

**Ministry of Health
Council of Medical Sciences**

**SECOND FIVE YEAR
HEALTH RESEARCH MASTER PLAN
* 1997 - 2001 ***

JUNE 1997

Supported by IDRC - Canada

Acknowledgments

On behalf of the Council of Medical Sciences(CMS), I would like to express my high gratitude to the leaders of the Ministry of Health for actively guiding and supporting in the development of the 2nd Five Year Health Research Master Plan, especially for issuing the notification to each Institution to prepare priority health research topics. I would like to thank the Science-Technology and Environment Organization and the organizations at each level of the Ministry of Health and the Science-Technology Environment Organization for their regular support and assistance.

We highly appreciate the IDRC-CANADA, the Singapore regional office for their financial and technical support during the National Conference on the Evaluation of the 1st Five Year Health Research Master Plan (1992 - 1996) and the Endorsement of the 2nd Five Year Health Research Master Plan (1997-2001).

We would like to express our special thanks to Associate Prof. Dr. Somchai Durongdej IDRC-CANADA consultant, Deputy Dean for research affairs, Faculty of Public Health, Mahidol University and Dr. Somsack Chunharas, Director of Health System Research Institute, the Kingdom of Thailand for their technical advice and guidance in the preparation and the implementation of the 1st Five year Health Research Master Plan and also for their technical support and advice in the development of the 2nd Five Year Health Research Master Plan.

We sincerely thank every person and each involved institution for their cooperation in the preparation of this successful conference.

On this occasion, on behalf of the CMS, please allow me to take this opportunity to remember the merit of the leaders of the Ministry of Health, the Science-Technology and Environment Organization and the organizations of each level of these two Ministries as well as the contribution of all those who have devoted their expertises and efforts for the Medical and Health Sciences tasks of our Lao nation.



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Chapter I

Research Policy and Strategy

1. Background and Rationale

The history of the Lao nation is the history of a long struggle for peace, independence, friendship, cooperation and development of the nation. Many decades of war in the past resulted in the unstable health status of the Lao people

After the liberation of the nation and the proclamation of the Lao People's Democratic Republic in 1975, the Party and Government clearly laid down policies and guidelines for socio-economic development. A revolutionary health policy and guidelines have been established since the 3rd-4th resolution of the 2nd Party congress until the 6th Party congress, which opened ways for health sector activities step by step, particularly the introduction of scientific and technological outcomes of the world in order to gradually develop health sector in accordance with the situation and the condition of the Lao PDR.

The 5th and 6th Lao people's revolutionary party congresses stated that the application of the outcomes on sciences and technology is a real need of the country. We have to combine the application of technology as well as modern tools in some work place, some sectors, and some areas in which we can accept and apply them. Important attention should be paid to the development of technical science staff and workers, to be capable to accept new technology, and to focus on base line data survey, estimation and scientific information.

In the policy of the Government of the Lao PDR, the rehabilitation and the improvement of health activities are considered as significant tasks which are a motivation for the socio-economic development of the nation. The health status of the ethnic people is both a main indicator and a challenge for the progress and the development of the country. On the other hand, it is considered as the promotion and the development of a good quality of life for the Lao society in the future. In order to make the Ministry of Health to function as the primary unit for the promotion of the ethnic people's health, on 28 December 1989 there was a decree of the Prime Minister No 145 regarding the organization and activities for the Ministry of Health, and establishing the CMS as an advisory body for the Ministry of Health. The CMS plays a role in setting up research strategic plans, proposals for guideline and teaching curriculum, standards in legislation and regulations, standards of sciences and technology, disease prevention, therapy

and rehabilitation, drugs and medical equipment. It proposes to the MOH to declare the correct utilization across the country to be in agreement with the policy of the Party and Government.

The CMS consists of a technical organization, health staff under the MOH who have a specialization. At the beginning there were only two permanent health staff. For that reason, on 11 December 1990 there was a decree by the Minister of Health regarding the role of the CMS.

On 25 July 1991, there was a decree by the Ministry of Health regarding the nomination of the honorary consultant committee and the managerial committee board. The subcommittee of the CMS is comprised of 9 main branches : fundamental sciences, internal medicine, surgery medicine, gynecology-obstetric, pediatry, hygiene and epidemiology, Tropical diseases, oto-rhino-laryngology and dentistry, Drug-Food production and public health management.

In late September 1991 with the financial support from IDRC-CANADA through the Ministry of Science-Technology and through the technical cooperation with the Faculty of Public Health, Mahidol University, Thailand. On the beginning of January 1992 the IDRC-CANADA proposed to send an eminent Thai Scientist, who was also a Deputy Dean, responsible for research affairs at the Faculty of Public Health, to help the CMS as an IDRC consultant. In cooperation with the President of the CMS, the consultant was collected data information from different institutes, departments, and some provincial health departments to identify a potential in building health research capacity in Lao PDR. Some questionnaires were prepared and sent to involved institution concerned. At the same time a consultative meeting was also organised among senior health managers and technical staff from different departments, institutes, schools, and hospitals under the MOH for a consensus building, concerning the necessity of conducting research.

In May 1992, with the technical and financial support from IDRC-CANADA, the 1st national workshop on prioritizing health research was set up. This workshop aimed at officially establishing the First Five Year Health Research Master Plan (1992-1996). The participants of this workshop were representatives of the Ministry of Science-technology, the Prime Minister's office, and from different departments, institutes, schools, hospitals and from 8 provinces. They selected and prioritized health problems according to 7 criteria: relevance, avoidance of duplication, feasibility, political acceptability, applicability, urgency of data needed and ethical acceptability. From the workshop 64 research topics were identified as priorities in nine main branches; each branch also prioritized its research topics.

In May 1993, a decree by the Prime Minister No 73/PM dated 10th May, regarding the organization and activities of the MOH, and this confirmed the organization and activities of the CMS once more. Therefore, 1993 to 1996 was an official implementing phase of the 1st Five Year Health Research Master Plan, with the technical and financial support from IDRC-CANADA and with the technical cooperation from the Faculty of Public Health, Mahidol University in building health research capacity in Lao PDR.

