CHAPTER II

BACKGROUND INFORMATION

2.1 Country Profile

Thailand is situated in South-East Asia, covering an area of 514,000 square kilometers. With a total population of 62.83 million in 2007, 31.5% of the population lived in urban areas which reflect a significant urbanization compared to 18.7% in 1990. The administrative unit is divided into 76 provinces, 876 districts, 7,258 sub-districts, and 67,373 villages (MoPH, 2008).

2.2 Thai health care system

Health care is provided by public and private sectors in Thailand. The Ministry of Public Health (MoPH) is responsible for providing, controlling, and supporting all health activities in the country.

The majority of public hospital operates under the umbrella of MoPH, whilst some of them are provided by other Ministries such as Education, Defense, and Interior. In addition to the public sector, the private sector runs different levels of hospitals and clinics (MoPH, 2007). The numbers of health facilities are summarized in Table 2.1.

Table 2.1 Health facilities in Thailand, 2005

Type	Bangkok	Province level	District level	Sub-district level	Village
- Medical school	7	5	-	-	-
- Specialized hospital	19	40	-	-	-
- Regional hospital	-	-	724	-	-
- General hospital					
▪ Public	29	70	-	-	-
▪ Private	101	244	-	-	-
- Community hospital	5	-	-	-	-
- Private clinic	3,603	12,944	-	-	-
- Health center	82	-	214	9,720	-
- Primary health care center	-	3,108	-	-	66,223
- 1st class drug store	3,672	5,186	-	-	-
- 2nd class drug store	479	4,031	-	-	-
- Groceries	-	-	-	-	400,000

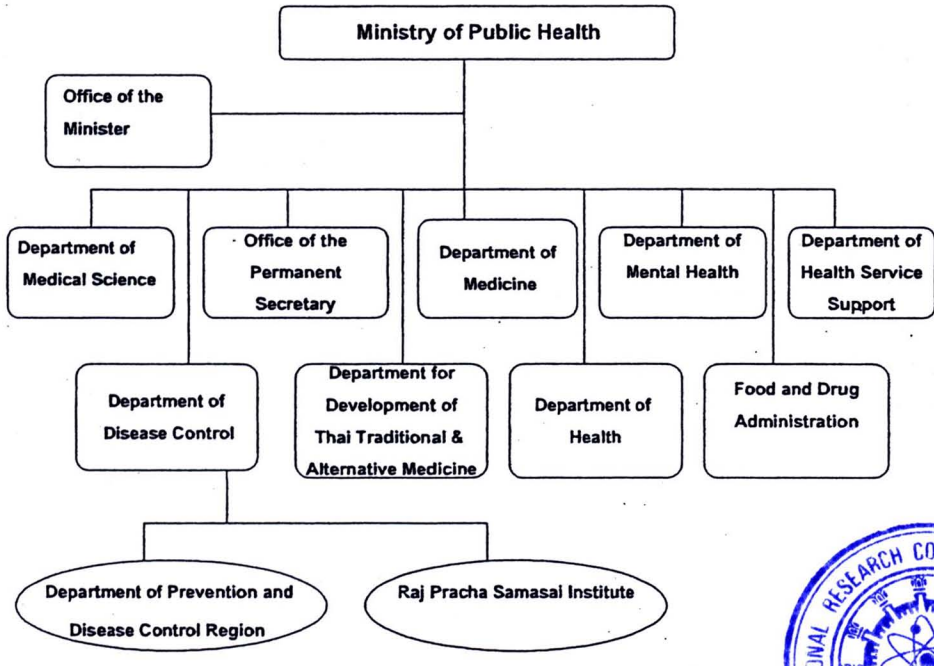
Source: MoPH, 2007

Most of the rural public facilities are under the central MoPH. The ratio of beds to population was 1:223 for Bangkok, and 1:468 for all provinces (MoPH, 2007). The physician to population ratio ranged from 1:867 in Bangkok to 1:7,015 in the Northern region, which reflect a significant mal-distribution of health workforces.

The structure of organization of MoPH is divided into 10 major departments/offices, namely:1) The Office of the Minister 2) The Department of Medical Science 3) The Office of the Permanent Secretary 4) The Department of Medicine 5) The Department of Mental Health 6) The Department of Health Service Support 7) The Department of Disease Control 8) The Department for Development of Thai Tradition & Alternative Medicine 9) The Department of Health and 10) The Office of Food and Drug Administration. (Figure 2.1)

All the above mentioned departments/offices give technical support to the provincial health offices in their responsible areas.

