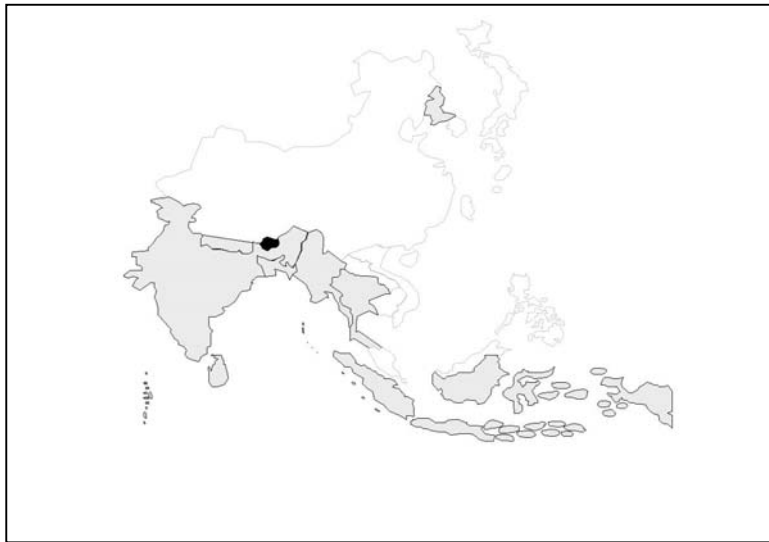


# **COUNTRY HEALTH PROFILE**

**BHUTAN**



*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**

Bhutan has enjoyed peace and political stability since the present line of hereditary monarchs was established in 1905. Bhutan's approach to health care has been the delivery of an integrated health service package to its population scattered across a difficult mountainous terrain. It has made significant strides after adopting the primary health care approach in 1978.

Bhutan gives importance to strike a balance between economic growth and the preservation of its age-old traditions and culture. Human development is at the core of national development priorities and the Royal Government accords the highest priority to human resources investment. Sustainability is recognized as a key consideration in all national development strategies and policies, achieved through meaningful community participation in development activities. An effective health care system is in place that provides access to 90% of the population. The literacy rate and per capita GNP have risen over the years. Given the priority afforded to health and education, financial allocations have been high. Public expenditure on health as a percentage of general government expenditure was 12.2% in 1998.

With declining mortality rates, high birth rates and rising life expectancy, the population growth rate had accelerated to 3.1% by the mid 90s. However, following the emphasis given to the issue in the 8th Five Year Plan (FYP), the rate has come down to the more moderate level of 2.55% (2000). The country has no obvious gender discrimination and within the purview of the nation's laws, women enjoy equal status with men and have high participation in the decision-making process at the grass roots level. The 8th FYP (1997-2002), based on HFA goals and priorities, has been formulated to include intensification of population activities, coverage of un-reached population groups, disease control, reproductive health, mental health and environmental health.

All these considerations are not without constraints. The country is landlocked, is subject to trade sanctions, has a rugged topography and harsh climate, and has limitations in qualified, skilled manpower, which cuts across all sectors. At present the country is still dependent on external assistance to support development.

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

### **2.1 Economic trends**

Up to 1985 the Bhutanese economy was dominated by agriculture, but with the commissioning of the Chhukha power project in 1987-88, the GDP experienced a significant increase with an annual growth rate of 6.8%. The per capita GNP increased from US\$ 110 in 1988 to US\$ 470 in 1995 and US\$ 551 in 2000. The annual growth rate of the GDP was 5.9% at the beginning of this period before slowing down. As overall development activities accelerated, the flow of funds from external donors increased and government investment formed 52% of the total in 1994. With the government policy being to encourage the private sector and privatisation, the volume of private investment is also steadily increasing. The social sectors including health are considered important and received 22.6% of overall national fund allocations. Out of this, in the 8th FYP, the health sector (excluding water and

sanitation) will receive 8.3% of the overall national allocation, with about 47% apportioned as capital and 53% as recurrent expenditure.