On the 6th January 1993, the MOH set up a Health strategy by the Year 2000. In order to assure the implementation of such strategy, the MOH transformed that strategy into 9 work plans: 1. Health management work plan, 2. Health service work plan, 3. Maternal and child health care work plan, 4. Primary health care work plan, 5. Communicable disease and noncommunicable control work plan, 6. Environmental sanitation and water supply work plan, 7. Development of human resource for health work plan, 8. Consumers protection work plan, 9. Health research work plan.

After the implementation of the nine work plans for two years, in late 1995 the nine work plans were reduced into 6 work plans aimed at improving health activities along the concise direction. They had goals, particularly to avoid duplication. The six work plans were : 1. disease prevention and Health promotion work plan including health education, MCH, EPI, malaria control, water supply sanitation and waste disposal environmental protection, 2. Curative care and rehabilitation work plan, 3. Development of human resource for health work plan, 4. Consumers protection and essential drugs supply work plan, 5. Management of health research work plan, and 6. Health Economic work plan.

The ninth work plan (in the previous nine work plans) and the fifth work plan in the current six work plan up until now have confirmed the importance of health research as well as attention paid by the MOH on the implementation of the First Five Year Health Research Master Plan. In general, particularly having one work plan in the six work plans of the MOH is a guarantee to promote stability in building health research capacity in Lao PDR. For that reason, the 1st Five Year Health Research Master Plan for the development of health research capacity in Lao PDR had been implemented through several activities.

1. workshops on methodology and research design, workshops on management of research project, workshops on data processing and analysis, workshops on management of information system, workshop on health policy research, workshops on Participatory Action Research(PAR), and workshop on Training of the Trainer (TOT) for Health System Research (HSR).

2. Promotion and support of health research projects, a provision of supervision and technical assistance on the implementation of research projects as well as the development of a health research network within the country.

3. Collaborative research with foreign countries as well as the development of international health research networks.

4. Other activities related to research such as writing and translating scientific papers, a translation of medical terms, and setting up an international conference to promote cooperative health research as well as study tours, attending international conferences, and international workshops at international forums. Most of such activities have paved a foundation, established a root in building health research capacity in Lao PDR. These have never been tried in the past.

However, the number of health staff who are trained methodology and research design are still limited in both a quantity and a quality. Financial support from both internal and external sources is still limited. This was the reason for the limitation and discontinuation of the project implementation in the past. Researchers were not able to provide the accurate and reliable information needed for decision making. Decision making as well as an formulation of health policy in the past were not strongly based on research findings. Some senior managers have not understood the usefulness of health research. For those reasons, the establishment of the 2nd Five Year Health Research Master Plan is considered as one the first priority of the health sector to direct, sustain and strengthen health research capacity in Lao PDR.

2. Role and Functions of the Council of Medical Sciences.

2.1 Role :

The CMS has the role as an advisory body for the MOH regarding the 5th work plan and it is a national focal point in promoting and coordinating health research activities within the country and foreign countries.

2.2 Functions:

1. To establish health research master plan for every 5 years.
2. To motivate and to promote the development of health research network within the country and foreign countries in assuring the conduction of a continuous research system for the interest of the Lao people's health in the future.

3. To carry out research for the collection of necessary information for policy makers in making decision and planning appropriately.
4. To promote and utilize research findings in formulating national health policy as a management tool.

3. Health research policy and strategy

3.1 Health research policy.

Research policy is principles, methods as well as regulations of the health sector and it is a legal and behavioural characteristics to motivate the activities and the organization of a science-technology potential of a sector. These direct to achieve positive outcomes with high values through science-technology.

In reality, science-technology in Lao PDR has just been established and it is still new in technical practice as well as in public awareness. The community has a limited knowledge about such issue. The majority of information is scattered, inadequate and inaccurate. All of these are major constraints to the development of the management of economics and science technology. For those reasons, in connection with the urgent need and the desire to actively contribute in solving gradually the above mentioned problems. At the beginning of June 1992, the Ministry of Science Technology and Environment organized a workshop on fundamental science-technological policy under the auspices of the regional UNESCO office. This was a favorable opportunity for Lao technical staff from all sectors who deal with scientific research. Also science-technological management had an opportunity to apply their potential creative thinking in contributing to research and to effectively promote the use of outcomes of advanced science technology of the world into the development of socio-economics in general, practically into the development of their sectors.

The above mentioned functions were more easily implemented in the real world after a decree issued by the Prime Minister No 66/PM/1993 regarding the establishment of the Department of intellectual property right which belongs to the Organization of Science-Technology and Environment. This department has the role of converting research and the development policy and guidelines of the Party and State into planning, projects, regulations, rules and various legislation concerning intellectual property right, standards, measurement, quality control and transfer technology, coordination with various sectors under the Organization of Science-Technology and Environment and with sectors at the grass roots level throughout sectors concerned. It also has the role of research and management of intellectual property right, relation and cooperation with foreign countries and

with various international organizations, particularly with regard to international intellectual property right, international measuring standards and so on.

Because of the general research policy, there was a positive impact on the establishment of science technological policy in the health sector later with the goals of promoting and support scientific research which aimed at developing the quality of disease prevention and treatment, health promotion, the development of learning and teaching, and the development quality of health care providers. It promotes equality and unity in getting access to health service either in the urban as well as in the rural areas. Finally, it promotes and supports research for the development of health protection for the people. This aim at preventing non communicable diseases such as diseases resulting from the impact of the war, tuberculosis, psoriasis, late exploding bombs, weakness, and malnutrition, or from the effect socioeconomic development (obesity, blood hypertension, cancer, diabetes, drug addiction, traffic accident, AIDS, suicide and so on). In order to assure the implementation of the research policy in health sectors with efficiency and high effectiveness for the Lao ethnic people, the Government of the Lao PDR issued a decree for various sectors to establish their own legislation which will be promulgated to use by the year 2000. These include health legislation.

