CHAPTER 2

BACKGROUND INFORMATION

2.1 Country Profile

Myanmar, one of the countries of South-east Asia, is located on the western edge of the Indo-China peninsula. It is bounded by Thailand and Laos in the east, China in the north and north-east, India in the north-west, Bangladesh in the west and by Indian Ocean in the south-west and south. Shaped like a lopsided diamond. The country in its entire area occupies 676,577.5 square kilometers.

2.1.1 Geography

Geographically, Myanmar can be divided into hilly, coastal, dry area and area of plains and a deltaic region. The main features of the country are delta region and acentral plain surrounded by mountains. Administratively the country is divided into 14 States and Divisions. There are 52 districts, 320 townships, 16762 village tracts and 65325 villages in the whole country. Myanmar has abundant natural resources including land resources, water resources, natural gas and coal resources, and mineral and marine resources.

Leprosy is one of the tropical diseases and many cases are found out from tropical regions. In Myanmar, many cases are found out from dry area namely Magway Division, Sagaing Division and Mandalay Division.

2.1.2 Climate

Myanmar has the effects of the monsoon in different parts of the country. Temperature varies from 38°C to 19°C. There are three distinctive seasons namely: hot(March to May), rainy(June to October) and cool(November to February).

2.1.3 Religion and Culture

Over 80% of Myanmars are Buddhist and there are also Christians, Muslims, Hindus and even some animist. Myanmar lies on the cross-road of two of the world's great civilizations--- China and India. Its culture is a blend of both interspersed with Myanmar native traits and characteristics. Buddhism has great influence on daily life of Myanmars. The people have preserved the traditions of close family ties, respect for elders and reverence for Buddhism.

2.1.4 Economy

Since late 1988, Myanmar has replaced the centrally planned economy to a more liberalized economic policy based on market-oriented system. In moving towards a more market oriented economy, Myanmar has liberalized domestic and external trade promoting the role of private sector and opening up to foreign investment.

Myanmar is richly endowed with renewable and non-renewable energy resources which are being exploited by the state sector with the participation of local and foreign investors. Agriculture remains the main sector of the economy and measures have been taken to increase productivity: diversification of crop patterns and revitalization of agriculture exports.

The Gross Domestic Products(GDP) is 61,949.8 million kyats in 1994-95. Per capita GDP is 1,410 kyats and per capita national income is 1,335 kyats. The government budget is 44,099.8 kyats in million. The total health expenditure is 2,064.6 million kyats. The health expenditure is 3.33% of GDP and 4.7% of total government expenditure.

2.1.5 Demography

In 1994-95, Myanmar has an estimated population of 43.92 million. The population density of Myanmar is 65 persons per square kilometer. 75% of the population reside in the rural areas while the remaining 25% are urban dwellers. The average household size is estimated at 3 or 4 people. The capital of Myanmar is Yangon and has a population of nearly 5 million.

The estimates on population by age-group and sex in Myanmar is shown in Table 2.1.

Table 2.1: Estimates on Population by Age-group and Sex in Myanmar

Age (years)	Male (in million)	Female (in million)	Total	%
0-14	7.63	7.22	14.85	33.81
15-59	12.72	13.09	25.81	58.77
60+	1.48	1.78	3.26	7.42
Total	21.83	22.09	43.92	100.00

Source: Ministry of Planning and Economic Development, Myanmar

2.2 National Health Profile

The first People's Health Plan (PHP I) was from 1978 to 1982, the second People's Health Plan (PHP II) was from 1982 to 1986 and the third People's Health Plan (PHP III) was from 1986 to 1990. This was followed by a two year National Health Plan (NHP I) covering fiscal years 1990-91 and 1991-92. The formulation of NHP has taken into account the existing and feasible manpower, budget and materials to get most effective and beneficial results.

2.2.1 National Health Plan(1993-1996)

With the ''Health for all by the year 2000'' objectives in mind, the Ministry of Health has formulated National Health Plan (NHP) (1993-1996). The National Health Plan has a main objective the enhancement of the quality of the whole population. A number of strategies and activities are directed specifically to vulnerable groups such as children and mothers, the undeserved such as the population in the hilly regions and border areas, and the underprivileged who are prone to disease and infirmity due to various reasons.

