#### **CHAPTER II**

#### BACKGROUND AND HEALTH CARE SYSTEM IN CAMBODIA

#### 2.1 The Socio-Economic Background of Cambodia

Cambodia is one of the developing countries and located in the Southeast part of the 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 degrees 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 the Gulf of Thailand on the southwest. In comparison with its neighbors, Cambodia is a geographically compact country, administratively composed of 5 regions, 24 provinces, 2 municipalities, 172 districts, 1547 communes and 12738 villages.

The important features of the Cambodian landscape are the large, almost centrally located, Tonal Sap Great Lake, the Basac River system and the Mekong River, which crosses the country from north to south. Surrounding the central plains region, which covers three quarters of the country's area, are the more densely forested and sparsely populated highlands, the Dangrek Mountains of the adjoining Korat plateau of Thailand.

The recognition of the potential of social health insurance as a major health care financing method for Cambodia in the future comes after of ten years of health sector reform and development. In neighboring countries, compulsory health insurance for the formal labor sector was introduced in Thailand in 1991 and in Vietnam in 1992. Viet Nam's Social Security System is now intensifying its efforts to increase voluntary insurances for the informal sector.

In 2001 Laos introduced an independent community- based health insurance system for urban workers in the mid-1990:s by shifting to municipal level pooling and is attempting to re-instate Rural Cooperative Medical Schemes.

Throughout the period of health sector reform in Cambodia, serious efforts have been made to improve health systems and health care financing through an increase in the level of government expenditure based on upgraded information on costs, improved allocation of resources to priority areas and efforts to increase formal revenues at the provider level. The current pressure is to reach a more adequate, stable and efficient health care financing system that will promote improvement in quality in the delivery of an appropriate volume and mix of health services, and remove financial barriers to seeking health care.

## 2.2 Health Care System in Cambodia

Cambodia's health infrastructure is still being developed. Currently, the health system is divided into three levels: central, provincial and operational districts. As of 2001, there were 26 general hospitals, 6 specialized hospitals, 43 district/first level referral hospitals and 768 primary health care centers. Within these public health facilities, there were an estimated 7 634 hospital beds.

Health indicators show a decline of infant and under-five mortality rates between 1990 and 2000, but there was a slowing down of this trend in the second half of the 1990. There are indications that the trend has reverted due to an increase in post-neonatal mortality. In 2000, the infant mortality rate was estimated to be 95 deaths and the under-five mortality rate was 124 per 1, 000 live births. Post-neonatal mortality is estimated at 58 per 1 000 live births and constitutes 61% of infant mortality. Infants and children have no access to effective health care. Parental health-seeking behavior is often inappropriate and access to health education is limited.

Malnutrition among women and children is a major health problem. Chronic malnutrition among children is high. Fifteen per cent of children less than six months old have stunted

growth, increasing to 53% of children aged three to five years. Twenty one per cent of women between 15 and 49 years of age are underweight.

There is a high prevalence of micronutrient deficiencies: 63% of children younger than five and 66% of pregnant women are anemic, and vitamin A and iodine deficiencies are widespread among women and children. Widespread nutritional deficiencies in children represent the biggest risk factor for childhood mortality. The underlying cause is poor infant and child feeding practices. Lack of access to effective preventative and curative health service is also a major obstacle for improving the health status of Cambodian children.

Acute respiratory infections, mainly pneumonia, diarrhea diseases, and neonatal conditions, including neonatal tetanus, are the leading causes of early childhood deaths, causing more than 80% of all deaths. Malaria and dengue fever are a considerable burden of mortality and morbidity in certain geographical areas and during certain periods of time. In 2003, blood surveys were conducted in 197 villages to identify hyper-endemic villages. In total, 1 589 children were randomly sampled and tested by means of rapid diagnosis tests (RDT); 1 022 were found to be Plasmodium falciparum positive.

Over the 1990s, the maternal mortality ratio in Cambodia has declined. However, it is still high, 437 per 100 000 live births. The total fertility rate is 4.0 and access to contraceptives remains low in 2000. The contraceptive prevalence rate (CPR) in 2000 was 19.0% for modern methods, and 24.0% for all methods, and there are indications that it is increasing. The latest figures from the Ministry of Health suggest the CPR currently remains at 24.0%. In 2000, however, 32.6% of women stated that they want to limit or space their childbirths.

Limited access to skilled health workers is reported to be a significant factor in the high maternal mortality ratio. The majority of women are still delivering attended by untrained birth attendants. Direct causes of maternal death are hemorrhage, eclampsia, sepsis and abortion; indirect causes are related to poor access to emergency obstetric care. The

percentage of adults in Cambodia infected with HIV appears to have leveled out over the last few years. However, HIV/AIDS remains a serious public health problem. The estimated national HIV prevalence was 160 000 in the age group 15—49 years in 2002, and remains the highest estimated prevalence rate in the Asia -Pacific region.

