

## HEALTH

Improvement in the health status of the population has been one of the major thrust areas for the social development programmes of the country. This was to be achieved through improving the access to and utilization of Health services with special focus on under served and under privileged segments of the population. Over the last five decades, India has built up a vast health infrastructure and manpower at primary, secondary and tertiary care in government, voluntary and private sectors. Professionals and paraprofessionals trained in the medical colleges in modern medicine and ISM&H and paraprofessional training institutions man these institutions. The population has become aware of the benefits of health related technologies for prevention, early diagnosis and effective treatment for a wide variety of illnesses and accessed available services. Technological advances and improvement in access to health care technologies, which were relatively inexpensive and easy to implement, had resulted in substantial improvement in health indices of the population and a steep decline in mortality (Table .1). The extent of access to and utilization of health care varied substantially between states, districts and different segments of society; this to a large extent, is responsible for substantial differences between states in health indices of the population.

**Table 1: Time Trends (1951-2000) in Health Care**

	1951	1981	2000
SC/PHC/CHC	725	57,363	1,63,181 (99-RHS)
Dispensaries & Hospitals (all)	9209	23,555	43,322 (95-96-CBHI)
Beds (Pvt. & Public)	117,198	569,495	8,70,161 (95-96-CBHI)
Doctors (Modern System)	18,054	1,43,887	7,37,000 (98-99- MCI)
Nursing Personnel	61,800	2,68,700	5,03,900 (99-INC)
Malaria (cases in million)	75	2.7	2.2
Leprosy (cases/ 10,000 population)	38.1	57.3	3.74
Small Pox (no. of cases)	>44,887	Eradicated	
Guineaworm (no. of cases)		>39,792	Eradicated
Polio (no. of cases)		29709	265
Life Expectancy (Years)	36.7	54	64.6 (RGI)
Crude Birth Rate	40.8	33.9 (SRS)	26.1 (99 SRS)
Crude Death Rate	25	12.5 (SRS)	8.7 (99 SRS)
IMR	146	110	70 (99 SRS)

Source: National Health Policy – 2002

During the 1990s, the mortality rates reached a plateau and the country entered an era of dual disease burden. Communicable diseases have become more difficult to combat because of development of insecticide resistant strains of vectors, antibiotics resistant strains of bacteria and emergence of HIV infection for which there is no therapy. Longevity and changing life style have resulted in the increasing prevalence of non-communicable diseases. Under nutrition, micro nutrient deficiencies and

associated health problems coexist with obesity and non-communicable diseases. The existing health system suffers from inequitable distribution of institutions and manpower. Even though the country produces over 17,000 doctors in modern system of medicine and similar number of ISM&H practitioners and paraprofessionals, there are huge gaps in critical manpower in institutions providing primary healthcare, especially in the remote rural and tribal areas where health care needs are the greatest.

As the country undergoes demographic and epidemiological transition, it is likely that larger investments in health will be needed even to maintain the current health status because tackling resistant infections and non-communicable diseases will inevitably lead to escalating health care costs. Last two decades have witnessed explosive expansion in expensive health care related technologies, broadening diagnostic and therapeutic avenues. Increasing awareness and rising expectations to access these have widened the gap between what is possible and what is affordable for the individual or the country. Policy makers and programme managers realise that in order to address the increasingly complex situation regarding access to good quality care at affordable costs, it is essential to build up an integrated health system with appropriate screening, regulating access at different levels and efficient referral linkages. However, both health care providers and health care seekers still feel more comfortable with the one to one relationship with each other than with the health system approach.

Another problem is the popular perception that curative and preventive care compete for available resources, with the former getting preference in funding. Efforts to convince the public that preventive and curative care are both part of the entire spectrum of health care ranging from health promotion, specific protection, early diagnosis and prompt treatment, disability limitation and rehabilitation and that to improve the health status of the population both are equally essential have not been very successful. Traditionally health service (both government and private) was perceived as a social responsibility albeit a paid one. Growing commercialisation of health care and medical education over the last two decades has eroded this commitment, adversely affecting the quality of care, trust and the rapport between health care seekers and providers.

Faced with the problems of sub-optimally functioning health care system and providing adequate investment for improving health Ninth Plan emphasized the need for :

- ☛ Reviewing the changing health scenario and assess response of the public, voluntary and private sector health care providers as well as the population themselves to the changing situation
- ☛ Reorganizing health systems so that they become efficient and effective
- ☛ Introducing health system reforms which ensure access to public health programmes free of cost to all and enable the population to obtain essential health care at affordable cost.

The ongoing health system reforms broadly fall into three categories : structural and functional aimed at improving efficiency, financial aimed at improving resource available and governance related aimed at improving transparency and accountability . It was envisaged that the public sector will play the lead role in health systems reform.

## **The Health care system**

The Health care system consists of:

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

So far the interaction between these components of the system had been sub-optimal. In spite of the plethora of primary, secondary and tertiary care institutions and medical college hospitals there are no well organised referral linkages between the primary, secondary and tertiary care institutions in the same locality. The programme managers and teachers in medical colleges do not link with institutions in any of the three tiers; essential linkages between structure and function are not in place. The health sector is currently undertaking structural and functional reforms aimed at correcting these problems and improving efficiency. Major efforts include

- ☛ reorganisation and restructuring the existing government health care system including the ISM&H infrastructure at the primary, secondary and tertiary care levels with appropriate referral linkages. These institutions will have the responsibility of taking care of all the health problems (communicable, non-communicable diseases) and deliver reproductive and child health (RCH) services for people residing in a well-defined geographic urban and rural area;
- ☛ development of appropriate two-way referral systems utilising information technology (IT) tools to improve communication, consultation and referral right from primary care to tertiary care level;
- ☛ building up an efficient and effective logistics system for the supply of drugs, vaccines and consumables based on need and utilisation;
- ☛ horizontal integration of all aspects of the current vertical programmes including supplies, monitoring, information education communication and motivation (IECM), training, administrative arrangements and implementation so that they are integral components of health care; there will be progressive convergence of funding, implementation and monitoring of all health and family welfare programmes under a single field of administration beginning at and below district level;