As the government continues to pursue free education and health for the population, an emerging challenge is that of escalating costs and their containment, without diminishing the quality of the services rendered. Increasingly the government is exploring avenues of cost recovery and cost sharing in the social sectors. Unemployment is not a problem at present but concerns are expressed for the future, given the large number of school leavers who will enter the job market.

## **2.2 Demographic trends**

Bhutan has a crude birth rate of 34.09, crude death rate of 8.64 and a total fertility rate of 4.7(2000). Three decades of consistent development in the health sector have resulted in a rise in the expectation of life at birth. With the declining mortality, the population growth rate had risen to 3.1%, but slowed down thereafter to 2.55%, which is still high.

In view of this, the current plan carries intensified activities in reproductive health including family planning, with a commitment to reduce the rate of population growth to less than 2% by the end of the 8th plan. At present 7.2% of the population is more than 60 years old, and this proportion is expected to increase within the next 5-10 years. Bhutan's population is predominantly rural, but the process of urbanization is increasing due to rural/urban migration, resulting in an increase in the urban population proportion from 5% in 1980 to 14.5% in 2000.

## **2.3 Social trends**

The adult literacy rate has risen from 23% in 1980 to 54% in 2000. Improved levels of education have increased health awareness and the utilization of health services. The majority of the population (85%) is rural and dependent on agriculture. Big industrial ventures (construction and mining) experience shortfalls in labor, compelling the importation of outside labor, for whom health care has to be made available by the government. A landmark initiative of the government has been the introduction of non-formal education.

Lack of trained human resource in all sectors is one of the biggest hurdles, and a large quantum of financial resources is used for training and building human resource capacity within the country. The topography of the country poses problems in coordination of social services to rural communities. To meet this challenge, emphasis is given to improving the road network and radio/telecommunication facilities.

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

The percentage of newborns weighing less than 2500 grams was 15.1% in 1999. The prevalence of underweight children (weight-for-age) was 18.7% and that of stunting (height for age) was 40 % in 1999. The percentage of anemia in pregnancy (reported as a complication of pregnancy) was 59% (1996) and the prevalence of iodine deficiency disorders was 14% (based on urine analysis). With the introduction of universal iodization of salt and legal control of un-iodized salt, the prevalence of goiter has fallen from 64.5% in 1983 to 14% in 1996 and the cretinism rate from 10% to 0.4% in the same period. Supplements of vitamin A are given to children at basic health units and iron supplements to

anemic women at MCH clinics. Iodized salt is available throughout the country. Exclusive breast-feeding (up to 4-6 months) and good child feeding practices are promoted. Nutrition information is disseminated through all basic health units. Seasonal food shortages have been known to compound the nutritional problems.

## **2.5 Lifestyle**

Although no proper assessment has been made, tobacco consumption, especially smoking, which was alarmingly high in the 1960s, appears to have declined following dissemination of information on the hazards of tobacco. Mental illness including psychological conditions appears to be significant. Alcohol consumption still poses a problem. Sedentary lifestyles among office workers could adversely influence their health.

## **SECTION 3: HEALTH AND ENVIRONMENT**

### **3.1 General protection of the environment**

Bhutan still has its natural resource base largely intact. The country's environmental planning therefore precedes environmental degradation. Pollution, especially that of air, is not a problem at present. The main source of energy is wood, supplied in a sustainable way from healthy forests. Some shift has occurred from biodegradable waste to non-biodegradable waste, e.g. plastic products/bags, etc., especially in urban areas. Pollution from industry and from stores of agricultural chemicals is minimal. The National Environmental Committee (NEC) created in 1989 and made autonomous in 1991 does routine monitoring. It has two divisions - the Environment Impact Assessment (ESA) Division mainly concerned with industries and the Natural Resources Management (NRM) Division concerned with agriculture, forestry, etc. Lack of trained manpower, low literacy and the almost non-existent concern for environmental issues in rural communities are some of the major constraints.

