CHAPTER I

INTRODUCTION

1.1 Socio-economic Situation of Lao PDR

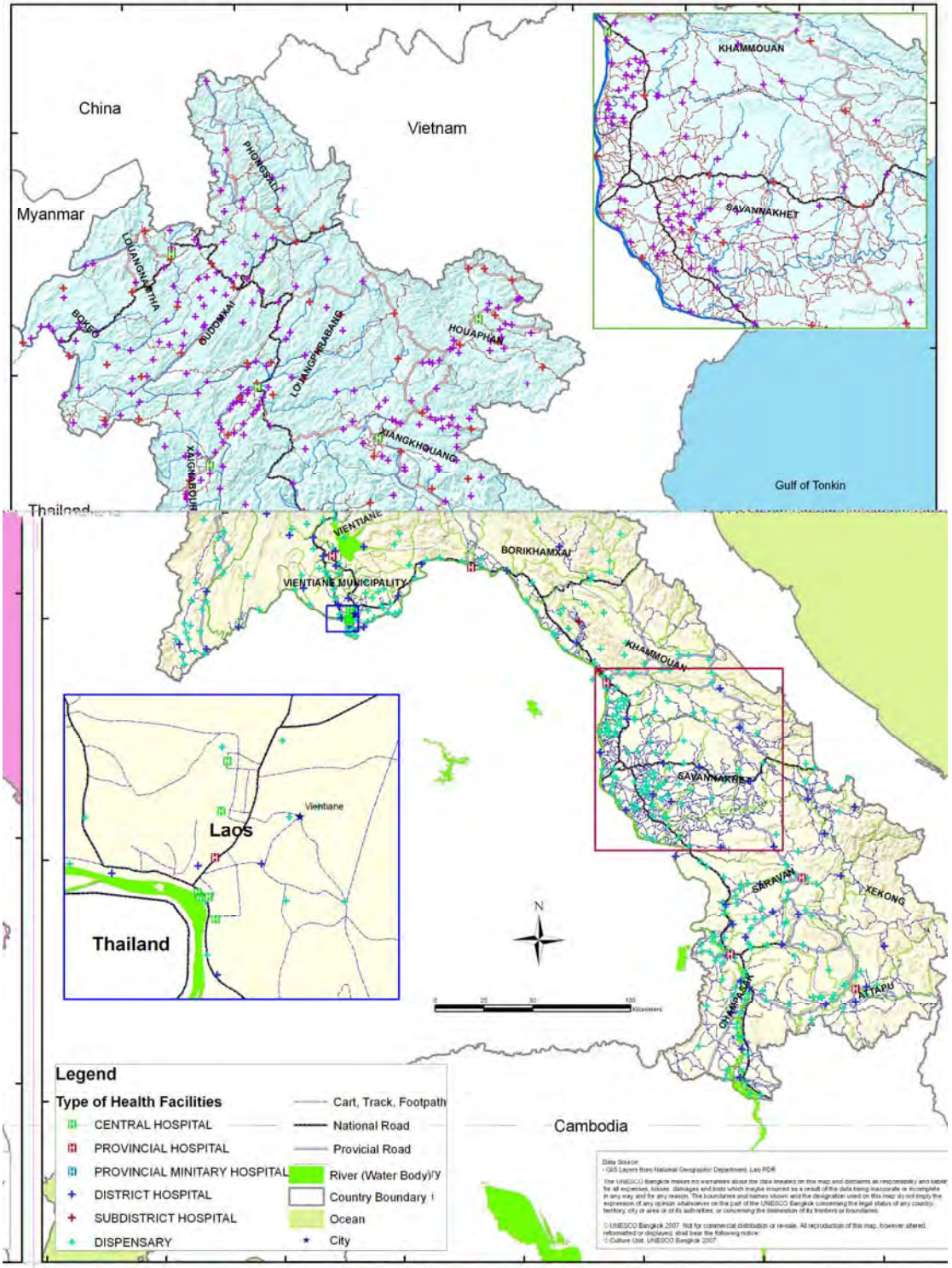
The Lao's People Democratic Republic is located in Indochina. It has common borders with China, Vietnam, Myanmar, Cambodia, and Thailand. Lao PDR has 236,800 square km. Most area are mountainous and forest. The country is divided into three geographical areas: the Northern, the Central, and the Southern areas. The Mekong River flows through 1,865 km of Lao PDR territory and forms the major portion of the border with Thailand (1,835 km) (see Figure 1.1). Lao PDR comprises over 47 different ethnic groups, such as Hmong, Khmer, Yao, A'kha, Ikoh, Lu etc. Each tribe has its own distinctive customs, dialects and costumes. These minorities can be classified into three groups: 56% in Lao Lum (Lowlanders), 34% in Lao Theung (uplanders), and 9% Lao Soung (hill tribes). The total population is 5.7 million and the population density is 24 persons per square km. The life expectancy is 61.3 years. An adult literacy is 78% in 2005.

Current macro-economic situation:

Lao PDR is one of the poorest countries in the ASEAN region but its recent economic performance has been encouraging, according to the World Bank's estimate in 2007 GNI per capita in current US$ increased from $280 in 2000 to $500 in 2006. The economic has enjoyed a period of macroeconomic stability, underpinned by fiscal and monetary discipline. Growth has been robust, GDP growth at 7% in 2007. Output expanded in mining, newly emerging processing industries, agriculture, and new construction of hydropower projects, tourism and other services. Although proportionally decreasing, the agriculture sector is till predominant and represents 75% of Lao workers and 41% of GDP share.

As Lao PDR is surrounded by some of the fastest growing economies in the world, it has benefited from increased demands for its products and large foreigner

Figure 1.1 Map of Lao PDR



investment inflows from neighboring countries, such as Thailand, China, and Vietnam. Over the last decade, poverty has significantly decreased. However, many challenges remain. It is currently ranking at 133rd position out of 177 countries on the Human Development Index.

Progress in strengthening fiscal management has been slow and uneven. Weak domestic revenue collection. The country is financially heavily assisted when compared to other countries in the region. The national poverty line regarding purchasing power parity has shown: 1.5 PPP$ per day around 30% of the population, < 2 PPP$ per day around 66% of the population, and < 1 PPP$ per day around 18% of the population according to the World Bank's estimate 2006.

1.2 Problems and Its Significance

From 1975 until the late 1995's, health cares for the population of Lao PDR was funded by Government and services were provided free of charge to patients in public facilities. However, budgetary constraints increasingly limited the care that government could fund. Salaries of health workers were low, shortage of essential drugs and medical supplies became increasingly frequent and infrastructure deteriorated.

It was not been feasible to increase government funding from general tax revenues to improve the situation, so rather than letting the public health system collapse, the government introduced user fees in 1995 through Decree 52, for specific services these changes resulted in:

- User fees for services in government health care institutions, with fees levied for patient registration and for ancillary services but not for consultations with professional health workers.
- The fees to patients for drugs were set at cost plus 25%.

This regulation allowed the public hospital to increase resources in public sector to reduce financial burden on the government while at the same time attempting to ensure the appropriate access to health care for those without ability to pay.

The purpose of use of these revenues which collect from the imposition of user fees are important which enable provider to improve the quality of care, the level income of health workers, and maintenance of infrastructure deteriorated but whereas as the result of the implementation has shown that the public provision of health services is likely to be ineffective and of low quality. So one of the most proposed changes for solving inefficiency is decentralization and autonomous management of the organization such structural changes, improvement in policy process, management system improvement as well as sustainability of financial system in self-financed.

A recurrent theme in most government decisions on giving autonomy to hospitals is the expectation that autonomy would enable the hospital to mobilize revenue and lessen the budgetary pressure on governments. The hospital autonomy in all countries seems to be motivated by these objectives (Govindaraj and Chawla, 1996).

- achieving a “split” between purchasers and providers of health services,
- restructuring public-sector institutions to (at least partially) mimic private organizations.
- cost recovery.
- managerial and budgetary reform.
- decentralization and increased community involvement in health management.
- reallocation of public sector budgets towards an “essential” package of cost-effective services.

There are several critical transitional issues that the Ministry of Health must resolve if the hospital will move toward decentralized financing and management.

- Whether hospital employees will remain civil servants.
- A new basis for flowing funds to hospital must be articulated. If the hospital is to be expected to generate their funds from fee income, then the payment rates must be more closely aligned with costs. This will require prices substantially higher than the current fee schedule. A strategy may also have to be developed to reduce the current disparities in payment among comparable hospitals.

- The government seeks to shift funding of hospital to fee-for-service. So a system of hospital financing that is based upon uninsured individuals who are poor being fully responsible for their own bills that have the potential of confronting hospitals with structural shortfalls in payment, the Ministry of Health should be paid to develop financing mechanisms that prevent this and must qualify patients for government assistance, while a sizable portion of population remains without coverage.

1.3 Research Questions

1.3.1 Primary Question

How much are the expenditures and revenues in each fiscal year in hospital and will the hospital finance be sustainable in the changing environment of an autonomous organization?

1.3.2 Secondary Questions

1) How much are the previous expenditures and revenues from the government and non-government budget in each fiscal year?

2) Will the hospital finance for labor, material, and capital costs be sustainable in the changing environment into hospital autonomy?

1.4 Objectives of Study

1.4.1 General Objective

The hospital would enable to mobilize the revenues and be sustainable in financing support for improving quality of health care, income level of health workers, and maintaining facilities on new environment organization change as transformed to hospital autonomy.

1.4.2 Specific Objectives

The five hospital domain functions are: (1) strategic management; (2) procurement; (3) human resource management; (4) administration; and (5) financial management (Chawla, Govindaraj, Berman, and Needleman, 1996). But this study focused on analysis of the current situation and to forecast the financial status i.e. contingency of revenues and expenses of hospital. Thus the specific objectives of this study are to examine the following aspects:

1) To analyze the current and preceding situation of the revenues and expenses from government and non-government budget.
2) To forecast the contingency of revenues and expenses from non-government budget after transformed into an autonomous organization.

1.5 Scope of the Study

The study contemplates to analyze the financial status of the Setthathirath hospital before transformed into an autonomous organization. The revenues and expenditures are determined by the actual data of the hospital from year 2004-2008. Labor cost, material cost, and capital cost are collected from actual expenditure of the hospital. The whole picture of the hospital's expenditures is studied. Because of the complexity of each particular procedure, this study does not aim to reveal specific cost in case by case. The same perspective is applied to the revenue side. Only total revenue of the hospital and income from various sources are considered. This study will focus on the actual expenditures and revenues from 2004-2008 and tries to predict the financial sustainability when transformed into an autonomous hospital based on the available information with speculation of the most possible events that will be taken place.

1.6 Research Hypothesis

The current theme in government on giving financial autonomy to hospital is the expectation that autonomy can encourage revenues mobilization, and lead to significant gains in efficiency, effectiveness, organizational accountability, and the

quality of health care, with a reduction of budgetary pressure on government, at the same time, to ensure compromise of equity for those without ability to pay.

Autonomy is presumed to gain both technical and allocative efficiency, i.e. to increase public accountability and patients' satisfaction, to be better respond to local community needs with an increase in public support and acceptance, and greater community participation to hospital decision-making.

1.7 Possible Benefits

When autonomous and healthcare reform is established in the future, it is necessary for the hospital to adjust and control organization to maintain its mission on the quality of services. This study emphasizes on financial sustainability, particularly expected revenues and expenditures, due to changing environment. The most possible scenarios under conditions of autonomous system are forecasted to estimate future financial status of the hospital.

Structural changes in administration and operation can lead to improve in management under the resource constraint. Financial viability is anticipated in autonomous system and policy adjustment should be able to improve the quality of health care services.

It is hoped that this study would be the most useful and to provide detailed information and some implicitly guideline for the Ministry of Health, the Setthathirath, or other hospitals, and other related personnel in Lao PDR in preparing to implement hospital autonomy.

CHAPTER II

BACKGROUND

2.1 Background of Setthathirath Hospital

Setthathirath hospital is a central hospital located in Vientiane Capital; it is middle sized hospital that has 3 clusters: Internal Medicine/OPD, General Affair, and Surgery, with 186 beds, a total staff 281 persons (Setthathirath hospital's report in December 2008) (see Table 2.1 and 2.2). It provides tertiary care following the principle of referral system in the country. In 1959 Setthathirath named O.B.I hospital "Operation Brotherhood International" (O.B.I) by Philippines Medical Team after 1975 this hospital was carried out by Lao medical staffs of the Lao government, during 1999-2000 new O.B.I hospital was constructed based on granted aid from Japanese government (JICA) to Lao government total amount 1,611,000,000 yen. In 2001 an official opening ceremony for new O.B.I hospital was held on; during that time O.B.I hospital was changed to Setthathirath hospital. In 2001-2004 new hospital provided services for population of Lao PDR, the services were operated by new technical cooperation with Japanese side under the name of Lao-Japan Setthathirath Hospital Improvement Project (L-J SHIP) and the project was finished at the end of 2004. The statistic of health care and types of services in 2007 are reported by Setthathirath hospital on December 2008 (see Table 2.3).

To encourage hospital to recover costs by allowing them to control and manage the fees they collect, these fees are importance which enable provider to improve efficiency of patient care, the income level of health worker, and innovation of the hospital facilities including medical equipments, in addition; to reduce financial burden on government as much as possible. The incomes of sources of hospital derive from government budget, international grant aid, medical services fee, and donation.

Table 2.1 Setthathirath Hospital Structure

Internal Medicine/OPD	General Affair	Surgery
Internal medicine I	General Affaire	Surgery
Internal medicine II	Organization & Staff	Anesthesia & ICU
Pediatrics	Finances	Emergency
Nursing Care	Maintenance & Environment	Laboratory
Assurance Health	Medical Affairs	X-Ray
OPD	Foreign Relation	
Pharmacy		
OB-GY		
Eye & ENT		
Dentistry		
Rehabilitation & Traditional medicine		

Source: Setthathirath hospital's report in December 2008.

Table 2.2 Number of Hospital Personnel, Setthathirath Hospital: 2007

	Amount
Associate Professor:	3
Ph.D	3
Master Degree	14
Specialists	17
Medical Doctors	35
Assistant Doctors	15
Bachelor of Nursing	9
Midwifery	13
Auxiliary Nurses	45
Technical Nurses	26
Kynesitherapy	14
Other personal	87
Total	281

Source: Setthathirath hospital's report in December 2008.

Table 2.3 Types of Services: 2007

	Case
Total of patients attended in OPD	58,661
Average of OPD/day	188
Total number of Inpatient	16,181
Average of Inpatients/day	44
Total number of Emergency	31,611
Total number of Delivery	1,444
Total number of Cesarean section	194
Injury	3,192
Accidents	2,254
Others	938
Major surgery	620
Medium surgery	620
Minor surgery	528
Bed occupancy	47.47%
Laboratory	115,635
Blood tests	105,509
Urine tests	5,703
Stool tests	4,423
X-Ray	8,946
CT Scanner	494
EKG	2,694
Ultrasonography	5,494
Endoscopy	924
Ophtalmology	2,898
ENT	2,298
Physiotherapy	2,348
Dental	1,942
Gynecology	3,347

Source: Setthathirath hospital's report in December 2008.

Following Notification No. 619/OCP, dated 7/11/2007 from Office of the Central Party Committee which encouraged the development of autonomous institutions for all public hospitals which serve population of Lao PDR; the Setthathirath hospital is one of central hospital to be targeted of the government in transforming to autonomous system.

It is a middle sized hospital that provides tertiary care for all people in the country and serves large proportion of population within its area in Vientiane Capital.

The mainly rational in selecting this hospital for study focused on 4 principle issues:

- It is a central and middle sized hospital that can be able to provide tertiary care.
- Hospital provides health care services with modern technology.
- By technical cooperation with Japanese experts made Setthathirath hospital have an experience in management that will help to facilitate the study.
- The result of study from this hospital would be the most useful and to provide detailed information and some implicitly guideline for the Ministry of Health and other hospitals in Lao PDR in modifying to develop financial sustainability of an autonomous hospital throughout the country.

2.2 Healthcare Financing in Lao PDR

After the prime minister degree No. 52 was introduced in 1995 since then the public hospital began to charge user fees from the patients. The fees collected by the hospital have been significant 60-70% of total income; the rest coming from subsidies from the national and local government in the line-item grants while the hospital is required to turn over 20% of total income from user fees to the national and local government which administered them and 80% is retained in the hospital. Use these funds for operations and hiring of contract personnel. Fee revenues cannot be used for equipment and construction if they are not approved by the Ministry of Health;

however the hospital is allowed to use the fund to contract services such as security, cleaning, and laundry. The hospital is given to control over 80% of their total revenues that come from fees they collect at the facility. Each year the hospital is required to submit a yearly plan for the use of their own sources revenues incorporating them into the planning-budgeting exercise that includes the government subsidies from national, provincial, and district sources, the hospitals are allocated line-item grants for inputs such as labor, material, and capital cost, and provision based on historic levels of spending. Purchasing that use budget from national, provincial, and district subsidies are controlled by issuing requisitions to procurement committee of the Ministry of Health approved and the requisitions are submitted to the treasury at the national, provincial, and district levels for payment. The operation of revenue collection from user fees; the hospital is authorized to bill patients according to the fee schedule that is established by the Ministry of Finance joined with the Ministry of Health but fee levels established by both ministries have traditionally been set below cost that create a structural deficit and put hospital at risk for balancing revenues and expenditures, so the hospital established their own new fee schedule based on economic circumstance without regard to the Ministry of Finance and the Ministry of Health. It has extremely difficulty to construct the estimates of unit cost in place in hospital or comparatively across hospitals because of without such data so it is hard to establish reasonable fee levels for each hospital.