- ☛ Building up efficient and effective logistic system for supply of drug, vaccines and, consumables based on the need and utilisation
- ☛ mainstreaming ISM&H practitioners, so that in addition to practising their system of care, they can help in improving the coverage of the National Disease Control Programmes and Family Welfare Programme;
- ☛ increasing the involvement of voluntary and private organisations, self-help groups and social marketing organisation in improving access to health care;
- ☛ improving the efficiency of the existing health care system in the government, private and voluntary sectors and building up appropriate linkages between them.
- ☛ Building up tele linkages between villages, Subcentre, PHC ,FRU, district and tertiary care centers; linking tertiary care institutions especially in the remote areas (eg northeastern states) with major super-speciality institutions for other regions so that patients could benefit from tele-consultations.
- ☛ Increasing use of Information Technology for health management. All sub-sectors dealing with the generation, transmission and utilisation of demographic and epidemiological data such as bio-informatics, bio-statistics, HMIS and the decision support systems (DSS) will be used in health planning and management building up a fully functional, accurate Health Management Information System (HMIS) utilising currently available IT tools; this real time communication link will send data on births, deaths, diseases, request for drugs, diagnostics and equipment and status of ongoing programmes through service channels within existing infrastructure and manpower and funding; it will also facilitate decentralized district based planning, implementation and monitoring;
- ☛ building up an effective system of disease surveillance and response at the district, state and national level as a part of existing health services;;
- ☛ improving inter sectoral coordination;

### **Human resource development for health**

During new century medical education faces newer opportunities and challenges. The country has to train an adequate number of health professionals with appropriate knowledge, skill and attitude to meet the health care needs of the growing population and dual disease burden. Priority areas for Human Resources Development for Health were:

- ☛ creation of a district data base on requirement, demand and availability for health manpower in the government, private and voluntary sectors;
- ☛ periodic updating of information on
- ☛ requirement availability and of different categories of health manpower;
- ☛ health manpower production based on the needs;
- ☛ improvement in quality of undergraduate/ postgraduate education;
- ☛ promotion of equitable and appropriate distribution of health manpower;
- ☛ continuing medical education for knowledge ( using distance education technology and IT linkages )and skill upgradation and appropriate people and programme orientation; and

- ☛ continuing multiprofessional education for promoting team work and intersectoral co-ordination

In this era of globalization, India with its excellent teachers and abundant clinical material can become a key player in medical education. The health care institutions can transform India into a major medical tourism destination. Appropriate investment in research and development and quality control can result in a massive expansion of the pharmaceutical sector. The next two decades will show whether the country has successfully used these opportunities to train and provide gainful employment to the highly skilled medical manpower

- ☛ improving community awareness, participation and effective utilisation of available services;
- ☛ use of PRIs in improving community participation and monitoring implementation of programmes.

### **Indian Systems Of Medicine And Homoeopathy**

The Indian Systems of Medicine and Homoeopathy consist of Ayurveda, Siddha, Unani and Homoeopathy, and therapies such as Yoga and Naturopathy. Some of these systems are indigenous and others such as Homeopathy have over the years become a part of Indian tradition. Prior to the advent of modern medicine these systems had, for centuries, catered to the health care needs of the people; these systems are widely used even today because their practitioners are acceptable both geographically and culturally, are accessible and their services and drugs are affordable

During the next two decades a major thrust will be given to mainstream ISM&H system and utilise ISM&H practitioners by

- ☛ ensuring that ISM&H clinics are located in the primary, secondary and tertiary care institutions providing complimentary system of care in these institutions and ISM&H care is funded as a part and parcel of funds provided for these institutions;
- ☛ specially focusing on use of ISM&H therapeutic modalities for diseases for which effective drugs free of serious side effects are not available in the modern system of medicine and for prevention and management of lifestyle related chronic diseases;
- ☛ increasing utilisation of ISM&H practitioners working in Government, voluntary and private sector to improve IEC, counselling so that utilisation and completion of treatment in National disease control and Family Welfare programmes improve;
- ☛ explore opportunities in public and private sector for health tourism and set up regulations in this regard.

### **Prevention and management of communicable and non communicable diseases**

Appropriate strategies for combating the dual disease burden for prevention, detection and management of communicable and non communicable disease

through existing health care infrastructure will be evolved, implemented and evaluated. Modalities to improve delivery of services pertaining to these programmes through the existing health services should be worked out. Efforts will be made to improve states ownership of the programmes, participation of the community, private sector and NGOs. Local accountability and intersectoral co-ordination should be improved through the involvement of PRIs. Evaluation and operational research to rectify problems in implementation and improving efficiency will receive attention.

Appropriate modification will be required in the health care delivery as the country undergoes demographic and epidemiological transition and non communicable disease emerge as major public health problems. In view of this there is a need to obtain data on not only mortality but also morbidity due to chronic illnesses and disabilities and take them into account while formulating public health programmes. There are wide inter-state differences health indices, morbidity rates and rate of demographic and epidemiological transition. Under these conditions, it is important to:

- ☛ ascertain and document morbidity and mortality due to major health problems in different states/ districts;
- ☛ evolve appropriate interventions programmes;
- ☛ invest adequately in well targeted interventions;
- ☛ implement intervention effectively by modifying the health care system; and
- ☛ monitor the impact on the morbidity and mortality.

Such an effort would require a reliable sustainable database for mortality and morbidity. While mortality data can be obtained through strengthening of CRS/SRS and ascertainment of the cause of death, the data base for morbidity can come only through a strengthened HMIS supplemented by the data from disease surveillance. When sustained, these three systems should, over the next two decades, provide valuable insights regarding time trends in morbidity and mortality in different states/ districts. Development of this data base is critical for evolving appropriate health policies and strategies, identifying priority areas for investment of available funds and bring about modifications in the existing health system to ensure equitable, efficient and effective implementation of the programmes to tackle dual disease burden.

