CHAPTER 1

INTRODUCTION

Cambodia is one of developing countries and located in the Southeast part of Indochina peninsula. It occupies a territory of 181,035 square kilometers, about 20 percent of which is used for agriculture. It lies completely within the tropics with its southernmost points slightly more than 10 degree above the Equator. The country is bordered by Thailand and Laos People's Democratic Republic to the north and the west and by the Socialist Republic of Vietnam to the south and to the east. It is bounded by Gulf of Thailand on the southwest. In comparison with its neighbors, Cambodia is geographically compact country administratively composed of 5 regions, 20 provinces, three of which have relatively short maritime boundaries, 2 municipalities, 172 districts, 1547 communes and 12,738 villages. The important features of the Cambodian landscape are the large, almost centrally located, Tonle Sap Great Lake, the Bassac River system and the Mekong River, which crosses the country from north to south. Surrounding the central plains region which covered three quarters of the country's area are the more densely forested and sparsely populated highlands. Dangrek Mountains of the north adjoining the Korat plateau of Thailand; and the Ratanakiri Plateau and Chhlong highlands on the east merging with Central Higghlands of Vietnam (MOC, 1997).

Cambodian's climate is controlled by the monsoons that are known as tropical wet and dry because of the distinction of marked seasonal differences. In summer the southwest monsoon comes from the Indian Ocean and the Gulf of Thailand and brings the rainy season from mid-May to mid-September or to early October. The northeast monsoon is from the Himalayas Mountain and flows the dry and cold air from early November to March and the hot air prevailing in April and early May.

The estimated population is 10.702 million for 1996 consisting of 5.119 million males and 5.583 millions females with a population growth rate of 2.6 per thousand. The population density in average is 59.1 per square kilometer. An estimated 85-90 percent of people lives in rural areas and completely entrenched in agriculture (MOC, 1997). More than two-thirds of the population were literate. The

official and majority language is Khmer, speak Khmer even those who are not Cambodian ethic. 90% of the population is Buddhism.

The estimated number of households in Cambodia was about two million of which 13.4 percent were located in the urban sector and 86 percent in the rural areas (MOC, 1997). The average household's size in urban areas is 5.7 and in rural areas is 5.3.

The main national products in 1997 are rice and livestock, with fishery and rubber production as important driving economic producers. Timber is also provided significantly contribution to the country's economic income. Unfortunately, the heavy deforestation, both legal and illegal during the last two decades has now affected the environment, resulting in recent natural disasters of both flood and drought.

On the macro-economic front, noticeable progress has been achieved over the last four years. Real GDP grew by 6.5% in 1996, a major improvement from a mere 2.8% in 1990. With an estimated population of 10.702 million in 1996, per capita income is still low at US$291, making Cambodia one of the poorer countries in the region and the world. However, per capita income has registered a significant increase from US$130 in 1990 to US$291 in 1996, and is expected to reach US$299 in 1997. With a 6-8% annual growth rate per capita income is expected to double by the year 2004 (MOC, 1997).

1.1 Problems and Rationale

After a long civil war, Cambodia has had to face many problems especially in the health sector. Poor quality of public health services and financial problems have led to limited and inequitable accessibility to the health services, namely the private sector's uncontrolled development and the poor use the public services which has led to poor health status.

After election in the middle of the year 1993 most of problems are solved with success except health problem, still remains unchanged. Government budget devoted to health is U.S $2.8 per capita. Household expenditure on medical care per capita is US $19 (MOH, 1996).

The fact which public services does not function due to lack of funding influence. Households spend a lot of money for health care. They buy health care from private providers without being properly treated and waste money (Gertrud and Sophal, 1996). There is an evidence that Cambodian people sometimes have to sell their cattles or even their houses, or to get debt in order to afford treatment (MOH, 1996).