Figure 2.1 Organization of the Ministry of Public Health (Central Administration)

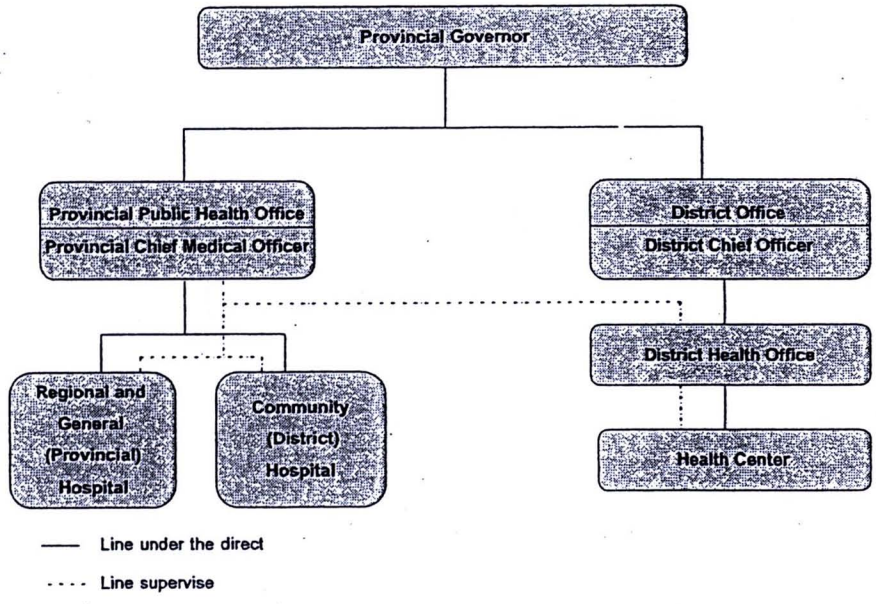


Source: MoPH, (2007)

The role and functions of each service level in rural areas are as follows:

Each of the provinces has a Provincial Chief Medical Officer (PCMO), who is responsible for both administration and support of all medical and health facilities in the province including the regional, general (provincial) hospital, and community (district) hospital. The PCMO is responsible to the permanent secretary for MoPH. At the same time, she/he is also administratively responsible to the governor, the senior civil administrator of the province who reports to the Ministry of Interior. The District Health Office (DHO) is directly responsible to the district officer who reports to the Ministry of Interior. Most of the DHO's technical and managerial support and supervision are coordinated by the Provincial Health Office. (Figure 2.2)

Figure 2.2 Provincial Administration



Source: MoPH, (2007)

2.3 Leprosy control in Thailand

Leprosy control based on case finding and dapsone domiciliary treatment was established in 1955 as a vertical programme[5]. To respond to the comprehensive health care and integration policy of the Third National Health and Development Plan, leprosy control was integrated into the general health system step by step since 1973 and completely done all over the country in 1998. Training was arranged during 1971-1976 in order to prepare general health staff for leprosy tasks.

Since 2001, under new health policy, all Thai people have been encouraged to seek treatment in health facilities nearby their places. To get treatment from public health units with minimal fee (initially 30 baht/1 visit), clients have to firstly visit health centers (primary care unit) before being transferred to secondary care if further treatment is needed. Leprosy care is provided as free of charges service as usual.

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[5] A vertical programme i.e. the exclusive undertaking of all the activities against the disease down to the community level in specialized settings.(WHO,1998)

2.3.1 Multi-drug Therapy (MDT) implementation and leprosy elimination

MDT has been implemented in Thailand since 1984, started in the Northeastern endemic region. One hundred percent geographical coverage (by province) and 100% registered case coverage were achieved in 1989 and 1994 respectively. The target of elimination of leprosy as a public health problem at national level was attained in 1994. As of 30 September 2005, 59,965 leprosy patients had been cured by MDT.

The plan of action for elimination of leprosy in Thailand (1994-1996) was established with the target of reducing the prevalence of leprosy in every province to be less than 1 case/10,000 population. All essential control activities were expected to be maintained by the existing provincial, district and primary health care systems. Training, supervision, monitoring, epidemiological, surveillance and supplementary activities were assisted by the 12 regional offices of Disease Prevention and Control and Raj Pracha Samasai Institute (Former Leprosy Division and Prapradaeng Hospital). In order to accelerate the achievement of the elimination goal at sub-national level, promotion and intensification of different supportive activities were implemented both in high and low prevalence provinces (Raj Pracha Samasai Institute, 2006).

2.3.2 Special interventions in Thailand to strengthen and sustaining leprosy services

Leprosy Elimination Campaigns (LEC_s) have been conducted 3 times during the period of 1996 to 2002.