In addition to these the health system is getting geared up to tackle some of the emerging problems through:

- ☛ strengthening programmes for the prevention, detection and management of health consequences of the continuing deterioration of the ecosystems; improving the linkage between data from ongoing environmental monitoring and that on health status of the people residing in the area; making health impact assessment a part of environmental impact assessment in developmental projects;
- ☛ improving the safety of the work environment in organized and unorganised industrial and agricultural sectors especially among vulnerable groups of the population;

- ☛ developing capabilities at all levels, for emergency and disaster prevention and management; evolving appropriate management systems for emergency, disaster, accident and trauma care at all levels of health care;
- ☛ effective implementation of the provisions for food and drug safety; strengthening the food and drug administration both at the centre and in the states;
- ☛ screening for common nutritional deficiencies especially in vulnerable groups and initiating appropriate remedial measures; evolving and effectively implementing programmes for improving nutritional status, including micronutrient nutritional status of the population.

## **Medical research**

Medical research can play a major role in improving access to health care . In India, most of the morbidity and mortality is due to illnesses for which simple, inexpensive and effective preventive measures and time-tested cost-effective curative interventions are available. Therefore, priority has been given to health systems research for improving service delivery and coverage as well as operational research aimed at improving access to technological advances. Basic and clinical research leading to development of products, drugs, vaccines for prevention, diagnosis and management of illnesses especially major health problems for which currently there is no effective cure are encouraged. Health policy research and health system research at the national level is essential and a reliable information base is a pre-condition for effective investment in health care and performance assessment of the health system.

Currently, Indian industry is investing about 5 per cent of turnover on research and development. These investments may have to be augmented so that the Indian pharmaceutical industry achieves its full potential. Parallel efforts to improve public sector-funded research are also essential for the development of drugs for the treatment of public health problems such as emerging drug resistance, development of newer contraceptives and vaccines. The private sector may not be willing to make requisite investments in these areas because of very low profit margins .

## **Quality assurance and redressal mechanisms**

Quality Assurance and redressal mechanism is another major area that will increasing attention during the next two decades. A transparent procedure for defining the norms of quality and cost in various setting and then review is an essential step in improving quality of care. There will be efforts to

- ☛ Introduce a range of comprehensive regulations prescribing minimum requirements of qualified staff, conditions for carrying out specialized interventions and a set of established procedures for quality assurance.
- ☛ evolve standard protocols for care for various illnesses; at primary, secondary and tertiary care settings – public sector hospitals, medical colleges, professional associations to play a major role in this exercise. improvement in the quality of care at all levels and settings by evolving and implementing a whole range of comprehensive norms for service delivery, prescribing minimum requirements of

qualified staff, conditions for carrying out specialised interventions and a set of established procedures for quality assurance;

- ☛ evolve treatment protocols for the management of common illnesses and diseases; promotion of the rational use of diagnostics and drugs;
- ☛ evolve, implement and monitor transparent norms for quality and cost of care in different health care settings;
- ☛ improve quality assurance and redressal mechanism such as Consumer Protection Act and Citizens' Charter for hospitals.
- ☛ Ensure appropriate delegation of powers to Panchayati Raj Institutions (PRIs) so that the problems of absenteeism and poor performance can be sorted out locally and primary health care personnel function as an effective team.
- ☛ Increase Involvement of the Panchayati Raj Institutions in the planning and monitoring ongoing programmes and taking timely corrections for optimal utilisation of services.
- ☛ devolution of responsibilities and funds to panchayati raj institutions (PRIs); besides participating in area-specific planning and monitoring, PRIs can help in improving the accountability of the public health care providers, improve inter-sectoral co-ordination and convergence of services.

## **Financing health care**

As a part of economic reforms health sector reforms are perhaps inevitable; however due care will be taken to ensure that poorer segments of population are able to access services they need. In view of the importance of health as a critical input for human development there will be continued commitment to provide essential primary health care, emergency life saving services, services under the National disease control programmes and the National Family Welfare programme totally free of cost to individuals based on their needs and not on their ability to pay. Data from NSSO indicate that escalating health care costs is one of the reasons for indebtedness not only among the poor but also in the middle income group. It is therefore essential that appropriate mechanisms by which cost of severe illness and hospitalisation can be borne by individual/Organisation/State are explored and affordable appropriate choice made. Global and Indian Experience with health insurance/health maintenance organisations have to be reviewed and appropriate steps initiated. In order to encourage healthy life styles Yearly 'no claim bonus'/ adjustment of the premium could be made on the basis of previous years hospitalisation cost reimbursed by the insurance scheme. The center and the states will :

- ☛ evolve, test and implement suitable strategies for levying user charges for health care services from people above poverty line while providing free service to people below poverty line; utilise the collected funds locally to improve quality of care.
- ☛ Evolve and implement a mechanism to ensure sustainability of ongoing govt. funded health and family welfare programme especially those with substantial external assistance.



- ☛ work out cost of diagnosis and therapeutic procedures for major and minor ailment in different levels of care and setting cost of care norms.
- ☛ explore alternative systems of health care financing including health insurance so that essential, need based and affordable health care is available to all;
- ☛ initiate appropriate interventions to ease the existing funding constraints at all levels of health system and to promote the complete and timely utilization of allocated funds.

Different models of health care financing at the individual, family, institution and state level will be evolved, implemented and evaluated. Models found most suitable for providing essential health care to all will be replicated.

The issue of how much the government sector, private individuals and the country as a whole is spending on health care and which segments of the population are benefiting has been debated widely during the last decade. As there is no National Health Accounting system, there is no information on total government expenditure on health and categories of people who benefit from this expenditure. It is imperative that a system of National Health Accounting, reflecting total government expenditure on health is established. This will enable periodic review and appropriate policy decisions regarding modalities for ensuring optimal utilisation of the current government investment in the health sector and also future investments to meet public health needs.

