

# **COUNTRY HEALTH PROFILE**

**MYANMAR**



*The boundaries shown on the above map do not imply official endorsement or acceptance by the World Health Organization.*

## SECTION 1: TRENDS IN POLICY DEVELOPMENT

Myanmar changed its political, economic and social systems in late 1980s. The **State Peace and Development Council (SPDC)** laid down four objectives for each of the three broad areas (political, economic and social). The economic objective identifies development of agriculture as the base and emphasizes the overall development of other sectors of the economy as well as the adoption of a market economy. The social objective of relevance is the upliftment of health, fitness and education standards of the entire nation, as well as safe guarding the cultural heritage and national character. The government formed a National Health Committee (NHC) at the highest level chaired by Secretary I of **State Peace and Development Council (SPDC)**.

The NHC is the highest policy making body for health matters in the country. This committee formulated a new National Health Policy in 1993 which covers the adoption of the HFA goal with PHC as the main approach, the provision of sufficient as well as efficient human resources for health, augmenting the role of cooperative joint ventures, the private sector and NGOs in the delivery of health care, exploring and developing alternative health care financing systems, intersectoral collaboration and action for health, intensification and expansion of environmental health activities, promotion of national fitness through sports and physical education, medical and health systems research, expansion of health services to also cover rural and border areas, preparedness for emerging and re-emerging health problems, reinforcing services and research activities in indigenous medicine, and strengthening collaboration with other countries for national health development.

Draft national population policies were also formulated in 1992 which changed the old pronatalist policy to a health-oriented policy to incorporate birth spacing in order to improve the health status of women and children, to provide the community with information on birth spacing, to encourage women to participate as equal partners in national development, to promote responsible reproductive behavior, including educating the male population on such matters, and to involve adolescents and youth in national development. A national environment policy was formulated in 1994. This policy relates to the integration of environmental considerations into the development process, with environmental protection as a primary objective in development.

The Ministry of Health laid down new objectives and strategies in 1996. The two main objectives are (i) to enable every citizen to attain full life expectancy, and (ii) to ensure that every citizen is free from disease. The strategies to meet these objectives are widespread dissemination of health information and education, enhancing disease prevention activities, and providing effective treatment for prevailing diseases.

## **SECTION 2: TRENDS IN SOCIOECONOMIC DEVELOPMENT**

### **2.1 Economic trends**

Myanmar changed to a market oriented economy in 1988. Since then various economic reform measures have been undertaken, such as decentralizing control, encouraging private sector development, abolishing price controls and reducing subsidies, allowing direct foreign investment, streamlining taxes and duties, diversifying exports, restructuring wages and prices, etc. With these reform measures the economy began to gradually recover between 1992-93 and 1995-96, with an average annual GDP growth rate of 2%. Along with economic development, social sector spending by the Government increased from 8157 million kyats in 1991-92 to 11,675 million kyats in 1995-96. However, the relative share of social sector expenditure out of the total government expenditure decreased due to the rapid expansion in infrastructure and in the other economic sectors. In 1999-2000 the GDP was 1,794 kyats per capita.

### **2.2 Demographic trends**

The main sources of demographic data are the vital registration and statistics system and population censuses. The last population census was in 1983. In 2000 the population was estimated to be 50.125 million (based on projections of the 1983 census). A third source of demographic data in Myanmar is the "Population changes and fertility survey" (PCFS) conducted with UNFPA assistance. Based on available data, the four main demographic indicators are as follows: crude birth rate (CBR) per 1000 population was 27.5 in urban and 29.0 in rural areas (2000), crude death rate (CDR) per 1000 population was 8.2 in urban and 8.5 in rural areas (2000), annual population growth rate was 1.84% (2000) and total fertility rate (TFR) 3.42 (2000) and about 24.8% of the population in Urban (2000). The proportion of people above 60 years of age is 7.65%. About 27.3% of the population is urban (1999), with minimal internal migration.

### **2.3 Social trends**

Myanmar has always placed a high value on education. The national literacy rate was 91.4% male and 90.6% female. A programme of skill based non-formal education initiated by UNESCO is also being implemented. Primary education is not compulsory but there is nearly universal enrolment at the primary level. The government has also embarked on a rapid expansion of basic education facilities and other social amenities in border areas. One of the major end-decade goals is the reduction of functional illiteracy from 22% to 11%.