The primary Health Care (PHC) approach brings basic health care nearer to home and emphasizes the preventive aspects of

health care. It also helps establish and maintain linkages between the community and the health system. The most important feature of this National Health Plan is emphasized in community involvement. The support of various community organizations and the participation of community itself play a major role in its successful implementation. The Ministry of Health will try utmost to raise the health status of the people of Myanmar in line with the National Health Plan.

There are six broad program areas and 47 sub-programs were identified for the National Health Plan (1993-96). The six broad program areas are Community Health Care, Disease Control, Hospital Care, Environmental Health, Health System Development and Organization and management. The Leprosy Control Program is one of the 16 sub-programs of Disease Control Broad Program.

Leprosy is the number eight in the priority ranking disease of National Health Plan.(seen in Table 2.2) The disease priority is ranked by highest(1) to the lowest(15).

Table 2.2 Priority Ranking of Diseases

No.	Diseases	Rank
1.	Malaria	1
2.	Tuberculosis	2
3.	Acquired Immune deficiency Syndrome	3
4.	Diarrhoea and Dysentery	4
5.	Protein Energy Malnutrition	5
6.	Sexually Transmitted Diseases	6
7.	Drug Abuse	7
8.	Leprosy	8
9.	Abortion	9
10.	Anaemia	10
11.	Snake Bite	11
12.	Eye Diseases	12
13.	Viral hepatitis	13
14.	Neonatal Tetanus	14
15.	Measles	15

Source: National Health Plan(1993-1996), MOH

2.2.2 Working with International Agencies and Non Governmental Organizations (INGOs)

Myanmar works hand-in-hand with international agencies to accomplish its achievement in health. In the United Nation system: WHO, UNDP, UNICEF, UNFPA, UNCDP and UNHCR are mainly responsible for the provision of technical assistance. The Asian development Bank and JICA are also assisting in health development.

The Ministry of Health is working in collaboration with many INGOs in the areas of maternal and child health, primary curative measures, environmental sanitation, rehabilitation of the deaf, the blind and handicap persons, control and prevention of communicable diseases.