3.2 Health research strategy

Health research strategy in the 2nd Five Year Health Research Master Plan aims at strengthening health research capacity in Lao PDR. That means to continuously create conditions to cause research guidelines which promote to the development of health system of the country by encouraging parties concerned to have a real participation, coordination and cooperation with institutes, departments, centers, hospitals and health services in different provinces throughout the country. To establish networks, working units, and research personnel who aim at reinforcing health system research, developing knowledge and potential in health system research including establishing a network for health research information, developing data base within the country and foreign countries, having a close relation and coordination with policy makers and senior managers. This aims at encouraging the utilization of research findings in decision making and formulating health policy according to the 6 action plans. The establishment of the action plan in different levels of health system should be in agreement with the operational level and policy level.

4. Goals and Objectives of health research.

4.1 Goals of health research

The goals of health research in the Western Pacific for the next five years in the future in general, and particularly for the 2nd Five Year Health Research Master Plan in Lao PDR, aim at creating new knowledge and development or improving the method of utilization the existing knowledge effectively. They also encourage the use of research findings in a managerial practice, as a tool to improve the health status as well as quality of life of the Lao people under the operational programme of new horizon in health. This will also contribute to the development of the socio-economics of the nation.

4.2 Objectives of health research

4.2.1 General objectives

To establish sustainable cultural sciences which consider health research as a key role in establishing national health policy, to improve health service at different levels and to develop a quality of life in the frame of new horizons in health.

4.2.2 Specific objectives

1. To continuously prioritize health research in accordance with three major topics of new horizon in health,
2. To create a relationship of cooperation and coordination among policy makers, senior managers, health staff, researchers and community leaders in conducting health system research to gradually solve national health problems.
3. To Strengthen health research capacity in individual, institutes and provinces through training for the development human resources for research in each level of health system within the country.
4. To strengthen research network within the country and with foreign countries in research collaboration which is one of the good ways to promote the progress of science-technology of the nation; on the other hand it will bring mutual benefit for the interest of the health of the Lao ethnic people.
5. To promote the utilization of practical research findings in decision making appropriately. This will in particular contribute to the socio- economic development of the nation.

5. The major health work plan.

The general content of the work plan of the Ministry of Health Lao PDR is towards disease prevention as a major task and therapy as important goal, and focuses on health services at the grass root level as a strategy. Therefore, to improve the quality of health service management as well as to improve the Lao people's health by the year 2000, the health sector has set up a general strategy to encourage practical tasks: the rehabilitation of health system network to suit the political condition which is considered as strategic unit, the rehabilitation of human resources for health in all categories to meet the condition and the public health Lao needs, and the establishment of a good coordinating mechanism with other sectors. Specific actions include the control of communicable and non communicable disease projects, to balance health service staff with the supply, to have enough essential drugs by promoting rational utilization and consumer protection by encouraging community participation, all of which address the rehabilitation of primary health care. At the same time, it is to promote "3 hygienes and environmental protection. Such strategy was transformed into nine work plans in the past and has been reduced to six work plans since late 1995. The detailed content of the six work plans are as follows:

5.1 Disease prevention and health promotion work plan.

The department of hygiene and prevention is directly responsible for this work plan. This department has the role as an assistant body to help the Minister in supervising institutes, centers and different organizations who deal with communicable disease control, disease prevention, environmental sanitation, occupational health, child and youth health (school), nutrition, community health. It is also a coordinating office of Primary Health Care.

- (a) Sub-work plan regarding PHC
- (b) Sub-work plan regarding communicable disease control
- (c) Sub-work plan regarding health promotion
- (d) Sub-work plan regarding water supply and sanitation.

5.2. Curative care and rehabilitation work plan.

The curative care department is directly responsible for this work plan. This department is an technical assistant body for the management of hospitals health centers and providing health care services for the government staff, and the people by focusing on curative care network throughout the country. This work plan consists of 5 sub work plans.

- (a) Sub-workplan regarding curative care network and hospital management
- (b) Sub-workplan regarding leaders' health care
- (c) Sub-workplan regarding mobile health service
- (d) Sub-workplan regarding drug and medical equipment management.
- (e) Sub workplan regarding management of private health services..

5.3 Consumer protection and essential drug supply work plan.

The food and drug Department is directly responsible for this workplan. It has the roles in developing monitoring and controlling the implementation of laws regulation plan and programs of the Ministry of Health in order to protect consumer of food and drug safely and successfully. This work plan consists of two sub-workplans.

- (a) Sub-work plan regarding consumer protection
- (b) Sub-work plan regarding provision and supply of essential drugs.

5.4 Development of Human resources for health work plan

The department of organization and human resource development is responsible for this work plan. Its has role as an assistant body to the Ministry of Health and the party's committee of the Ministry in the training of the party members, the organization of the health system in training, in refresherment training and the education of personnel. This department is also responsible for supervision the incentives provision health for supervision training institutions, in implementing training plan, and managing every hospitals for the development of personnel throughout the country. This work plan consists of five sub-work plans.

- (a) Sub work plan regarding health personnel training within the country and foreign countries.
- (b) Sub work plan regarding refresherment training of health persons.
- (c) Sub work plan regarding the operation of incentives for health staff.
- (d) Sub work plan regarding the renovation of the organization
- (e) Sub work plan regarding the management of health staff.

5.5 Management of health research work plan.

This work plan is under the responsibility of the Council of Medical Science. It consists of five sub work plans.

- (a) A sub work plan regarding the management of human resources for health research.
- (b) A sub work plan regarding the management of health research promotion and disease prevention.
- (c) A sub work plan regarding the management of health service research.
- (d) A sub work plan regarding the management of food and drug research
- (e) A sub work plan regarding health economics research.