### **2.4 Food supply and nutritional status**

There has always been a fair amount of surplus at the national level in respect of calorie supply from the staple food (rice). The food security index is 1.215. With regard to food

consumption patterns, 31% of families consumed 80% of calories less than the recommended daily allowance (RDA), and 20% consumed 80% of protein less than the RDA. These families can be regarded as being vulnerable to transitory or seasonal food insecurity. The prevalence of low weight in children under 5 years was 35.3 and that of stunting 33.9 (2000). The percentage of low birth weight newborns was found to be 11% in 2000. The national nutrition programme estimates that 89.32% of pregnant women are at risk of iron deficiency anaemia. The 1994 national nutrition survey revealed that 33.08% of children 6 to 11 years of age had visible stages of goiter and 0.38% of children under five years had signs of vitamin A deficiency (Bitot's spots).

## **2.5 Lifestyle**

Since the change to a market oriented economy, both positive and negative impacts have been seen in the health sector with regard to peoples' behaviour and lifestyles. The news media, radio and TV have played a significant role, with easier access to information in both urban and rural areas. Communicating knowledge about health through the media has been shown to be effective, but there are also negative aspects about mass communication through the media, such as the promotion of tobacco smoking. A limited study in 1994 revealed a 10% increase in smokers over a short period of four months. A study conducted among the elderly 32 townships in 1994 showed that 48.8% of males and 42% of females were smokers. The National Health Committee has decided to prevent smoking in public places like schools, hospitals, cinemas, etc., and the mass media is also being~ extensively used to combat smoking by highlighting its health hazards.

## SECTION 3: HEALTH AND ENVIRONMENT

### 3.1 General protection of the environment

The National Health Policy of 1993 makes reference to environmental health and the need “to intensify and expand environmental health activities including prevention and control of air and water pollution”. The National Health Plan (2000-2006) for environmental health has **five** subprogrammes, namely **environmental health risk assessment and control, occupational health, healthy setting, safe water and sanitation and control of agricultural hazard.**

Air pollution results mainly from vehicle emissions and strict smoke checks are done at the time of vehicle registration renewal. In 1994 unleaded fuel was introduced into the country.

Chlorinated water for domestic use is available in cities, while other areas use tube wells and small scale impounding dams for their regular water supply. Rural areas depend on rainwater, shallow wells, streams and river water. Drinking water surveillance is done by the National Health Laboratory of the Ministry of Health. Regular collection and safe disposal of solid waste is done by the city development committees.

The country has a national food safety policy and plan of action. The recently formed food and drugs advisory committee provides technical assistance to the food safety programme. The implementing unit is a food and drugs division formed in 1993 under the department of health. The country follows the Codex Alimentarius (CAC) guidelines. The public is educated on matters of food safety through the mass media and school curricula.

In Myanmar, the working population includes over 16 million people. The occupational health division of the Department of Health is responsible for identifying occupational health problems and implementing health promotional activities at work sites.

Intersectoral coordination and cooperation exist between the Ministry of Health and the other health related ministries with regard to environmental health matters. Constraints include limited trained human resources and scarce financial resources.

### 3.2 Water supply and sanitation

There is regular monitoring of the drinking water supply and sanitation. The proportion of the population with safe drinking water available at home or within reasonable access increased from 19.6% in 1980 to 71.5%(urban 89.2, rural 65.8) in 2000. The proportion of the population with adequate excreta disposal facilities increased from 20.2% in 1980 to 63.45% (urban 87.08, rural 82.27) in 2000. (Reported population based on 41 millions) and 86.6% (Urban 90.42, Rural 85.3) in 2001(based on population 42 millions). Source: NSW, ESD. Cases and deaths from water and food borne diseases decreased from 301,654 cases and 1434 deaths reported in 1991, to 208,790 cases and 491 deaths in 1995. Efforts by the

government to improve the water supply and ... sanitation facilities are also supported by UN (WHO and UNICEF) and bilateral agencies. The renewed HFA strategy will emphasize a demand driven bottom-up approach, adopting a social mobilization strategy to raise awareness and enhance community participation, and developing closer - collaboration between all partners -national, NGO and international.