### **3.2 Water supply and sanitation**

Safe drinking water was available to 77.8% of the urban population in 2000 as compared to 54% in 1992. Access to piped drinking water was 73.2% in the rural sector in 2000 compared to 26% in 1992. Adequate latrine facilities were available in the homes or immediate vicinity for 88% of the urban population and 70% of the rural population in 1995. In 2000 the access (combined rural and urban) was 90%. In the 8th FYP provision has been made for water and sanitation - both maintenance and new facilities. Although drinking water quality is monitored periodically, there are no established water quality standards. Laboratory facilities are also inadequate. Further, old habits and traditional beliefs are hard to change. In villages, people still believe that "water contamination carries only for a yard" and that the kitchen garden can benefit from excreta, which accounts for the high incidence of diarrhoeal diseases.

## **SECTION 4: HEALTH RESOURCES**

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

Human resources for health per 10,000 population in 1999 were as follows: physicians 1.6, midwives/nurses 7, pharmacists 0.7, dentists 0.6, and other health care providers 24.6. In spite of efforts over the past decades, the country is short of doctors and other skilled categories and must rely heavily on the employment of expatriates. The country has now embarked on training general practitioners rather than specialists, since the latter would be underutilized and not cost effective in the Bhutanese context.

Training of human resources for health is carried out in-country and externally. Within Bhutan the main training institute, the Royal Institute of Health Sciences (RIHS), trains nurses, midwives, health assistants and technicians. With WHO assistance, the quality of training at the RIHS has been improved through training in educational sciences for faculty members, curriculum development, upgrading of library services and efforts to develop “field training areas” affiliated to the RIHS. The National Institute of Family Health, which provides refresher training for health workers, has been revitalized in collaboration with the RIHS. Another local institute for training is the National Institute of Traditional Medicine (NITM), which is based on the Tibetan system. With regard to external training, students are trained in Myanmar, Thailand, Sri Lanka, Bangladesh and India in a spirit of technical cooperation. A master plan for human resources for health has been developed to cover a period of 20 years.

The challenges in the area of human resources are many but the situation is likely to improve. Constraints include non-availability of candidates for specific training such as malaria, forensic medicine, etc., too few faculty members in the RIHS to be spared for further training, and insufficient candidates for training at the NITM.

### **4.2 Financial resources for health**

The government health expenditure as a proportion of the total government expenditure is 12.2% (2000). The recurrent health expenditure is 52% of the total health expenditure. The government's total revenue income is less than what it spends, thereby necessitating assistance from bilateral and UN agencies. External resources for health formed 27.5% of public expenditure on health in 2000.

Health and education continue to be provided free of cost and so far private sector involvement has not been solicited. However, during the 8th plan, alternative schemes of funding in the public sector will be studied. The creation of a large trust fund for health has been proposed to ensure and maintain vital health service components such as essential drugs. The country is largely dependent on donors for most of its financial resources. Sometimes external assistance is not timely enough for effective utilization, the quantum of funding remains in doubt, and unexpected cuts applied to committed funds by donors significantly disrupt the planning process.

### **4.3 Physical infrastructure**

The physical infrastructure for health which commenced with one hospital in 1961 now has a four-tiered network of 27 hospitals at national, regional and district levels, 149

basic health units (BHUs), 14 dispensaries and 426 outreach clinics covering 90% of the population. It is proposed to replace the dispensaries with BHUs, while some BHUs will be upgraded to hospitals and the older hospitals replaced by new facilities. The total hospital-bed availability is 1023 giving a population-bed ratio of 622 (16 beds per 10,000 population). Concurrently, the management of the hospital equipment maintenance division will be strengthened and telecommunication services to health facilities in remote districts improved. Maintenance and repair of imported equipment has at times proved difficult, and a lack of electricity in many BHUs has been a constraint.