### National Health Policy 2002

The NHP (1983) provided comprehensive framework for planning, implementation, monitoring of health services and to be achieved by 2000. The

**The Ninth Plan recommended a review of the National Health Policy in view of:**

- ☛ ongoing demographic transition;
- ☛ ongoing epidemiological transition;
- ☛ expansion of health care infrastructure;
- ☛ changes in health care seeking behaviour;
- ☛ availability of newer technologies for management;
- ☛ rising expectations of the population,

NHP2002- Goals to be achieved	
Eradicate Polio and Yaws	2000
Eliminate Leprosy	2000
Eliminate Kala Azar	2010
Eliminate Lymphatic Filariasis	2015
Achieve zero level growth of HIV/AIDS	2007
Reduce Mortality on account of TB, malaria and other vector and water-borne diseases by 50 per cent	2010
Reduce prevalence of blindness to 0.5 per cent	2010
Reduce IMR to 30/1000 and MMR to 100/100,000 live births	2010
Increase utilisation of public health facilities from the current level of <20 per cent to >75 per cent	2010
Establish an integrated system of surveillance,	2005

a Department of Health has reviewed the performance since 1983 and formulated the NHP, 2002 which emphasises that any significant improvement in the quality of health services and health status of the citizens, would depend on increased financial and material

inputs, service providers treating their responsibility not as a commercial activity, but as a service (albeit a paid one), the citizens demanding improvement in the quality of services, a responsive health delivery system, particularly in the public sector, and improved governance. Recognising that the health needs of the country are enormous and dynamic and acknowledging the human and financial resource constraints, the NHP 2002, attempts to make choices between various priorities and has set the goals for the next two decades. It is expected that with effective implementation of the policies and strategies indicated in the Tenth Plan and NHP 2002, the country will achieve the goals set and complete the health and demographic transition within the set time frame.

## **FAMILY WELFARE**

India, the second most populous country in the world having a meagre 2.4% of the world's surface area sustains 16.7% of the world's population. Realising the inevitable high population growth during the initial phases of demographic transition and the need to accelerate the pace of the transition, India became the first country in the world to formulate a National Family Planning Programme in 1952, with the objective of "reducing birth rate to the extent necessary to stabilise the population at a level consistent with requirement of national economy". The First Five Year Plan stated "The main appeal for family planning is based on considerations of health and welfare of the family. Family limitation or spacing of children is necessary and desirable in order to secure better health for the mother and better care and upbringing of children. Measures directed to this end should, therefore, form part of the public health programme". Thus the key elements of health care to women and children and provision of contraceptive services have been the focus of India's health services right from the time of India's independence. Successive Five Year Plans have been providing the policy framework and funding for planned development of nationwide health care infrastructure and manpower to deliver these services. The centrally sponsored and 100% centrally funded Family Welfare Programme provides the States additional infrastructure, manpower and consumables needed for improving health status of women and children and to meet all the felt needs for fertility regulation.

The technological advances and improved quality and coverage of health care resulted in a rapid fall in Crude Death Rate (CDR) from 25.1 in 1951 to 9.8 in 1991. In contrast, the decline in Crude Birth Rate (CBR) has been less steep, from 40.8 in 1951 to 29.5 in 1991. As a result, the annual exponential population growth rate has been over 2% in the period between 1971-1991. The pace of demographic transition in India has been relatively slow but steady. Census 1991 showed after three decades the population growth rate declined below 2%. In order to give a new thrust and dynamism to the Family Welfare Programme and achieve a more rapid decline in birthrate, death rate and population growth rate in the last decade of the century, the National Development Council (NDC) set up a Sub-Committee on Population and endorsed its recommendations in 1993.

### **Census 2001**

Census 2001 recorded that the population of the country was 1027 million-15 million more than the population projected for 2001 by the Technical Group on Population Projections. The decadal growth during 1991-2001 was 21.34% (decadal growth in 1981-91 was 23.86%). Analysis of growth rates of the states from the decade 1951-1961 indicates that it took four decades for Kerala to reach a decadal growth rate of less than 10% from a high growth rate of 26.29% during 1961-71. Tamil Nadu also took 40 years to reduce its growth rate from a high of 23.2% during 1961-71 to 11.2 % during 1991-2001. Andhra Pradesh has shown an impressive fall in growth rate by over 10 percentage points within a short span of a decade during nineties. The growth rate in Bihar has shown an upward swing during 1991-2001; the growth rates in Rajasthan, UP and MP are now at a level where Kerala and Tamil Nadu were 40 years ago.

## Population projections and their implications to the family welfare Programme

The Technical group projected the total population, population growth rates (Fig) the year by which the replacement level of TFR of 2.1 be achieved by different states in India if the pace of decline in Total Fertility Rate observed during 1981-93 continues in the future years. The projections regarding some of these indicators is given in Text box

### Population projections 1996-2016

The population will increase from 934 million in 1996 to 1264 million in 2016. Between the periods 1996-2001 and 2011-2016 there will be a decline of:

