provide health security to the poor by ensuring accessible, affordable, accountable and good quality hospital care forms the supplementary strategies of the Mission.

3.11 External Assistance to Health Sector

In health, the external assistance has never been more than 1 – 3 per cent of the total public health spending in any given year. Yet, external assistance has a profound impact on health; technical support obtained from such assistance has made a significant contribution for hastening India’s demographic and epidemiological transition. According to the UNDP’s Human Development Report 1992, development assistance from industrialised countries has been equivalent to 0.35 per cent of their combined GNP against the 0.7 per cent norm recommended by the UN General Assembly. However, this assistance has not been uniformly spread – the ten countries accounting for more than 72.0 per cent of the world’s poor have received hardly 27.0 per cent of total Official Development Assistance (ODA). Over the years, the share of external assistance has declined since 1988 which recorded the lowest ODA per capita in 1998 among selected countries, as per the reports. Out of the total ODA, the social sector accounted for less than 8.0 per cent; the estimate for the health sub-sector is not more than 3.0 per cent which appears to be changing for the years 1990-98 wherein the percentage share has risen from 3.17 to 6.69 per cent.

Since the mid-1990s there has been an increase in the quantum of funding and a perceptible shift in the content of funding compared to earlier years. Till 1994, donor aid has been by and large
in the area of family planning, primary health care, and MCH, with a focus on projects related to the strengthening of service delivery, capacity building, training and IEC. From 1995, the portfolio for external assistance has changed in terms of size and scale of funding, indicating a decline in the share of family welfare as a percentage of total donor aid to health; while in 1991, primary health care and immunisation programmes accounted for more than 75.0 per cent of the total ODA for health, the percentage share have declined to 40.0 per cent in 1995.

During the initial years of development, external assistance to health has been in the form of grant-in-aid, largely from bilateral donors such as USAID, DFID and SIDA, for specific programmes in family planning, leprosy and malaria eradication. Assistance under the IDA of the World Bank constituted about 10.0 to 20.0 per cent of the total external aid flows to health, and this has been mainly utilised for the construction of Subcentres, post-partum facilities and family welfare centres. With the introduction of the India population projects in the early 1980s, the World Bank gradually emerged as the principal donor. Funds have been provided under these projects for the construction of health centres, the provisioning of equipment and supplies, and the training of health workers. Substantial assistance has also been given to reproductive health which includes traditional concerns with MCH, as well as the control and prevention of reproductive tract infections. There has been an increase in the total outlay with an increase in the share of total aid to 45.0 per cent during 1980-90. This period also has seen an expansion in the lending portfolio of other bilateral donors. A major innovation has been UNICEF fund support to establish the cold chain infrastructure for the nationwide campaign against vaccine-preventable diseases. However, the funding outlay by the various external agencies like World Bank, USAID, UNICEF, have decreased over the decades.

The rapid expansion of primary health care facilities as a part of the minimum needs programme has been at the cost of reduced investment in district and sub-district hospitals, affecting the development of a referral system. Poor quality services resulted in the proliferation of the private sector and consequent out-of-pocket expenditure on minor ailments, communicable diseases, deliveries and respiratory infections. District hospitals, area hospitals at the sub-district levels, and CHCs at the block level are being upgraded and strengthened through the funded projects. The DFID has also gradually shifted lending to an area approach, with assistance provided to projects in West Bengal for disease control programmes, apart from other states. The EEC, a late entrant, focuses on the improvement of delivery systems at the district level. The World Bank, WHO, UNICEF, UNFPA, USAID and DFID all consider newborn health as a high priority area for their respective country programmes.

India is the largest polio endemic country in the world and annually accounts for approximately 40.0 per cent of the cases globally. Therefore, the progress in India is critical for the success of the global initiative. The eradication effort of the government of India is supported by a reliable international coalition of partners, including among others, Rotary International, United
States through the Centre for Disease Control and Prevention and USAID, UNICEF, WHO, Japan through JICA, Great Britain through DFID, Denmark through DANIDA, Germany through KfW, Canada through CIDA, Government of Italy, World Bank, European Union, as well as government of other non-endemic countries. There has been a convergence of all donors in the Pulse Polio Programme: pooled bilateral and multilateral funding support the National Immunisation Days Initiative for polio eradication. Donors such as SIDA or NORAD have mainly provided funds for special programmes such as CSSM, and leprosy/polio eradication, through a consortium of donors or through the WHO. While all donors without exception have focused on primary health care, only JICA has assisted initiatives to bridge the investment gaps in strengthening tertiary care. JICA (and now France) have substantially assisted the NICED in Kolkata in its basic research on cholera.