Based on Notification No. 619/OCP, dated 7/11/2007 from Office of the Central Party Committee to pilot in transforming public hospital into hospital autonomy in order to encourage hospital to recover their costs and move toward decentralized financing and management but the hospital is still government-owned with remaining some levels of supervision and control by the Ministry of Health, the Ministry of Finance and by local authority level at the national, provincial, and district levels which depend on scope of the decentralization.

In Lao PDR, as in many other developing countries, public hospitals consume large portions of scarce health sector resources and do not always use them effectively or efficiency. Faced with difficulties in funding health services, that causes the

government to design autonomy to hospitals to facilitate management improvements, which are expected to lead to better quality of care, increased revenue generation, and/or reduced cost.

The expectation of autonomous after transformation, the hospital is allowed to retain their total revenues that come from the fees they collect at the facility and hospital manager may set fees for all charges. Autonomy means that the facility directors are given some control over the often significant portion of their total revenues that comes from the fees they collect at the facility. Hospitals receive subsidies from the national and local governments, plus cost-recovery from their own fees. It is only for their own sources that the hospital has received new authority to manage.

Financial pattern of Healthcare systems in Lao PDR are financed by two main sources, public and private. Public sources are derived through taxes and manage by government (MOH). Private sources comprise foreigner assistance, donation, loan, and out-of-pocket these funds are derived through the MOH, or NGOs or pay directly to the providers or quasi-governmental agencies such as Social Security Organization (SSO) and Civil Servant Organization (CSS), Community Based Health Insurance (CBHI), these organizations are under government supervisor.

The current list of third party in Lao PDR is:

2.2.1 Social Security Organization (SSO)

Employees and employers are required to participate to the compulsory social security scheme and may not enter mutual agreement for the purpose of avoiding their participation to the social security system in order to ensure enterprise employees' social welfare rights and benefit with the objective of improving their living condition and contributing to national socio-economic development. State owned enterprises, private enterprises, and joint enterprises in the sectors of the industry, agriculture, services, and other business that have more than 10 employees, these agencies have to

apply to be members of SSO. Individual member of SSO will be governed by the following benefits.

- Medical Care Benefit
- Sickness Benefit
- Maternity Benefit
- Death Benefit
- Employment Injury or Occupational Disease Benefit
- Retirement Pension
- Survivors' Benefit
- Invalidity Benefit

Funds and Contributions

According to the Decree 207/PM on Social Security System for Enterprise Employees dated 23 December 1999. Contributions are paid by employers, employees, and voluntarily insured persons, at rate 9.5% of their total wages or salaries to each fund of the Social Security Fund and this payment shares between employer and employee 5:4.5.

2.2.2 Civil Servant Security (CSS)

The purpose of this fund is as the same as SSO to ensure government employees' social welfare rights and benefit with the objective of improving their living condition and contributing to national socio-economic development. Each individual government official will be governed by the following benefits.

- Medical Care Benefit
- Sickness Benefit
- Maternity Benefit
- Death Benefit
- Employment Injury or Occupational Disease Benefit
- Retirement Pension

- Survivors' Benefit

Funds and Contributions

Based on temporary Decree 045/GSSO dated 15 July 2008, contribution are paid by government employees at rate 16.5% of total salaries to Healthcare Fund, Short-term Allowance Fund, Long-term Allowance Fund, Injury or Occupational Disease Fund, and Operation Administrative Expenses of GSSO, this payments are shared between civil servant and government 8:8.5.

2.2.3 Community Based Health Insurance (CBHI)

The objectives of the CBHI scheme are to offer to the population the advantage of health insurance only, which are obtained through risk pooling and pre-payment. In addition, the principles of risk pooling and cost sharing, the community will get more benefit from this fund such as rich people subsidize poor people and healthy people subsidize sick people that lead to decrease the risk of catastrophic expenditures in healthcare, at the same time this fund can help to improve the quality of health care provision and the financial accessibility of health services.

Funds and Contributions

Contributions are paid by voluntarily insured family through collectors who is appointed and employed by the Management Committee at district level. Contributions are in 4 rates depending on family size and are different for urban and rural areas.

Urban rates

- the rate for single-person families: 14,000 kip/person/month
- the rate for families with two to four members: 24,000 kip/family/month
- the rate for families with five to seven members: 30,000 kip/family/month
- the rate for large families with eight or more members: 33,000 kip/family/month

Rural rates

- the rate for single-person families: 12,000 kip/person/month
- the rate for families with two to four members: 20,000 kip/family/month
- the rate for families with five to seven members: 35,000 kip/family/month
- the rate for large families with eight or more members: 38,000 kip/family /month

Other contribution from monks, convent women residing in the temple, and other religious people, and student who live in the dormitory pay 5,000 kip/person/month. The contribution rates will be adopted every 3-5 years if necessary (Ministerial Decree No. 723 dated 13 April 2005).

2.2.4 Medical Care Benefit and Payment Mechanism

Insured persons, their spouses and children are entitled to receive medical care benefits; but children are required to be less than 18 years of age. However if children pursue their studies on a constant and full time basis, such benefit will apply until they reach 25 years of age.

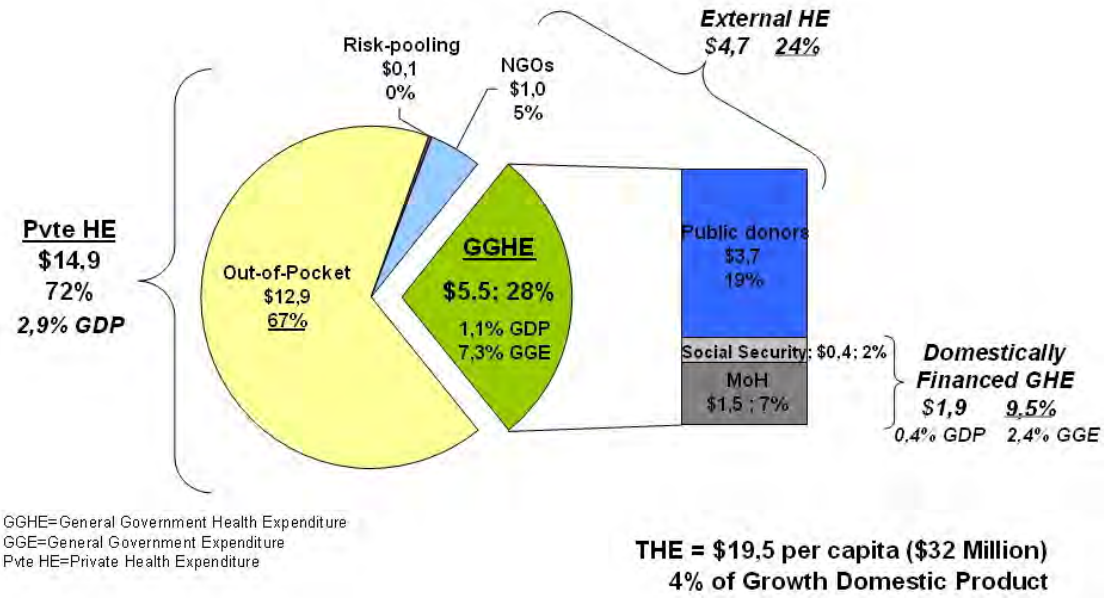
Both SSO and CSS shall pay premiums to hospitals on the basis of mutually agreed contracts and approved by the MOH. The rate of premiums are paid to the hospitals, 65,000 kip/person/year. In case of high cost treatment will be sharing 50:50 between Health Insurance Organization and contract Hospital.

CBHI provides capitation payment to the main and referral hospital, CBHI will not pay for treatment outside the contracted network of hospital. The CBHI shall enter agreements on the payment of the capitation lump sum with the hospitals. Sharing of the capitation payment between district and central/provincial hospital 60:40 is according to the percentage negotiated by the Management Committee.

Although; three types of health insurance have constituted in the last 5 years ago, but still very low proportion of population were covered by health insurance. So

out-of-pocket is still very important payment mechanism for people in accessing to healthcare services, and is the highest healthcare expenditures (see Figure 2.1).

Figure 2.1 Total Health Expenditures in Lao PDR



Source: http://www.who.int/nha/country/lao/en/

CHAPTER III

LITERATURE REVIEW

3.1 The Hospital Budgetary Planning

Berman (1986) has defined to meet the total financial requirements of the hospital; a margin of net patient care revenues in excess of current operating requirements must be maintained.

Accordance to the purpose of the financial autonomy, the conventional regulations in budgetary planning needs to be changed to implicitly reduce burden on governmental financial support. Block grant management is as a characteristic criterion of financial autonomy. Until now the affirmative definition to change rules in budget allocation and management to warrant the autonomous status of the hospital is not defined yet. It is only image that improving hospital performance are authorities given the responsibility to make decision in planning, monitoring, and controlling of the hospital services in order to meet the total financial requirements of the hospital.

There are 9 basic steps in hospital budgetary planning if a budget is not properly written, the hospital may be unable to deliver medical services at all. So many expenses and sources of revenue must be taken into consideration. Find out how to start: (1) Determine hospital revenue; (2) Figure out expenses; (3) Know the cost of personnel; (4) Add all medical equipment costs; (5) Know the medical costs of each bed; (6) Expansion of new plan or renovation of an old one; (7) Parking garages; (8) landscaping, groundkeeping; (9) include all insurance for the facility and personnel (Goldfield, 1999-2009).

The current potential sources of revenues of the Setthathirath hospital can be categorized and determination in the following groups:

1) Governmental line-item budget

2) Non-governmental budget

- Non-Medical Services

- Medical Services
- Health Insurance
  - CSS
  - SSO
  - CBHI
- Government Contribution for the poor and low income patients
- Donation

3.2 Mechanisms to develop system for new budgetary planning consist of two aspects.

3.2.1 Non-government Budget

As mentioned in article of the problems and its significance the revenues from user fees are important which enable provider to improve the quality of care and the income level of health workers. So there should be autonomous and authority in managing financial control to reduce the delay of mechanism payment and collection. The first is revenue-generating activities, which should be independently administered by the hospital. Secondly, the pattern and allocation system should be based on accountability and transparency. The funds will be designated and related to the objectives of each particular revenue. If the hospital can not generate insufficient income, the dependency on the government budget should be reimbursement. If the hospital can generate sufficient income, the dependency on the government budget should be reduced. Finally, the supremacy in budgetary spending based on efficiency and flexibility will support the operating process within the organization. The evaluation will be conducted to maintain the objectives and to measure efficiency, effectiveness, and equity of hospital in implementing autonomous organization rather than bureaucratic system is being nowadays.

3.2.2 Governmental Budget

Based on autonomous hospital policy, the new block grant method will cover some part of previous budgetary allocation which includes per capita salaries,

overtime payment, capital cost, and budget for free healthcare services for the poor. However there is no consensus whether the capital cost should be included within this block grant. In addition, the basic calculation for block grant has not been definitely defined (Puntasen, 1999). The calculation of medical services for the autonomous hospital based on the unit cost multiplied by total number of services utilized.

3.3 Unit Cost of Setthathirath Hospital

Presently, the Ministry of Health had effort to enhance the hospital financial management system but there is no study unit cost such labor cost was calculated from staff and contractual person's salaries, wages, and overtime payment. The cost of material (office supplies) was calculated from number of total staffs and hospital utilization is incurred. Drugs and medical supplies were calculated from actual amount that is incurred from providing services. The depreciation of medical equipment and building constituted capital cost did not calculate and several sources of capital spending were derived directly from donation and foreigners' assistance. Labor cost was derived form government and non-government budget, material cost was derived from 2 sources: government and non-government, the calculation for these expenditures based on the Ministry of finance's regulation, drugs and medical supplies are derived from revolving drug fund.

3.4 Financial Management in the Autonomous Hospital

In financial management of autonomous organizations, hospital should develop revenue-seeking measures to help sustain academic activities in better quality because the real cost of healthcare services is much higher than the charges levied from patients. It is necessary for government to subsidize the hospital in these public goods. Therefore, it would be considerably burden to patients to bear all the costs incurred if the hospital is under the autonomous system and it would be barrier for the poor patients to access to the healthcare.

Governmental subsidy should be in the form of block grant for flexibility in using these budgets under appropriate auditing system by authorized offices in the

Ministry of Health and the Ministry of Finance.

One revenue-seeking measure should be implemented as below:

- Hospital's property investment: In autonomous system, this kind of revenues is feasible if regulations is adapted and permitted.

To achieve the goals of autonomous control of the hospital, (Visarnvate, 1999) proposed the conceptual framework in reengineering the financial management process (see Table 3.1).

3.5 Established Autonomous Hospital

In the present, there is no study and implementation of autonomous hospital or other organization in Lao PDR. In the previous research, hospital autonomy in the case of Banpaew hospital in Thailand has been studied for its block grant budget (Pitayarangsarit, 2000). The hospital subsidiary budgeting is on capitation basis.

Many variables will affect the sustainability of the autonomous organization, such as:

- Number of employee: the lesson learnt from the existing autonomous hospital is obvious. Majority of personnel does not remain the civil servant status, therefore; the dual status will lead to confusion within the administration and management of the organization.
- Societal impact: the perception of society will significantly influence the utilization of healthcare service program. There is anxiety concerning the rate of service would increase because of privatization.
- National economy: if the economic crisis reappears, the anticipated budget would not be at the sufficient level.

On the above-mentioned criteria with uncertainty of future stipulation and highly competitive healthcare market can bring the prosperity or failure of the Setthathirath Hospital if it transforms into an autonomous organization.

Table 3.1 Reengineering the Financial Management Process.

Planning	Activities	Achievements
Strategic planning ↓	• Review the organization's potential. • Review threat and opportunities of the organization. • Set goals and strategies of development.	Set job descriptions
Plan structure ↓	• Review mission's limit of each unit. • Set objectives of operations.	
Fund raising and founding ↓	• Review spending policy. • Review how to establish long-term financial soundness.	Set financial stability
Budgetary planning ↓	• Apply the rational-related method. • Review operation process with most cost-effectiveness.	Control resources use in the most efficient way and reduce expenditure
Activity-based Cost Accounting ↓	• Control budget spending according to the activities and operating outcome. • Develop database for unit cost calculation.	
Outcome reporting system ↓	• Review and control the operation following the plan/project.	Quality assurance of administration and management system
Project evaluation	• Create activity evaluation: - Financial auditing. - Performance auditing. - Management auditing.	

Source: Visarnvat (1999).

3.6 Financial Constraint on Hospital Behavior

Behavior of autonomous organization must have been adapted in containing costs and producing as many as output as possible, if not profit targeted. Possible measures in autonomous hospital include: utilization review, use of an essential drug list, monitor length of stay, efficient management of drugs and supplies, development of the staffs' performance monitoring, and development of treatment protocol (Charoenparij, 1999).

Infrastructure and capital investments are another controversial issue for autonomous hospital. There is no consensus in the amount of budget allowed for capital expenditures whether in term of block grant or line-item budget. Any investment financed by the government block grant requires permission before constructing or purchasing.

Another financial pressure to autonomous hospital is in efficiency and cost-shifting behavior. Efficiency is the most important key performance indicator of reform success. A study in the United States found a reduction in inefficiency in the least profitable hospitals comparing to a slight increasing in inefficiency for the highest profit group (Hadley, 1996). In this study, hospital inefficiency was defined as the percentage difference between a hospital's actual costs and its minimum technically feasible costs, given its mix and levels of output, its technical structure and the characteristics of its Medicare patients.

One conditional pressure on financial status to an autonomous hospital based on increasing competition in healthcare market and national per capita it was noted that both conditions appear to have had a bigger negative impact on revenue growth than on expenses growth, with the result that profit grew significantly less in more competitive hospital markets. This should be taken into consideration for Setthathirath Hospital for its experience in free market competition.

3.7 Autonomous Transition

Based on Notification No. 619/OCP, dated 7/11/2007 from Office of the Central Party Committee and 345/PM inform to conduct in gradual transforming public hospital into hospital autonomy. The goals of hospital autonomy are to improve the quality of care, increase revenues generation and reduce cost as a means of improving the efficiency and financial sustainability in the public hospital. The concept of hospital autonomy is new in Lao PDR, an initiative that has recently received a considerable amount of attention is the introduction of incentive system, thereby, encouraging hospital to carry out alternative financing mechanism. In response to these problems; the MOH by cooperation with 4 central hospitals began to explore strategies that would lead to greater autonomy within public hospital. Actually those hospitals already began to be self-dependence in finance for material cost in the last 5 years ago, because of proportion of government budget for material procurement that allocated to the hospital is very low comparing with the hospitals' own budget.