5.6 Health economic work plan

The cabinet of the Ministry of Health is responsible for this work plan. It manages all health activities of the Ministry of Health, including study and summary of general management and archives, foreign relation, reception of internal and international guests, management of living conditions, working place, the provision of incentives for staff, security and order of the Ministry of Health. It is also an assistant body for the Ministry of Health concerning statistics, planning, finance, accounting, management and inspection of foreign assistance and budget within the country centrally, foundation construction, maintenance and management of property and incentive. This work plan consists of four sub-work plans.

- (a) A sub work plan regarding the administration
- (b) A sub work plan regarding the management of statistics
- (c) A sub work plan regarding summary, planning, foreign relations and cooperation.
- (d) A sub work plan regarding health economics.

Chapter II

A strategic health research plan, the health research priority setting.

1 The prioritization of health research

To determine priority of health research in the six work plans of the Ministry of Health appropriately and to be in agreement with an urgent need of a real task in accelerating the development of health sector, the Ministry of Health had an order No 4084/MH dated 1 November 1996 requesting departments, institutes, schools, hospitals and centers under the Ministry of Health and various provinces to identify priority health problems in the frame of each work plan in contributing to the formulation of the 2nd Five Year Health Research Master Plan (1997-2001).

The order specified that criteria for an evaluation and selection of research projects and guideline of WHO would be used to identify health research priorities in one's own areas of responsibility. In addition, the research topic that would be developed had to be appropriate with new horizon in health and to be in agreement with the six work plans of the Ministry of Health. They must also be research projects which aim at problem solving, developing health system or formulating health policy. These projects should gradually change behaviours in contributing to health promotion of the ethnic of the Lao people. Therefore, between late December 1996 and February 1997, a 1-2 day meeting was set up by each department, institute, school, hospital, and center which is responsible for each work plan, including Institute of Maternal and Child Health Care, Institute of Hygiene and Epidemiology, Food and Drug Department, Friendship hospital, Mahosoth hospital, Sethathirath hospital, College of Health Science-Technology, Faculty of Medicine (the national university), Information Education Center, Center of Ophthalmology, the Economic and Planning Unit of the Ministry of Health and health Departments in nine provinces (Vientiane Municipality, Vientiane province, Bolikhamxay, Savannaketh, LuangPrabang, Khammouane, Xiengkhouang, Champasack and Sayaboury provinces). These meetings were attended by policy makers or senior managers and technical staff representing of all disciplines in each sector. For many meetings technical assistance was contributed by the CMS. The procedure for identifying research priorities was as follows:

First day or first session devoted to a discussion, a recommendation, a definition of problems, a method of identification priority problems and techniques used to prioritize by using WHO priority field of research namely,

1. Research projects have to be important for developing countries in general, especially for one's own country.
2. They must be in agreement with concept and guideline of new horizon in health.
3. They must agree with the cooperation and coordination of research.
4. They must be an urgent importance for problem solving in areas concerned.
5. They must promote the participation of multiple disciplines or multiple sectors
6. They must contribute to sustainable development
7. They must have the prevalence of problem related to priority field of research.
8. They must have indicators for an evaluation.

In addition, it guides a selection of research projects such as

1. Type of research (It is probably an essential national health research health system research, health behavioural research, health economic research, epidemiological research, clinical research, and bio-medical research)
2. Scientific quality of the project;
3. Relevance to health problems;
4. Usable research findings;
5. Researchers' capability;
6. Authority and community agreement with research projects;
7. Research cooperation and coordination;
8. Capability of carrying out research projects to be finished under the time frame determination;
9. Cost-effectiveness of research projects.

The process of prioritization was carried out on the 2nd. day (2nd session) as follows: First of all, the participants had prioritized all health problems of each sector (according to their work plan). Then criteria for evaluation and selection of the above mentioned project was used to prioritize by giving a score of 1-5 (the highest score was considered as the highest priority, and the low score was considered as the lowest priority).

Therefore, the research topics listed in the 2nd Five Year Health Research Plan were prioritized from each sector according to their score and they were arranged into each work plan They became a basic draft of the 2nd Five Year Health Research Master Plan. Such draft plan was commented on by those who

are responsible for each work plan, the committee of 9 major branches of the CMS. It was then passed through the Ministry of Health. After the 2nd adjustment, the draft of the 2nd Five Year Health Research Master Plan was officially discussed and then endorsed at the 2nd National Workshop (see appendix II B).

1.1 Priority for the 1st health work plan (Health promotion and disease prevention).

The objectives of research in health promotion area are to limit health risk behaviour, to limit endemic diseases or disease outbreak, to determine ways to improve EPI coverage, to limit the expansion of AIDS and communicable diseases, and to find out the best means for promoting health behaviour such as taking children to have vaccination, birth spacing, breast feeding, correct nutrition appropriate health education, environmental health and water supply.

Research priority in the first work plan is primary health care including studying the role of village health volunteer, governmental and community participation in PHC, Health education, EPI, community participation in water supply and sanitation, behaviour of latrine use, nutrition, communicable and non-communicable disease control and diarrhea.

1.2 Priority for the 2nd health work plan (Curative care and rehabilitation)

The objectives of research in this area are to study the health service utilization, evaluate health service in health facilities at both central and provincial level to look for causes and inequality of the quality of health services, to identify reasonable implementation mechanisms of health service to assure effective and efficient quality of care.

- Research priority in the second workplan is to reform health service, study on the indicators for the modernization of central hospital, study on various methods of treatment for common diseases, study on the effectiveness of cost recovery in different levels of hospitals and methods of management which provides cost-effectiveness and less expenditure.

1.3 Priority for the 3rd health work plan (Consumer protection and essential drugs supply)

The objectives of research in this area are to find out risk factors which are associated with food or drugs affecting health, and to find out knowledge and behavior in drug use of the Lao people. in order to protect their health. To study

on factors favorising the availability of banned, substandard drug and smuggling drugs in Lao PDR and to study the situation of drug revolving fund.