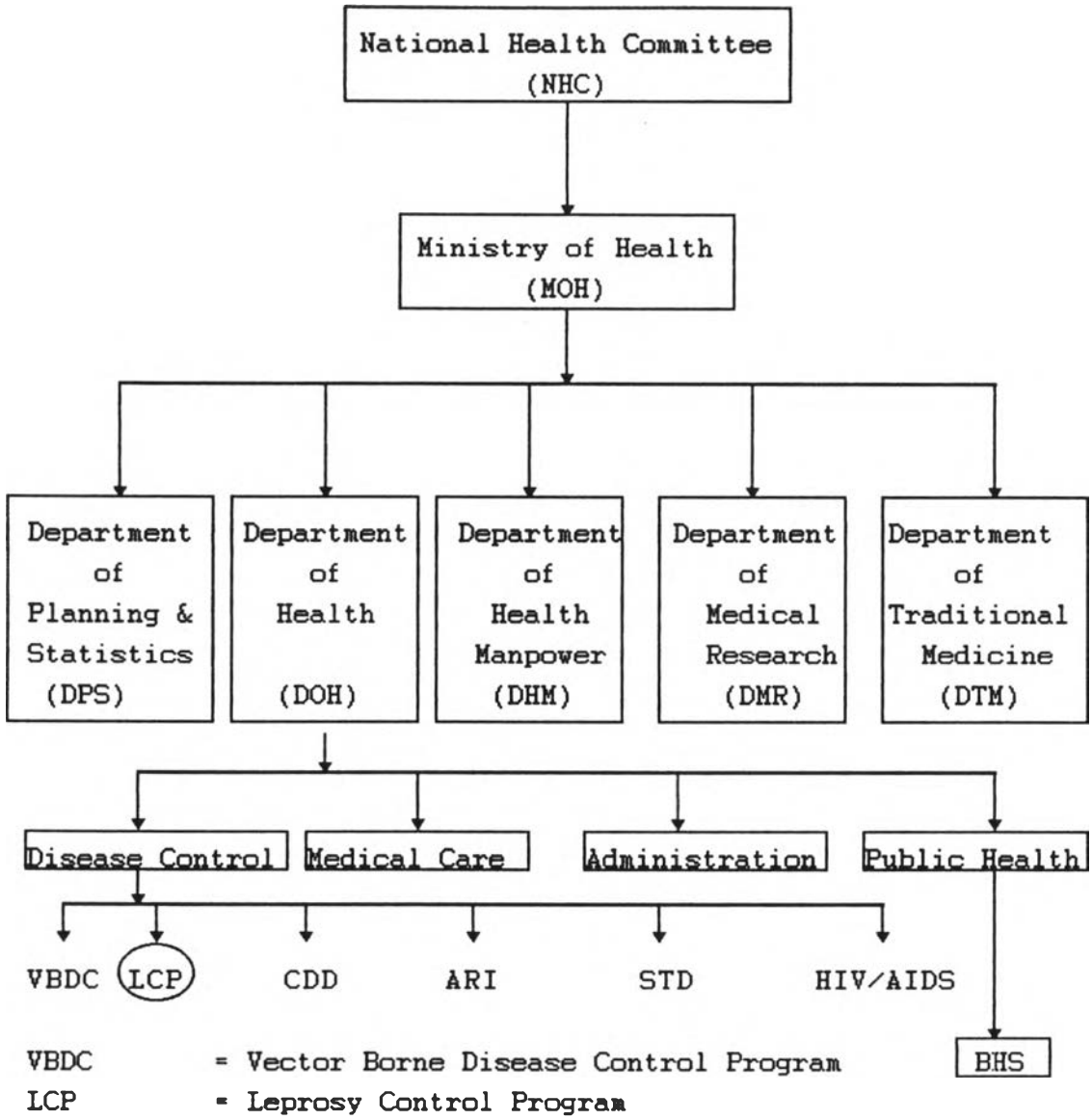
2.2.3 Health Care Delivery System

The organization of health services delivery system in Myanmar consists of Central, Intermediate and Peripheral level. The central level comprises of the National Health Committee (NHC), Ministry of Health(MOH) and five main departments under the MOH. The central level is responsible for overall formulation of policy, planning, technical training, supporting, monitoring and evaluation of health services in the country.

The intermediate level comprises 14 State and Divisional Health Departments. The intermediate level undertakes planning, training, co-ordination, supervision, monitoring and evaluation of health services delivery system of townships within the districts of states and divisions.

The peripheral level consists of township health departments, station health units, rural health centers and sub-rural health centers. At this level, the township health departments being the basic administrative unit of DOH, are responsible for actual implementation of the health service activities.

Figure 2.1: Organization of Ministry of Health



2.3. Leprosy Control Program in Myanmar

Leprosy has been endemic in Myanmar since ancient times. Among the communicable diseases, it causes a major socio-economic problem due to its disfigurement and disabilities.

2.3.1 Developmental Phases

Knowing the magnitude of the problem, the government started to launch an anti-leprosy campaign as early as 1950-51. Dapsone monotherapy was the first tool of intervention introduced to combat the disease. During the WHO Leprosy Assessment Team's (LAT) visit in 1963, the estimate for the country was 250/10,000 population with nearly 600,000 cases in the country. The government decided to launch a five-year program to cover the whole country by 1968. During the consolidation and maintenance phase of Leprosy Control(1969-1977) field trials for integration of leprosy control activities into Basic Health Service(BHS) were made continuously in selected areas. With the experience gained in these integration trials, the government decided to integrate leprosy control and other disease control activities into BHS under the People's Health Plan (PHP I) (1977-1980) in a phased manner till 1988.

During this period case finding, treatment with dapsone and registration activities were integrated whereas patient assessment, epidemiological investigation and other technical components were still undertaken by the specialized Leprosy Control Project personnel. With the advice of WHO, the present WHO Multi Drug Therapy regimen with fixed duration was initiated in 6 hyperendemic Divisions: Ayeyarwady, Bago, Magway, Mandalay, Sagaing, Yangon in a phase manner by vertical staff since 1988. But the end of 1990, it was recognized that, the present leprosy control manpower will not be sufficient to cover all cases within the short period. Hence in addition to previously integrated activities, MDT activity was also integrated into BHS by the mid-1991.