MOH and the 4 central hospitals prepare learning ability to be autonomous in the year 2010. Sharma and Hotchkiss (2000) have studied the developing financial autonomy in public hospitals in India: **Rajasthan's Model** has considered the following measurements in developing financial autonomy in public hospital:

Possible measures that might be considered include user fee schemes, the adoption of hospital wards, the operation of in-hospital pharmacies, the recruitment of donations and grants from community organizations and donors, and securing loans from financial institutions.

Comparing between the purpose of the Lao government's policy and current situation of the public hospital in Lao PDR, the word hospital autonomous could be possible public-private mix in primarily when refer to Tangcharoensathien (1994) has mentioned that the private practices in public hospitals are the implementation of private management in public organizations, and these intervention should be based on the roles and responsibilities of public organizations. In addition, these public organizations should be concerned about equity, efficiency, and quality of services for

the people on a wider scale, especially for the poor, the vulnerable and low income groups, not for profit making.

There are 5 main objectives of private practices in public hospitals: (1) to increase health resources to be used in the public sector; (2) to increase competition in health service provision markets, between the public and private sector; (3) to decrease public finance subsidies to public providers and using marketing mechanisms as well as pricing policy; (4) to decrease national health expenditure that is allocated through public providers; and (5) to improve quality of services that has to be responsive to the clients' expectation.

3.8 Financial Sustainability

The most important objective of the study is to ensure whether the implementation of the hospital autonomous could reduce government financial support and increase hospital's revenues, and to be sustainability to finance medical care services.

Definition of Financial Sustainability

Financial sustainability has been defined as "the ability of the system to produce benefits valued sufficiently by users and stakeholders to ensure enough resources to continue activities with long term benefits" (Hsiao, 1998).

The concerns of financial sustainability in the autonomous system have been widely discussed. Transition from the old bureaucratic structure into decentralizing pattern with self-governance system, the most prioritized question is how will the organization be sustain with the same or better quality in board spectrum of medical care services. The criteria for budget allocation are flexibly implemented but, of course, limited. The only stipulation in current economic is output-related performance of institution, based on unit cost study as being used in the business enterprise. However, the different between a public and private entity is profit consideration. Not-for-profit status of hospital mandates the goal of the hospital to

output maximization and concurrently quality assurance. The dichotomy of these objectives is obviously contradicted to the constraint of resources allocation.

The specific definition of financial sustainability of this study is focusing on cost recovery of the hospital after revenues and expenditures data have been collected and analyzed. The future sustainability is depending on multiple factors. On the revenues side, the number of patients and rate charging for each procedure will determine the estimated the prospect of income; this amount of revenue is added up to government budget and other sources of income. The expected expenditure from three principle cost: labor cost, material cost, and capital cost.

Sharma and Hotchkiss (2000) have found the problems that have frequently prevented the success of cost recovery programs include the following:

- Collection incentives are lacking
- Sources of supplementary financing are limited
- Exemption mechanisms are weak

3.9 Autonomous Hospital

Many of the key characteristics of the autonomous public hospitals included the need for the hospitals to carry out public functions, the possibility to have flexible management practices by setting its own rules and regulations with regards to manpower and financial resources management (Thailand Health Profile, 1999-200). They were also obliged to carry out policies and programs deemed necessary by the government. The overall governance of the hospitals would be public in nature but would be decentralized as much as possible to the individual hospital.

Understand the different analytical approaches to decentralization. Bossert (2003) mentioned that decentralization is one of major macro-organizational changes that health reformers can make. The essential elements of its structures and processes in this study are to emphasize an innovative approach called: Decision Space Analysis. Range of choice is needed to determine hospital autonomy in decision making (see Table 3.2).

Table 3.2 Map of Decision Space

Functions	Range of Choice		
	Narrow	Moderate	Wide
Finance			
Sources of Revenues			no limits
Allocation of Expenditures		Authorization of Purchasing and procurement	
Choices about Fees	Defined by hospital board		
Service Organization			
Hospital Autonomy			Designed by hospital board
Insurance Plans	Defined by hospital board		
Payment Mechanisms	Defined by hospital board		
Contracts with Private Provider		Defined by law	
Human Resources			
Salaries		Increasing salaries	
Contract Staff		Number of new staff	
Civil Service	Hiring/firing restrictions		

CHAPTER IV

RESEARCH METHODOLOGY

4.1 Conceptual Framework

To consider for financial sustainability, comparison between hospital's revenue and expenditure budget are done. In revenue side, the hospital received budget from a government fixed grant, hospital's services, and non-government revenues budget includes donation, leasing of hospital's assets. Calculation of basic production expenditures is base on labor, material, and capital cost. This study arbitrarily uses expenditures as a proxy for costs of these basic productions. When changes in healthcare financing and autonomous organization are taken place in the future, there will be effects on both revenues and expenditures (see Figure 4.1 and 4.2).

On the hospital non-government healthcare services revenues side, healthcare financing pattern will be shifted into the more cost containment paradigm the hospital's services revenues, third-party payers: SSO (Social Security Organization), CSS (Civil Servant Security), and CBHI (Community Base Health Insurance) are paid by capitation instead of fee-for-service with agreement to pay. Both of this financial reform will result in considerable alteration of hospital's income.

The important thing under new regulation that might be incurred after management system transforms into an autonomous organization as unexpected impacts to provider, payers, society, and patients.

First financial sustainability of an autonomous hospital will cause impact to expenditures and revenues from government budget and other revenues from non-government sources. The changes of expenses appear in all labor, material, and capital expending. Government budget in the form of itemized line will be changed into fixed grant for only labor, compensation and allowance.

Second increasing financial burden on an autonomous hospital may induce the hospital to increase their revenue by prescribing unnecessary services or medicines,

Figure 4.1 Old System (Pre)

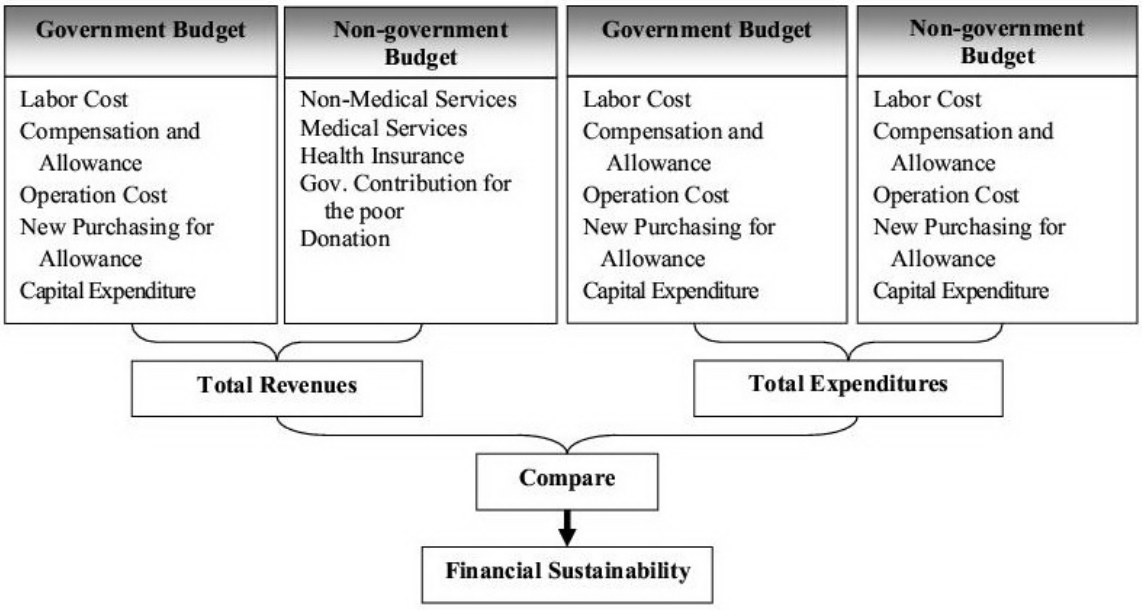
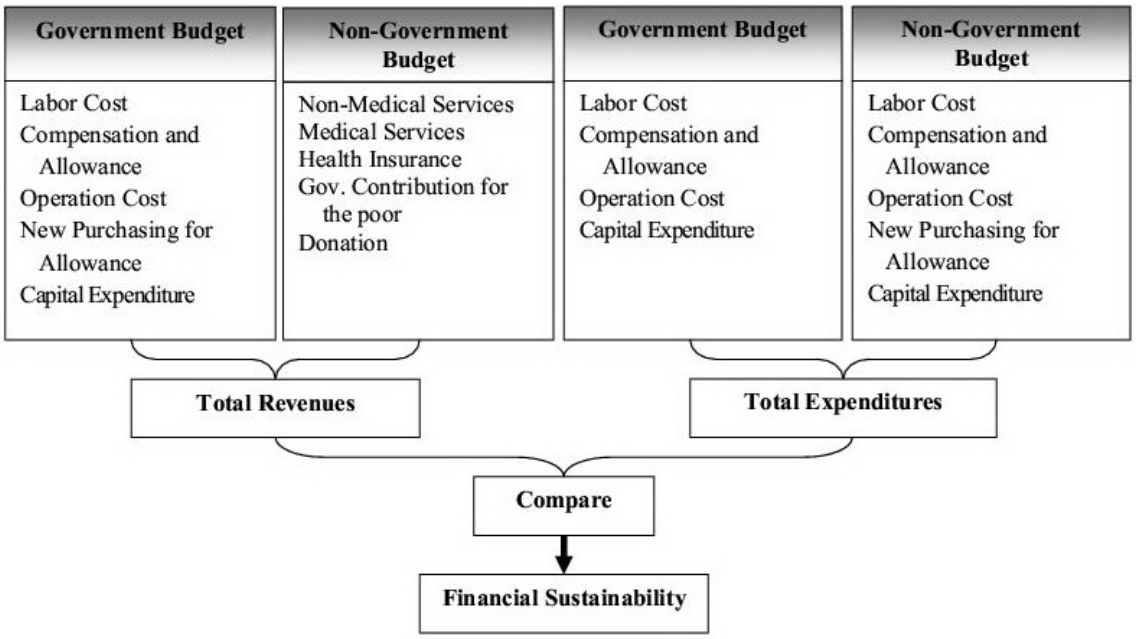


Figure 4.2 New System (Post)



in addition; there is no clearly regulation for calculating of unit cost.

Third user fees at high level of service cost can create problem of access to services, the number of patients may reduce in using health care services in an autonomous hospital and the relationship between users and provider might change such patient have high expectation of service improvement and want to see those benefit immediately.

This study attempts to demonstrate the actual and forecasted financial status of the hospital in 3 patterns: with and without reform. These 3 different scenarios are shown to compare financial sustainability between trend of historical revenues and expenditures in bureaucratic system and in the autonomous system. Forecasting is demonstrated in alternate year 2010.

4.2 Study Design

The design is descriptive study of financial status of hospital. Two components of data are analyzed.

4.2.1 Current Situation

The historical data of the hospital in the last fiscal year (2008) is observed. By collecting data from secondary sources of the hospital, the financial statement including balance sheet and income statement are analyzed and categorized as the follows:

- Sources of revenues (List of services and others)
- Lists of expenditure (Chart of accounts)

4.2.2 Contingent Event Analysis

Under new regulations there will be alterations of hospital financial status. The assumptions applied in this study are:

- Type and number of patients in each category of payment: demand

for outpatient and inpatient services is expected to increase after alteration of hospital structure.

- The revenues of hospital will be augmented by expanding patients, services mixed, establishing referral health system (from health insurance), and hospital property utilization.
- Structure of staffs and employees: there is an expectation of the future staffs and employees; this study assumes total staffs and employees being enrolled in the autonomous system will increase and employees status will be mixed between civil servants and contract personnel.
- The regulation of the third-parties: the reimbursing stipulation should be changed such as the rate of capitation payment of the health insurance scheme should increase according to the economic circumstance in the market.

The items listed below are forecasted under simulation of the most possible model; the forecasting method utilizes the regression analysis to predict the future events including.

- Potential sources of revenues.
- The expected expenditures in labor, material, and capital cost.

4.3 Methods of Analysis

4.3.1 Potential Sources of Revenues:

Total revenues derive from government and non-government sources and can be shown in the following equation:

$$TR = GB + NGB \quad (1)$$

and

$$NGB = MS + NMS + HI + DO + GCP \quad (2)$$

Where

TR = Total Revenues.

GB = Government Budget.

NGB = Non-Government Budget.

MS = Medical Services.

NMS = Non-Medical Services.

HI = Health Insurance.

DO = Donation.

GP = Government's Contribution to the Poor.

1) Government Budget:

In autonomous system, this budget is expected to be shifted into block grant from labor cost, compensation and allowance, and operation cost, new purchasing for operation and capital expenditures remain only labor cost, compensation and allowance after hospital transforms into an autonomous in which the hospital can dependently optimized resources based on real staffs and employees by being appropriately audited from a government agency which can be evaluated transparently and accountably. The criteria in allocation government block grant are base on the Ministry of Finance's regulation in calculating government expenditures but this criteria especially the calculation for operation cost, new purchasing for operation and capital expenditure are not definitely defined, therefore it would be difficult to estimate the exact amount of this budget. By categorized governmental budget into 3 groups: labor, material, and capital cost.

In this study, calculation for governmental budget is determined in 2 different scenarios. The first situation is from trend projection of historical governmental revenues. Growth rates of budget in labor, material, capital groups of revenues are calculated in each year and then applied for the next experimental year. In the other scenario, government budget is fixed at the same in the latest year. This is based on the expectation of reduction in government spending when the hospital is in an autonomous hospital.

2) Non-Government Revenues:

a) Revenues from health care services: Income from medical services can be calculated from 2 sources:
   - Inpatient-care services.
   - Outpatient-care services.

b) Other non-government revenues: This type of revenues could be calculated from 2 sources:
   - Donation.
   - Hospital property utilization

c) Other revenues: There are miscellaneous sources of revenues which cannot be grouped in the above categories.

4.3.2 The Expected Expenditure:

Basic production expenditures are separated in different types, according to sources and nature of spending such governmental and non-governmental budget. The simplified equation is:

$$TE = LC + MC + OE \quad (3)$$

and

$$LC = SA + CA \quad (4)$$

Where

TE = Total Expenditure.
LC = Labor Cost.
SA = Salary.
CA = Compensation and Allowance.
MC = Material Cost.
OE = Other Expenditure.

1) Government Budget:

These budgets are spent in the following items:

(1) Labor expenses

There is no change in salary rate when the hospital is under autonomous.

- Salary: there is increase in salaries after transition from bureaucratic system to autonomous system. The trend of increasing salary, basic salary is added up percentage of the hospital own salary spending.
- Wages: this payment is for temporary employees or contract person.
- Extra Work: OT payment; overtime payment is calculated by using the same formula in regulation of the Ministry of Finance.
- Bring Benefit: this payment is according to negotiate policy between the MOH and the MOF.

(2) Material expenses: there is no contribution from government any more in spending for material such drugs, medical supplies, and operation cost. Deduction in this expenditure is expected after transition from bureaucratic system to autonomous system, except electricity and water cost need to conduct further discussion to find out mutually agreed between the MOH and MOF.

(3) Capital expenses: government still continues to finance for capital investment.

2) Non-government Budget:

The spending in this budget is in materials for free healthcare services, fringe benefit, and other expenditures. Non-government budget can be categorized in 4 groups: labor, material, capital, and miscellaneous expenses.

The data from fiscal year 2005-2008 will be selected as a basic for calculation of labor, material, capital, and other cost. The expenses are predicted by trend of projection. The expected revenues and expenditures from the simulation will be compared to estimate the possible chance of financial sustainability of the hospital after transformed into autonomous.

4.3.3 Financial Status

1) Total Current Assets

Current assets as a wealth of the hospital that consist of cash in vault, cash in bank, account receivable, and inventories. The equation is shown below:

$$TCA = CV+CB+AR+IR \quad (5)$$

Where

TCA = Total Current Assets.
CV = Cash in Vault.
CB = Cash in Bank.
AR = Account Receivable.
IR = Inventories (drug, medical equipment, and laboratory agents).

2) Total Current Liabilities

Liability is exactly amount budget that has to be paid for venders based on the different types of transactions where the hospital incurs debt, consists of account payable for drug, medical supplies, maintenance, and repair. The equation is shown below:

$$TL = APD+APMS+APM \quad (6)$$

Where

TCL = Total Current Liabilities
APD = Account Payable for Drugs
APMS = Account Payable for Medical Supplies
APM = Account Payable for Maintenance and Repair

3) Current Ratio

The current ratio is a financial ratio that measures whether or not a firm has enough resources to pay its debts over the next 12 moths. It compares a firm's current assets to its current liabilities. It is expected as follows.

$$\textbf{Current ratio} = \frac{\textbf{Total Current Assets}}{\textbf{Total Current Liabilities}} \quad (7)$$

4.4 Forecasted Revenues and Expenditures in the next 5 years 2009-1013.

The revenues and expenditures of the hospital in the last 5 years (2004-2008), are the important historical data that use to project for the next 5 years in transition from public hospital to hospital autonomy; uncertain income of both government and non-government revenues in each fiscal year have shown us how to predict and resolve problems consistency with the appropriate circumstance toward, the trend projection of these data are studied by trend analysis**.**

4.5 Sources of Data

The study will take place in the Setthathirath Hospital that is a central hospital in Vientiane Capital, consists of 186 beds, 3 clusters such as, Internal Medicine, General Affair, Surgery, OPD, and 22 divisions, and total staff 285 persons. Setthathirath Hospital is a representative hospital that is in the government's target to be pilot implementing hospital autonomy.