## **SECTION 4: HEALTH RESOURCES.**

### **4.1 Human resources for health**

Between the periods of 1998 and 2002 tremendous changes in the organizational setup as well as technological development took place in the Department of Medical Sciences. Now the Department, which is running thirteen medical and health professional institutions and forty-three midwifery and nursing training schools, is responsible for training and production of all categories of Human Resources for Health. To ensure quality, congruence and relevance of the curriculum of the medical and allied health professions the post graduate curricula of 23 disciplines were revised in 1998. Thereafter, in line with the national Health Policy and in accordance with the changing needs of the country the undergraduate curriculum of medical and health professions was revised and updated in 2001.

With an objective to keep abreast with other ASEAN countries an Educational Development Special Four Year Plan (2000-2004) was implemented with special emphasis on eleven elements : - faculty development, curriculum development, technology development, library development, research development, infrastructure development, continuing medical education system development, strengthening of collaboration with International Institutions, greater involvement of Health Professional Institutions in Health Care System and Development of Human Resources for Health.

Myanmar Vision 2030 has been proposed for long-term development in HRH production in accordance with the projected population growth and health needs, to achieve measurable objectives and to bring about sustainable changes. Human Resources for Health Development Programme, which is one of the 12 programme of national Health Plan (2001-2006)\_ has also been developed with an aim to produce adequate and efficient health personnel for delivery of quality health care.

Endeavors to ensure equity in health care and reduction of discrepancy between different geographical areas has been implemented by opening of a new medical institute in Magway in may 2001 and establishment of the Institute of Dental Medicine, Nursing, Paramedical Sciences and Pharmacy in Mandalay in 1999, catering for students from central and upper Myanmar region.

As “man matters most”, human resources for health has been developed systematically with structured, supervised programmes which ensures quality and accountability. Selection of candidates into undergraduate and postgraduate programmes for medical and allied health professional institutions are meticulously carried out by admission policies and selection examinations.

Educational research, programme evaluation and continuous monitoring are methods used to improve the quality and relevance of HRH production. Close interdepartmental coordination between health services and the Health Professional Institutions has been strengthened to meet the changing needs of the user departments.

## 4.2 Financial resources for health

Total expenditure on health was 1.5% of GDP in 1998. Government expenditure on health was 15.1 % of the total expenditure on health, and this formed 3.9% of all government expenditure. Per capita government expenditure on health was \$13 (1998) Due to rising medical costs; alternative health care financing is among the new national health policies. This includes provision of paying wards in government hospitals and community cost sharing for essential drugs at government institutions. **Special trust funds are established at all public hospitals to provide free or subsidized care for unaffordable patients.** The challenge is to maintain both equity and quality of services in the cost-sharing scheme, which will allow affordable price setting and suitable exemption procedures (i.e. balancing sustainability of the scheme against the affordability of the community, particularly in rural areas).

## 4.3 Physical infrastructure

Upgrading of hospitals at all levels is an integral part of health policy. In many instances, physical requirements could not be provided due to financial limitations. There are no specific regulations on the quality, safety and efficiency of physical assets in government hospitals. The logistics of supply and management of medical equipment, supplies and drugs is found to be wanting. Some expensive medical equipment has been procured with financial participation of the community meeting up to 50-75% of the unit cost. To renew the strategy for HFA, a comprehensive health manpower development plan and a comprehensive health care technical service will need to be developed. The further development of the ~ public-private mix strategy for financing of health care will be encouraged, but with equity, quality and sustainability as central issues.

## 4.4 Essential drugs and other supplies

Lack of adequate essential drugs and supplies in the PHC system led the government in 1986 to request WHO assistance to strengthen this aspect of services. This led to the initiation of the Myanmar Essential Drugs Project in December 1988, which was to be implemented on a phased basis. The main objective was that items in the essential drugs list would be available as appropriate at each of the four levels of primary health care. Of 131 townships in the country, project implementation had covered 118 townships by October 1995. The project also advocated the manufacture of drugs in the national list of essential drugs by private entrepreneurs within the country. Two other activities of note are the publication of a National Drug Formulary in June 1989 and the adoption of a National Drug Law in 1993 to regulate, control and authorize the importation of pharmaceuticals and vaccines into the country. Future actions will relate to the wider production of essential drugs locally according to the standards of good manufacturing practices, to extend the activities of the essential drugs project to health care facilities in other Ministries, and to strengthen the mechanisms for quality control of drugs, both imported and manufactured in the country.