#### **4.4 Essential drugs and other supplies**

The percentage of essential drugs available in a sample of remote BHUs ranged from 85% to 98%. Bhutan has succeeded in maintaining an exemplary essential drugs programme, with all essential drugs dispensed free of cost. To date, the major share of funding is from government sources, with a high potential for sustainability. Training, together with the development of management tools, has strengthened the programme. The main constraints are the lack of pharmaceutical industries and logistics support, inadequate human resources to meet increasing demands, and the difficult terrain.

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

The health sector has received aid from WHO, other UN agencies, bilateral agencies and NGOs. DANIDA, though a recent donor, is now probably the single largest agency involved in health. India has recently begun to support construction and upgrading of hospitals. The policy of the government is to continue with existing collaborative mechanisms. Towards this end, a unit for aid coordination has been established.

### **SECTION 5: DEVELOPMENT OF THE HEALTH SYSTEM**

#### **5.1 Health policies and strategies**

The 7th plan, which was devoted to the goals of consolidating, strengthening, and expanding the coverage of services to ensure accessibility, ended in mid-1997. The 8th plan came into effect thereafter and mainly strives to intensify population activities; consolidate and strengthen existing health infrastructure; promote self-reliance and sustainability of the health sector by studying cost sharing practices, instituting trust funds and involving the private sector in a controlled manner in chosen areas; strengthen human resource development according to a master plan and upgrade training institutes; enhance the quality of health services; extend health care services to those in unreached areas; and strengthen the health management information system.

#### **5.2 Intersectoral cooperation**

The Ministry of Planning is the coordinating agency among the various sectors at central level. District administration facilitates intersectoral cooperation at that level, while individual sectors have a free hand to establish direct coordinating mechanisms. Good examples of intersectoral coordination are seen in the implementation of national immunization days during 1995/96, and in the malaria control, nutrition, and water and sanitation programmes.

### **5.3 Organization of the health system**

Health care is provided through a four-tiered network of outreach clinics, BHUs, district hospitals and regional hospitals with the national referral hospital at the apex. Through this organized system, access to services with uniform levels of care at the various levels is assured. At the district level all hospitals are manned by at least one medical doctor. At national and regional levels, where specialized services are available, clinics serve to screen patients needing admission. The development of doctors who are generalists to serve in district hospitals is encouraged.

The national policy is one of decentralization to the district level, with the district hospitals and the BHUs under the full control of the Dzongdag or district administrator. Constraints include lack of eligible candidates to serve as general practitioners, lack of funds, difficult terrain, and inadequate road network and telecommunication facilities.

### **5.4 Managerial process**

The health sector has a functional bottom-up approach to planning. The center provides broad guidelines based on national health policies and strategies. The districts have the primary responsibility of planning and implementing their health care activities, be it infrastructure or service development. The center merely facilitates the district effort by providing support, technical as well as resource mobilization. The center also monitors progress of the districts through an annual health meeting. Districts conduct their own mid-year and annual reviews. Development of human resources for management, strengthening the health management information system and conducting evaluations have ensured effective implementation of the managerial processes for health.

### **5.5 Health information system**

The health management information system (HMIS) is based on a conventional system with over dependence on hospital records, as can be seen in the data reported in the annual health bulletin. With assistance from DANIDA and WHO, the HMIS is being reoriented to receive data from all sources and gear the system towards use of information for decision making at all levels. This would involve training of personnel throughout the system and the provision of data processing equipment.

### **5.6 Community action**

More emphasis has been given to community action in the 8th plan than in the 7th plan. Already over a thousand village health volunteers have been trained and more will be recruited where necessary. They are not substitutes for formal health workers but catalytic agents in an interactive process, to provide health care within their own communities with some simple curative tasks. Efforts will also be made to encourage the community to take on responsibilities for maintenance of health facilities in their areas - such as contributing their labor for construction of outreach clinics, management and maintenance of water supply schemes, and maintenance of health facilities.