The representatives who will be involved in this study, they are hospital superintendents, department heads, and technical staffs. Information will be collected on six topics as bellows:

- Government revenues in each year from 2004-2008.
- Government expenditures in each year from 2004-2008.
- Non-government revenues from user fees collection in each year form 2004-2008.

- Non-government expenditures that incurred in each year from 2004-2008.
- Current assets.
- Current Liability.

Respondents will be asked for each above question and include question on the procedures and practices use to administer user fees and annual budgetary allocation of government such as revenue-generating activities will be collected and line-item grants were allocated from government budget.

4.5.1 Data Collection

Data will be collected from secondary source as financial statement that includes revenues statement, expenditure statement, and liability statement of the Setthathirath Hospital in the fiscal year 2004-2008.

The line-item grants that derive from annual budgetary allocation of government based on Chart of Accounts and non-government revenues from user fees collection based on List of Services as fees schedule that hospital had used them to refer to its clients and expenditure data based on the actual spending incurred in each fiscal year.

4.5.2 Data Analysis

- Using trend analysis.

In studying the relationship between the quantity supplied and quantity demanded for health care services.

4.5.3 Record Forms

Data collection will use record forms as tools for data entry for revenues, expenditures, current assets, and liabilities by in dept interview financial record.

CHAPTER V

EMPIRICAL RESULTS AND DISCUSSION

Based on the conceptual framework and study design this chapter is divided into 4 sections. The first section will describe the revenues and expenditures of the hospital under the public system. The second will analyze the situation on the current asset and liability of the hospital but land, building, and fixed assets are excluded due to obtain incomplete data caused by improper system in recording of those for follow-up. The third section will examine the financial situation under the autonomous system. The fourth section will discuss about the result of this study.

The method of data collection which has been carried out that financial analysis is based on secondary data. Secondary data related to financing system are: (1) the revenue of the hospital from two sources of finance i.e. Government Revenue and Non-Government Revenue; (2) the expenditure of the hospital in terms of labor cost, material cost, and capital cost; and (3) the current ratio in terms of a financial ratio that measure whether or not a firm has enough resources to pay its debts over 1 years.

The revenue of the hospital is difficult to define an individual item and group them together due to the information revenue system of the hospital in line-item is not the same, and some item is uncertain income in alternating year. Almost data are obtained from the financial statement report in each fiscal year from the year 2004-2008 according the Lao Government Accounting Regulations and there is discussion with the responsible hospital staffs. The financial data in terms of revenue from non-government revenue especially medical services are mixed together between income from OPD and IPD and they are categorized in line-item revenue depend on the given services that hospital provides for the clients.

Data analysis and results of this study will be begun with government and non-government revenues, government and non-government expenditures, current assets, liability, debt ratio, and financial sustainability under the autonomous system according to the research question how much are the expenditures and revenues in

each fiscal year in hospital and will the hospital finance be sustainable in the changing environment of an autonomous system? Summary total revenues and expenditures from historical data during the last 5 years are revealed.

5.1 Revenues and Expenditures of the Hospital under the Public System

This study has collected financial data from the year 2004-2008 consists of total revenue, total expenditure from both government and non-government, assets, liability. The sources and structure of the revenues and expenditures of the hospital under the public system will be shown as the study results were illustrated as the follows.

5.1.1 Revenues.

1) Revenues from Government and Non-Government Budget

(1) Revenues from Government Budget

Revenues are allocated from the Budget Department of the Ministry of Finance to the Ministry of Health in the beginning of October every year as the start of new fiscal year then the MOH reallocates these budgets to the departments, institute, centers, and hospitals that are under control of the MOH. The hospital has received budget in line-item system, there are Salary, Compensation and Allowance, Operation Cost, Subsidies and Contribution, New Purchasing for Operation, and Capital Expenditures, which can be grouped in labor cost (Salary, Compensation and Allowance), material cost (Operation Cost, Subsidies and Contribution, and New Purchasing for Operation), and capital cost (Capital Expenditure), total government budget are cover only 23.0% of total revenues (11,849.0 million kip). The spending of these budgets is approved, monitored and audited by the MOH and the MOF.

From the historical data; government contribution for the Setthathirath hospital in the last 5 years were increasing and decreasing in alternating year (see Table 5.1) that shows the level increasing of government revenues which allocated to the hospital from year 2004-2008, is uncertain amount and not consistency with the level

increasing of GDP in the country. It was increased by 15.0% in the year 2005 from 1,483 million kip in 2004 to 1,698.4 million kip, 48.0% in the year 2006 from 1,698.4 million kip to 2,521.6 million kip, but it was decreased by -13.0% in the year 2007 from 2,521.6 million kip to 2,200.1 million kip and increased by 79.0% in the year 2008 from 2,200.1 million kip to 3,946.1 million kip.

The significant results of this study has shown that 92.0% of total government budget (10,895.4 million kip) in the last 5 years focused on labor cost and the rest of 8.0% for material cost (953.6 million kip), there is no spending or investment on the capital cost from the government budget in the last 5 years.

(2) Revenues from Non-Government Budget

Total non-government revenues cover 77.0% of total revenues (40,155.1 million kip). The main hospital revenues are dependency on the various activities of services that are provided the clients within the hospital. As above mention revenues of the hospital is in line-item system and some item is uncertain income in the alternating year so the sources of finance that are derived from those services can be categorized into 5 groups such Non-Medical Services, Medical Services, Health Insurance, and Reimbursement from government. Contribution for the poor and low income patients, and Donation (see Table 5.1). Based on historical data in the last 5 year 2004-2008, non-government revenues were increasing every year; it was increased by 20.0% in the year 2005 from 5,687.1 million kip to 6,815.6 million kip, 27.0% in the year 2006 from 6,815.6 million kip to 8,636.9 million kip, 6.0% in the year 2007 from 8,636.9 million kip to 9,165.5 million kip, and 7.0% in the year 2008 from 9,165.5 million kip to 9,850.1 million kip. There is no study in this research regarding factors that stimulate increasing revenues of the hospital in each year; whether increasing number of clients or increasing price of services.

The proportion by source shows that revenues from Medical Services are the highest sources of income, 86.0% of total non-government revenues, 9.0% Non-Medical services, 3.0% health insurance, 0.4% Government Contribution for the poor and low income patients, and 1.0% Donation, respectively.

Table 5.1 Total Revenues from Government and Non-Government Budget: 2004-2008

unit: million kip

	2004	2005	2006	2007	2008	Averager	
						Amount	Growth Rate
Total Revenues	**7,169.8** (100)	**8,514.0** (100)	**11,158.5** (100)	**11,365.6** (100)	**13,796.1** (100)	**10,400.8** (100)	18.3
Government Budget[a]	**1,482.7** (20.7)	**1,698.4** (19.9)	**2,521.6** (22.6)	**2,200.1** (19.4)	**3,946.1** (28.6)	**2,369.8** (22.8)	32.4
Non-Government Budget	**5,687.1** (79.3)	**6,815.6** (80.1)	**8,636.9** (77.4)	**9,165.5** (80.6)	**9,850.1** (71.4)	**8,031.0** (77.2)	15.0
Medical Services[b]	5,107.9 (71.2)	6,247.3 (73.4)	7,478.1 (67.0)	8,150.6 (71.7)	7,109.3 (51.5)	6,818.6 (65.6)	9.6
Non-Medical Services[c]	531.5 (7.4)	528.4 (6.2)	691.4 (6.2)	988.3 (8.7)	857.6 (6.2)	719.4 (6.9)	15.0
Health Insurance					1,668.9 (12.1)	333.8 (3.2)	
Donation	47.7 (0.7)	39.9 (0.5)	467.4 (4.2)	26.6 (0.2)		116.3 (1.1)	
Government's contribution to the poor					214.2 (1.6)	42.8 (0.4)	

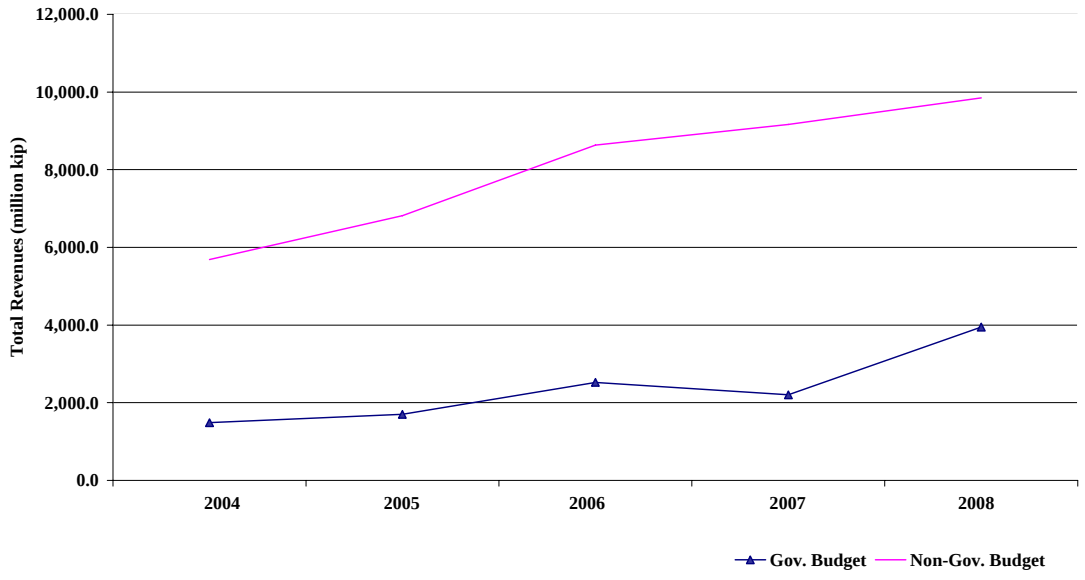
Notes: 1. Figures in the parentheses are the proportion by sources

[a]Salary, Compensatation and Allowance, and etc.

[b]Doctor's fees, Material in the operating room, and etc.

[c]Bed room, General service, and Parking.

Figure 5.1 Total Revenues from Government and Non-Government Budget: 2004-2008



There is no clarification on the payment mechanism of clients for their given services between out-of-pocket and capitation in the last 4 years. In the year 2008 only that shows the main non-government revenues are derived from out-of-pocket such 52.0% Medical services, 6.0% Non-medical Services, 2.0% Government Contribution for the poor and low income patients, and the health insurance scheme are generated very low revenue about 12.0%, so the burden of healthcare and main source of finance of hospital is based on individual household; the out-of-pocket payment was the most important factors affecting revenues of hospital.

On the other hand, the results indicated the donation from internal and external country was decreased in the last 5 year and the situation may go on until this proportion source remains zero in the future; in addition, revenue from the government contribution for the poor, these expenditures are prepaid by the hospital for treatment cost for the poor, low income patients according to government's policy then those will be reimbursed from the MOF to the MOH but the receipt amount cannot warrantee to be the same amounts that are incurred to the hospital. The total revenue of each source was distributed through outpatient and inpatient services, except capitation was distributed through bank by buyers who are represented of member of each health insurance organization.

5.1.2 Expenditures

1) Expenditures from Government Budget

Based on the historical data in the last 5 years indicated there was only 23.0% of total expenditures that government has spent on the healthcare for the last 5 years in the Setthathirath hospital.

The majority of spending in government contribution is labor cost which covers 92.0% of total government expenditures (2,179.1 million kip), 6.8% for material cost (160.4 million kip), and around 1.3% for others (30.3 million kip) (see Table 5.2).

Table 5.2 Total Expenditures from Government Budget: 2004-2008

unit: million kip

	2004	2005	2006	2007	2008	Average	
						Amount	Growth Rate
Total Expenditures	**1,482.7** (100)	**1,698.4** (100)	**2,521.6** (100)	**2,200.1** (100)	**3,946.1** (100)	**2,369.8** (100)	32.4
Labor Cost	**1,267.7** (85.5)	**1,626.9** (95.8)	**2,359.6** (93.6)	**2,200.1** (100.0)	**3,441.0** (87.2)	**2,179.1** (92.0)	30.8
Salary[a]	968.7 (65.3)	1,206.5 (71.0)	1,401.4 (55.6)	1,593.7 (72.4)	1,923.7 (48.8)	1,418.8 (59.9)	18.8
Compensation and Allowances[b]	299.0 (20.2)	420.4 (24.8)	958.2 (38.0)	606.5 (27.6)	1,517.3 (38.5)	760.3 (32.1)	70.5
Material Cost[c]	**215.0** (14.5)	**70.0** (4.1)	**162.0** (6.4)		**355.1** (9.0)	**160.4** (6.8)	
Other Expenditures[d]		**1.5** 0.1			**150.0** 3.8	**30.3** 1.3	

Notes: 1. Capital Cost is responsibility of government in procurement.
2. Figures in the parentheses are the proportion by sources
[a]Salary for employees, Employee allowance.
[b]Family allowance, Serverance payment, Extra work allowance, Cost social welfare.
[c]Operation cost, New purchasing for operation, account payable.
[d]Subsidies and contribution (politics, and cultural and social).

The total spending is increasing and decreasing in the alternating year that is consistency with increasing and decreasing labor cost. It was increased 15.0% of total government expenditures in the year 2005 from 1,482.7 million kip to 1,698.4 million kip, 45.0% in the year 2006 from 1,698.4 million kip to 2,521.6 million kip and decreased -13.0% in 2007 from 2,521.6 million kip to 2,200.1 million kip and increased 79.0% in the year 2008 from 2,200.1 million kip to 3,946.1 million kip.

However, the tendency of government budget will reduce consecutively every year as see in the last 5 year the trend of reducing has started on spending of material cost, there is only 8.0% of total government expenditures and no spending or investment on the capital cost.

The government revenues are not cash in hand; the total amount is in line-item grant that is centralization in the Budget Department of the MOF. The spending based on requesting of the Setthathirath hospital then the request must be approval by the MOH before the budget can be released from the MOF to the hospital.

2) Expenditures from Non-government Budget

Non-government expenditures are covered by 77.0% of total expenditures, the budget is spent primarily for activities of medical care services in the hospital, and material cost is the highest of non-government expending which reaches to 93.0% of total non-government expenditures, those material spent are medical supplies, drugs, office supplies, repair and maintenance such office, building, vehicles, machine, equipments, 6.9% of total non-government expenditure for labor cost, and around 0.04% of total non-government expenditures for others (see Table 5.3).

The sustainable exiting activities of medical care services are based on non-government spending that most income are spent from the hospital utilization.

Even though, there is increasing of non-government revenues every year but expenditures were increasing too; it was increased by 28.0% in the year 2005 from

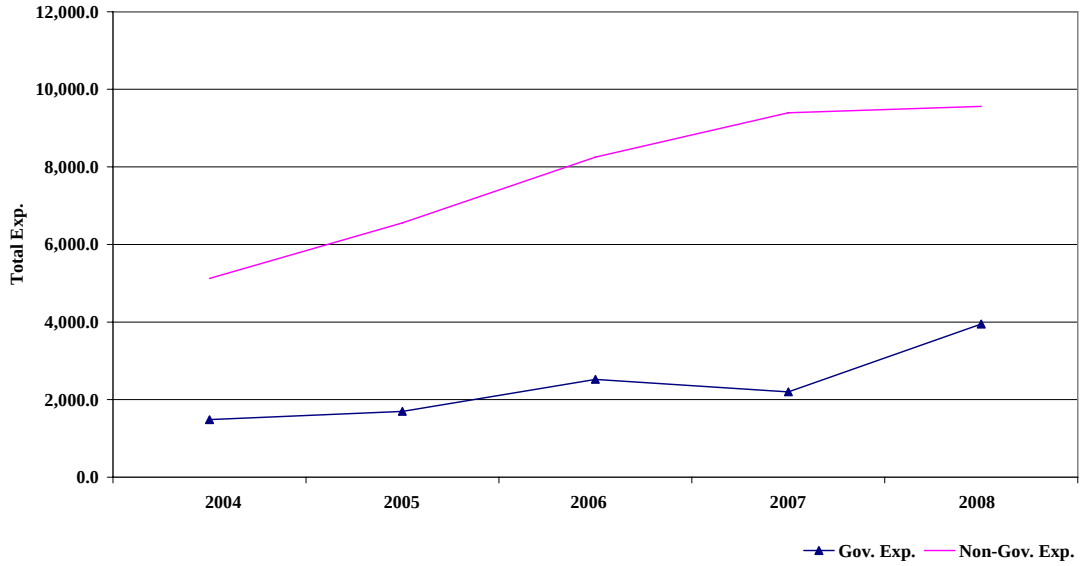
Table 5.3 Total Expenditure from Non-Government Budget: 2004-2008

unit: million kip

	2004	2005	2006	2007	2008	Average	
						Amount	Growth Rate
Total Expenditures	**5,121.6** (100)	**6,558.8** (100)	**8,253.4** (100)	**9,394.7** (100)	**9,558.4** (100)	**7,777.4** (100)	17.4
Labor Cost	**260.1** (5.1)	**197.5** (3.0)	**790.9** (9.6)	**684.6** (7.3)	**769.5** (8.1)	**540.5** (6.9)	68.9
Salary[a]	120.5 (2.4)	122.5 (1.9)	125.6 (1.5)	167.1 (1.8)	365.2 (3.8)	180.2 (2.3)	38.9
Compensation and Allowances[b]	139.6 (2.7)	74.9 (1.1)	665.2 (8.1)	517.6 (5.5)	404.3 (4.2)	360.3 (4.6)	174.3
Material Cost[c]	**4,861.5** (94.9)	**6,361.3** (97.0)	**7,448.9** (90.3)	**8,708.7** (92.7)	**8,788.9** (91.9)	**7,233.9** (93.0)	16.4
Other Expenditures[d]			**13.6** (0.2)	**1.3** (0.01)		**3.0** (0.04)	

Notes: 1. Capital Cost is responsibility of government in procurement.
2. Figures in the parentheses are the proportion by sources
[a]Salary for employees, Employee allowance.
[b]Family allowance, Serverance payment, Extra work allowance, Cost social welfare.
[c]Operation cost, New purchasing for operation, account payable.
[d]Subsidies and contribution (politics, and cultural and social).