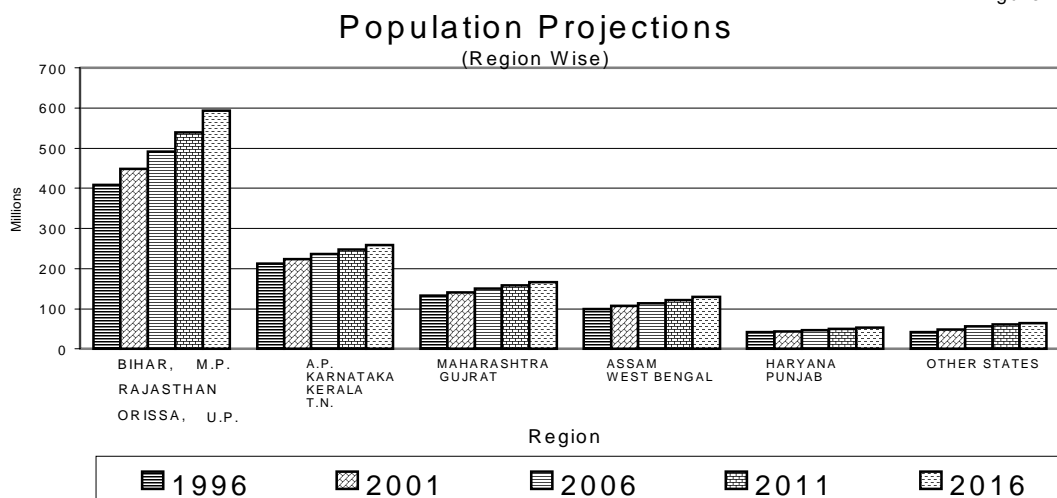
- CBR from 24.10 to 21.41
  - CDR from 8.99 to 7.48
  - NGR from 1.51% to 1.39%
  - IMR
- |             |          |
|-------------|----------|
| Male from   | 63 to 38 |
| Female from | 64 to 39 |

and  
will

### Inter state differences

The projected values for the total population in different regions is shown in the Figure. There are marked differences between states in size of the population projected, population growth rates and the time by which TFR of 2.1 is likely to be achieved. If the present trend continues, most of the southern and the western states are likely to achieve TFR of 2.1 by 2010. Urgent energetic steps to assess and fully meet the unmet needs for maternal and child health (MCH) care and contraception through improvement in availability and access to service are needed in Rajasthan, Orissa, Uttar Pradesh, Madhya Pradesh and Bihar (before division) in order to achieve a faster decline in their mortality and fertility rates. The performance of these states would

Figure-2



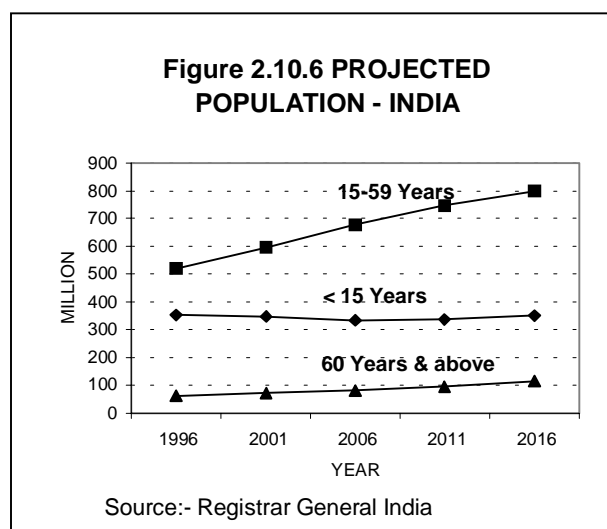
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the country achieves replacement level of fertility. It is imperative that special efforts are made during the next two decades to break the vicious self-perpetuating cycle of poor

performance, poor per capita income, poverty, low literacy and high birth rate in the populous states so that further widening of disparities between states in terms of per capita income and quality of life is prevented. An Empowered Action Group has been set up to provide special assistance to these states. The benefits accrued from such assistance will depend to a large extent on the states' ability to utilize the available funds and improve services and facilities.

### Changes in age profile of the population



The projected population of India in the three major age groups (less than 15, 15-59, 60 years or above) between 1996 and 2016 are shown in Figure . In the country as a whole, there will be a marginal decline in less than 15 years of age population (352.7 million to 350.4 million), even though in poorly performing states there will be continued increase in the number of children requiring care. The health care infrastructure will, therefore, not be under pressure to provide care to an ever increasing number of children. They will be able to concentrate on:

- ☛ improving quality of care;
- ☛ focus on antenatal, intra natal and neonatal care aimed at reducing neonatal morbidity and mortality;
- ☛ improve coverage for immunisation against vaccine preventable diseases;

**Age group < 15 years**  
 There will be no increase in numbers. Focus will be to improve:

- ☛ quality and coverage of health and nutrition services and achieve improvement in health and nutritional status
- ☛ improve access to education & skill development

adolescents.

The economic challenge is to provide needed funds so that these children have access to nutrition, education and skill development. The challenge faced by the health sector is to achieve reduction in morbidity and mortality rates in infancy and

- ☛ promote inter sectoral coordination especially with the ICDS programme so that there is an improvement in health and nutritional status; and
- ☛ improve coverage and quality of health care to vulnerable and underserved

**Age group 15-59 years**  
 The challenge is the **massive** increase in the number of people in this age group. They will:

- ☛ need wider spectrum of services :
  - ➔ maternal and child health services
  - ➔ contraceptive care
  - ➔ gynaecological problems
  - ➔ RTI /STD management
- ☛ expect better quality of services
- ☛ expect fulfillment of their felt needs for MCH/family planning care.

Opportunity is that if their felt needs are met through effective implementation of RCH programme, it is possible to accelerate demographic transition and

childhood, to improve nutritional status and eliminate ill effects of the gender bias.

There will be a massive increase of population in the 15-59 age group (from 519 million to 800 million). The RCH care has to provide the needed services for this rapidly growing clientele. The population in this age group is more literate and has greater access to information. These people will, therefore, have greater awareness and expectation regarding both access to a wide spectrum of health care related services and the quality of these services. The Family Welfare Programme has to cater to a wider spectrum of health care needs of this population– including maternal and child health (MCH) care, contraceptive care, management of gynaecological problems, the quality of services also needs to be improved. There will be a substantial increase in the population more than 60 years (62.3 million to 112.9 million) in the next two decades. Increasing numbers of the population beyond 60 years would necessitate provisions for the management of some of the major health problems in this age group, including early detection and management of cancers.