Timely supply of drugs of good quality which involves procurement as well as logistics management is of critical importance in any health system. At the level of the Central Government, with the support of the World Bank and the DFID, an Empowered Procurement Wing (EPW) has been set up which would be the nodal agency for all procurement matters.

The establishment of the Technology Mission for the Universal Immunisation Programme (UIP) has attached substantial assistance from a UNICEF-led consortium of donors to establish a cold chain and to supply associated inputs. This has helped in the upgradation of infrastructure and enabled campaigns against vaccine-preventable diseases, significantly reducing the disease load among children. India has virtually eliminated polio with the assistance provided on an unprecedented scale for the Pulse Polio Campaign. These successes have strengthened and expanded the original design of the MCH programme into a comprehensive RCH strategy, with a primary focus on the reduction of maternal and child mortality. In proportion to the total Central (Plan) budget for health and family welfare, external assistance has steadily increased manifold over the years.

The programme of RCH II receives funding from three sources: the Government of India; pooled funding from DFID/World Bank/UNFPA and funding from other Development Partners (including EC, USAID, UNICEF and UNFPA). Over the years the proportion of external assistance for the implementation of RCH programme and Polio Eradication programme have increased progressively (Appendix Table A.3.23) amounting to a total of Rs 5,247.47 crores from 1997-98 to 2004-05.

Of all the donor agencies, the WHO occupies a unique position as the designated UN organisation for health. In India, WHO assistance are utilised for studies, surveys, evaluation; for the training of technical personnel within or outside the country; for the procurement of small equipment, essential drugs and medicines for emergencies; and for the mobilisation of technical expertise. Of late, the WHO has sought to strategise global health by focusing resources on identified priority areas such as polio eradication and safe motherhood and by identifying parameters.
and indicators for increasing the sensitivity of health systems to the needs of the poor. DFID has also
took up research studies in sector work to improve efficiencies in hospitals, the contracting of
services, the financing of PHCs, hospital autonomy, cost effectiveness studies, procurement systems
and decentralisation. The World Bank has also assisted a set of research studies which can be used
for drafting legislation, for legal frameworks regulating the private sector, and for the protection of
patients from market distortions. Thus donor lending has gradually shifted from passive,
programmatic assistance to the central government, to a more direct, active role in influencing and
building the capacity of governments to initiate health reform.

Utilisation of external assistance has shown under-performance due to: mismatch between
budget allocations indicated to the implementing department and assistance agreements with donor
agencies; inadequate preparation of projects; multiple goals and sub-goals in excess of capacity of
the implementing agency; unrealistic time frames; inadequate matching of financing and scheduling
of project activities; delay in filling up staff positions; and delayed completion of projects due to
system deficiencies.

3.12 Achievements of the Maternal and Child Health Care Services

An analysis of the achievements in the maternal and child health care services and health
outcomes can supplement the study by depicting the picture of the interlinkages between the
provisioning, accessibility and utilisation of the health care delivery services. Appropriate
provisioning of services can bear no fruitful results unless the targets are achieved as per the
guidelines of the programme implementation and its effective and efficient utilisation. The
evaluation of the achievements of maternal and child health care services can actually indicate the
impact of provisioning of services on its utilisation axes.

As per the report on maternal health care of the state health directorate, 106.71 per cent of the
estimated targets of registered ANC cases has been achieved (Table 3.7) thereby surpassing the
targeted number. About 65.03 per cent of target for three ANC checkups has also been achieved.
The proportion of targets achieved is quite high for immunised ANC cases (78.80%), TT given to
pregnant women (78.84%), Vitamin A oil given to pregnant women (74.12%) and IFA given to
pregnant women (69.95%). However, only 54.61 per cent of the target of institutional delivery has
been achieved. Only 6.75 per cent of the high risk cases of pregnancy have got detected. In 2006-07,
about 5,72,651 JSY beneficiaries have been registered.