Research priority in third workplan is focusing on the knowledge and attitude of the Lao people in drug use study on factors causing self-medication study on food additive and preservative, study on food handling mixed with marihuana and study on factors expanding of drug revolving fund in hospital, and opium addition detoxification by using traditional medicines.

1.4 Priority for the 4th health work plan

(Development of Human resources for health)

The objectives of research in this area are to upgrade the quality of training (learning and teaching processes students selection), to find out an appropriate mechanism in health workforce planning, in health personnel deployment, and find out the needs of health staff.

Research priority for this area are to study factors influencing to health personnel training, study on efficiency and effectiveness in country short term training. Study on factors promoting of the efficient performance of health workers and evaluation on the capability of pharmacy students of the first to the third promotion in the drug administration and management.

1.5 Priority for the 5th health work plan

(Management of health research and development of data base)

The objectives of this research area are to strengthen health research capacity in Lao PDR, as well as to develop health policy, to develop health system for the interest of the Lao people's health, and its ethnic, to encourage development of database for research, to encourage policy makers and senior managers in using research finding for health planning management, for decision making, for formulation and development of various health policies.

Research priority of this area is to study health transition and health sector reform in Lao PDR (A comparative study of health transition in Asia), Study health resources allocation and their effective use (A cooperative study between Lao PDR and Japan), study on the prevalence and causes of anemia among women of child bearing age in Vientiane province (A cooperative study between Lao PDR and Malaysia), Need assessment survey for health legislation development and Evaluation of the implementation of the national drug policy towards the development of national health policy in collaboration with Swiss Institutes.

1.6 Priority for the 6th health work plan (Health economics)

The objectives of this work plan are to increase understanding of health financial systems and the future trends, to improve the use of estimated expenditure as well as to correctly allocate budget, to know medical health services, to examine the impact of the utilization of new mechanism on health system, to improve various methods of health management.

Research priority in this area include study on the average expenditure for medical care per person and per time in comparison between urban and rural areas, study on the development of statistical information system in the Ministry of Health and study on methods that effectively manage external assistance (see Annex I).

Chapter III

The action plan for 2nd the Five Year Health Research Master Plan (1997-2001).

1. Strengthening health research capacity among health care providers

The general objectives of health system research include the utilization of existing technology and resources within the country with high effectiveness in health promotion and improving health service at each level of the national health system research. On the other hand, it is also able to provide policy makers and senior managers with information at project level, operational level or policy level for the process of problem solving. Therefore, health system research is considered a new methodology to transfer concept into operational behaviour for health system reform. It is also an important tool for improving the organization and activities of the national health system. The ultimate national goal is to introduce health system research linkage into the process of management for the development of the health system in general, and it especially serves as driving force in improving the quality of medical and health services.

The World Health Organization stated that the development of Health For All would not be successful without health system research and various countries are required to promote health system research of their own. A country cannot wait for research findings of other countries to use because health system research in one country is different from another country in many aspects, such as Politics, and socio-economics, including culture and customs. Health services in Lao PDR are low in quantity, knowledge, and capability in science-technology. To modernize hospital and health services with real quality, it is necessary to improve the knowledge and skill in science-technology for health care providers by different means, including the organization of training and workshops, study tours or a short-term research training in foreign countries.

1.1 Training courses and seminars within the country.

This plan aims to develop health system research at different levels including those health staff under the Ministry of Health, provinces, and districts. At the same time, it also increases the skill of those researchers who have already been trained in research methodology. This develops quality researchers and enables them to transfer their knowledge to others in their departments, and divisions. These in turn expand the research network laterally and vertically,

developing research networks down to district level in order to make research as their daily work. Conducting research improves and rehabilitates the development of their task not only in managerial areas but also in health-medical services.

There are several methods using in training workshops. First, set up health research methodology at the central level or at the provincial level by inviting participants from various provinces. After the completion of training, those participants go to conduct research in their own areas. Then those researchers who have already been trained in research methodology and conducted some research projects are invited to attend a workshop on training of trainers. They then will organize a similar workshop in their locality to develop research network throughout the country. In order to achieve such objectives, the CMS divides workshops into two phases.

1.1.1 Short-term training courses In order to allow health staff in different provinces to gain knowledge concerning research methodology and develop research proposals to solve priority health problems in their own locality, the CMS in cooperation with WHO will conduct research methodology and research design workshops in Champasack province, inviting health staff from 5 southern provinces (Savannaketh, Saravane, Attapeu, Sekong, and Champasack). In Oudomxay province the participants will be from 4 northern provinces (Phongsaly, LuangNamtha, Bokeo, and Oudomxay). In the Xiengkhouang workshop there will be participants from Luangprabang, Huaphanh, Xiengkhouang and Vientiane provinces. In addition, workshops on data processing and analysis, project management, and training of trainers for health system research will be set up for technical staff from departments, institutes, schools, and central hospitals.

1.1.2 Long-term training courses In cooperation with Faculty of Medical Sciences, of the National University of Laos has introduced courses methodology and research design into the Faculty of Medicine, Faculty of Pharmacy, and Faculty of Dentistry. At the same time, the CMS also encourages the Faculty of Medicine to organize methodology and research design workshops, which aim to train the teachers and students to know how to conduct research. This results in a gradual improvement in the quality of learning and teaching. On the other hand, it builds fundamental health system research and the utilization of research findings in solving priority health problems in general, especially in the development of quality teaching-learning within the faculty. The faculty doing this will give the students an opportunity to participate in research with teachers

since they are still in the domain of the National University of Laos before employment.

1.2 Study tours short-term and long-term upgrading courses abroad.

1.2.1 Study tour

In order to upgrade the level of staff both in management and teaching, in the 2nd Five Year Health Research Plan some managerial staff will be sent to a National Institute of health to develop skills regarding the management of research, improving teaching skills on methodology and research design, and to learn about research and health legislation development abroad.