#### **4.5 International partnerships for health**

The National Health Policy specifically refers to strengthening collaboration with other countries for national development. In this regard, the Ministry of Health has close collaboration with UN and international agencies as well as other governments in the area of health. Such collaboration includes WHO, UNICEF, UNDP, UNFPA and **20** international NGOs, as well as bilateral arrangements with other countries in the South-East Asia Region and with Malaysia, Singapore and the People's Republic of China among others. Collaboration with other ASEAN countries is expected in the near future. Border meetings are also held regularly for communicable disease surveillance.

## SECTION 5: DEVELOPMENT OF THE HEALTH SYSTEM

### 5.1 Health policies and strategies

Among the social objectives laid down in the national policy is "to uplift health, fitness and educational standards". Under the guidance of the National Health Committee (NHC), new national health policies were enacted in 1993 to promote national health development. The policy also provided for continuing political commitment to HFA with PHC as the key approach. Other areas highlighted included private sector financing, health surveillance for emerging health problems, intersectoral coordination, and population issues for which a separate national population policy was drafted in 1992. National health policies are currently being implemented through the **fourth** National Health Plan (**NHP 2001-2006**), in which **twelve** broad programme areas and **78** detailed projects are identified.

### 5.2 Intersectoral cooperation

The NHC is convened every three months to take decisions on health matters. Intersectoral cooperation for implementation of **NHP IV** is accomplished through "supervision and implementation committees" at regional and subregional levels. In addition, NHP dissemination workshops are conducted in all regions to strengthen intersectoral cooperation activities. Cooperation with the NGO *sector*, which makes an important contribution to health programmes, is well established. Examples of multi-sectoral action for health include integrated health care provision in border areas, organization of national immunization days, programmes for the prevention and control of communicable diseases (e.g. malaria, tuberculosis, HIV/AIDS, etc.), salt iodization, school health, and the promotion of safe water and sanitation. The main constraint in effecting inter-sectoral cooperation is the weakness of communication between central, regional and sub-regional levels with regard to transmission and exchange of information. The absence of a monitoring and evaluation mechanism for inter-sectoral cooperation also tends to decrease its effectiveness.

### 5.3 Organization of health services

The Ministry of Health is the focal point for provision of health care for entire population and plays a very important role in the planning, organizing, coordinating, financing, regulation in delivery of health care. Ministry of Health consists of six departments, namely the Department of Health, the Department of Health Planning, the Department of Medical Research (Upper Myanmar), the Department of Medical research (Lower Myanmar), the department of Medical Sciences and the Department of traditional medicine. The Department of Health is mainly concerned with the provision of health care services and is functionally divided into eight divisions, namely public health, disease control, medical care, planning, administration, laboratory, food and drug control and nursing. Medical services are provided through various institutions ranging from teaching hospitals, specialist hospitals, state/division hospitals, district hospitals and township hospitals at the urban areas to station hospitals and traditional clinics at the rural areas.

Public health services encompass for planning, coordinating providing technical and material support to training, supervision, monitoring and evaluation of basic health services,

environmental health, MCH/BS, school health and health education services. At the state/divisional levels similar functions are exercised. At township level, a township medical officer is responsible for both public health and curative activities. Each township has one hospital with a bed strength varying from 16 to 50 bedded depending upon the population, one or two station hospitals and four to seven rural health centers (RHCs). Under each RHC there are four sub-centers staffed by midwives and public health supervisor (PHS II). A stepwise referral system exists though in some certain situation direct referrals are possible. The department of Health collaborates closely with other departments of the Ministry, and in particular with the Department of Medical Sciences which is responsible for basic training of health personnel.

#### **5.4 Managerial process**

For managerial purposes, implementation of the National Health Plan is divided into twelve broad programmes namely community health, disease control, hospital care, environmental health, laboratory services, food and drug administration, traditional medicine, human resources for health, health research, health promotion, health information system and health systems development.

#### **5.5 Health information system**

The national health management information system (HMIS) has been established to provide information for planning, monitoring, evaluation and disease surveillance. The system has been decentralized to the various levels of the health infrastructure to facilitate the completeness and validity of the data collected and the use of information for decision-making at lower levels. To improve the quality of data as well as its use, a minimum essential data set has been developed with the consensus of all project managers. Basic data collection tools, definitions and procedures have been standardized. The system has been designed to also allow the service provider to use the information generated before reporting it to the next level. A feedback mechanism has been established. Statisticians have been assigned to the various levels and computers provided.