## **5.7 Emergency preparedness**

Although the country is not free from disasters, the magnitude of the problem has not been sufficient to draw serious concern of the government. Some safety measures have been taken with regard to fire hazards and road accidents, which have been increasing over the years. A trauma unit was formed in the national hospital in 1994 and the orthopedic services strengthened.

## **5.8 Health research and technology**

In the last three decades health research has not played a significant role, but its use in the decision-making process has now been recognized. In 1996 a unit of health research and epidemiology was established within the Health Division, with technical and financial support from WHO. Several small scale studies and assessments have since been carried out. Research has been given emphasis in the 8th FYP, with provision also made for research activities under a DANIDA-supported project. Substantial financial allocation has been earmarked for development of research capacity within the Health Division. Future strategies will also include collaboration with research institutes in other countries.

# **SECTION 6: HEALTH SERVICES**

## **6.1 Health education and promotion**

The IEC for Health Bureau provides health education and health promotional support to all health programmes, including those at schools, health facilities and outreach clinics. Some components of health have also been included in school curricula. The Bureau also has recourse to the mass media and has facilities for materials production.

## **6.2 Maternal and child health/family planning**

The proportion of pregnant women attended by trained personnel during pregnancy is 72%, and deliveries attended by trained personnel is 23.66% (2000). The percentage of women of childbearing age using family planning is 30.7% (2000). Between 1984 and 2000 the infant mortality is reported to have fallen from 102.8 to 60.5; the under-five mortality rate reduced from 162.4 to 84 per 1000 live births; and the maternal mortality ratio from 770 to 258 per 100,000 live births. A declining mortality rate and a stationary birth rate of 39.9 per 1000 population during the early 90s had resulted in a high population growth rate of 3.1% in 1994. Following the increased priority the government has given to population planning in the 8th FYP, the growth rate has come down to 2.55% but is still short of the 2% targeted for the year 2002.

The 8th FYP also considers reproductive health (RH) crucial to general health and visualizes development of a strategy to focus on reproductive health care with all its respective service components. A youth guidance and counseling unit has been established to counsel and disseminate RH information to adolescents and youth. Efforts are also underway to increase the literacy rate through an adult education programme initiated in 1992.

MCH/FP services are provided through the four-tiered network of health institutions. The population that cannot be covered by static health facilities are reached by outreach

clinics. Village health workers are involved in motivating and bringing women and children to clinics for MCH/FP services. Although health service coverage is 90% there are still unreached pockets. Due to transport difficulties, the referral of complicated deliveries poses problems, accounting for the high maternal mortality. Deliveries attended by trained health personnel are also very low and add to the problems of safe motherhood. Despite continuing health education, the rate of contraceptive prevalence is still very low. During the 8th FYP, family planning and MCH care will be intensified within the scope of reproductive health.

### **6.3 Immunization**

The proportion of infants reaching their first birthday that have been fully immunized according to national immunization policies is 85% (2000). The proportion of women that have been immunized with tetanus toxoid (TT) during pregnancy is 73%. National immunization days have been conducted since 1995, with OPV as the main antigen and TT and measles as 'mop-up' antigens. The coverage of the targeted population was almost 99%.

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

Since early 1990s, much progress has been made. The awareness of people has increased, services have been brought closer to the people, and more effective methods of control have been used for some diseases. Most vertical communicable disease programmes are gradually being integrated into general health services. The five leading diseases reported for 1999, in rank order, are acute respiratory infections, diarrhoea/dysentery, skin diseases, conjunctivitis and worms.