The following are the developmental phases of the Leprosy Control Program (LCP) in Myanmar from 1951-52 to up to date. (Table 2.3)

In accordance to the National Health Policy guide-lines, leprosy elimination was given a high priority . Therefore the Ministry of Health is committed to the WHO global goal of leprosy elimination by reducing the leprosy prevalence to below 1/10,000 population by the year 2000.

Table 2.3: Developmental Phases of Leprosy Control Program

No.	Phase	Period	Main activities
1.	Initial phase	1951-1952	WHO consultant visited and Campaign started
2.	Trial phase	1953-1963	Pilot trial in six endemic districts
3.	Expansion phase	1964-1968	Expansion to cover the whole country
4.	Maintenance & Consolidation phase	1968-1977	Surveillance, education and treatment all over the country. Capacity building
5.	Partial integration phase	1977-1988	Partial integration with People's Health Plan
6.	MDT initiation phase	1988-1991	MDT was started in six hyper-endemic regions
7.	MDT expansion phase (Integrated)	1991-1996	MDT expansion to cover the whole country
8.	Leprosy elimination phase	1996-2000	To eliminate leprosy, as one of the major public health problems of the country

Source: Annual Report, Leprosy Control Program, Department of Health, Myanmar, 1995

2.3.2 Present Situation

Leprosy still remains to be a public health problem and takes number eight position in the priority ranking of diseases in National Health Plan (1993-1996).

Since the implementation, various surveys were performed to estimate the leprosy burden in the country. The estimated prevalence rate varied from 120/10,000(Bago and Kawa survey 1991) to 240/10,000(national assessment survey 1994) depending on the case definition and other factors. At the end of 1994,

using the WHO correction factor method, it was estimated that there can be 50,781 cases in the country. At the end of 1995, there were 21,071 registered cases and the prevalence rate was 4.7/10,000. The registered prevalence was reduced from 39.9/10,000 in 1988 to 4.7/10,000 at the end of 1995.

As MDT was integrated, coverage during the period was accelerated. At the end of 1995, (21071) patients (100%) and 297 townships (92.81%) out of 320 townships were under MDT. Due to introduction of MDT and intensification of both active and passive case finding activities, more new cases were detected and brought under MDT.

Various surveys were conducted to determine the disability grade among the registered cases. Bago, Kawa survey(1991) and Hmawbi survey(1992) showed 17-25% of disabilities grade II among the registered cases. Disabilities grade II among the new cases from MDT area was reported to be 9-11%.

The following activities are undertaken for the implementation of the program.

(1) Case finding activities
(2) Treatment activities
(3) Assessment activities
(4) Prevention of disabilities
(5) Rehabilitation
(6) Information, Education and Communication(IEC)
(7) Training
(8) Research
(9) Collaboration with external organizations

Among these, case finding activities are very important because there are many hidden cases in the country and how to improve case finding activities, with emphasis on early case detection, within the limited budget is a great question for the Leprosy Control Program(LCP Annual Report, 1992). In case finding activities, both active and passive case detection are carried out. Mass survey(MS), contact examination(CE) and school children examination(SE) are carried out in the process of active case detection (ACD). In the passive case detection (PCD), the patients are encouraged through health education and opening of clinics to seek diagnosis at the outpatient clinic

and specialized clinics both in urban and rural areas. These activities are routinely carried out by the Basic Health Staff (BHS). The specialized staff are involved in confirmation of the newly diagnosed cases and in helping the BHS staffs in planning and organization of the activities.