In case of child care, almost 90.0 per cent of the targets have been fulfilled (Table 3.7). For
the separate vaccines, the percentages are 87.45 per cent for DPT, 84.72 per cent for Polio, 100.30
per cent for BCG and 85.56 per cent for Measles. Almost 82.74 per cent of the targets have been
fully immunised. National Polio Surveillance Project (Government of India and WHO) has been
established in 1997 that has been able to achieve heavy reduction in polio cases and AFP
surveillance indicators nearly reached international standards required for certification. However, the
percentage of children given IFA is quite low (32.84%). The drop out rate in immunisation from BCG to Measles is 14.7 per cent. Cases of children suffering from vaccine preventable diseases like neonatal tetanus, diphtheria, whooping cough, measles and polio have also been identified and deaths due to these diseases have been registered.

<table>
<thead>
<tr>
<th>Maternal Health</th>
<th>Achievement of Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of ANC Registered (against number of estimated pregnant women)</td>
<td>106.71</td>
</tr>
<tr>
<td>Percentage of 3 ANC check-ups completed</td>
<td>65.03</td>
</tr>
<tr>
<td>Percentage of ANC cases Immunised</td>
<td>78.80</td>
</tr>
<tr>
<td>Percentage of “high risk” cases detected</td>
<td>6.75*</td>
</tr>
<tr>
<td>Percentage of ANC cases given IFA (Folifer)</td>
<td>69.95</td>
</tr>
<tr>
<td>Percentage of Pregnant Women given TT</td>
<td>78.84</td>
</tr>
<tr>
<td>Percentage of Pregnant Women given Vitamin A in Oil</td>
<td>74.12</td>
</tr>
<tr>
<td>Percentage of Institutional Delivery</td>
<td>54.61</td>
</tr>
<tr>
<td>Percentage of Delivery by Untrained Personnel</td>
<td>9.71</td>
</tr>
<tr>
<td>Percentage of Maternal Deaths</td>
<td>Before Delivery 29.0</td>
</tr>
<tr>
<td>reported</td>
<td>During Delivery 37.0</td>
</tr>
<tr>
<td></td>
<td>Within 6 weeks of Delivery 34.0</td>
</tr>
<tr>
<td>Number of Beneficiaries under JSY</td>
<td>572651</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Children Immunised</td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td>Percentage Drop out from</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Percentage of Children given IFA (Folifer)</td>
</tr>
<tr>
<td>Percentage of Low Birth Weight Babies</td>
</tr>
<tr>
<td>Percentage of Infant Deaths reported</td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>Incidence of Vaccine Preventable Diseases (VPD)</td>
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<td></td>
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<td></td>
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</tbody>
</table>

(As compiled from District Monthly Reports)

* For year 2006-07
Source: Health on the March, 2007-08

India has the highest burden of maternal mortality in the world. Of the global toll of 529,000 maternal deaths each year, India accounts for one-fourth (136,000). Estimates of the maternal mortality rate (MMR) in recent years have varied from 400-540 per 100,000 live births (State of India’s New Borns, 2004). Haemorrhage, anaemia, puerperal sepsis, obstructed labour and abortions are the primary causes of maternal deaths in India.

Table 3.8 summarises the nature of maternal and child deaths in West Bengal. About 12.5 per cent of the maternal deaths have been within 20 weeks of pregnancy and 26.3 per cent during the period of after 20 weeks and before delivery. About one-fourth of the maternal deaths have been during labour and 35.5 per cent have been within six weeks of delivery. The major cause of maternal deaths have been due to toxaemia (20.1%) followed by haemorrhage (17.8%) and anaemia (10.9%). In case of neo-natal deaths, 84.7 per cent have occurred within seven days of birth and about 15.3 per cent between 8 to 28 days of birth.
Table 3.8 Some important indicators on Maternal deaths and Neo-natal deaths, West Bengal, 2007-08

<table>
<thead>
<tr>
<th>Delivery Status</th>
<th>Number of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 20 weeks of pregnancy</td>
<td>94</td>
<td>12.5</td>
</tr>
<tr>
<td>After 20 weeks but before delivery</td>
<td>197</td>
<td>26.3</td>
</tr>
<tr>
<td>During labour</td>
<td>193</td>
<td>25.7</td>
</tr>
<tr>
<td>Within 6 weeks of delivery</td>
<td>266</td>
<td>35.5</td>
</tr>
<tr>
<td>Total</td>
<td>750</td>
<td>100</td>
</tr>
</tbody>
</table>