1st LEC

To accelerate case detection in the community and to celebrate the special occasion of the Fiftieth Anniversary of His Majesty the King's Accession to the Throne, a National Leprosy Elimination Campaign was carried out all over the country from 9 June 1996 to 16 January 1998. The objectives were to promote community awareness and participation, and to encourage remaining undetected cases to identify themselves for MDT treatment and receive better rehabilitative care. Extensive Information Education and Communication (IEC) activities at all levels of the communities had been regularly organized and operated. Some 47 000 health volunteers had been trained to detect new cases, especially hidden cases at peripheral levels. As a result of the campaigns, a number of 2,134 new cases were detected, 20% higher than that of the previous year, 62% of them were from the Northeastern region. The proportions of

children, of grade 2 disability and of multibacillary leprosy among new cases were 4%, 13.6%, and 55.4% respectively. Regarding the mode of detection, 39% of the patients were self-reporting and 41.5% were detected by health volunteers.

2nd LEC

This campaign was implemented in 2000 to mark the 72nd birthday anniversary of His Majesty the King. The objective and the implementation of this campaign were the same as the first LEC but more emphasize on 124 districts (of 36 provinces) of which the prevalence rate was higher than 1 cases/10,000 population. As a result of the campaigns, a number of 738 new cases were detected, 20% higher than that of the previous year, and the number of endemic districts reduced to be 79 districts (of 25 provinces)

3rd LEC

The Leprosy Elimination Campaign was implemented again in 2001 to celebrate his Majesty the King's birthday. The campaigns aim to strengthen new case finding by encouraging communities to participate in new case finding. The campaign focused on 93 districts (of 32 provinces) of which prevalence rate were more than 1 / 10,000 population. Monetary incentives were given to new cases and health volunteers who actively participated in case finding. This incentive was supported by Raj Pracha Samasai Foundation under the royal patronage. The campaign was completed in 2002 with a number of 935 newly detected cases, 27% higher than that of the previous year.

4st LEC

The focus LEC was implemented again in 2005. To accelerate case detection in the community and to celebrate the special occasion of the Sixtieth Anniversary of His Majesty the King's Accession to the Throne, National Leprosy Elimination Campaigns had been carried out all over the country from 16 January 2005 to 5 June 2007. The objectives were to promote community awareness and participation, and to encourage remaining undetected cases to identify themselves for MDT treatment and receive better rehabilitative care. Extensive Information Education and Communication (IEC) activities at all levels of the communities were organized and operated every year. As a result of the campaigns, a number of 506 new cases were detected, and the number of endemic districts (prevalence rate was higher than 1

case/10 0000 population) reduced to 17 districts (of 11 provinces), 74% lower than that of the previous year.

In order to gain information to be used for further operation, Leprosy Elimination Monitoring (LEM) were conducted.

1st LEM

Monitoring and evaluating leprosy elimination programmes, based on WHO guidelines regarding key indicators for monitoring the elimination of leprosy at provincial level, was conducted in 32 provinces during 1998-1999.

The objectives were to evaluate the achievement of elimination goal, monitor the leprosy situation at provincial level and the quality of control activities conducted by local health staff. The results revealed that the ability of local health staff on case detection, case management and prevention of disability need to be improved and strengthened. Therefore, during 1998-1999 training courses were conducted for Provincial Leprosy Coordinator (PLC), who were general health staff working at provincial level. These training programmes resulted in the better understanding of PLC in their own tasks and better coordination between national, regional and provincial levels. (MoPH,2005)

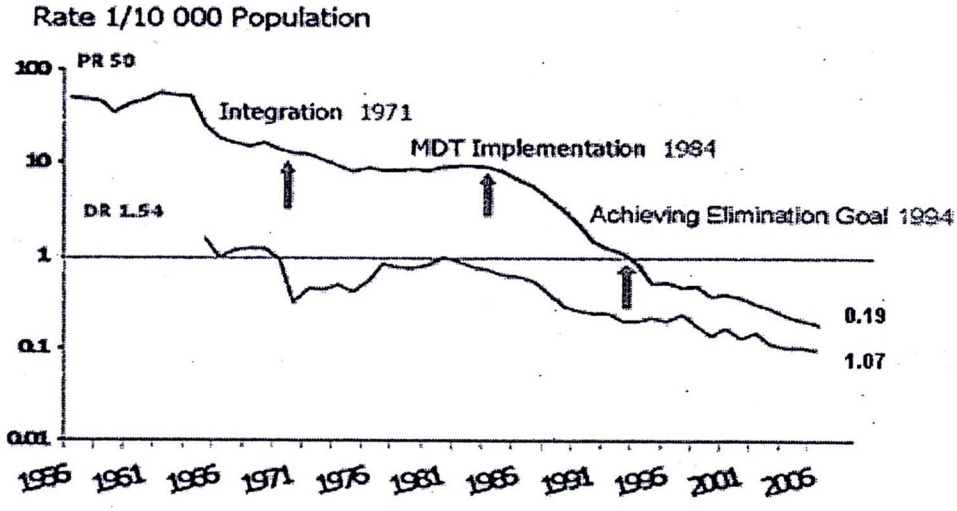
At the end of the 10th health development plan (2007-2011), the achievements of elimination goal at district levels are also expected, except in Narathiwat province because of unrest area.