Figure 5.2 Total Expenditures from Government and Non-Government Budget: 2004-2008



5,121.6 million kip to 6,558.8 million kip, 26.0% in the year 2006 from 6,558.8 million kip to 8,253.4 million kip, 14.0% in the year 2007 from 8,253.4 million kip to 9,394.7 million kip, and 2.0% in the year 2008 from 9,394.7 million kip to 9,558.4 million kip.

5.1.3 Total Revenues and Expenditures from Government and Non-Government Budget: 2004-2008

1) Revenues and expenditures from government budget is in line-item grant, consist of 6 main parts.

- Salary
- Compensation and Allowance
- Operation Cost
- Subsidies and Contribution
- New Purchasing for Operation
- Capital Expenditures

Those can be grouped into: (1) labor cost (Salary, Compensation and Allowance); (2) material cost (Operation Cost, Subsidies and Contribution, and New Purchasing for Operation); and (3) capital cost (Capital Expenditure) (see Table 5.4).

2) Revenues from Non-government budget consist of 5 main sources.

- Non-medical Services
- Medical Services
- Health Insurance
- Donation
- Reimbursement from Government

When comparing between government and non-government revenues is around 22:78.

3) Non-government Expenditures

Non-government expenditure can be categorized into 6 main parts as bellows:

- Salary
- Compensation and Allowance
- Operation Cost
- Subsidies and Contribution
- New Purchasing for Operation
- Capital Expenditures

Comparing between government and non-government expenditures is around 23:77. Based on the historical data in the last 5 years there is surplus in the alternating year between revenues and expenditures 565.5 in 2004, 256.8 in 2005, 383.4 in 2006, and 291.7 million kip in 2008, accept in 2007 the hospital got loss, -229.2 million kip (see Table 5.4)**.**

Table 5.4 Total Revenues and Expenditures from Government and Non-Government Budget: 2004-2008

unit: million kip

	2004	2005	2006	2007	2008	Average	
						Amount	Growth Rate
Total Revenues (TR)	**7,169.8**	**8,514.0**	**11,158.5**	**11,365.6**	**13,796.1**	**10,400.8**	18.3
	(100)	(100)	(100)	(100)	(100)	(100)	
Government Budget[a]	**1,482.7**	**1,698.4**	**2,521.6**	**2,200.1**	**3,946.1**	**2,369.8**	
	(20.7)	(19.9)	(22.6)	(19.4)	(28.6)	(22.8)	
Non-Government Budget	**5,687.1**	**6,815.6**	**8,636.9**	**9,165.5**	**9,850.1**	**8,031.0**	15.0
	(79.3)	(80.1)	(77.4)	(80.6)	(71.4)	(77.2)	
Medical Services[b]	5,107.9	6,247.3	7,478.1	8,150.6	7,109.3	6,818.6	9.6
	(71.2)	(73.4)	(67.0)	(71.7)	(51.5)	(65.6)	
Non-Medical Services[c]	531.5	528.4	691.4	988.3	857.6	719.4	15.0
	(7.4)	(6.2)	(6.2)	(8.7)	(6.2)	7	
Health Insurance					1,668.9	333.8	
					12.1	3	
Donation	47.7	39.9	467.4	26.6		116.3	
	(0.7)	(0.5)	(4.2)	(0.2)		1	
Government's contribution to the poor					214.2	42.8	
					1.6	0.4	
Total Expenditures form Government and Non-Government Budget (TE)	**6,604.3**	**8,257.2**	**10,775.0**	**11,594.8**	**13,504.5**	**10,147.2**	19.9
	(100)	(100)	(100)	(100)	(100)	(100)	
Labor Cost	**1,527.8**	**1,824.4**	**3,150.5**	**2,884.8**	**4,210.5**	**2,719.6**	32.4
	(23.1)	(22.1)	(29.2)	(24.9)	(31.2)	(26.8)	
Salary[d]	1,089.2	1,329.1	1,527.0	1,760.8	2,288.9	1,599.0	20.6
	(16.5)	(16.1)	(14.2)	(15.2)	(16.9)	(15.8)	
Compensation and Allowances[e]	438.6	495.3	1,623.5	1,124.0	1,921.5	1,120.6	70.2
	(6.6)	(6.0)	(15.1)	(9.7)	(14.2)	(11.0)	
Material Cost[f]	**5,076.5**	**6,431.3**	**7,610.9**	**8,708.7**	**9,144.0**	**7,394.3**	16.1
	(76.9)	(77.9)	(70.6)	(75.1)	(67.7)	(72.9)	
Other Expenditures[g]		**1.5**	**13.6**	**1.3**	**150.0**	**33.3**	
		(0.02)	(0.1)	(0.01)	(1.1)	(0.3)	
Balance or Net Revenues (TR-TE)	**565.5**	**256.8**	**383.4**	**-(229.2)**	**291.7**	**253.6**	

Notes: 1. Capital Cost is responsibility of government in procurement.

2. The figures in the parentheses are the proportion by sources

[a]Salary, Compensatation and Allowance, and etc.

[b]Doctor's fees, Material in the operating room, and etc.

[c]Bed room, General service, and Parking.

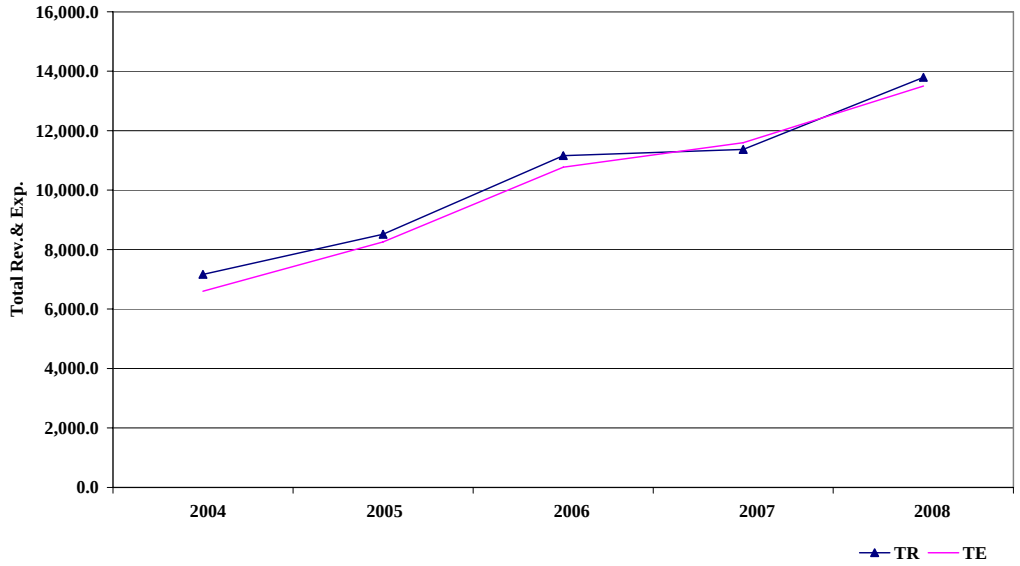
[d]Salary for employees, Employee allowance.

[e]Family allowance, Serverance payment, Extra work allowance, Cost social welfare.

[f]Operation cost, New purchasing for operation, account payable.

[g]Subsidies and contribution (politics, and cultural and social).

Figure 5.3 Total Revenues and Expenditures from Government and Non-Government Budget: 2004-2008



5.1.4 Current Financial Status of the Setthathirath Hospital: 2008

1) Revenues

Around 71.0% of total revenue, 9,850.1 million kip derived from non-government revenues and 29.0%, 3,946.1 million kip from government revenues (see Table 5.5). Revenues from medical services are the largest portion of the total revenues around 52.0%, 7,109.3 million kip and the main source of medical service from sale of drugs, medical material, and laboratory services.

2) Expenditures

Non-government expenditures are covered by 71.0% of total expenditures, 9,558.4 million kip and 29.0% from the government expenditure, 3,946.1 million kip, the budget is spent primarily for activities of medical care services in the hospital, and material cost is the highest of non-government spending which reaches to 64.0% of total expenditures, 8,688.2 million kip.

Table 5.5 Total Revenues and Expenditures from Government and Non-Government Budget: 2008

unit: million kip

	Amount	%
Total Revenues from Government and Non-Government Budget (TR)	**13,796.1**	**100.0**
Total Revenues from Government Budget	**3,946.1**	**28.6**
Revenues from Government Budget		
Salary	1,923.7	13.9
Compensation and Allowance	1,517.3	11.0
Operation Cost	337.1	2.4
Subsidies and Contribution	150.0	1.1
New Purchasing for Operation	18.0	0.1
Capital Expenditure	0.0	0.0
Account Payable	0.0	0.0
Total Revenues from Non-Govenmnet Budget	**9,850.1**	**71.4**
Revenues from Non-Government Budget		
Non-Medical Services	857.6	6.2
Medical Services	7,109.3	51.5
Health Insurance	1,668.9	12.1
Reimbursement from Gov. contribution for the poor	214.2	1.6
Donation	0.0	0.0
Total Expenditures Government and Non-Government Budget (TE)	**13,504.5**	**100.0**
Total Expenditures from Government Budget	**3,946.1**	**29.2**
Expenditures from Government Budget		
Salary	1,923.7	14.2
Compensation and Allowance	1,517.3	11.2
Operation Cost	337.1	2.5
Subsidies and Contribution	150.0	1.1
New Purchasing for Operation	18.0	0.1
Capital Expenditure	0.0	0.0
Account Payable	0.0	0.0
Total Expenditures from Non-Government Budget	**9,558.4**	**70.8**
Expenditures from Non-Government Budget		
Salary	365.2	2.7
Compensation and Allowance	404.3	3.0
Operation Cost	8,688.2	64.3
Subsidies and Contribution	0.0	0.0
New Purchasing for Operation	64.9	0.5
Capital Expenditure	0.0	0.0
Account Payable	35.8	0.3
Balance or Net Revenues (TR-TE)	**291.7**	

5.1.5 Current Ratio

Current ratio is financial ratio that measures whether or not a firm has enough resources to pay its debts over the 12 months. It compares a firm's current assets to its current liabilities. The hospital's assets comprise cash in vault, cash in bank, account receivable, and stock inventories (see Table 5.6).

The term inventories include any good owned by or under control of the hospital; in this case excluding fixed assets that consist of land, building, equipment, motor vehicles, furniture, and etc. but includes disposal of fixed assets such medical materials (syringe, disposable needle, cotton, catheters, bandage, and etc.) and drugs. According to the historical data in the year 2008, has shown that the hospital has total current assets, 5,302 million kip and total current liability, 3,224 million kip, which equals 1.6. It means that for every one kip the hospital owes it has 1.6 available in current assets. A current ratio of assets to liabilities of 2:1 is usually considered to be acceptable.

5.2 Financial Situation under the Autonomous Hospital system

Based on historical data on revenues and expenditures of the Setthathirath hospital in the last 5 years (2004-2008), trend analysis are used for forecasted revenues and expenditures under the autonomous system in years 2009-2010 (see Table 5.7).

According to government's policy, it requires and encourages all public hospitals in the country to be more self-dependence in generating revenues and using the retained revenues in providing and improving quality of medical care, and paying health workers' salaries instead of depending on government's contribution, which will alleviate the government's financial burden.

Following this government policy, the basic conceptual framework of this study regarding hospital autonomy that is focusing on financial sustainability. It is needed to set up the clear targets in financial planning for the next 5 years before the different scenarios are created. The two targets are set up to achieve the goals as follows.

Table 5.6 Current Ratio in the Year 2008

unit: million kip

	Total	Proportion by Source
Total Current Assets	**5,302.0**	**100**
Current Assets		
Cash in Vault	**102.0**	**1.9**
Cash in Bank	**1,263.1**	**23.8**
Account Receivable	**2,617.9**	**49.4**
SSO	345.1	6.5
CSS	319.4	6.0
CBHI	278.7	5.3
Drug	789.1	14.9
Medical Supplies	398.5	7.5
Chemical	426.3	8.0
Medical Attestation	60.8	1.1
Inventories	**1,318.9**	**24.9**
Drugs and Medical Materials	1,217.5	23.0
Laboratory Supplies	101.4	1.9
Total Current Liability	**3,224.1**	**100**
Current Liabilities		
Account Payable for drugs and medical supplies	**3,224.1**	**100**
Prasom Pharma Co., LTD	1,648.9	51.1
Viengthong Pharma Co., LTD	766.8	23.8
EURO Continent Co.	96.7	3.0
CBF Pharmaceutical Factory	444.3	13.8
Pharmaceutical Factory No. 2	114.8	3.6
Pharmaceutical Factory No. 3	0.6	0.0
KODU Pharma Co., LTD	29.8	0.9
Sinrung Rode Co., LTD	7.4	0.2
Dithiem Pharma Co., LTD	9.2	0.3
Berlin Pharma Co., LTD	11.1	0.3
MEMESCO Pharma Co., LTD	3.6	0.1
ENGTER Pharma Co., LTD	75.2	2.3
Palamy Pharma Co., LTD	15.8	0.5
Account Payable for maintenance and repair	**0.0**	**0.0**
Building	0.0	0.0
Equipment	0.0	0.0
Mortor vehicle	0.0	0.0
Difference between total assets and liabilities	**2,077.8**	
Current Ratio	**1.6**	

Table 5.7 Comparison of Financial Status between Actual Revenues and Expenditures: 2004-2008 and Forcasted: 2009-2013.