Cambodia has the highest rate of amputations due to land mine injury in the world. Currently there are about 40 000 people with amputations in the population. Since 1995, road traffic injuries started to exceed those due to land mines. In 2002, the Department of Transport reported 535 deaths due to traffic injuries, making the fatality rate 13.05 per 10 000 vehicles, representing one of the highest rates in ASEAN countries. There is little data on the prevalence of mental illness in Cambodia.

However, a study in 1998–1999 showed that 24% of the people in the province in Battambang had depression. Another study in 2001, that which covered 15 villages (2000 households), showed that intellectual disability was 2.6.0% among children and emotional and behavioral problems among children and adolescents (up to 18 years) were estimated to be 14%. In 1990s, the government introduced health system reforms to improve and extend primary health care through the implementation of a district health system.

The reforms included the establishment of a three-level health system structure, set out by the "Guidelines for Developing Operational Districts" in 1997, which focuses on the distribution of facilities in accordance with a health coverage plan and the allocation of financial resources to the provinces. Operational districts are the most peripheral level, consisting of health centers and a district referral hospital for 100 000 to 200 000 people.

The Health centers deliver primary health care to a target population of 10 000 through a Minimum Package of Activities. The referral hospitals provide a Comprehensive Package of Activities in 1997.

#### 2.2.1 Health Care Financing

From 1979 to 1996, public health services were provided free of charge to the Cambodian

population. But the government spending was too low and could not cover basic health care needs for the population. The total amount spent on health was only 16.6 million dollars. After 1996, the government expenditure on health increased constantly. In 1996, it doubled to \$32.72 million and remained approximately at this level until 2001. Health care financing was therefore an important component of the Health Sector Reform project undertaken over the last decade, with the technical assistance of the World Health Organization and funded by a consortium of donors.

# 2.2.2 User Charges

In accordance with the Health Finance Charter introduced by the MoH in 1996, user charges were introduced in public health facilities. The aim was to eliminate under-table payments to health workers in these facilities. This was not always implemented, nevertheless the user-charges became more transparent and in some facilities, under-table payment actually vanished (for example at Takeo hospital).

The revenue coming from user charges should be allocated as follows: (1) 49% for increasing the salary; (2) 1% for being handed over to the salary; (3) 50% for covering operating costs of the facility. The MoH, on the other side, should provide drugs covered in the Minimal Package of Activity (MPA) from the Central Medical Stores (CMS). In reality, the 50% share of user charge revenues were often increasingly used to purchase drugs, at the discretion of the staff the facility.

Meanwhile, user fees represent a significant source of income for public facilities, helping to reduce or even put an end to under-table payments. In some hospitals, the income of the staff from user fees sometimes is frequently as much as their official salary. The necessary additional income to meet the increasing costs of living in Cambodia has to come not only from the share of user-fees but more likely from second and even third jobs, and from private practice. The user fees system was introduced without social safety nets, through defined social assistance, for those who cannot afford the fees. On the one hand, the National Health Financing Charter provided clear rules on exemptions; on the other hand, no allocation of funds was made to cover these costs. As a result the provider

did not receive any remuneration for the patients exempted from user fees. Either the poor did not get the exemption or the staff itself had to pay for it indirectly, through increasing user fees shares. As a consequence of this, the exempted were treated differently.

## 2.2.3 Equity Funds

Since 2000, several development partners have proposed Equity Funds as a temporary measure to cover health care expenditures for poor households. The objective was to free health facility staff from bearing the burden of the exemption. Two major roles are fulfilled:

- (1) To evidence exempt the poor from paying user-fees
- (2) To contribute with additional funds towards an increase of salaries of the health facility's staff. The equity funds will most likely result in a significantly improved access to health care and a better quality of services. The concept is considered as the most direct way to buy health care for the poor. In addition, the idea is easy for the population to understand.

The first experiences have shown evidence that identifying the poor is rather difficult and resource- intensive. But the practice to identify them at the time of arrival at the hospital has demonstrated adverse impact. Many poor cannot just be reached. They either do not know about the fund, or they are not sure of being entitled to it. That's why they hesitate to come to the facility, or, even worse, the main recourse of income (cow, pig etc) has already been sold. Surveys have been recently undertaken to provide data on poor identification and draft recommendations for its implementation.

To solve this problem the GTZ Health Sector Reform Support and the Decentralization and Administrative Reform project work together on possibilities of developing a common approach to poverty reduction in the provinces where GTZ works. The approach will focus on the pre-identification and targeting of the poor households in the 2 project provinces, as well as on investigation and development of ways for decentralized structures in Cambodia to support poverty reduction strategies more efficiently. The model will be implemented early next year in Kampong Thom. In addition to the

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The introduction of social health insurance should address the serious problems in maternal and child health, particularly in safe pregnancies and deliveries, infant and young child feeding and nutrition, diarrhea and acute respiratory infections, and immunization coverage. Social health insurance essentially should allow access to health care without financial barriers. However, the planned allocation of health insurance revenues could be designed to address specific health problems, including investment at the community level (Samnang et al., 2003)