#### **5.6 Community action**

As indicated in the national health policy, community participation in health activities is encouraged and the cooperation of NGOs promoted. Community action has been associated with community cost sharing schemes, the essential drugs project (1988-1994), community health management and financing project (1994), the revolving drug fund administered by supervisory committees, birth spacing projects, community contributions towards the building of hospitals and health centers, and the implementation of water and sanitation projects. Many village health committees have been formed which actively support health improvement at the village level. The main constraints are lack of financial resources and IEC materials. The renewed strategy will concentrate on social mobilization leading to effective community action.

## **5.7 Emergency preparedness**

The country has an established disaster response system with the involvement of all related government sectors, UN agencies and local NGOs, both national and subnational. The Ministry of Relief and Resettlement is responsible for the chairmanship of this committee. Natural disasters are a frequent occurrence in Myanmar and vary from storms and strong winds to floods and occasional earthquakes. The rapid growth of cities and migrating populations pose threats from fire hazards and epidemics of communicable diseases. A manual on disaster management for medical officers has been developed and published, and training given to those in disaster prone areas. The supply system has also been geared to respond to emergency situations. Rapid response kits have been developed that take into account specific types of disasters. The main constraints are the lack of well-trained personnel and weak intersectoral coordination and linkages.

## **5.8 Health research and technology**

In Myanmar the importance of health research is well recognized. The health policy specifically encourages the conduct of medical research, not only on prevailing health problems but also with due attention to health systems research. From 1990 to 1995, research studies provided evidence that certain areas had environmental iodine deficiency and pockets of endemic goitre which has led to the iodization of salt. Studies evaluating the pros and cons of various cost sharing schemes for health services have provided options for the consideration of decision makers. Other areas in which research has been undertaken include vaccine development for hepatitis B, pathophysiology of shock syndrome in dengue, haemorrhagic fever, reproductive health, and ORS compliance to name a few.

In 1994 the Health Research Policy Board was reformed under the chairmanship of the Minister of Health with the Director General of the Department of Medical Research as the Secretary. The other members of the board are the other Directors General of Health, " Directors of Medical Institutes and representatives of other related ministries. The board has laid down guidelines which include strengthening of research capability, identifying factors affecting national health, promoting health systems research, investigating major communicable and non communicable diseases and nutritional problems, promoting and conducting reproductive health research, and translating research findings into practical application. A steering committee on health policy research and a task force on health futures studies have also been formed.

## **SECTION 6: HEALTH SERVICES**

### **6.1 Health education and promotion**

In the national health plans for 1993-1996 and 1996-2001, the status of health education has changed from that of a support programme to a specific IEC project under the Health Systems Development Programme. Dissemination of health education down to the grass roots level is one of its major objectives. Accordingly, the Health Education Bureau (HEB) has revitalized and reorganized its countrywide health educational activities. As a consequence, the use of mass media for health education (radio talks, television spots, public service announcements on television) has increased considerably. In like manner, the preparation and dissemination of posters and pamphlets have also increased, with technical inputs given by the central HEB to other health related projects in the development of pamphlets and posters. More training of various medical and health staff has also been undertaken. The main constraints are inadequate financial resources, insufficient involvement of NGOs, and sustaining health promotion and education at the grass roots level.

### **6.2 Maternal and Child Health/Birth spacing**

Health care services for mothers and children receive priority consideration. The proportion of deliveries assisted by trained attendants was 43.3% in 2000. Antenatal care by trained personnel during pregnancy covered 61% pregnant women. One and a half million infants and almost two and a half million preschool children were also provided care through the health system.

A birth spacing project was initiated in 1991 and by 1995 covered 33 townships and by 2001 covered 120 townships. The contraceptive prevalence rate among women of reproductive age was 43.7% in year 2000. Infant mortality has significantly declined, mainly due to the successful implementation of the expanded programme on immunization. Maternal mortality has, however remained static due to multifactorial reasons. Future actions will include the formulation of a national plan for reproductive health (RH), advocacy for RH at all levels, adolescence reproductive health and expansion of birth spacing programme. The main constraints are lack of information about RH, limited resources and social and culture barriers.