unit: million kip

	Actual Revenues and Expenditures					Forecasted Revenues and Expenditures					Average (2009-2013)	
	2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Amount**	**Growth Rate**
Total Revenues (TR)	**7,169.8**	**8,514.0**	**11,158.5**	**11,365.6**	**13,796.1**	**15,232.1**	**16,842.5**	**18,452.9**	**20,063.3**	**21,673.7**	**18,453.3**	9.2
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	
Government Budget	**1,482.7**	**1,698.4**	**2,521.6**	**2,200.1**	**3,946.1**	**3,998.3**	**4,541.2**	**5,084.0**	**5,626.9**	**6,169.7**	**5,084.0**	11.5
	(20.7)	(19.9)	(22.6)	(19.4)	(28.6)	(26.2)	(27.0)	(27.6)	(28.0)	(28.5)	(27.6)	
Non-Government Budget	**5,687.1**	**6,815.6**	**8,636.9**	**9,165.5**	**9,850.1**	**11,233.8**	**12,301.4**	**13,369.0**	**14,436.6**	**15,504.2**	**13,369.2**	8.4
	(79.3)	(80.1)	(77.4)	(80.6)	(71.4)	(74.0)	(73.3)	(72.8)	(72.3)	(71.9)	(72.4)	
Medical Services	5,107.9	6,247.3	7,478.1	8,150.6	7,109.3	8,590.5	9,181.1	9,771.7	10,362.3	10,952.9	9,771.7	6.3
	(71.2)	(73.4)	(67.0)	(71.7)	(51.5)	(56.4)	(54.5)	(53.0)	(51.6)	(50.5)	(53.0)	
Non-Medical Services	531.5	528.4	691.4	988.3	857.6	1,053.1	1,164.3	1,275.5	1,386.7	1,497.9	1,275.5	9.2
	(7.4)	(6.2)	(6.2)	(8.7)	(6.2)	(6.9)	(6.9)	(6.9)	(6.9)	(6.9)	(6.9)	
Health Insurance					1,668.9	1,308.3	1,609.3	1,910.4	2,211.5	2,512.5	1,910.4	17.8
					(12.1)	(8.6)	(9.6)	(10.4)	(11.0)	(11.6)	(10.4)	
Donation	47.7	39.9	467.4	26.6		114.0	140.2	166.4	192.7	218.9	166.4	17.8
	(0.7)	(0.5)	(4.2)	(0.2)		(1.0)	(1.1)	(1.2)	(1.3)	(1.4)	(0.9)	
Government's contribution to the poor					214.2	167.9	206.6	245.2	283.8	322.5	245.2	17.8
					(1.6)	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.3)	
Total Expenditures from Government and Non-Government Budget (TE)	**6,604.3**	**8,257.2**	**10,775.0**	**11,594.8**	**13,504.5**	**15,288.6**	**17,002.4**	**18,716.2**	**20,430.0**	**22,143.8**	**18,716.0**	9.7
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	
Labor Cost	**1,527.8**	**1,824.4**	**3,150.5**	**2,884.8**	**4,210.5**	**4,647.3**	**5,289.9**	**5,932.5**	**6,575.1**	**7,217.7**	**5,932.4**	11.6
	(23.1)	(22.1)	(29.2)	(24.9)	(31.2)	(30.4)	(31.1)	(31.7)	(32.2)	(32.6)	(31.7)	
Salary	1,089.2	1,329.1	1,527.0	1,760.8	2,288.9	2,448.3	2,731.4	3,014.6	3,297.7	3,580.8	3,014.6	10.0
	(16.5)	(16.1)	(14.2)	(15.2)	(16.9)	(16.0)	(16.1)	(16.1)	(16.1)	(16.2)	(16.1)	
Compensation and Allowances	438.6	495.3	1,623.5	1,124.0	1,921.5	2,198.9	2,558.4	2,917.8	3,277.3	3,636.7	2,917.8	13.4
	(6.6)	(6.0)	(15.1)	(9.7)	(14.2)	(14.4)	(15.0)	(15.6)	(16.0)	(16.4)	(15.6)	
Material Cost	**5,076.5**	**6,431.3**	**7,610.9**	**8,708.7**	**9,144.0**	**10,518.0**	**11,559.2**	**12,600.5**	**13,641.7**	**14,683.0**	**12,600.5**	8.7
	(76.9)	(77.9)	(70.6)	(75.1)	(67.7)	(68.8)	(68.0)	(67.3)	(66.8)	(66.3)	(67.3)	
Other Expenditures		**1.5**	**13.6**	**1.3**	**150.0**	**123.2**	**153.2**	**183.2**	**213.2**	**243.1**	**183.2**	18.6
		(0.02)	(0.1)	(0.01)	(1.1)	(0.8)	(0.9)	(1.0)	(1.0)	(1.1)	(1.0)	
Balance or Net Revenues (TR-TE)	**565.5**	**256.8**	**383.4**	**-(229.2)**	**291.7**	**-(56.5)**	**-(159.9)**	**-(263.3)**	**-(366.6)**	**-(470.0)**	**-(262.8)**	

Notes: 1. TR = GB + NGB; GB = 741.23 + 542.85t; NGB = MS + NMS + HI + DO + GP; MS = 5,046.81 + 590.61t; NMS = 385.81 + 111.21t.
DO, HI, and GP are estimated from the proportion of the average amount during 2004-2008.
2. TE = LC + MC + OE; LC = SA + CA; SA = 749.67 + 283.11t; CA = 42.23 + 359.45t; MC = 4,270.56 + 1,041. 24t.
OE are the remaining of forecasted expenditures of the deducting LC and MC.
3. Figures in the parentheses are percentage.

- Government budget has to be reduced at least 20-25% within in the next 5 years (2009-2013).
- Salaries of health workers in the Setthathirath hospital should be raised to the same level as the private sector or about 20% at the time the Setthathirath hospital become an autonomous hospital and increase annually about 5%, not less than the inflation rate, during the next 4 years (2010-2013).

The different scenarios are created and compared before hospital has to change environment from public to autonomous system. The scenarios will indicate the most possible choice among different situations of hospital's revenues and expenditures. Revenue from government's line-item budget should gradually decline, whereas non-government revenues will be increased by expanding services or raising price of medical care in order to comply to the policy of autonomous hospital and reduction in government's financial burden in the next 5 years.

To fulfill the above targets, the three different scenarios are considered. The trend analysis and historical data during the last 5 years (2004-2008) will be used for studying the possibility of financial sustainability in the three scenarios. The year 2008 will used as a base year for projecting both revenues and expenditures.

The three scenarios are as follows:

- Scenario A: Government and non-government revenues and expenditures of Setthathirath hospital increase according to the trend in the past.
- Scenario B: The same as Scenario A, except salaries in year 2009 increasing by 20.0% and the subsequent years (2010-2013) increasing by 5.0%.
- Scenario C: The same as Scenario B but the government budget allocated to Setthathirath hospital reducing by 5.0% annually from the year 2008.

The scenario A indicates forecasted financial status in the year 2009-2013 if the hospital maintains environment in the same situation as in bureaucratic system. This means that there is no change in the pattern of flow of fund, medical practice, human resources, hospital structure, etc. The revenues from government and non-government

budget and disbursement in providing activities of medical care services are based on traditional practice in the bureaucratic system and they are increased according to the past trend.

The scenario B shows forecasted financial status of Setthathirath hospital under the situation of changing salary structure but still receiving the financial support from government the same as being hospital in the bureaucratic system.

The scenario C represents the situation in which salary increases and the government budget allocated to the hospital decreases.

In scenario A, the findings show that the hospital's net revenues during 2004-2008, except 2007 are positive, whereas the net revenues in years 2009-2013 are -56.4, -159.6, -262.8, -365.9, and -469.1 million kips respectively if the trend of total revenues and expenditures is the same as in the past (see Table 5.8). This is probably because labor cost paid from government budget, and especially non-government budget sharply increase.

In scenario B, the net revenue during 2009-2013 will be -354.7, -312.2, -276.5, -247.9, and -227.0 million kips respectively (see Table 5.9). In scenario C, the net revenue during 2009-2013 will be more negative than scenario A and B i.e. -604.3, -1,292.1, -1,977.2, -2,660.7, and -3,343.4 million kips respectively (see Table 5.10).

The financial status of Setthathirath hospital in three scenarios will be deficit. Thus, its financial sustainability will not be attained unless programs or measures on cost reduction and increase in non-government budget revenue are implemented. Also, if the hospital has to pay for all capital expenditures on building and equipments, which are now mostly donated by JICA and from foreign assistance, the financial sustainability will be impossible.

5.3 Discussion

To be financial sustainability, Setthathirath hospital has to reduce total expenditures and/or to increase non-government budget revenues.

Table 5.8 Actual Revenues and Expenditures from Government and Non-Government Budget of the Year 2008 and Projected Revenues and Expenditures of the Year 2009-2013 Scenario A.

unit: million kip

	Actual	Forecast				
	2008	**2009**	**2010**	**2011**	**2012**	**2013**
Total Revenues (TR)	**13,796.1**	**15,232.1**	**16,842.7**	**18,453.3**	**20,063.9**	**21,674.5**
	(100)	(100)	(100)	(100)	(100)	(100)
Government Budget	**3,946.1**	**3,998.3**	**4,541.2**	**5,084.0**	**5,626.9**	**6,169.7**
	(28.6)	(26.2)	(27.0)	(27.6)	(28.0)	(28.5)
Non-Government Budget	**9,850.1**	**11,233.8**	**12,301.5**	**13,369.2**	**14,437.0**	**15,504.7**
	(71.4)	(73.8)	(73.0)	(72.4)	(72.0)	(71.5)
Medical Services	7,109.3	8,590.5	9,181.1	9,771.7	10,362.3	10,952.9
	(51.5)	(56.4)	(54.5)	(53.0)	(51.6)	(50.5)
Non-Medical Services	857.6	1,053.1	1,164.3	1,275.5	1,386.7	1,497.9
	(6.2)	(6.9)	(6.9)	(6.9)	(6.9)	(6.9)
Health Insurance	1,668.9	1,308.3	1,609.3	1,910.4	2,211.5	2,512.5
	(12.1)	(8.6)	(9.6)	(10.4)	(11.0)	(11.6)
Donation		114.0	140.2	166.4	192.7	218.9
		(0.7)	(0.8)	(0.9)	(1.0)	(1.0)
Government's contribution to the poor	214.2	167.9	206.6	245.2	283.8	322.5
	(1.6)	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)
Total Expenditures from Government and Non-Government Budget (TE)	**13,504.5**	**15,288.5**	**17,002.3**	**18,716.0**	**20,429.8**	**22,143.6**
	(100)	(100)	(100)	(100)	(100)	(100)
Labor Cost	**4,210.5**	**4,647.3**	**5,289.8**	**5,932.4**	**6,574.9**	**7,217.5**
	(31.2)	(30.4)	(31.1)	(31.7)	(32.2)	(32.6)
Salary	2,288.9	2,448.3	2,731.4	3,014.6	3,297.7	3,580.8
	(16.9)	(16.0)	(16.1)	(16.1)	(16.1)	(16.2)
Compensation and Allowances	1,921.5	2,198.9	2,558.4	2,917.8	3,277.3	3,636.7
	(14.2)	(14.4)	(15.0)	(15.6)	(16.0)	(16.4)
Material Cost	**9,144.0**	**10,518.0**	**11,559.2**	**12,600.5**	**13,641.7**	**14,683.0**
	(67.7)	(68.8)	(68.0)	(67.3)	(66.8)	(66.3)
Other Expenditures	**150.0**	**123.2**	**153.2**	**183.2**	**213.2**	**243.1**
	(1.1)	(0.8)	(0.9)	(1.0)	(1.0)	(1.1)
Balance or Net Revenues (TR-TE)	**291.7**	**-(56.4)**	**-(159.6)**	**-(262.8)**	**-(365.9)**	**-(469.1)**

Sources: From Table 5.7

Table 5.9 Actual Revenues and Expenditures from Government and Non-Government Budget of the Year 2008 and Projected Revenues and Expenditures of the Year 2009-2013 Scenario B.

unit: million kip

	Actual	Forecast				
	2008	**2009**	**2010**	**2011**	**2012**	**2013**
Total Revenues (TR)	**13,796.1**	**15,232.1**	**16,842.7**	**18,453.3**	**20,063.9**	**21,674.5**
	(100)	(100)	(100)	(100)	(100)	(100)
Government Budget	**3,946.1**	**3,998.3**	**4,541.2**	**5,084.0**	**5,626.9**	**6,169.7**
	(28.6)	(26.2)	(27.0)	(27.6)	(28.0)	(28.5)
Non-Government Budget	**9,850.1**	**11,233.8**	**12,301.5**	**13,369.2**	**14,437.0**	**15,504.7**
	(71.4)	(73.8)	(73.0)	(72.4)	(72.0)	(71.5)
Medical Services	7,109.3	8,590.5	9,181.1	9,771.7	10,362.3	10,952.9
	(51.5)	(56.4)	(54.5)	(53.0)	(51.6)	(50.5)
Non-Medical Services	857.6	1,053.1	1,164.3	1,275.5	1,386.7	1,497.9
	(6.2)	(6.9)	(6.9)	(6.9)	(6.9)	(6.9)
Health Insurance	1,668.9	1,308.3	1,609.3	1,910.4	2,211.5	2,512.5
	(12.1)	(8.6)	(9.6)	(10.4)	(11.0)	(11.6)
Donation		114.0	140.2	166.4	192.7	218.9
		(0.7)	(0.8)	(0.9)	(1.0)	(1.0)
Government's contribution to the poor	214.2	167.9	206.6	245.2	283.8	322.5
	(1.6)	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)
Total Expenditures from Government and Non-Government Budget (TE)	**13,504.5**	**15,586.9**	**17,154.9**	**18,729.7**	**20,311.8**	**21,901.5**
	(100)	(100)	(100)	(100)	(100)	(100)
Labor Cost	**4,210.5**	**4,945.6**	**5,442.4**	**5,946.1**	**6,456.9**	**6,975.4**
	(31.2)	(31.7)	(31.7)	(31.7)	(31.8)	(31.8)
Salary	2,288.9	2,746.7	2,884.0	3,028.3	3,179.7	3,338.6
	(16.9)	(17.6)	(16.8)	(16.2)	(15.7)	(15.2)
Compensation and Allowances	1,921.5	2,198.9	2,558.4	2,917.8	3,277.3	3,636.7
	(14.2)	(14.1)	(14.9)	(15.6)	(16.1)	(16.6)
Material Cost	**9,144.0**	**10,518.0**	**11,559.2**	**12,600.5**	**13,641.7**	**14,683.0**
	(67.7)	(67.5)	(67.4)	(67.3)	(67.2)	(67.0)
Other Expenditures	**150.0**	**123.2**	**153.2**	**183.2**	**213.2**	**243.1**
	(1.1)	(0.8)	(0.9)	(1.0)	(1.0)	(1.1)
Balance or Net Revenues (TR-TE)	**291.7**	**-(354.7)**	**-(312.2)**	**-(276.5)**	**-(247.9)**	**-(227.0)**

Notes: 1. Assume salary in the year 2009 increasing by 20.0% and the 4 subsequent year (2010-2013) increase by 5.0%

Table 5.10 Actual Revenues and Expenditures from Government and Non-Government Budget of the Year 2008 and Projected Revenues and Expenditures of the Year 2009-2013 Scenario C.

unit: million kip

	Actual	Forecast				
	2008	**2009**	**2010**	**2011**	**2012**	**2013**
Total Revenues (TR)	**13,796.1**	**14,982.6**	**15,862.8**	**16,752.5**	**17,651.1**	**18,558.1**
	(100)	(100)	(100)	(100)	(100)	(100)
Government Budget	**3,946.1**	**3,748.8**	**3,561.3**	**3,383.3**	**3,214.1**	**3,053.4**
	(28.6)	(25.0)	(22.5)	(20.2)	(18.2)	(16.5)
Non-Government Budget	**9,850.1**	**11,233.8**	**12,301.5**	**13,369.2**	**14,437.0**	**15,504.7**
	(71.4)	(75.0)	(77.5)	(79.8)	(81.8)	(83.5)
Medical Services	7,109.3	8,590.5	9,181.1	9,771.7	10,362.3	10,952.9
	(51.5)	(57.3)	(57.9)	(58.3)	(58.7)	(59.0)
Non-Medical Services	857.6	1,053.1	1,164.3	1,275.5	1,386.7	1,497.9
	(6.2)	(7.0)	(7.3)	(7.6)	(7.9)	(8.1)
Health Insurance	1,668.9	1,308.3	1,609.3	1,910.4	2,211.5	2,512.5
	(12.1)	(8.7)	(10.1)	(11.4)	(12.5)	(13.5)
Donation		114.0	140.2	166.4	192.7	218.9
		(0.8)	(0.9)	(1.0)	(1.1)	(1.2)
Government's contribution to the poor	214.2	167.9	206.6	245.2	283.8	322.5
	(1.6)	(1.1)	(1.3)	(1.5)	(1.6)	(1.7)
Total Expenditures from Government and Non-Government Budget (TE)	**13,504.5**	**15,586.9**	**17,154.9**	**18,729.7**	**20,311.8**	**21,901.5**
	(100)	(100)	(100)	(100)	(100)	(100)
Labor Cost	**4,210.5**	**4,945.6**	**5,442.4**	**5,946.1**	**6,456.9**	**6,975.4**
	(31.2)	(31.7)	(31.7)	(31.7)	(31.8)	(31.8)
Salary	2,288.9	2,746.7	2,884.0	3,028.3	3,179.7	3,338.6
	(16.9)	(17.6)	(16.8)	(16.2)	(15.7)	(15.2)
Compensation and Allowances	1,921.5	2,198.9	2,558.4	2,917.8	3,277.3	3,636.7
	(14.2)	(14.1)	(14.9)	(15.6)	(16.1)	(16.6)
Material Cost	**9,144.0**	**10,518.0**	**11,559.2**	**12,600.5**	**13,641.7**	**14,683.0**
	(67.7)	(67.5)	(67.4)	(67.3)	(67.2)	(67.0)
Other Expenditures	**150.0**	**123.2**	**153.2**	**183.2**	**213.2**	**243.1**
	(1.1)	(0.8)	(0.9)	(1.0)	(1.0)	(1.1)
Balance or Net Revenues (TR-TE)	**291.7**	**-(604.3)**	**-(1,292.1)**	**-(1,977.2)**	**-(2,660.7)**	**-(3,343.4)**

Notes: 1. $GB = 0.95 \times GB_{t-1}$

2. Assume salary in the year 2009 increasing by 20.0% and the 4 subsequent year (2010-2013) increase by 5.0%

3. Government budget allocated to hospital reducing by 5.0% annually from year 2008.

5.3.1 Reducing Expenditures

The component of total expenditures consists of labor cost, material cost and other expenditures. If the hospital tries to maintain the salary structure, compensation and allowances the same level as private sector, labor cost cannot be reduced. It can only possibly to decrease material cost and other expenditures. If the hospital will not reduce material cost because the quality of medical services may be affected, then the financial sustainability will be overcome through income-generating programs or measures.

5.3.2 Increasing Revenues

The non-government budget revenues are composed of medical services, non-medical services, health insurance, donation, and government's contribution to the poor. However, the government's contribution to the poor is beyond the hospital's control and thus it cannot be increased.

For the revenue from medical services, the hospital can generates more income from raising the price of medical services and medicines and/or extending the time period of medical services, for example, initiation the evening clinic program. The evening clinic program is not only generating income for the hospital but also reducing the average fix cost due to the buildings and equipments. An increase in the price of medical services and medicines may result in a decline in the number of OPD and IPD patients though the medical services are necessary goods, except the quality of medical services is higher than those of surrounding hospitals or most of OPD and IPD patients are the rich people.