### **Progress in implementation of the Family Welfare Programme during the Ninth Plan**

Review of the FW programme have shown that Governmental network provides most of the MCH and contraceptive care ( NFHS 1998-99). During the Ninth Plan period the Dept. Of Family Welfare has implemented the recommendations of the NDC Sub committee on Population. The centrally defined methods specific targets for family planning were abolished; emphasis shifted to decentralised planning at district level, based on community needs assessment and implementation of programmes aimed at fulfilment of these needs. RCH programme aimed at providing integrated good quality maternal, child health and contraceptive care. A massive pulse polio campaign was taken up to eliminate polio from the country. The Department of Family Welfare set up a Consultative Committee to suggest appropriate restructuring and revision of norms for infrastructure funded by the states and the Centre and has initiated implementation of the recommendations. Monitoring and evaluation have become part and parcel of the Family Welfare Programmes and the data is used for midcourse corrections.

It was expected that these initiatives would lead to substantial improvement in the coverage and quality of services. The health systems in the states required longer time to adapt to decentralised planning and RCH programme implementation. In an attempt to improve coverage under specific components of the RCH programme, some states embarked on campaign mode operations which took their toll on routine services. Efforts to eliminate polio by the winter of 2000 through massive pulse polio campaign also had some adverse effect on routine delivery services. As a result of all these it is unlikely that Ninth Plan goals for CBR, Couple Protection Rate, Maternal Mortality Ratio and Infant Mortality Rate will be achieved. However, the country is likely to achieve elimination of polio by 2004.

Independent surveys have shown that several states have achieved goals set for some aspect of the RCH programme during the Ninth Plan, demonstrating that

these can be achieved with in the existing infrastructure, manpower and inputs. For instance

- ☛ Andhra Pradesh, Punjab, West Bengal and Maharashtra have shown substantial decline in birth rates; the latter three states are likely to achieve replacement level of fertility, ahead of the projection made.
- ☛ Punjab has achieved couple protection rate and use of spacing methods far ahead of all other states
- ☛ Tamil Nadu and Andhra Pradesh have achieved increase in institutional deliveries
- ☛ Kerala, Maharashtra, Punjab and Tamil Nadu improved immunization coverage
- ☛ Tamil Nadu and Andhra Pradesh had achieved improvement in coverage and quality of Antenatal care.

### **Major Areas of Concern**

Some of the major areas of current concern include:

- ☛ the massive interstate differences in the fertility and mortality- the rates are high in the states where nearly 50 % of the country's population lives;
- ☛ gaps in infrastructure/manpower/equipment and mismatch between infrastructure and manpower in PHC/CHC; lack of referral services;
- ☛ decline in mortality during the nineties was slow; the goals set for mortality and fertility in the Ninth plan will not to be achieved;
- ☛ there has been no decline in the maternal mortality ratios over the nineties; neonatal and infant mortality rates have remained essentially unaltered in the nineties;
- ☛ the routine service coverage has declined perhaps because of the emphasis on campaign mode operations for individual components of the programme;
- ☛ in spite of the emphasis on skill up gradation training for delivery of integrated reproductive and child health services, the progress in in-service training has been very slow; the anticipated improvement in the content and quality of care has not taken place;
- ☛ evaluation studies have shown that the coverage under immunization is not universal even in the best performing states; coverage rates are very low in states like Bihar; elimination of polio is yet to be achieved;
- ☛ logistics of drug supply has improved in some states but remains poor in populous states;
- ☛ decentralised district based planning, monitoring and midcourse correction utilising the locally generated service data and CRS has not yet been operationalised fully.

### **Approach during the next two decades**

The current high population growth rate continues to be due to:

- ☛ the large size of the population in the reproductive age-group (estimated contribution 60%);
- ☛ higher fertility due to unmet need for contraception (estimated contribution 20%);

☛ and high wanted fertility due to prevailing high IMR and other socio-economic reasons (estimated contribution about 20%).

During the next two decades paradigm shift which began in the Ninth plan from:

- ☛ demographic targets to **focus on enabling the couples to achieve their reproductive goals;**
- ☛ method specific contraceptive targets **to meeting all the unmet needs for contraception to reduce unwanted pregnancies;**
- ☛ numerous vertical programmes for family planning and maternal and child health to **integrated health care for women and children;**
- ☛ centrally defined targets to **community need assessment and decentralised area specific microplanning** and implementation of health care for women and children to reduce infant mortality and reduce high desired fertility;
- ☛ quantitative coverage to **emphasis on quality and content of care;**
- ☛ predominantly women centred programmes to **meeting the health care needs of the family with emphasis on involvement of men in Planned Parenthood;**
- ☛ supply driven service delivery to **need and demand driven service; improved logistics for ensuring adequate and timely supplies to met the needs;**
- ☛ service provision based on providers perception **to addressing choices and conveniences of the couples.**

will be fully operationalised .

The focus will have to be on improving access to services to meet the health care needs of women and children by:

- ☛ decentralised area specific approach to planning , implementation and monitoring of the performance and effecting mid course corrections;
- ☛ differential strategy to achieve incremental improvement in performance in all states/districts;
- ☛ special efforts to improve access to and utilisation of the services in states/districts with high mortality and /or fertility rates;
- ☛ filling the critical gaps (especially CHCs) in existing infrastructure through appropriate reorganisation and restructuring primary health care infrastructure;
- ☛ ensuring that post of specialists in CHC/FRU do not remain vacant; skill upgradation and redeployment existing manpower to fill other critical gaps;
- ☛ streamlining the functioning of the primary health care system in urban and rural areas; providing good quality integrated reproductive and child health services at primary, secondary and tertiary care and improving the referral services;
- ☛ providing adequate supply of essential drugs, diagnostics and vaccines; improving the logistics of supply;
- ☛ well co-ordinated activities for delivery of services by public, private and voluntary sectors to improve coverage;
- ☛ involvement of the PRI in planning, monitoring and midcourse correction of the programme at local level;



- ☛ involvement of the industries, organised and unorganised sectors, agriculture workers and labour representatives in improving access to RCH services;
- ☛ effective use of social marketing to improve access to simple OTC products such as ORT and condoms;
- ☛ effective Information, Education, Communication and Motivation;
- ☛ effective intersectoral co-ordination between concerned sectors

## **National Population Policy**

The National Population Policy was drawn up by the Dept of Family Welfare and was approved by the cabinet in 2000. As envisaged in NPP National Commission on Population was constituted on 11<sup>th</sup> May 2000 under the Chairmanship of the Prime Minister of India. Deputy Chairman, Planning Commission is the Vice Chairman.