2.3.3 Organizational Structure of LCP

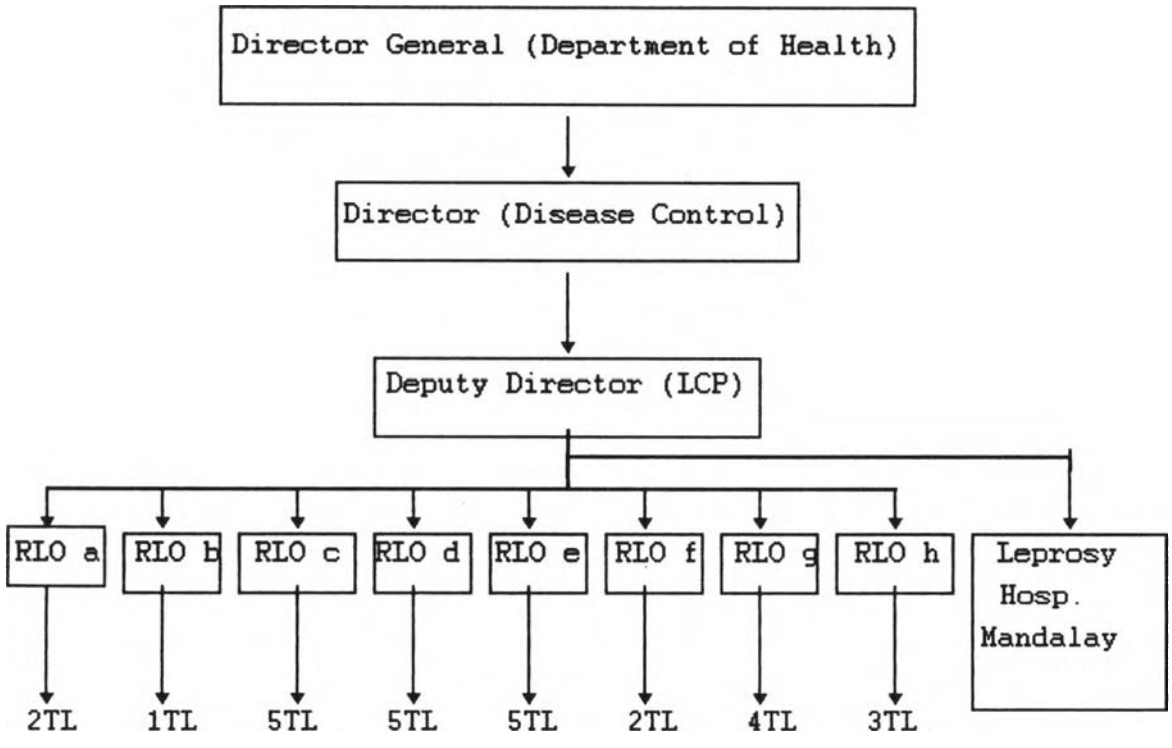
The LCP has technical organization at Central, State and Divisional level and District levels. The teams at the State/Divisional and District level are stationed under the administration of the BHS at the respective levels. Special actions such as clinical research, sentinel monitoring and other action such as evaluation and overall monitoring were carried out by the LCP personnel in conjunction with BHS staff. At the township level, the township medical officer is supported either by a Junior Leprosy Workers(JLW) or Assistant Leprosy Inspectors (ALI) and Leprosy Inspectors(LI) in hyperendemic areas.

In 1978, with the initiation of People's Health Plan, leprosy control activities were integrated into basic health services in township-wise phase by phase manner. In 1988, MDT program using the WHO regimen was implemented in the six hyperendemic divisions of the country. At the beginning, the MDT delivery was carried out by the specialized staff of the LCP but starting from the second half of 1991, this activity was also integrated into the basic health services. The BHS staff are now responsible for the routine leprosy control activities including MDT where as the specialized staff are responsible to give technical and logistic support to the BHS.

For PCD, some of the activities like health education, refresher training are given by specialized staff while other activities like opening of out patient clinic and diagnosing the leprosy cases are done by BHS staff. The specialized staff and basic health staff collaborate each other in all three methods of ACD: contact examination, school examination and mass survey.

The organizational structure of LCP(Myanmar) is shown in Figure 2.2.

Figure 2.2: Organizational Structure of LCP(Myanmar)



RLO = Regional Leprosy Officer (States/Divisional level)
TL = Team Leader (Township level)

One Leprosy Team contains-

Team Leader	1	person
Leprosy Inspector(LI)	2-4	persons
Assistant Leprosy Inspector(ALI)	2	persons
Junior Leprosy Worker(JLW)	6-25	persons
Lower Division Clerk	1	person
Field Worker	1	person
Laboratory assistant	1-2	persons