B. Maternal deaths by cause of death

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaemia</td>
<td>82</td>
<td>10.9</td>
</tr>
<tr>
<td>Haemorrhage</td>
<td>133</td>
<td>17.8</td>
</tr>
<tr>
<td>P. Sepis</td>
<td>35</td>
<td>4.7</td>
</tr>
<tr>
<td>Toxaemia</td>
<td>151</td>
<td>20.1</td>
</tr>
<tr>
<td>Tetanus</td>
<td>24</td>
<td>3.2</td>
</tr>
<tr>
<td>Obstructed Labour</td>
<td>39</td>
<td>5.2</td>
</tr>
<tr>
<td>Other causes</td>
<td>286</td>
<td>38.1</td>
</tr>
<tr>
<td>Total</td>
<td>750</td>
<td>100</td>
</tr>
</tbody>
</table>

C. Neo-natal deaths within 7 days and above 7 days

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 7 days</td>
<td>6341</td>
<td>84.7</td>
</tr>
<tr>
<td>8 - 28 days</td>
<td>1148</td>
<td>15.3</td>
</tr>
<tr>
<td>Total</td>
<td>7489</td>
<td>100</td>
</tr>
</tbody>
</table>

(Based on hospital admitted cases as available from quarterly reports of PP Units)

Source: Health on the March, 2007-08

Percentage of deaths in the age group 0 – 4 years to total deaths by residence have been 14.5 per cent (total), 17.5 per cent (rural) and 7.0 per cent (urban) in West Bengal in 2005. Percentage of early neo-natal deaths to infant deaths has been 59.7 per cent in West Bengal. In rural and urban areas the values have been 62.1 and 46.0 per cent in 2005. Percentage of neo-natal deaths to infant deaths has been 76.8 per cent in West Bengal. In rural and urban areas the values have been 79.1 and 64.0 per cent in 2005.

Table 3.9 Achievements of Targets (in percentage) of Maternal and Child Health Care Activities, 2006 - 07

<table>
<thead>
<tr>
<th>Indicators</th>
<th>West Bengal</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetanus Immunisation for Expectant Mothers (TT + Booster)</td>
<td>81.5</td>
<td>79.0</td>
</tr>
<tr>
<td>DPT Immunisation for Children (II Dose)</td>
<td>95.0</td>
<td>94.7</td>
</tr>
<tr>
<td>Polio (III Dose)</td>
<td>95.7</td>
<td>94.6</td>
</tr>
<tr>
<td>BCG (below 1 year)</td>
<td>111.2</td>
<td>100.1</td>
</tr>
<tr>
<td>Measles (below 1 year)</td>
<td>91.0</td>
<td>90.5</td>
</tr>
<tr>
<td>DT Immunisation for Children*</td>
<td>65.3</td>
<td>75.9</td>
</tr>
<tr>
<td>TT (10 years)*</td>
<td>40.9</td>
<td>59.7</td>
</tr>
<tr>
<td>TT (16 years)*</td>
<td>32.0</td>
<td>50.7</td>
</tr>
<tr>
<td>Prophylaxis against Nutritional Anaemia among Women (completed)*</td>
<td>79.0</td>
<td>76.0</td>
</tr>
<tr>
<td>Prophylaxis against Blindness due to Vitamin A Deficiency - 1st Dose (below 1 year)*</td>
<td>86.4</td>
<td>107.5</td>
</tr>
<tr>
<td>Prophylaxis against Blindness due to Vitamin A Deficiency - 2nd Dose to 5th Dose (above 1 year)*</td>
<td>66.6</td>
<td>58.0</td>
</tr>
</tbody>
</table>

* Figures correspond to year 2005-06. All India percentage have been worked out after excluding need assessed of those States/UTs for which figures are not available

As per the records of the Family Welfare Statistics, in West Bengal about 81.5 per cent of the targeted expectant mothers have been given TT and booster dose, 95.0 per cent of targeted children have got immunised by the second dose of DPT and 95.7 per cent by third dose of Polio (Table 3.9). About 111.2 per cent of the targeted children below one year have been given BCG and 91.0 per cent have been given Measles. The achievements in case of immunisation of children above 10 years
by TT have been average in performance. About 79.0 per cent of women suffering from nutritional anaemia have been given IFA. Large proportions of children are also administered with the specified doses of vitamin A.