1.2.2 Short-term and long-term upgrading courses.

This promotes and encourages health staff to learn how to conduct quality and quantity in a short period of time in conduction with training within the country. This also strengthens health system research network throughout the country in the future, and increases good foreign relation and cooperation. In the 2nd Five Year Health Research Plan, the CMS will try to request for scholarship for sending some technical staff who have basic foreign language abilities to attend training workshops on research methodology or research activities abroad. In addition, the CMS will contribute a commitment for those technical staff who wish to study a master or Ph.D. degree by mail. These personnel will become supervisors and consultants on research. On the other hand, this program will sustain research capacity in Lao PDR by increasing self-reliance through thorough technique (see annex II).

1.3 The development of health research work

Primary research findings (from thesis) of those master or Ph.D degree students and various reports of those students who have a long-term training abroad will be kept in the CMS and the research findings of each individual will be studied for the feasibility in using them to help policy makers to apply them to problem solving or planning in the future.

1.4 The development of internal and international research networks.

1.4.1 Internal research networks To make research activities carried out systematically with convenience in cooperation and it is also a place for research coordination, each department, institute, school, hospital, center and various provinces should organize a unit which is responsible for research to be

research network, and to coordinate regularly with the Technical Science division of the CMS.

1.4.2 International research networks.

To facilitate research between the countries, the CMS will increase the establishment of research network with foreign countries. This will bring resources for research such as documents, research findings, and bulletins as well as research grants. Research networks with foreign countries include Asian ENHR network, Institute for Medical Research of Malaysia, Mahidol University, and Institute of Health System Research of Thailand. To strengthen research networks with foreign countries, the CMS has also cooperated with international organizations, research institutes, and universities abroad in conducting research in any topic which investigates solutions to mutual priority health problem of the country and region for the mutual benefit, especially in cooperation with Japan, Institute for Medical Research of Malaysia, and IDRC-CANADA. PHC areas such as self care, nutrition, drug revolving fund, environmental problems which affect health, participatory action research, research regarding acute respiratory infectious diseases, diarrhoea and self care service are topics of mutual concern. In addition, the CMS also has cooperative research plans with Vietnam, Faculty of Public Health Mahidol University and Health System Research Institute of Thailand, World bank and ADB (Asian Development Bank) to assist research which focuses on evaluation of the implementation of the projects in Savannakhet, Xienkhouang, Oudomxay, and Xayaboury provinces.

2. Dissemination of research findings

2.1 Setting up scientific conference for exchange experiences

2.1.1. Setting up scientific conference to disseminate research findings conducted within the country

A dissemination of research findings aims at encouraging institutions concerned to use the information for planning, supervision and evaluation their own work. This helps them to improve their performance in making health system research produce a good result and applying research findings to solve real problems. Researchers should encourage those who will use research findings to cooperate at the beginning, from problem selection until dissemination of research findings. So, researchers should have a capability to encourage policy makers, managers, and decision makers to participate in research.

In addition, researchers have to know how to publish and disseminate research findings to others. A scientific conference for dissemination of research findings within the country will be organized yearly. Research team who conducted research in provinces and under the Ministry of Health will be invited to participate to this conference to exchange experiences and research findings. Policy makers as well as decision makers will also be invited to participate this conference, which will be a good opportunity to encourage policy makers and health managers to use research findings for policy formulation and for health management appropriately and to address a real solution.

This conference will promote the use of health research findings for policy makers and health managers in the development of the techniques. Therefore, research findings dissemination and communication should be conducted effectively. Research findings will be selected, evaluated, synthesized, and decorated in appropriate form to meet the need of policy makers and health managers. A dissemination of research findings regularly and effectively is an important characteristic of communication with the user. This is not only true in health areas, but also for other sectors which are relevant to problems. In addition, mass media participation enables the improvement of communication quality and it is acceptable for public as well.

2.1.2 . Setting up an international scientific workshop.

In order to strengthen research capacity in Lao PDR and to exchange experiences with foreign countries, it is necessary that technical staff from different sectors who are concerned with research should seek cooperation with foreign countries. To attend a short-term scientific workshop in neighbouring south east Asia as well as in other countries in the world, to attend a research finding dissemination and exchange research experiences or to develop international research activities are effective ways to do this.

(see Annex 2)

2.2 Providing the opportunity to present the research findings.

The provision of facilities for publication of scientific results aims to disseminate research findings as well as send information to readers. So, it is necessary to identify who will be the readers of a report. In health system research, it is important to remember the need of audiences because the audiences are not only community, but they are also health managers. Some research reports may not be suitable for managers. Therefore, in report writing, simple words should be used and research findings should be revealed. Furthermore, it is necessary not only to reporting scientific findings, but it is also

necessary to make recommendations regarding a characteristic of local health system, constraints, possibility and usefulness of the proposed solution as well.

Therefore, the publication of research findings is a task which is necessary for research dissemination. It is a task which is necessary for individual scientific findings and for sectors who conduct research within the country.

In the past, the majority of research findings were sent to be published in the science-technology bulletin of the Organization of Science-Technology and Environment, and some were sent to a health bulletin of the Health Information and Education Center, the Ministry of Health. For the 2nd Five Year Health Research Master Plan, the CMS has planned to establish "a quarterly bulletin of health sciences" (issued every three months) to create convenient conditions for a direct dissemination of research findings for internal researchers. In addition, excellent research findings of the world will be translated into Lao language to allow practical application in Lao medicine and health. This is to give technical health staff everywhere in the country timely knowledge of advanced science and technology of the world.

2.3 Organizing a forum for the dissemination of research findings to the public for the utilization of research findings.

Information which is disseminated to the public should have appropriate content and should be communicated through appropriate channels. Such dissemination can occur concurrently to health managers and policy makers but information should have more detail and have a different analysis. Another way to encourage the utilization of research findings in health system research is to write a scientific report. A publication of scientific reports can organize discussion within a concerned group and should focus on the importance of health system research or especially community participatory action research. This assists the improvement of the health status of the Lao people.