The survey of Health Seeking Behavior conducted by National Research Institute of public Health in 1996 showed that household rely heavily on either their savings or on loans from money's lenders. Asking relatives for assistance, paying in kind, selling/mortgaging properties and promising later payments to private doctor are not popular choices. Farmers and low income households like to go to money's lenders.

Insufficient salary of health staff, less friendship, less responsiveness of worker for covering their basic needs have led to limitation of working time and force health personnel to offer their services against payment and/or to follow extra professional activities (Gertrud and Sophal, 1996). There are examples of health facilities that have installed the formal population contribution practices, but in which under-table payments still exist, the patients will have to pay twice in order to receive health care (MOH, 1996). This is unacceptable to people not only because they may have to pay quite large amounts, but also they do not know in advance how much they will have to pay. As a result, people may be reluctant to attend public facilities where compose of reasonable price and appropriate treatment (MOH, 1996).

In many countries, health care financing reforms have been set in order to compensate for an almost total lack of government funding of non-salary running costs. For example in case of Guinea, the Government has decided to establish a system of cost recovery to help financial viability to recover the recurrent costs other than salaries incurred in the delivery of health care. But in case of Cambodia both shortages appear together, investment costs and running costs. Ministry of health already informed to the health staff that the major financial support is secured from the donors. This donation is unstable. The national health budget that is expected to increase further should also be avoided. All of health sectors should catch this time primarily generate the revenue with a donated amount to pay the costs of providing

services. The influence of financial participation by the population on the demand for health care is stable and durable (Carrin, Pierrot and Sergent, 1994). Article number 16 of ministry of health said that provincial health departments, districts and public service provider units will be given autonomy to manage their operations within a given budget, if needed (MOH, 1996).

Nakloeung district hospital is at the bank of Mekong River, in the plain region and located at the southern part of Cambodia with higher population density near Vietnam frontier. This district hospital just renovated and also new medical equipment supplied by German Health Project. The population coverage was 167,481 in 1997. Movement rate of people in and out is very high which causes more communicable diseases.

According to the health problems described above and Ministry of health's article number 16 Nakleoung district hospital begin to run the hospital as non profit one. It wanted to invest the given money from government and donors to charge the patient within the amount which it can be covered. So that it can generate the revenues from the patient to replace the building and equipment when their lifetime over.

Now mainly renovation costs and necessary equipment are provided by German Health Project and partially Overseas Development Agency. The drug costs provided from National budget, Wold Bank and other aid granting agencies.

Therefore to charge the patients this district hospital needs to study about the hospital costing in order to find out the unit cost for both in-patient and outpatient departments how much that it can save each year to replace the cost of building and equipment when it lifetime finishes.

1.2 Research Objectives

General Objective

To estimate unit cost of services provided by Nakloeng district hospital for both outpatient and inpatient departments in order that patient charges can be appropriately set for the hospital to recover its input costs.

Specific Objectives

- To estimate the cost per visit for outpatient department from provider perspective in different scenarios by changing some parameters such as labor cost and the volume of activities.
- To estimate the cost per patient day for in-patient department from provider perspective in different scenarios by changing some parameters such as labor cost and the volume of activities.

1.3 Possible Benifits

The district hospital committee, based on its experiences, expected that the unit costs for outpatient and inpatient departments may be lower than those of private clinics. If it can provide the service with a good result the patients not only save money for inappropriate treatment but also save time, loss of money during health care in private clinics. In other words, all private clinics in Nakloeung district as well as in the whole province can be influenced by indirect effect of this good result in terms of quality and market price competition in some extent. Furthermore, the morbidity and the mortality of diseases can be reduced due to early seeking hospital's assistance by the patient. Because the charges are expectedly low the patients will seek health care from the doctors even minor illness.

It is hoped that this study will provide important information to the committee of the hospital and German Health Project to make decision on establishing the discrimination of price so that the poor can afford it and equity can be maintained to some extent. This study could also be a basic guideline for further studies in order to improve efficiency and equity in this district. Similar methodology can be used for cost estimation and analysis for other national/provincial/district hospitals in Cambodia.