Much progress has been made in the control of iodine deficiency disorders and leprosy. Goiter has been reduced from 64.5% in 1983 to 14% in 1996 and cretinism from 10% to 0.4% in the same period. The ionization of salt and its distribution have not encountered any major logistical problems and national commitment is strong. Leprosy control too has made good progress and in 2001 only 16 new cases were reported. Acute respiratory infections, diarrhoeal diseases, malaria and tuberculosis remain major problems and the lack of a sensitive reporting system makes situational analysis difficult. Acute respiratory infections (ARIs) still top the morbidity ranking. They also account for 14.1% of deaths in children under five years. With the introduction of ORT, mortality from diarrhoeal diseases has been minimized to some extent.

The annual load of new cases of tuberculosis is 1200, of which about 27% are sputum positive. In 1994 Bhutan introduced the DOTS strategy nationwide. The estimated population exposed to the risk of malaria is less than 250,000, yet in 1994 and 1995, the number of cases reported were 39,801 and 23,195 respectively, with *P. falciparum* proportions being 41.1% and 32.5% respectively. Since the introduction of synthetic pyrethroid in 1995 and the use of impregnated bed nets, a significant improvement appears to have been made. The number of reported cases were 12,237 in 1999 but *P. falciparum* proportion was 53.4%.

The immunization programme has made a dramatic impact on the vaccine-preventable diseases of childhood. The last case of polio was reported in 1986. National immunization days have been successfully implemented. The prevalence of hepatitis B is significant with a carrier rate of 4.9%, which places Bhutan at "intermediate endemicity". In July 1996 hepatitis B vaccine was introduced into the immunization programme. For

communicable disease control, laboratory support is critical. Towards this end laboratory services are being strengthened with technical assistance from WHO.

Although communicable diseases currently continue to hold centre-stage, noncommunicable disease concerns such as hypertension, neoplastic diseases and trauma, especially road traffic accidents, are emerging problems. In this context, a reliable health information system and operational research become important. Overall, the main constraints are the shortage of trained human resources that cuts across all sectors, inadequate laboratory service back up, a weak health information system, and a topography that makes access difficult.

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

Communicable disease programmes such as those for acute respiratory infections, diarrhoeal diseases and other childhood problems are being integrated as part of a "sick child initiative". Newer disease control strategies have been introduced with regard to the major communicable diseases. Programmes for community-based rehabilitation and mental health were launched in 1996. The problem of streptococcal infection and rheumatic heart disease is being investigated.

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

### **7.1 Life expectancy**

Life expectancy, which was reported as 45.6 years based on data of 1980-1985 had increased to 60.7 years by 2000. This increase is attributable to improvement in maternal and child health, immunization, nutrition, water supply and sanitation, control of communicable diseases and higher literacy rates.

### **7.2 Mortality**

Since 1992, the infant mortality rate (IMR) has declined from 102.8 to 60.5 per 1000 live births and the maternal mortality rate (MMR) from 770 to 258 per 100,000 live births. Acute respiratory infections accounted for 21% of deaths in children under-five years of age and diarrhoeal diseases 13.3% (2000 survey). Routine reporting (which is not very sensitive) indicates declines in ARI, diarrhea and malaria-related deaths.

Though the quantum drop in infant and maternal mortality is significant, mortality still remains very high. Indicators of maternal health services need to be improved considerably (e.g. overall only 23.66% of deliveries are attended by trained personnel and in some areas it is as low as 4%). The contraceptive prevalence rate is only 30.7%. Nutritional problems also contribute to maternal and child mortality. The shortage of human resources, the lack of a sensitive information system for reliable assessment of disease problems, and overdependency on external assistance are major concerns.

### **7.3 Morbidity**

Infectious and parasitic diseases are the leading causes of morbidity. Diseases such as malaria, tuberculosis and leprosy have shown a diminishing trend. The EPI-target diseases

have decreased remarkably. An increasing trend is seen with ARIs and diarrhoeal diseases. Newer disease control strategies have been adopted where applicable.