The hospital can generate revenue from non-medical services in the form of parking fees, operating restaurant, convenience store, and gift shop. Although the revenues from non-medical services are smaller than revenues from medical services, at least, they can alleviate the financial deficit.

Health insurance can create more revenue to the hospital, especially in the future when health insurance is more accepted by individuals, government bureau and

private company. However, at the present time, Setthathirath hospital encounter the negative net revenue from health insurance because its costs of medical services is higher than the revenues collected from Social Security Organization (SSO), Civil Servant Security (CSS), and Community-Based Health Insurance (CBHI). The net revenue of the hospital in 2008 was -468.2 million kips (see Table A.4 in Appendix). Thus, Setthathirath hospital has to charge the prices of medical services from these organizations at least not less than the actual cost e.g. 10.0% above the costs.

Donation is the other source of revenue that can be increased from community, if the hospital involves in community and allows community to participate in hospital's activities. Government and foreign donors may reduce the financial burden of the hospital by providing medical equipment and technical assistance if the hospital initiate the project which improves the quality of medical services and benefits to the poor.

In the case of no reduction in labor cost, material cost, and other expenditures, the non-government budget revenue in years 2009-2013 has to increase by 5.4%, 10.5%, 14.8%, 18.4% and 21.6% of the non-government budget revenue in the respective year.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This chapter is divided into three parts. The first part is the summary of a feasibility study of financial sustainability of Setthathirath hospital if it becomes an autonomous hospital. The second part is the policy recommendation. Finally, the third part is the limitation of the study.

6.1 Summary

It is believed that the autonomous hospital will use resources more efficient in order to provide a high quality of medical services than the public hospitals and the government has to bear less financial burden on the autonomous hospitals. However, the autonomous hospital may lead to the problem of equality of access to the health care provision for the poor, and faces the problem of financial sustainability.

The objective of the study is to analyze the cash flow of Setthathirath hospital during the past 5 years 2004-2008 and to evaluate its financial sustainability during 2009-2013 if it becomes an autonomous hospital. In studying the financial sustainability of the hospital, three different scenarios are investigated: (1) Scenario A: Government and non-government revenues and expenditures of Setthathirath hospital increasing according to the trend in the past; (2) Scenario B: The same as Scenario A, except salaries in year 2009 increasing by 20% and the subsequent years (2010-2013) increasing by 5%; and (3) Scenario C: The same as Scenario B but the government budget allocated to Setthathirath hospital reducing by 5% annually from the year 2008.

The methods of study are based on the cash flow analysis, the trend analysis, and the ratio method. In the cash flow analysis, data on revenues are grouped into two categories i.e. government and non-government budget. The non-government budget is also divided into five components i.e. medical services, non-medical services, health insurance, donation, and government's contribution to the poor. Data on expenditures are grouped into labor cost, material cost, and other expenditures. Labor

cost is divided into two categories i.e. salary, and compensation and allowances. All of data for analyzing hospital's revenues and expenditures are obtained from the financial records of the hospital during the years 2004-2008. Data on capital expenditures are inadequate and incomplete. Hence, total expenditures in this study will be only recurrent expenditures, not including capital expenditures.

Due to the availability of data on revenues and expenditures only from the years 2004 to 2008, it is not possible to use the econometric method to estimate the demand function for health care and the cost function of Setthathirath hospital. Then, the demand function and prices of medical services are used for forecasting hospital's revenues, while the cost function is used for forecasting hospital's expenditures.

Thus, the trend analysis based on the simple regression is used for forecasting the components of revenues and expenditures during 2009-2013. However, some components of revenues and expenditures are projected by the ratio method if they are incomplete.

The findings show that, in scenario A, if the trend of total revenues and expenditures is the same as in the past, the hospital has positive net revenues during 2004-2008, except for 2007, whereas it has negative net revenues in years 2009-2013 i.e. -56.4, -159.6, -262.8, -365.9, and -469.1 million kips respectively. The negative net revenue is probably due to high labor cost paid from government budget, and especially non-government budget. In scenario B, the hospital encounters negative net revenue during 2009-2013 i.e. -354.7, -312.2, -276.5, -247.9, and -227.0 million kips respectively. In scenario C, the negative net revenue during 2009-2013 will be higher than scenario A and B i.e. -604.3, -1,292.1, -1,977.2, -2,660.7, and -3,343.4 million kips respectively. In all three senarios, the Setthathirath hospital's financial status will be deficit. Thus, it will not have financial sustainability unless programs or measures on reducing cost and increasing non-government budget revenue are implemented.

6.2 Policy Recommendation

The policy recommendations for the financial sustainability of Setthathirath hospital if it becomes the autonomous hospital is to reduce total expenditures and/or to increase non-government budget revenues. However, the reduction on labor cost will be difficult if the salary structure is kept as the same level as in the private sector. Also, a decrease in material cost may affect the quality of medical services.

For the increase in non-government budget revenue, the hospital can increase revenue from medical services, non-medical services, health insurance, and donation, while the government's contribution to the poor is not the policy variable of the hospital. The revenue from medical services can increase by initiating the evening clinic program, without raising the price of medical services. Non-medical services may come from parking fees, operating restaurant, convenience store, and gift shop in the hospital. Health insurance is the other major sources of revenues but the hospital has to charge the prices of medical services from Social Security Organization (SSO), Civil Servant Security (CSS), and Community-Based Health Insurance (CBHI), at least not less than the actual cost e.g. 10% above the costs. The hospital can get more donation and support from community if it allows community to participate in hospital's activities. Also, if the hospital initiate the project which improves the quality of medical services and benefits the poor, it is possible receive financial and technical assistance from government and foreign donors.

In the case of no measures to reduce labor cost, material cost, and other expenditures, the non-government budget revenue in years 2009-2013 has to increase by 5.4%, 10.5%, 14.8%, 18.4% and 21.6% of the non-government budget revenue in the respective year.

6.3 Limitation of the Study

In this study, it is not able to obtain the unit cost of OPD and IPD patients, and the unit cost by types of medical services since the financial records of the hospitals do not classify expenditures by types of patients and hospital activities.

Sample size is quite small since the new Setthathirath hospital has just started to provide medical services in 2001. In addition, data on revenues and expenditures of the hospital before 2004 are not available or incomplete to use for cash flow analysis.

Therefore, it is not able to obtain the demand function and the cost function for forecasting revenues and expenditures.

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APPENDIX

Government and Non-Government revenues and Expenditures budget: 2004-2008

Table A-1 Detail of Revenues and Expenditures from Government Budget: 2004-2008

unit: kip

Account Code				Item Name	2004	2005	2006	2007	2008	Total	Proportion by Source
Part	Division	Sub-Division	Code								
1	2	3	4	6	7	8	9	10	11	12=7+8+9+10+11	13.00
				Total =	***1,482,712,352***	***1,698,427,453***	***2,521,608,705***	***2,200,141,305***	***3,946,066,767***	***11,848,956,582***	***100***
10				**Salary**	**968,720,352**	**1,206,544,947**	**1,401,383,219**	**1,593,688,842**	**1,923,724,381**	**7,094,061,741**	**59.9**
	01			***Salaries for employees***	***882,363,152***	***1,117,530,747***	***1,312,492,019***	***1,443,167,442***	***1,760,836,581***	***6,516,389,941***	***55.0***
		01		Base salaries for existing employees	871,923,872	1,097,515,467	1,257,449,339	1,388,122,362	1,713,262,581	6,328,273,621	53.4
		02		Provision for promotions							
		03		Provision for new employees							
		04		Salary of employees taking local training	10,439,280	10,439,280	47,488,680	52,651,080	47,574,000	168,592,320	1.4
		05		Salary of employees taking training abroad							
		06		Contractual Employees		9,576,000	7,554,000	2,394,000		19,524,000	
	02			***Employee allowances***	***86,357,200***	***89,014,200***	***88,891,200***	***150,521,400***	***162,887,800***	***577,671,800***	***4.9***
		01		Functional allowances	5,010,000	5,022,000	4,980,000	6,684,000	6,360,000	28,056,000	
		03		Special allowances (army, police, medical, teacher)	53,204,000	54,324,000	53,136,000	56,538,000	54,132,000	271,334,000	2.3
		04		Length of service allowance	15,337,200	16,672,200	18,007,200	71,476,200	84,339,000	205,831,800	1.7
		05		Hardwork and toxic	12,806,000	12,996,000	12,768,000	15,823,200	18,056,800	72,450,000	0.6
11				**Compensation and Allowances**	**298,992,000**	**420,382,506**	**958,225,486**	**606,452,463**	**1,517,288,386**	**3,801,340,841**	**32.1**
	02			***Family allowances***	***53,992,000***	***76,062,000***	***75,450,000***	***75,666,000***	***64,426,000***	***345,596,000***	***2.9***
		01		Children allowances	45,892,000	65,892,000	65,550,000	65,721,000	56,506,000	299,561,000	2.5
		02		Spouse allowances	8,100,000	10,170,000	9,900,000	9,945,000	7,920,000	46,035,000	
	03			***Severance Payments***				***3,690,000***	***26,500,000***	***30,190,000***	
		01		Severance Payment when leaving Government				3,690,000	26,500,000	30,190,000	
		02		Severance payment before retirement							
	04			***Extra work allowances***	***245,000,000***	***344,320,506***	***630,507,806***	***527,096,463***	***1,426,362,386***	***3,173,287,161***	***26.8***
		01		Overtime							
		02		Translation							
		03		Research and studies							
		08		Surveillance	245,000,000	344,320,506	630,507,806	527,096,463	1,426,362,386	3,173,287,161	26.8
		09		Medical operations							
	06			***Cost social welfare***			***252,267,680***			***252,267,680***	***2.1***
		04		Medical treatment allowances			220,197,680			220,197,680	1.9
		05		Death allowances			32,070,000			32,070,000	

12				**Operation costs**	**65,000,000**	**70,000,000**	**162,000,000**		**337,054,000**	**634,054,000**	**5.4**
	01			***Purchasing of equipment and luburicants***	***23,000,000***	***30,000,000***			***123,560,000***	***176,560,000***	***1.5***
		01		**Fuel costs**	**23,000,000**	**20,000,000**			**63,560,000**	**106,560,000**	**0.9**
			01	Fuel	23,000,000	20,000,000			60,060,000	103,060,000	0.9
			02	Lubricants					3,500,000	3,500,000	
		02		**Office supplies and forms**		**10,000,000**			**60,000,000**	**70,000,000**	**0.6**
			01	Office supplies					55,000,000	55,000,000	
			02	Forms							
			03	Magazines and newspapers		10,000,000			5,000,000	15,000,000	
	02			***Uniforms***							
	03			***Purchasing of equipments***							
		01		Pedagogical equipments							
		02		Medical equipments							
		04		Purchasing of medical drugs							
	04			***Water, electricity costs***	***30,000,000***	***30,002,042***			***155,000,000***	***215,002,042***	***1.8***
		01		Water costs	10,000,000	10,002,042			35,000,000	55,002,042	
		02		Electricity costs	20,000,000	20,000,000			120,000,000	160,000,000	1.4
	06			***Repairs and maintenance***					***28,500,000***	***28,500,000***	
		01		Office and buildings					15,000,000	15,000,000	
		02		Vehicles					3,500,000	3,500,000	
		03		Materials, machines and equipments					10,000,000	10,000,000	
	07			***Insurance***							
	08			***Post and telecommunication costs***	***12,000,000***	***9,997,958***	***162,000,000***		***20,000,000***	***203,997,958***	***1.7***
		01		Postal costs							
		02		Telecommunication charges	12,000,000	9,997,958	162,000,000		20,000,000	203,997,958	1.7
	09			***Material transportation costs***							
	10			***Travel expense***					***9,994,000***	***9,994,000***	***0.1***
		01		***Travel expense***							
			01	Transportation expenses (air tickets, car, fuel)							
			02	Food costs							
			03	Accommodation costs							
			04	Visa fees, Airport tax							
			05	Contingency cost for collective travel							
			06	Contingency cost for individual travel							
		02		***Costs for receptions, meetings, seminars***					***9,994,000***	***9,994,000***	***0.1***
		03		***Reception costs***							
		04		***Souvenirs costs***							

		05		***Costs for national days***							
		06		***Funeral Cost***							
13				**Subsidies and Contribution**		**1,500,000**			**150,000,000**	**151,500,000**	**1.3**
	01			***Subsidies Politics and Social Cultural***		***1,500,000***			***150,000,000***	***151,500,000***	***1.3***
		01	04	**Politics**							
		03		**Cultural and Social**		**1,500,000**			**150,000,000**	**151,500,000**	**1.3**
			03	Preventive healthcare					10,000,000	10,000,000	
			04	Treatment healthcare		1,500,000				1,500,000	
			05	Consumers promotion ane providing medicine					10,000,000	10,000,000	
			06	Medical studies					80,000,000	80,000,000	0.7
			09	Newspapers and magazin, medails							
			11	Human resource development					50,000,000	50,000,000	
16				**New purchasing for operation**	**150,000,000**				**18,000,000**	**168,000,000**	**1.4**
	01			***Building, office***	***150,000,000***					***150,000,000***	***1.3***
		01		Rebuild	150,000,000					150,000,000	*1.3*
		02		Reparing							
	02			***Purchaing equipment and machineries***							
		01		New purchasing							
		02		Repairing							
	03			***Purchasing of vehicles***					***18,000,000***	***18,000,000***	
		01		New purchasing							
		02		Reparing					18,000,000	18,000,000	
	04			***Others fixed assets (tables, chairs, ccomputers...)***							
		01		New purchasing							
		02		Reparing							
17				**Capital Expenditure**							
	06			***Project management costs***							
	07			***Construction of infrastructure***							
		01		**Offices**							
			01	Rebuild							
			02	Reparing							
	08			***Machineries and equipments***							
		01		New purchasing							
		02		Repairing							
	09			***Vehicles***							
		01		New purchasing							
		02		Repairing							

	10			***Fixed assets (tables, chairs, computers)***							
		01		New purchasing							
		02		Reparing							
20				**Accounts Payable (Old year)**							
	01			***Salary***							
	02			***Employee allowances***							
	03			***Aministration costs***							
	04			***Family allowances***							
	05			***Interest on loans and guarantee***							
	06			***Other expenses***							
	07			***Purchase Fixed assets for administration use***							
	08			***Investment of government***							
	09			***Government contribution***							
	10			***Payment of grants and loans***							

Table A-2 Detail of Revenues from Non-Government Budget: 2004-2008

unit: kip

	2004	2005	2006	2007	2008	Total	Proportion by Source
	1	2	3	4	5	6 = 1+2+3+4+5	7
TOTAL	**5,687,094,457**	**6,815,599,510**	**8,636,859,710**	**9,165,450,863**	**9,850,082,501**	**40,155,087,041**	**100**
Non-Medical Services	**531,547,275**	**528,415,259**	**691,351,975**	**988,254,364**	**857,609,130**	**3,597,178,003**	**8.96**
Bed Services	**344,244,200**	**392,307,900**	**545,349,000**	**680,806,220**	**630,627,000**	**2,593,334,320**	**6.46**
VIP beds	254,740,708	290,307,846	441,786,000	490,594,720	443,718,000	1,921,147,274	4.78
Room with air conditioner (8 beds)	34,424,420	39,230,790	16,308,000	92,779,000	76,408,000	259,150,210	0.65
Room without air conditioner (8 beds)	44,751,746	51,000,027	77,445,000	75,074,500	86,145,000	334,416,273	0.83
Recovery room	10,327,326	11,769,237	9,810,000	22,358,000	24,356,000	78,620,563	0.20
General Services	**134,623,075**	**134,307,359**	**143,602,975**	**279,338,144**	**198,262,130**	**890,133,683**	**2.22**
Registration services	92,882,325	102,788,482	109,978,975	88,405,262	99,205,430	493,260,474	1.23
Telephone services	7,494,000	5,550,000	2,897,000	1,152,000	108,000	17,201,000	0.04
Dormitory rental	1,810,000	2,130,000	1,050,000	1,200,000	1,540,000	7,730,000	0.02
Morgue services	16,476,750	13,874,180	15,412,000	18,018,730	35,948,740	99,730,400	0.25
Accumulation				30,936,952		30,936,952	0.08
Documentation cost (old)				5,537,200	3,293,000	8,830,200	0.02
Restaurant operation	15,770,000	7,604,000	9,100,000	15,182,000	17,650,000	65,306,000	0.16
Coffee operation			2,000,000	3,650,000	2,350,000	8,000,000	0.02
Meeting room rental			2,930,000	12,724,000	2,909,960	18,563,960	0.05
Document cost for new admission					32,972,000	32,972,000	0.08
Water cost		285,697				285,697	0.001
Bed sheet	190,000	2,075,000	90,000	910,000		3,265,000	0.01
Laundry			145,000	138,300		283,300	0.001
Tobacco training					2,285,000	2,285,000	0.01
Teaching cost				101,483,700		101,483,700	0.25
Parking Services	**52,680,000**	**1,800,000**	**2,400,000**	**28,110,000**	**28,720,000**	**113,710,000**	**0.28**
Van, pick-up	35,822,400	1,224,000		13,110,000	27,000,000	77,156,400	0.19
Motorbikes	16,857,600	576,000		13,000,000		30,433,600	0.08
Motor tricycle (Tuktuk)			2,400,000	2,000,000	1,720,000	6,120,000	0.02
Medical Services	**5,107,892,182**	**6,247,284,251**	**7,478,096,265**	**8,150,569,979**	**7,109,348,941**	**34,093,191,618**	**84.90**
Doctors' fees				8,860,380	9,066,000	17,926,380	0.04
Evening clinic				6,617,110	17,625,000	24,242,110	0.06
Material cost in operation room					37,627,000	37,627,000	0.09
Medical check up fee for OPD					6,783,000	6,783,000	0.02
Medical check up fee for IPD					27,241,500	27,241,500	0.07
Medical check up fee for emergency					10,285,000	10,285,000	0.03