For those reasons, a publication to provide broad knowledge should be created, especially to disseminate research findings which affects a change in risk behaviour for people's health. This can also encourage responsible participation in environmental protection, change behavioural risk and take action in health promotion. In the 2nd Five Year Plan, the CMS in cooperation with concerned research teams and in cooperation with three mass organizations will establish a forum for research finding dissemination of participatory action research in Vientiane and Bolikhamsay provinces in late 1997 and if the results are good, repetition will be encouraged at least once per year at provincial level or municipality level according to conditions and the research findings concerned.

This will increase community participation in conducting research. A community will not reject, it will contribute to taking responsibility and supporting activities. An important thing is that a community will have a commitment to use research findings for the interest of their real health.

3. Facilities for research activities

3.1 Documents and scientific bulletin

- To improve the CMS library
- Firstly to train of all health personnel who are responsible for library in order to upgrade the knowledge and competence to facilitate the readers.
- Collect research findings of each institute, department, and provinces in which research has been carried out including reports and theses of those students who have finished their study in foreign countries and arrange according to the research topics.
- Seek documents, bulletins and relevant manuals or research findings from foreign countries.
- Translate scientific books or bulletins which are necessary for serving research methodology and research design workshops.
- Cooperate with foreign countries to exchange research bulletins and CD rom concerning research findings.
- Seek financial sources within the country and from foreign countries to publish and rehabilitate research methodology manual with an excellent content, appropriate and unambiguous words, that are understandable for researchers.

3.2 Search documents through (electronic mail (E-mail)

In the collaboration with the Science-Technology work the CMS and Science-Technology and Environment Organization under the sponsorship of IDRC-CANADA has formulated networks for linkage research and exchange of information with foreign countries through E-mail. The internet will be introduced in the future. This will be a convenient open door to the world for exchange information. The establishment the international health system research network in cooperation with foreign institutes will serve as sources for technical support, exchange of researchers' experiences and provision of research grant in a timely convenience and economic manner.

3.3 Technical assistance provision

The CMS has a role in consulting and advising on technique and teaching methodology and research design for students of the faculty of medical sciences, faculty of medicine, faculty of dentistry, and faculty of pharmacy of National University of Laos and those health staff who lack experiences in research in different departments, institutes, schools, and hospitals under the Ministry of Health and in provinces throughout the country. Consultation and technical assistance include in writing research proposals, in project management, data collection techniques and data processing analysis, scientific report writing, research dissemination, research network development within the country and intercountry as well as the setting up of a research master plan in each institution.

3.4 Opportunity for getting financial support

After the 2nd Five Year Health Research Plan has been endorsed, it will be officially reported to the Ministry of Health for requesting financial support for some research projects according to the six work plan, especially for the highest priority project which is suitable to support. For those projects which are relevant to strengthening research capacity, financial support will be requested from WHO. The implementation of some priority research projects of the country or a collaborative research by two parties will be proposed to IDRC-CANADA for financial support. The evaluation of research of rural development will be proposed to the World Bank, Asian Development Bank (ADB) and AUSAID. Research on health transition and health sector reform in Lao PDR has been supported by the Ministry of Health and Welfare of Japan, and if necessary a joint meeting with sponsorship of COHRED will be set up. Collaborative research between Lao and Thai Scientists including the linkage programme between CMS and Chiangmai-University will be proposed for financial support from Lao-Thai technical cooperation committee and on.

4. Establishment of coordinating mechanism

4.1. The management and coordination of research activities

In order to smoothly conduct health system research, it is necessary to coordinate with many sectors both internally and internationally, including non governmental organizations.

4.2. Internal coordinating mechanism

Because research activities will be carried out according to the six action plans of the Ministry of Health, the CMS will serve as the National focal point in facilitating and cooperating among departments, and institutes under the Ministry

of Health and among provinces throughout the country in order to make each health system research activity viable. Particularly in human resource development for research, research under certain topics, and the dissemination of research will be centralized to decrease cost and avoid duplication. At the same time, there will be coordination different ministries, especially the Ministry of Education, the Organization of Science-Technology and Environment and other ministries which are involved in integrated rural development programme.

4.3. International coordinating mechanism.

Health research is necessary for the development of health sector and for the people's health. In order to achieve such a goal, foreign relations are necessary to guarantee the effectiveness of research. Foreign financial assistance is important but foreign collaboration is also needed to share research methodology, management of research projects, and new knowledge to motivate the acceleration of the socio-economic development of each country. On the one hand, it is necessary to understand how to carry out implementation and a new plan effectively. Therefore foreign relation may take the following forms :

- Develop human resource for conducting research
- Exchange research findings documents, books and research bulletins.
- Collaborate with foreign experts conducting any research under the bilateral cooperation or multisectoral cooperation for the mutual benefits.
- Exchange technical staff by organizing some study tours
- Attend scientific conference to exchange lessons and research experiences.
- Present research findings.

In order to strengthen research capacity in Lao PDR it is necessary to continuously cooperate with international organizations : IDRC-CANADA, WHO, COHRED, World Bank, ADB, Research Institute of Sweden, Mahidol University, Health System Research Institute of Thailand, Chiang Mai University, Social Research Institute of Chiang Mai and so on.

5. Ethical consideration

Scientific research aims at discovering improvement or finding new knowledge, but research must be conducted under the frame of ethics, especially experimental study in human beings. So the CMS will be a core organization to propose establishment an ethical committee regarding experimental study in human beings. This means bio-medical research and clinical research by using

human beings as subjects of different tests in order to gain new knowledge without violating human rights.

The ethical committee will consist of senior technical staff from some disciplines concerned. This committee will be responsible for ethical consideration before permitting experimental research projects with human beings. Without the permission from such committee, experimental research projects would not be implemented. Details of different violations will be specified by law which will state in health legislation.

6. Plan for supervision and monitoring

Monitoring and supervision is an important component during cooperation according to the management process. Therefore, monitoring and supervision following encouragement and technical assistance are important for the success of research. In addition, a systematic and continuous monitoring plan to observe, collect data on different activities of that plan to compare them with goals, standards, norms of time and real expenditures will be established. Of these, the majority of measurements will be the quantity of input (human resources) or activities for the implementation of that plan. So the monitoring is to verify how that plan is implemented and to make sure that all activities will be carried out according to the plan, or in the case of technical problems, additional time will be given.