2.3.3 Current situation and trend analysis

As of 31 December 2006, there were 1,157 cases registered for treatment, with a national prevalence rate of 0.19/ 10,000 population. There were 23 districts in 15 provinces where the leprosy prevalence was still higher than 1 case/ 10,000 population. During the period of January to December 2006, 665 new cases had been detected. The detection rate was 1.07 cases/100,000 population. Of this, the proportion of newly detected cases with grade 2 disability was 14.29% and the rate of newly detected cases 4.51% for children. Since the implementation of MDT in 1984, the prevalence rate showed steady decline. After 14 years of MDT, the prevalence was reduced by 95%. The annual detection rate had sharply declined during 1984-1989 and then gradually decreased between 1990 -1993 and became constant from 1993 on ward.

The grade 2 disability rate among newly detected cases has been fluctuated from 9% to 14% from 1984 until now.

Figure 2.3 Leprosy Situation in Thailand, 1956-2006



From figure 2.3, Show the prevalence rate and detection rate in 1956-2006. Since the implementation of MDT in 1984, the prevalence rate showed steady decline. After 14 years of MDT, the prevalence was reduced by 95%. The annual detection rate had sharply declined during 1984-1989 and then gradually decreased between 1990 - 1993 and became constant from 1993 onward.

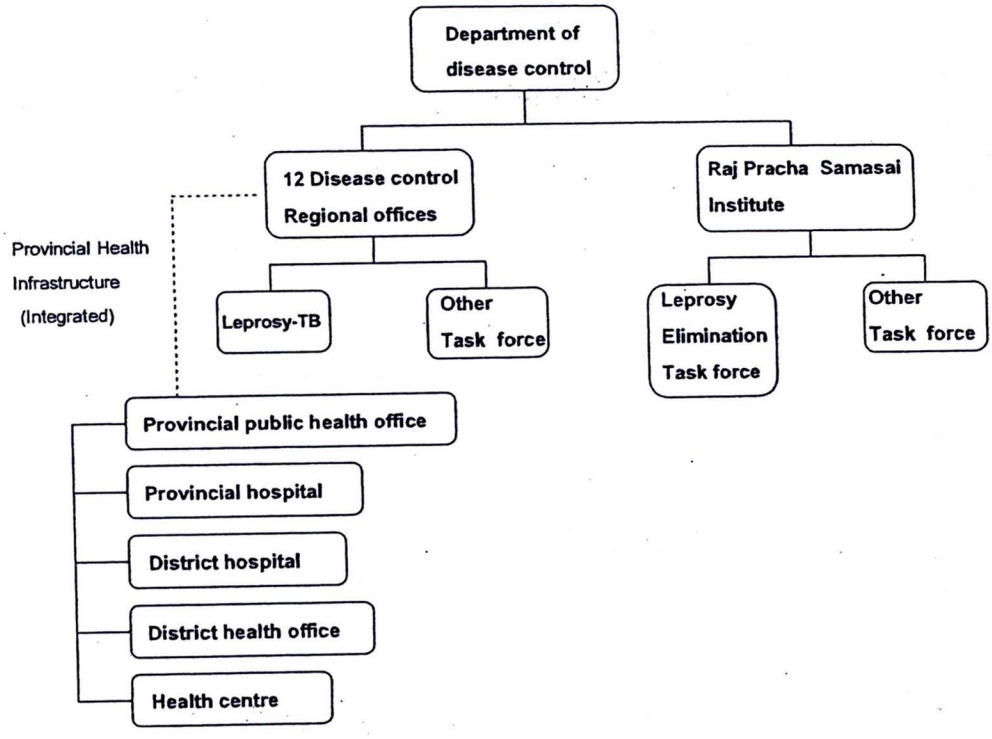
2.3.4 Leprosy related organizations in Thailand

The organizations which are responsible for leprosy may be classified into two groups. 1) Specialized: Raj Pracha Samasai Institute, 12 Disease Control Regional Offices. 2) Integrated: Provincial Health Infrastructure.

- Raj Pracha Samasai Institute is responsible for policy formulation, planning, supervision, monitoring, and evaluation of the national leprosy control programme. It serves as a technical guidance for 12 Disease Control Regional Offices and Provincial Health Offices.
- The 12 Disease Control Regional Offices are responsible mainly for providing necessary technical guidance, supervision, epidemiological and operational assessment, monitoring and evaluating the provincial health infrastructure.

- The Provincial Health Infrastructure including provincial hospitals, district hospitals and health centers are responsible for all leprosy control activities within their responsible areas. (Figure 2.4)

Figure 2.4 The organizations which are responsible for leprosy



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Source: Adapted from Pirayavaraporn, C. (1996)