Documentation cost for discharge					9,600,000	9,600,000	0.02
Documentation cost for delivery					3,900,000	3,900,000	0.01
Disease attestation					1,275,000	1,275,000	0.003
Patients' ID cards	110,760,200	116,775,160	91,723,040	47,102,001		366,360,401	0.91
Medical record books	64,600,000	65,033,000	51,975,000	49,831,000	100,255,000	331,694,000	0.83
Medical attestation	8,169,143	7,405,000	8,435,070	15,025,000	16,952,000	55,986,213	0.14
Medical attestation for going to work in abroad			1,285,000	1,604,500	3,035,000	5,924,500	0.01
Ambulance services	12,901,760	15,521,000	28,019,000	71,167,411	74,676,209	202,285,380	0.50
CT Scan services	485,499,621	520,537,100	508,681,670	360,454,670	157,297,560	2,032,470,621	5.06
Drug sales	2,567,566,043	2,585,398,834	3,121,198,985	3,497,216,355	2,702,949,991	14,474,330,208	36.05
Medical supply sales	417,896,925	725,036,656	848,228,740	1,007,134,062	981,599,009	3,979,895,392	9.91
Wound cleaning			11,558,000	31,925,000	20,928,000	64,411,000	0.16
Laboratory services	901,395,510	1,616,211,873	2,138,855,920	2,256,877,500	2,193,618,672	9,106,959,475	22.68
Echo	53,237,174	60,955,872	58,059,280	66,013,200	48,365,000	286,630,526	0.71
Echo in ICU			140,000	278,000	80,000	498,000	0.001
Dental services	23,292,600	18,554,500	34,095,000	47,946,000	21,608,000	145,496,100	0.36
Endoscope services	94,344,580	75,505,000	121,338,000	136,995,000	167,569,000	595,751,580	1.48
ENT services	3,712,520	4,926,000	8,568,000	8,725,000	2,558,000	28,489,520	0.07
Eye services	8,662,548	12,051,124	15,389,350	15,903,200	11,871,000	63,877,222	0.16
Ultrasound services	147,376,928	197,294,784	114,270,000	163,045,000	183,155,000	805,141,712	2.01
Ultrasound services for mother and child			59,300,000	41,682,190	2,268,000	103,250,190	0.26
X-ray	153,566,077	182,915,448	189,384,460	189,898,800	181,550,000	897,314,785	2.23
Mother and child services	15,600,000	5,098,000	15,219,000	9,822,000	9,103,000	54,842,000	0.14
Physiotherapy services	7,332,000	10,527,000	10,413,000	18,586,000	23,592,000	70,450,000	0.18
Oxygen cost	31,618,053	27,230,900	36,293,750	89,703,000	74,641,000	259,486,703	0.65
Food for Patients	325,500		1,070,000	4,361,600	500,000	6,257,100	0.02
Sterilization and waste burning			850,000	3,301,000		4,151,000	0.01
Inhalation treatment	35,000	247,000	206,000	465,000	5,460,000	6,413,000	0.02
Ultrasound for uterus		60,000	3,540,000	30,000		3,630,000	0.01
Artificial wood for broken armed					1,045,000	1,045,000	0.003
Corpses cleaning					1,270,000	1,270,000	0.003
Insurance					**1,668,883,810**	**1,668,883,810**	**4.16**
CBHI					87,875,929	87,875,929	0.22
SSO					1,176,046,306	1,176,046,306	2.93
CSS					404,961,575	404,961,575	1.01
Reimbursement from Gov. contribution for the poor					**214,240,620**	**214,240,620**	**0.53**
Exemption for the poor					214,240,620	214,240,620	0.53
Revenues from Donation	**47,655,000**	**39,900,000**	**467,411,470**	**26,626,520**		**581,592,990**	**1.45**

Table A-3 Detai of Expenditures from Non-Government Budget: 2004-2008

unit: kip

Account Code				Description	2004	2005	2006	2007	2008	Total	Proportion by Source
Part	Division	Sub-Division	Code								
1	2	3	4	5	6	7	8	9	10	11=6+7+8+9+10	12
				Total =	***5,121,594,162***	***6,558,764,519***	***8,253,420,759***	***9,394,695,881***	***9,558,401,727***	***38,886,877,048***	***100***
10				**Salary**	**120,480,000**	**122,520,000**	**125,641,330**	**167,090,000**	**365,203,350**	**900,934,680**	**2.3**
	01			***Salaries for employees***	***120,480,000***	***122,520,000***	***125,641,330***	***167,090,000***	***278,265,000***	***813,996,330***	***2.1***
		01		Base salaries for existing employees							
		02		Provision for promotions							
		03		Provision for new employees							
		04		Salary of employees taking local training							
		05		Salary of employees taking training abroad							
		06		Contractual Employees	120,480,000	122,520,000	125,641,330	167,090,000	278,265,000	813,996,330	2.09
	02			***Employee allowances***					***86,938,350***	***86,938,350***	***0.22***
		01		Functional allowances							
		03		Special allowances (army, police, medical, teacher)							
		04		Length of service allowance							
		05		Hardwork and toxic					80,415,350	80,415,350	0.21
		06		Difficult and hazardous assignment					6,323,000	6,323,000	0.02
		07		Teacher allowance					200,000	200,000	0.001
11				**Compensation and Allowances**	**139,621,649**	**74,934,825**	**665,246,890**	**517,552,439**	**404,260,370**	**1,801,616,173**	**4.63**
	02			***Family allowances***							
		01		Children allowances							
		02		Spouse allowances							
	03			***Severance Payments***							
		01		Severance Payment when leaving Government							
		02		Severance payment before retirement							
	04			***Extra work allowances***	***26,965,000***	***31,025,000***	***152,707,750***	***361,523,850***	***187,079,750***	***759,301,350***	***1.95***
		01		Overtime	26,965,000	31,025,000	134,055,100	337,178,850	183,282,250	712,506,200	1.83
		02		Translation				415,000		415,000	0.001
		03		Research and studies			1,460,000	636,000	500,000	2,596,000	0.01
		08		Surveillance			17,192,650	23,294,000	3,122,500	43,609,150	0.11
		09		Medical operations					175,000	175,000	0.0005
	06			***Costs social welfare***	***108,400,624***	***38,844,500***	***381,428,790***	***98,047,339***	***215,455,620***	***842,176,873***	***2.17***
		04		Medical treatment allowances	108,400,624	38,844,500	381,428,790	98,047,339	215,455,620	842,176,873	2.17

	07			***Children Allowances of death Employees***	***4,256,025***	***5,065,325***	***88,751,000***	***52,788,000***	***1,725,000***	***152,585,350***	***0.39***
	08			***Children's living cost of death Imployees (10%)***			***42,359,350***	***5,193,250***		***47,552,600***	***0.12***
12				**Operation costs**	**4,374,835,001**	**5,854,626,726**	**7,150,148,162**	**8,306,305,196**	**8,688,223,007**	**34,374,138,092**	**88.40**
	01			***Purchasing of equipment and luburicants***	***462,210,150***	***495,332,620***	***643,174,590***	***835,443,053***	***911,735,000***	***3,347,895,413***	***8.61***
		01		**Fuel costs**	**95,480,150**	**95,836,120**	**164,741,200**	**192,490,210**	**191,289,400**	**739,837,080**	**1.90**
			01	Fuel	95,480,150	95,836,120	164,476,200	192,490,210	190,829,400	739,112,080	1.90
			02	Lubricants			265,000		460,000	725,000	0.002
		02		**Office supplies and forms**	**366,730,000**	**399,496,500**	**478,433,390**	**642,952,843**	**720,445,600**	**2,608,058,333**	**6.71**
			01	Office supplies	125,950,000	147,459,500	228,860,340	352,163,180	277,416,200	1,131,849,220	2.91
			02	Forms	228,000,000	236,056,000	226,267,550	258,174,703	409,942,000	1,358,440,253	3.49
			03	Magazines and newspapers	12,780,000	15,981,000	23,305,500	32,614,960	33,087,400	117,768,860	0.30
	02			***Uniforms***							
	03			***Purchasing of equipments***	***3,576,723,190***	***5,017,634,734***	***5,452,112,864***	***6,787,791,400***	***6,990,986,698***	***27,825,248,886***	***71.55***
		01		Pedagogical equipments				784,000	1,031,000	1,815,000	0.005
		02		Medical equipments	1,515,592,653	1,303,195,455	1,749,890,791	1,236,170,322	774,763,958	6,579,613,179	16.92
		04		Purchasing of medical drugs	2,061,130,537	3,714,439,279	3,702,222,073	5,550,837,078	6,215,191,740	21,243,820,707	54.63
	04			***Water, electricity costs***					***2,510,000***	***2,510,000***	***0.01***
		01		Water costs					2,510,000	2,510,000	0.01
		02		Electricity costs							
	06			***Repairs and maintenance***	***78,018,321***	***81,395,285***	***675,316,887***	***509,999,330***	***555,839,848***	***1,900,569,671***	***4.89***
		01		Office and buildings	25,768,000		451,418,047	152,913,737	213,326,358	843,426,142	2.17
		02		Vehicles			16,609,840	60,081,500	79,254,000	155,945,340	0.40
		03		Materials, machines and equipments	52,250,321	81,395,285	207,289,000	297,004,093	263,259,490	901,198,189	2.32
	07			***Insurance***	***172,763,000***	***175,851,028***	***202,156,115***	***3,365,833***	***39,427,840***	***593,563,816***	***1.53***
	08			***Post and telecommunication costs***	***4,855,000***	***5,412,489***	***2,447,706***	***2,751,000***	***12,800,000***	***28,266,195***	***0.07***
		01		Postal costs			430,000	261,000	2,215,000	2,906,000	0.01
		02		Telecommunication charges	4,855,000	5,412,489	2,017,706	2,490,000	10,585,000	25,360,195	0.07
	09			***Material transportation costs***					***300,000***	***300,000***	***0.00***
	10			***Travel expense***	***61,627,500***	***69,337,500***	***173,247,790***	***166,954,580***	***153,229,590***	***624,396,960***	***1.61***
		01		***Travel expense***			***63,744,290***	***111,331,580***	***84,834,840***	***259,910,710***	***0.67***
			01	Transportation expenses (air tickets, car, fuel)			6,515,000	16,673,500	4,814,000	28,002,500	0.07
			02	Food costs			8,765,000	14,324,560	6,069,500	29,159,060	0.07
			03	Accommodation costs			338,000	4,628,000	5,825,000	10,791,000	0.03
			04	Visa fees, Airport tax			3,834,000	4,987,000	8,595,000	17,416,000	0.04
			05	Contingency cost for collective travel			24,817,140	63,830,000	42,683,520	131,330,660	0.34
			06	Contingency cost for individual travel			19,475,150	6,888,520	16,847,820	43,211,490	0.11

		02		***Costs for receptions, meetings, seminars***	***5,320,000***	***3,743,000***		***6,192,000***	***5,925,000***	***21,180,000***	***0.05***
		03		***Reception costs***	***56,307,500***	***65,594,500***	***61,517,000***	***36,154,000***	***41,086,750***	***260,659,750***	***0.67***
		04		***Souvenirs costs***			***8,447,000***	***6,117,000***	***7,675,000***	***22,239,000***	***0.06***
		05		***Costs for national days***			***33,079,500***	***600,000***	***12,830,000***	***46,509,500***	***0.12***
		06		***Funeral Cost***			***6,460,000***	***6,560,000***	***878,000***	***13,898,000***	***0.04***
	11			***Bank service charges***		***366,280***	***1,692,210***		***21,394,031***	***23,452,521***	***0.06***
	12			***Purchase of equipments for research***	***18,637,840***	***9,296,790***				***27,934,630***	***0.07***
13				**Subsidies and Contribution**			**13,628,000**	**1,344,000**		**14,972,000**	**0.04**
	01			***Subsidies***			***13,628,000***	***1,344,000***		***14,972,000***	***0.04***
		01	04	**Politics**			**3,430,000**			**3,430,000**	**0.01**
		03		**Cultural and Social**			**10,198,000**	**1,344,000**		**11,542,000**	**0.03**
			03	Preventive healthcare							
			04	Treatment healthcare							
			05	Consumers promotion ane providing medicine							
			06	Medical studies			6,428,000			6,428,000	0.02
			09	Newspapers and magazin, medails							
			11	Human resource development			3,770,000	1,344,000		5,114,000	0.01
16				**New purchasing for operation**	**130,740,312**	**132,474,524**	**182,604,877**		**64,917,000**	**510,736,713**	**1.31**
	01			***Building, office***	***110,754,312***	***116,818,524***				***227,572,836***	***0.59***
		01		Rebuild	110,754,312	116,818,524				227,572,836	0.59
		02		Reparing							
	02			***Purchaing equipment and machineries***	***19,986,000***	***15,656,000***	***15,314,000***		***9,617,000***	***60,573,000***	***0.16***
		01		New purchasing	19,986,000	15,656,000	6,720,000		9,225,000	51,587,000	0.13
		02		Repairing			8,594,000		392,000	8,986,000	0.02
	03			***Purchasing of vehicles***			***33,109,560***		***1,300,000***	***34,409,560***	***0.09***
		01		New purchasing			19,420,000			19,420,000	0.05
		02		Reparing			13,689,560		1,300,000	14,989,560	0.04
	04			***Others fixed assets (tables, chairs, ccomputers...)***			***134,181,317***		***54,000,000***	***188,181,317***	***0.48***
		01		New purchasing							
		02		Reparing			134,181,317		54,000,000	188,181,317	0.48
17				**Capital Expenditure**							
	06			***Project management costs***							
	07			***Construction of infrastructure***							
		01		**Offices**							
			01	Rebuild							
			02	Reparing							
	08			***Machineries and equipments***							

		01		New purchasing							
		02		Repairing							
	09			***Vehicles***							
		01		New purchasing							
		02		Repairing							
	10			***Fixed assets (tables, chairs, computers)***							
		01		New purchasing							
		02		Reparing							
20				**Accounts Payable (Old year)**	**355,917,200**	**374,208,444**	**116,151,500**	**402,404,246**	**35,798,000**	**1,284,479,390**	**3.30**
	01			***Salary***							
	02			***Employee allowances***							
	03			***Aministration costs***							
	04			***Family allowances***							
	05			***Interest on loans and guarantee***							
	06			***Other and contingency expenses***	***230,000,000***	***240,000,000***		***240,000,000***	***20,000,000***	***730,000,000***	***1.88***
	07			***Purchase Fixed assets for administration use***							
	08			***Investment of government***							
	09			***Government contribution***	***125,917,200***	***106,323,800***	***116,151,500***	***162,404,246***	***15,798,000***	***526,594,746***	***1.35***
	10			***Payment of grants and loans***		***27,884,644***				***27,884,644***	***0.07***

A.4 Revenues and Expenditures from Health Insurance: 2008

unit: million kip

	Amount	**Proportion by Source**
Revenues	**1,668.9**	**100**
Social Securtiy Organization (SSO)	1,176.0	70.5
Civil Servant Security (CSS)	405.0	24.3
Community Based Health Insurance (CBHI	87.9	5.3
Expenditures	**2,137.1**	**100.0**
Social Securtiy Organization (SSO)	1,314.7	61.5
Civil Servant Security (CSS)	611.0	28.6
Community Based Health Insurance (CBHI	211.4	9.9
Banlance or Net Revenues (TR-TE)	**-(468.2)**	

A.5 Expenditures for the Poor and Low Income Patients: 2008

unit: million kip

	Amount
Social welfare needs	53.1
Medical care services	161.1
Total	**214.2**

BIOGRAPHY

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Date and Place of Birth: December 10, 1969. Sibounehuang Village. Hongsa District. Sayaboury Province.

Marital Status: Married.

Employment:

2005	Until present residency in the Planning Budgeting Department, the Ministry of Health.
1997-2005:	Residency in the administrative division of the Ophthalmology Center.
1995-1997:	Residency in the pharmacy division to be responsible for making the eye drops.

Education:

1994:	Graduated from the Medical University in Vientiane Capital.
1988:	Graduated from the Hongsa High School, Hongsa District.
1985:	Graduated from the Hongsa Secondary School.
1982:	Graduated from the Hongsa Elementary School.