## **7.4 Disability**

There is no formal reporting or assessment of disability. The sequelae of cretinism and leprosy are evident, but an effective control programme is now in place. Disability following road and work related accidents are on the increase. Community based rehabilitation and mental health programmes were initiated in 1996. The lack of proper baseline data is a major constraint.

## **SECTION 8: OUTLOOK FOR THE FUTURE**

### **8.1 Overall assessment and strategic issues**

Given that the development of Bhutan started only 35 years ago, much has been achieved. The country's economic situation, social commitment and political will have been conducive to improvements in health. Morbidity and mortality due to communicable diseases, especially the vaccine-preventable diseases of childhood, have declined considerably. Control of iodine deficiency disorders (IDDs) has been remarkable. Protein-energy malnutrition (PEM) and iron deficiency anemia are still problems. Living conditions have improved. Increased coverage with sanitation and safe drinking water facilities have been effected. Promotion and preventive activities have contributed much to this improvement.

The development of the health service infrastructure has been considerable, with emphasis now on the quality and development of human resources. Community action and participation has been very effective and will continue to be promoted. The health management information system (HMIS) will need to receive priority consideration and health systems research promoted and used for decision making.

The country has come this far with assistance from bilateral, multilateral and UN agencies, both in financial and technical terms. Achieving the ultimate health goals in the 8th FYP will depend much on external assistance and active coordination with and cooperation of other relevant sectors.

### **8.2 Futures vision**

The health sector will be at the center of the overall development framework. Specific objectives for the future are intensification of population activities for smaller but well provided for and happier families, consolidation and strengthening of existing health infrastructure for equitable and standardized health services, promotion of self-reliance and sustainability, strengthening human resource development, enhancing quality health care services, and extending health care services to unreached areas.

### **8.3 Proposed strategies**

Future strategies are contained in the 8th FYP. The cornerstone is equity of access to the health system and its utilization. Action to ensure sustainability including financial

affordability and related policies has been initiated, commencing with a trust fund for essential drugs. To slow population growth to around 2%, intensified family planning services will be implemented. Disease prevention and control programmes will be intensified. Prevention of cancer and cardiovascular diseases will be promoted through health education. High immunization coverage will be maintained and nutrition standards strengthened to improve maternal health and reduce maternal and infant mortality. Human resources will be developed based on the human resources master plan through in-country and external training programmes. The quality of services and the HMIS will receive priority.

## Country reported Data for Basic Health Indicators

Indicator	Latest available data	Year	Source	Remarks	
<b>Population and Vital Statistics</b>					
Total population (in thousands)	658	1998	1		
Population density (persons per sq km)	16 <sup>a</sup>	1998	2		
Sex ratio (males per 100 females)	102.0	1999	3		
Population under 15 years (%)	42.1	1999	3		
Population 60 years and above (%)	7.2	1999	3		
Crude birth rate (per 1000 population)	34.09	2000	4	Sample survey	
Crude death rate (per 1000 population)	8.64	2000	4		
Annual population growth rate (%)	2.55	2000	4		
Total fertility rate (per woman)	4.7	2000	4		
Urban population (%)	14.5	1997	4		
<b>Socioeconomic Situation</b>					
Gross national product per capita (US\$)	551	2000	1		
Adult literacy rate (%): Total	54	1999	1		
Male	52	1999	1		
Female	28	1999	1		
Prevalence of low birth weight (weight <2500 grams at birth) (%)	15.1	1999	5	Hospital data	
Prevalence of underweight (weight-for-age) in children <5 years of age (%)	18.7	1999	5	Anthropometric survey	
Prevalence of stunting (height-for-age) in children <5 years of age (%)	40.0	1999	5		
<b>Environment</b>					
Population with safe drinking water available in the home or with reasonable access (%)	Total Urban Rural	77.8 97.5 73.2	2000 2000 2000	4 4 4	Sample survey
Population with adequate excreta disposal facilities available (%)	Total Urban Rural	88.0 ... ...	2000	4	
<b>Health Resources</b>					
<i>Facilities</i>					
Number of hospital beds	1023	1999	5		
Population per hospital bed	622	1999	5		
Hospital beds per 10,000 population	16	1999	5		
Basic health units (BHUs)	149	1999	5	Not all functional	
Outreach clinics (ORC)	426	1999	5		
<i>Human resources</i>					
Number of physicians	103	1999	5		
Population per physician	6,384	1999	3		
Physicians per 10,000 population	1.6	1999	5		
Number of nurses/midwives	467	1999	5		
Nurses per 10,000 population	7	1999	5		