### **6.3 Immunization**

The proportions of infants reaching their first birthday who have been fully immunized according to the national immunization schedule in 2000 were as follows: DPT p 89%, OPV 93%, measles 90% and BCG 95%. The proportion of pregnant women immunized with tetanus toxoid in 2000 was 77%. Following implementation of the BPI, there has been a significant decline in the incidence of BPI-target diseases. Training programmes have also been conducted for all categories of health personnel involved in the BPI implementation. National immunization days (NIDs) are held in the country. Acute flaccid paralysis surveillance is being implemented. The main constraints for BPI as a whole are transport difficulties and

maintaining an effective cold chain in remote areas. Attempts to resolve the latter with the use of solar refrigerators are being tried out.

#### **6.4 Prevention and control of locally endemic diseases**

The principal endemic diseases in Myanmar are cholera, plague, dengue haemorrhagic fever, watery diarrhoea, dysentery, viral hepatitis, typhoid and meningococcal meningitis. Cholera, plague and dengue haemorrhagic fever reach epidemic proportions in certain years, often occurring in cycles. The main strategies are surveillance, vector control, effective case management and laboratory support.

For the period from 1990 to 1996, the peak years for the following diseases were as follows: meningococcal meningitis morbidity/mortality 479/113 (1995); plague 528/3 (1992); and cholera 1758/52 (1993). The morbidity rates per 100,000 populations from 1990 to 1996 varied between 299.5 and 532.5 for diarrhoea; 128.7 and 269.8 for dysentery; 3.55 and 8.1 for typhoid; and 8.43 and 26.7 for viral hepatitis.

The main constraints have been the low level of health awareness among the population, poor environmental sanitation, and overload of work for peripheral health workers, poor facilities, and inadequate transport for supervision. The renewed HFA strategy will focus on public education through IEC and improved surveillance.

#### **6.5 Treatment of common diseases and injuries**

The five priority health problems listed in the NHP are malaria, tuberculosis, HIV/AIDS, diarrhoea/dysentery and protein-energy malnutrition. Other health problems listed in the NHP for 1993-96 was sexually transmitted diseases, drug abuse, leprosy, abortions and anaemia. The leading cause of mortality in children under five years is acute respiratory infection (25-30%). Noncommunicable diseases such as cancer, diabetes and occupational diseases are also considered priority health problems.

There have been significant changes in the approaches to deal with common diseases and injuries. These include the widespread use of IEC in the community, expansion of projects into more townships, changing treatment regimens (such as multi drug therapy in leprosy), and in-service training for basic health staff. Other actions to reduce the effects of common diseases and injuries are prevention by immunization, safe water and better sanitation, early recognition and effective treatment of diseases, and rehabilitation.

#### **6.6 Health Care by traditional medicine**

In addition to health care by modern medicine, the Department of Traditional Medicine provides community health care by traditional system of medicine through traditional medicine hospital and traditional medicine clinics all over the country. There are two 50-bedded traditional medicine hospitals and ten 16-bedded traditional medicine hospitals.

In order to serve health care for the rural community in remote area, the respective township traditional medicine practitioners carried out outreach health care services regularly to the nearby villages.

At the same time, human resources for health care by traditional system of medicine was enhanced by Institute of Traditional Medicine and University of Traditional Medicine expecting yearly production of 300 qualified Traditional Medicine Practitioners.

## **SECTION 7: TRENDS IN HEALTH STATUS:**

### **7.1 Life expectancy**

Life expectancy at birth has increased in Myanmar from 60.2 years for males and " 64.1 for females (urban) and 59.7 for males and 61.8 for females (rural) in 1994 to 63.9 years '. For females and 61 years for males (combined urban and rural) in 2000. This would imply w that more provisions would need to be made for health care of older persons in the future.

### **7.2 Mortality**

The infant mortality rate for 1999 was reported to be 59.8 per 1000 live births. The reported maternal mortality ratio was 2.81 per 1000 live births (rural) and 1.78 (urban) in 1999. One-third of the total deaths in children under five following hospital admission were due to acute respiratory infection. Diarrhoeal diseases in children under five are also a leading '. Cause of mortality. Malaria is a major public health problem, with an increase in the number of deaths from 4072 in 1988 to 4386 in 1994, but declining to 3062 in 1999. The number of deaths from tuberculosis were 953 in 1995/96 compared to 1444 in 1988, with a potential for increase due to drug resistance and cases associated with AIDS. Deaths from cardiovascular diseases and cancer are likely to increase in the future. As Myanmar moves towards a market economy, with increasing urbanization and more industrialization, deaths due to trauma following road traffic accidents and accidents in the work place are likely to increase.