Private health facilities are greatly used in urban India. However, private practitioners are well spread even in remote and backward areas, and they are usually contacted for day-to-day health care needs before availing distantly located specialist public facilities. In some parts of India there are public, private and NGO services for maternal health, and given recent improvements in roads and access to transportation, many women with delivery complications are now reaching some EmOC facilities, even though most deliveries still take place at home. However, it can be observed that about 61.6 per cent of population in urban areas and 32.1 per cent of population in rural areas have gone to government health facilities to avail health services during child birth in West Bengal whereas in case of private hospitals the respective figures are 17.0 and 5.1 per cent only (Table 3.10). It is quite alarming to notice that about 46.2 per cent of the population in rural West Bengal have consulted the untrained functionaries for delivery, the proportion of which is quite low in urban areas (13.2%).

### Table 3.10 Percent Distribution of Live Births by type of Medical Attention received by the mother at Delivery by Residence, 2006

<table>
<thead>
<tr>
<th>Type of Medical Institution</th>
<th>Place of Residence</th>
<th>West Bengal</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Hospital</td>
<td>Total</td>
<td>37.5</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>32.1</td>
<td>16.1</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>61.6</td>
<td>43.4</td>
</tr>
<tr>
<td>Private Hospital</td>
<td>Total</td>
<td>7.3</td>
<td>12.9</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>5.1</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>17.0</td>
<td>27.6</td>
</tr>
<tr>
<td>Qualified Professional (Doctor, Nurse or Trained Midwife)</td>
<td>Total</td>
<td>15.1</td>
<td>26.7</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>16.6</td>
<td>29.7</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>8.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Untrained Functionary and Others</td>
<td>Total</td>
<td>40.2</td>
<td>38.4</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>46.2</td>
<td>45.4</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>13.2</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Source: Health on the March, 2007-08

Thus it can be summarised that the performance of the state of West Bengal in respect to certain aspects of maternal and child health care are quite remarkable. The state of care during pregnancy and child immunisation has achieved much more than that of delivery care. However, the issue to institutional delivery needs special attention for safe motherhood and child delivery and to improve the health of the mother and child.

### 3.13 Conclusion

It can be summarised that considerable thought process has gone in streamlining the health services delivery system in India over the years through the various plans and programme implementation in maternal and child health care. The provisioning of health care services in West Bengal has been uniform in its distribution pattern of public health facilities as per the population size but there is a relative concentration of private health facilities in urban areas. However, there has been regional differences in the provisioning of various health facilities over the districts. Thus it can
be said that *provisioning of maternal and child health care services is not uniform over space and there is an urban bias for private health care services.* In West Bengal non-resident status of health functionaries in spite of available accommodation, under-utilisation of Subcentres, in-patient facilities in the PHCs, shortage of manpower have been identified as some of the problems in the health care system. The RCH programme provides for additional ANMs, staff nurses or public health nurses at difficult SCs and PHCs to improve access to maternal care services. In many health facilities, quality of care is poor. Many of the buildings, especially critical ones such as operation theatres and labour rooms, badly need repair and renovation. There is a concentration of specialists in medical colleges and large district hospitals with an acute shortage of staff in sub-district hospitals and FRUs. Though the public health sector has been performing moderately in West Bengal, much is needed to be done to strengthen the infrastructural facilities of health institutions for the rural areas to meet the needs of the people. Studies have shown that expenditure on healthcare is a primary cause of indebtedness. Due to inadequate and nonperforming public health infrastructure, the poor are forced to approach private practitioners who charge exorbitant fees. It is thus vital to ensure access to functioning public sector health care facilities. The urgent need is to transform the public health system into an accountable, accessible and affordable system of quality services.

The financing of health care sector needs proper revival and its screened assessment will result in effective utilisation of the funds allocated to the various sectors. The external assistance from donor agencies has been involved in actively influencing and building the capacity of governments to initiate health reform.

There has been progressive achievements in maternal and child health indicators over the years in West Bengal. However, to strengthen the proper functioning of the health care services, it should be based on the community needs assessment and the specific provisions are to be actualised where they are mostly needed. The districts should be categorised according to their performance and additional support is to be provided to them for their progress. There should be regular monitoring and evaluation of services. This will enable optimal utilisation of resources, strengthening of infrastructure and experimentation of innovative approach.