During the next two decades efforts will be directed to

- ☛ assess and meet the unmet needs for contraception;
- ☛ achieve reduction in the high desired level of fertility through programmes for reduction in IMR and maternal mortality ratio (MMR); and
- ☛ enable families to achieve their reproductive goals.

If the reproductive goals of families are fully met the country will be able to achieve the National Population Policy goal of replacement level of fertility by 2010. The medium and long term goals will be to continue this process to accelerate the pace of demographic transition and achieve population stabilisation by 2045. Reductions in fertility, mortality and population growth rate will be major objectives during the Tenth Plan. Three of the 11 monitorable targets for the Tenth Plan and beyond are:

- ☛ reduction in IMR to 45 per 1,000 live births by 2007 and 28 per 1,000 live births by 2012;
- ☛ reduction in maternal mortality ratio to 2 per 1,000 live births by 2007 and 1 per 1,000 live births by 2012; and
- ☛ reduction in decadal growth rate of the population between 2001-2011 to 16.2.

In view of the massive differences in the availability and utilisation of health services and health indices of the population, a differential strategy is envisaged so that there is incremental improvement in all districts. This, in turn, is expected to result in substantial improvement in state and national indices and enable the country to achieve the goals set for the Tenth Plan. The steep reduction in mortality and fertility envisaged are technically feasible within the existing infrastructure and manpower as has been demonstrated in several states/districts. It is imperative that the goals set are achieved within the time frame as these goals are essential prerequisites for improving the quality of life and human development

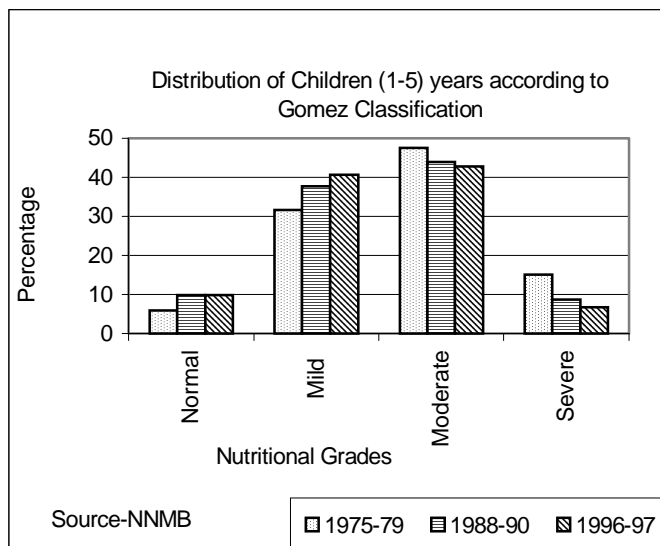
## NUTRITION

Importance of optimal nutrition for health and human development is well recognised. At the time of Independence the country faced two major nutritional problems - one was the threat of famine and acute starvation due to low agricultural production and lack of appropriate food distribution system. The other was chronic energy deficiency due to:

- ☛ Low dietary intake because of poverty and low purchasing power
- ☛ High prevalence of infection because of poor access to safe-drinking water, sanitation and health care
- ☛ Poor utilisation of available facilities due to low literacy and lack of awareness

Chronic energy deficiency (CED) , kwashiorkor, marasmus, goitre, beriberi, blindness due to Vitamin-A deficiency and anaemia were major public health problems. The country adopted multi-sectoral, multi-pronged strategy to combat these and to improve nutritional status of the population. Constitution of India (Article 47) states that “the State shall regard raising the level of nutrition and standard of living of its people and improvement in public health among its primary duties”. Successive Five Year Plans laid down the policies and strategies for achieving these goals.

During the last 50 years considerable progress has been achieved. Country has achieved self sufficiency in food grain production; famines no longer stalk the country. There has been substantial reduction in moderate and severe undernutrition in children and some improvement in nutritional status of all segments of population. Kwashiorkor, marasmus, pellagra, lathyrism, beriberi and blindness due to severe Vitamin-A deficiency have become rare. However:



- ☛ While mortality has come down by 50% and fertility by 40%, reduction in under nutrition is only 20%.
- ☛ Under nutrition in pregnant women and low birth weight rate has not shown any decline India with less than 20% global children accounts for over 40% under nourished children.
- ☛ Even though there has been 50% decline in severe under-nutrition reduction in mild under-nutrition is marginal Under nutrition associated with HIV/AIDS is

emerging as newer public health problems.