### **7.3 Morbidity**

Some reference to morbidity has already been made in Sections 6.4 and 6.5. The incidence of leprosy declined from 86,152 cases in 1992 to 19,502 in 1995/96 and further to 10,262 in 2000, and there is hope for elimination in the near future with the use of multidrug therapy. Malaria has been the leading cause of morbidity for many decades and the number of cases reported in 1994 from 617 hospitals was 156,157, with a rate of 355.5 per 100,000 population. There were 121,031 cases reported during 1999. Most of the vaccine-preventable diseases have shown a decline, although an outbreak of measles was reported in 1994, mostly among children born in the pre-immunization period. Forty-six (46) cases of neonatal tetanus were reported in 1995-96. Polio morbidity has reduced significantly. Twenty (20) cases of acute flaccid paralysis were reported in 1995/96 but the number confirmed as polio was not reported. Tuberculosis is another major public health problem with 14,165 cases reported by 702 hospitals in 1994. There were 11,458 smear positive cases reported during 1999. Among nutritional problems, the prevalence of iodine deficiency disorders as identified by visible goitre in the 5-14 year age group was 33.08% (1994). Iron deficiency anaemia in pregnancy (haemoglobin less than 11 grams) was reported to be 58%, and vitamin A deficiency (Bitot's spots among five year olds) was 0.37% (1994/95). Protein-energy malnutrition still remains a problem in the country in spite of its being considered 'food secure' at the national level.

## 7.4 Disability

The prevalence of blindness in 2000/2001 was reported to be 0.9% and is mostly due to cataract, glaucoma, trachoma, and trauma. The main interventions are early detection and treatment.

## SECTION 8: OUTLOOK FOR THE FUTURE

### 8.1 Overall assessment and strategic issues

Based on some health status indicators such as life expectancy, it could be said that, ~ the overall health status of the population has improved. There have been {many policy developments during this reporting period. New national health policies were developed, a draft population policy formulated and national environmental policy laid down. More funds were available for health due to the improved economic situation. Per capita expenditure on health increased and the health care infrastructure was strengthened. Following the new health policy, private sector participation in health care provision increased considerably. Alternative systems of health care financing for government health services were also promoted, such as cost sharing schemes, user charges, etc. Both modern and traditional systems of medicine were encouraged. Partnerships with UN agencies, international 0 ~ organizations and bilateral agencies were further strengthened.

### 8.2 Futures vision

The futures vision will be based on the two main objectives of the Ministry of Health derived from the national objectives of SPDC, namely (i) to enable every citizen to attain full life expectancy and enjoy longevity of life, and (ii) to ensure that every citizen is free from disease. The three main strategies are the widespread dissemination of health information and education, enhancing disease prevention activities, and providing effective treatment for prevailing diseases. For mobilization and distribution of resources for health, the government will explore and develop alternative systems of financing and augment the role of cooperative joint ventures, the private sector and NGOs. **Myanmar Health Vision 2030 as 30 yearlong term plan has been formulated.**

### 8.3 Proposed strategies

The present policies for health, population and the environment will form the basis for strategies, with projections for the future depending on the changing situation.

**Country reported Data for Basic Health Indicators**

Indicator	Latest available data	Year	Source	Remarks	
<b>Population and Vital Statistics</b>					
Total population (in millions)	50.125	2000	1	CSO, SYB2000	
Population density (persons per sq km)	74	2000	1		
Sex ratio (males per 100 females)	98.63	2000	2	Country update	
Population under 15 years (%)	33.33	2000	2	Country update	
Population 60 years and above (%)	7.65	2000	2	Country update	
Crude birth rate (per 1000 population)	Urban Rural	27.5 29.0	2000 2000	2 2	Provisional (Country update)
Crude death rate (per 1000 population)	Urban Rural	8.2 8.5	2000 2000	2 2	Provisional (Country update)
Annual population growth rate (%)		1.84	2000	3	Country update
Total fertility rate (per woman)		3.42	2000	4	Country update
Urban population (%)		24.8	2000	1	Country update
<b>Socioeconomic Situation</b>					
Gross domestic product per capita	1,794 <sup>a</sup>	1999-2000	2	In kyats	
Adult literacy rate (%):	Male Female	91.4 90.6	2000 2000	1 1	Dept of education planning and training
Prevalence of low birth weight (weight <2500 grams at birth) (%)	15	2000	1	National Nutrition Centre	
Prevalence of underweight (weight-for-age) in children <5 years of age (%)	35.5	2000	5	<- 2SD from NCHS median	
Prevalence of stunting (height-for-age) in children <5 years of age (%)	33.9	2000	5	<- 2SD from NCHS median	
<b>Environment</b>					
Population with safe drinking water available in the home or with reasonable access (%)	Total Urban Rural	71.5 89.2 65.8	2000 2000 2000	5 5 5	
Population with adequate excreta disposal facilities available (%)	Total Urban Rural	63.1 83.6 56.5	2000 2000 2000	5 5 5	