Indicator	Latest available data	Year	Source	Remarks
<b><i>Budgetary resources</i></b>				
Total Expenditure on Health (THE) as % of Gross Domestic Product (GDP)	3.8 %	1998	7	
Public Expenditure on Health (PHE) as % of Total Expenditure on Health (THE)	90.3 %	1998	7	
Private Expenditure on Health (PvtHE) as % of Total Expenditure on Health (THE)	9.7 %	1998	7	
Public Expenditure on Health (PHE) as % of General Government Expenditure (GGE)	12.2 %	1998	7	
Social Security Expenditure on Health (SSHE) as % of Public Expenditure on Health (PHE)	0.0	1998	7	
Tax funded Health Expenditure (TaxFHE) as % of Public Expenditure on Health (PHE)	72.5	1998	7	
External Resources for Health (Ext Res HE) as % of Public Expenditure on Health (PHE)	27.5 %	1998	7	
Private Insurance for Health Risks (Pvt ins HE) as % of Private Expenditure on Health (PvtHE)	0.0	1998	7	
Out-of-Pocket Spending on Health (OOPS) as % of Private Expenditure on Health (PvtHE)	100 %	1998	7	
Per capita Total Expenditure on Health (THE) at official Exchange rate (X-Rate per US\$)	23	1998	7	
Per capita Public Expenditure on Health (PHE) at official Exchange rate (X-Rate per US\$)	21	1998	7	
Per capita Total Expenditure on Health (THE) in international dollars (int'l \$)	71	1998	7	
Per capita Public Expenditure on Health (PHE) in international dollars (int'l \$)	64	1998	7	
<b>Health Services</b>				
Pregnant women attended by trained personnel during pregnancy (%)	72	2000	4	ANC attendance during 3rd trimester
Deliveries attended by trained personnel (%)	23.66	2000	4	
Women of childbearing age using family planning (%)	30.7	2000	4	
Eligible population (i.e. infants reaching their first birthday) that has been fully immunized according to national immunization policies	85	...	6	
Infants reaching their first birthday that have been fully immunized against diphtheria, tetanus, and whooping cough (%)	88	1999	5	

Indicator	Latest available data	Year	Source	Remarks
Infants reaching their first birthday that have been fully immunized against poliomyelitis (%)	89	1999	5	
Infants reaching their first birthday that have been fully immunized against measles (%)	79	1999	5	
Infants reaching their first birthday that have been fully immunized against tuberculosis (%)	93	1999	5	
Women that have been immunized with tetanus toxoid (TT) during pregnancy (%)	73	1999	5	
<b>Health Status</b>				
Life expectancy at birth (years): Total	60.7 <sup>b</sup>	2000	1	
Male	...			
Female	...			
Infant mortality rate (per 1000 live births)	60.5	2000	4	
Under-five mortality rate (per 1000 live births)	84.0	2000	4	
Maternal mortality ratio (per 100,000 live births)	258 <sup>c</sup>	2000	4	

<sup>a</sup> Computed based on population of 1998 and surface area of 1997 provided in the source document

<sup>b</sup> As per 1994 National Health Survey, life expectancy at birth in years was total 66.1, male 66.0, female 66.2.

<sup>c</sup> Based on 6 maternal deaths and 2,347 live births during the one year recall period of the National Health Survey 2000

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