- ☛ There had been major alterations in the life styles and dietary intake and consequently the prevalence of obesity and non-communicable diseases are increasing

## Currently the major nutrition related public health problems are:

- ☛ Chronic energy deficiency and under-nutrition
- ☛ Micro-nutrient deficiencies
  - ⇒ anaemia due to iron and folate deficiency
  - ⇒ Vitamin A deficiency
  - ⇒ Iodine Deficiency Disorders
- ☛ Chronic energy excess and obesity

## Initiatives in the next two decades

During the next two decades the will have to implement focused and comprehensive interventions aimed at improving the nutritional status of the individuals; this in turn will enable the country to achieve rapid reduction in severer forms of under-nutrition and ill health and lead to improvement in nutritional and health status of the population to achieve this objective, coordinated multi sectoral interventions for increasing food production, effective processing and distribution, improvement in purchasing power, generating awareness, ensuring optimum utilisation of well targeted interventions for prevention, detection and management of macro and micronutrient deficiencies are needed. As the country enters the era of dual nutritional burden of under and over nutrition and associated health hazards, efforts to define the nutritional requirements of Indian population , nutritive values of common and unconventional Indian foods and norms for anthropometric indices of Indian population will receive adequate support . It is important to embark on a paradigm shift from

- ☛ Household food security and freedom from hunger to **nutrition security for the family and the individual**
- ☛ Untargeted supplementation to **screening of all the persons from vulnerable groups, identification of those with various grades of under-nutrition and their appropriate management.**
- ☛ Lack of focused interventions on over-nutrition to **promotion of appropriate lifestyles and dietary intakes for prevention and management of over nutrition and obesity**

## Path ahead and goals set

Prime Minister in his Independence Day Speech on 15<sup>th</sup> August, 2001 announced the

- ⇒ Setting up of the National Nutrition Mission.
- ⇒ Providing Foodgrains at subsidized rates to adolescents girls and expectant and nursing mothers belonging to Below Poverty Line (BPL) families;

## **The National Nutrition Mission has the following objectives:**

- ☛ Reduction in under nutrition
- ☛ Reduction/elimination of micronutrient deficiencies - iron, iodine and Vit A
- ☛ mReduction in chronic energy deficiency

In addition the Mission would co-ordinate and monitor

- ☛ Implementation of National Nutrition Policy;
- ☛ Strengthening of existing programme;
- ☛ R&D
- ☛ Nutrition education and IEC ;
- ☛ Strengthening of ICDS and Mid Day Meal Programme
- ☛ Relief in Natural Calamities.

National Nutrition Mission will be supervised by the National Nutrition Council headed by the PM as envisaged in the National Nutrition Policy.

### **Interventions will have to be initiated to Achieve adequate household / individual nutrition security by**

- ☛ Ensuring production and availability of cereals, pulses and vegetables to meet the nutritional needs.
- ☛ Making them available at affordable cost through out the year to urban and rural population through reduction in post harvest losses and appropriate processing.
- ☛ More cost effective and efficient targeting of the PDS to address macro and micronutrient deficiencies ( such as providing coarse grains, pulses and iodised salt to BPL families through TPDS)
- ☛ Improve purchasing power by appropriate programmes including food for work programmes

### **Prevent under-nutrition through nutrition education aimed at**

- ☛ Ensuring appropriate infant feeding practices ( universal colostrums feeding, exclusive breast feeding upto six months, introduction of semisolids at six months)
- ☛ Promoting appropriate intra-family distribution of food based on requirements.
- ☛ Dietary diversification to meet the nutritional needs of the family

### **Operationalize universal screening of**

- ☛ All pregnant women for under-nutrition
- ☛ All infants and preschool and school children for under-nutrition

### **Initiate appropriate nutrition interventions for management of under-nutrition through**

- ☛ Targeted food supplementation and health care for those with under-nutrition

- ☛ Effective monitoring of these individuals and their families
- ☛ Utilisation of the PRI for effective intersectoral coordination and convergence of services, improving community participation in planning,, monitoring of the ongoing interventions for prevention and management of under-nutrition.

***Focus on Prevention, early detection and appropriate management of micronutrient deficiencies and associated health hazards through***

- ☛ Nutrition education to achieve dietary diversification and balanced intake of all micronutrients
- ☛ Universal access to double fortified salt
- ☛ Screening of
  - ⇒ all children with severe under-nutrition for micronutrient deficiencies
  - ⇒ all pregnant women for micronutrient deficiencies
  - ⇒ all school children for micronutrient deficiencies
- ☛ Appropriate intervention for treatment of micronutrient deficiencies

***Promotion of appropriate dietary intake and life style for prevention and management of obesity and prevention and management of diet related chronic diseases***

***Nutrition monitoring and surveillance will be given high priority*** to enable the country to closely monitor the impact of on going demographic, developmental, economic transition and ecological and life style changes on nutritional and health status of the population to ensure that :the existing beneficial strategies are fully exploited, andemerging problems are identified early and corrected expeditiously .

**Goals set**

The following goals have been set for the Tenth Plan period

- ☛ Enhance early initiation of breast-feeding (colostrum feeding) from the current level of 15.8% (as per NFHS2) to 50%.
- ☛ Enhance exclusive breast-feeding rate for children upto the age of 6 months from the current rate of 55.2% (as per NFHS2) to 80%.
- ☛ Enhance Complementary Feeding rate at 6 months from the current level of 33.5% (as per NFHS2) to 75%.
- ☛ Bring down the prevalence of under-weight in children under 3 years from the current level of 47% as per NFHS-II to 40%
- ☛ Reduce prevalence of severe undernutrition in 0-6 year children by 50%
- ☛ Universal screening of pregnant women for anaemia and appropriate treatment
- ☛ Reduce prevalence of moderate/severe anaemia by 50%.
- ☛ Reduce prevalence of night blindness to below 1.0% and that of Bitot Spots to below 0.5% in children between 6 months to 6 years of age
- ☛ Eliminate Vit A deficiency as a public health problem.
- ☛ Achieve universal access to iodised salt.

☛ Generate district-wise data on iodised salt consumption

Tenth Plan has set specific Nutrition goals to be achieved by 2007. In view of the massive interstate/ interdistrict differences in availability and access to the nutrition related services and in nutritional status of the population, the state specific goals to be achieved by 2007 have been evolved based on the current level of these indices and the Tenth Plan goals for the country has been derived from the state specific goals. The progress achieved in terms of the process and impact indicators will be reviewed yearly and if necessary goals may be reset at the time of mid-term appraisal. Intensification of the efforts during the next two decades can result in elimination of severe forms of macro and micro nutrient under nutrition and prevent any increase in prevalence of over nutrition and associated health hazard.