Indicator	Latest available data	Year	Source	Remarks
<b>Health Resources</b>				
<i>Facilities</i>				
Number of hospital beds	30,254	2000	3	Beds available in govt hospitals
Population per hospital bed	1,590	2000	3	Country update
Hospital beds per 10,000 population	6.29	2000	3	
Number of rural health centres	1,412	2000	3	Country update
<i>Human resources</i>				
Number of physicians	14,356	2000	3	Public and private
Population per physician	3,352	2000	3	
Physicians per 10,000 population	2.98	2000	3	Country update
Number of nurses	12,642	2000	3	Country update
Number of midwives	10,307	2000	3	Country update
<i>Budgetary resources</i>				
Total Expenditure on Health (THE) as % of Gross Domestic Product (GDP)	1.5 %	1998	6	
Public Expenditure on Health (PHE) as % of Total Expenditure on Health (THE)	15.1 %	1998	6	
Private Expenditure on Health (PvtHE) as % of Total Expenditure on Health (THE)	84.9 %	1998	6	
Public Expenditure on Health (PHE) as % of General Government Expenditure (GGE)	3.9 %	1998	6	
Social Security Expenditure on Health (SSHE) as % of Public Expenditure on Health (PHE)	2.8 %	1998	6	
Tax funded Health Expenditure (TaxFHE) as % of Public Expenditure on Health (PHE)	93.7 %	1998	6	
External Resources for Health (Ext Res HE) as % of Public Expenditure on Health (PHE)	3.5 %	1998	6	
Private Insurance for Health Risks (Pvt ins HE) as % of Private Expenditure on Health (PvtHE)	...	1998	6	
Out-of-Pocket Spending on Health (OOPS) as % of Private Expenditure on Health (PvtHE)	100 %	1998	6	
Per capita Total Expenditure on Health (THE) at official Exchange rate (X-Rate per US\$)	86	1998	6	
Per capita Public Expenditure on Health (PHE) at official Exchange rate (X-Rate per US\$)	13	1998	6	
Per capita Total Expenditure on Health (THE) in international dollars (int'l \$)	32	1998	6	

Indicator	Latest available data	Year	Source	Remarks	
Per capita Public Expenditure on Health (PHE) in international dollars (int'l \$)	5	1998	6		
<b>Health Services</b>					
Pregnant women attended by trained personnel during pregnancy (%)	60.1	2000	1	HMIS	
Deliveries attended by trained personnel (%)	77.5	2000	1	Country update	
Women of childbearing age using family planning (%)	43.7	2000	1	HMIS	
Infants reaching their first birthday that have been fully immunized against diphtheria, tetanus, and whooping cough (%)	89	2000	1	HMIS	
Infants reaching their first birthday that have been fully immunized against poliomyelitis (%)	93	2000	1	HMIS	
Infants reaching their first birthday that have been fully immunized against measles (%)	90	2000	1	HMIS	
Infants reaching their first birthday that have been fully immunized against tuberculosis (%)	95	2000	1	HMIS	
Women that have been immunized with tetanus toxoid (TT) during pregnancy (%)	77	2000	1	HMIS	
<b>Health Status</b>					
Life expectancy at birth (years):	Total	62.3	1999	1	CSO, SYB2000 Country update
	Female	63.9	1999	1	
	Male	60.7	1999	1	
Infant mortality rate (per 1000 live births)	59.8	1999	1	National Mortality Survey 1999	
Under-five mortality rate (per 1000 live births)	78	1999	1	National Mortality Survey 1999	
Maternal mortality ratio (per 100,000 live births)	Urban	100	1998	1	VRS
	Rural	180	1998	1	

<sup>a</sup> At 1985/86 constant producers' prices

**Sources:**

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