7. Plan of evaluation.

To assure that different task of the plan is implemented smoothly, the supervision for evaluation and the redesign of the research project should be in agreement with each action plan and suit to task of each stage. The implementation of the project should be designed for effectiveness. In addition, it is necessary to create indicators in advance to evaluate the implementation of the project, for example:

- Effectiveness and efficiency of the component of each work plan.
- Effectiveness of technology users as well as efficiency of the utilization of research .
- An increase of budget from government budget and international assistance.
- Improved health status of the people.
- Apparent decrease morbidity and mortality.
- Policy makers and senior managers under the support of research understand and utilize research findings in the process of problem solving as well as in the managerial process.

After the completion of the 2nd Five Year Plan, there will be an evaluation workshop of the implementation of the plan to find out strengths and weaknesses and constraints in the implementation. Result of the evaluation will be a contributing factor in continued strengthening of research capacity and sustainability in the 3rd Five Year Health Research Plan. The best research will be considered and proposed by the CMS for different forms of awards depending on the situation and the available capability, such as offering a congratulation certificate, victory medal, symbolic medal, or honorable scientific name, opportunity to attend an international scientific conference, go on a study tour for exchange experiences, present research findings at an international forum or submit research findings to get an international award.

Annex I

Prioritized Research Topics of each Health workplan and estimated budget for 1997-2001

Research Topics	responsible levels		Estimated Budget (US\$)				
	Central level	Provinces	1997	1998	1999	2000	2001
	Total		89500	64000	56500	29500	35000
I. Disease prevention and Health promotion workplan			32500	17500	17500	10500	21500
1. Study on causes of low level services of PHC HSR.		KM.	5000				
2. Study on community compliance on impregnated mosquito net to prevent malaria HSR. HBR		CPS.		3000			
3. Study on factors affecting the performance of malaria control network. HSR		LB.	4000				
4. Study on high groups risk to malaria infection HSR		BLS.		2000			
5. Study on community behavioral change in raw fish consumption causing risk of liver fluke HSR.		SVK.					3000
6. Study on reasons of slow increasing rate of immunization coverage HSR		HP	4500				
7. Survey on parent's intervention to manage diarrhoea of their children.	FMS		2500				
8. Study on sexually transmitted diseases	MCH			5000			
9. Study on HIV / STD transmission from mothers to children BMR	MCH		5000				
10. Study on HIV subspecies identified in Lao PDR	NIHE		5000*				
11. Study on gonorrhea resistance to antibiotics in Lao PDR.	NIHE			5000*			

12. Serological study of dengue fever in the under 15 years children.	NIHE				5000*		
13. Virological study of Dengue Fever virus identified in Lao PDR.	NIHE					5000*	
14. Virological study of hepatitis E and C	NIHE						5000*
15. Study on factors contributing to defaulters tuberculosis HSR		VTP			3000		
16. Study on factors and conditions leading to yearly outbreak of Dengue Fever in Bolikhamxay Prefecture HSR		BLS	2000				
17. Survey on causes of infant mortality in Lao PDR HSR	MCH				6000		
18. Pilot study on anemia and Iodine Deficiency BMR HSR	MCH.						3000
19. Anthropometric study among primary school children in urban and rural areas of Vientiane Municipality. HSR	FMS.				2500		
20. Study on health promotion at schools and behavioral change of the pupil, family and community health HSR, HBR	IEC				3500		
21. Study on breast and cervical cancer CLR BMS	FMS		3000				
22. Pilot study on health and Birth Spacing BMR. HSR, HBR	MCH.					5000	
23. Study on birth spacing methods of women aged 18 - 45 years HSR	NIHE			2500			
24. Study on cultural factors, belief and customs influencing in family planning / Birth spacing HSR, HBR	MCH.						3000
25. Impact study on breast feeding to birth spacing HSR	MCH.				3000		
26. Impact study on the effects of health education and behavioral change in health HSR	IEC.					3000	

27. Study on Effectiveness of Communication and Reception of target groups HSR	IEC.		3000				
28. Study on health information system and the development of health promotion HSR	IEC.						6500
29. Study on factors causing postnatal food taboo in Lao women HSR HBR		BLS.					3000
30. Study on risk factors of occupational health causing certain diseases in workers of 3 textile manufactories in Vientiane Municipality.	FMS.			3000			
31. Study on factors including community's participation in drilling artesian well in rural areas HSR		SVK.				2000	
32. Environmental Impact study to the people's health living near by the construction site of a lignite electric power factory in Hongsa district, Xayaboury province. HSR.		SYL.	10.000				
33. Study on factors and causes influencing low coverage of latrine use in rural areas HBR, HSR		CPS.		4000			
34. Study on risk factors of high mortality rate in traffic accident HSR		VTM.			2000		
35. Study on contributing factors to smoking behavior.	NIHE			3000			
II. Curative care and rehabilitation workplan			10000	6500	6500	3500	5000
1. Study on the causes of low district hospital utilization in Vientiane Prefecture.		VTM.		3000			
2. Study on consumers satisfaction in central and provincial hospitals. HSR	MH.	F SH.		3500			

3. Evaluation on health services in Savannakhet Prefecture HSR		SVK					2500
4. Study on factors to improve the quality of health services in Luang Prabang provincial hospital HSR		LP					
5. Study on cost recovery of medical care in hospitals. HPR, HSR		VTM.	5000				
6. Study on cost average of inpatient care in Friendship hospital HPR	FH.		5000				
7. Emergency sickness of Vientiane Municipality residents, the source of care and referral system HSR	FH.				6500		
8. Study on the average cost of cataract treatment.	ECC					3500	
III. Consumer's protection and Essential drug supply workplan.			15000	12000	7000	8000	6500
1. Field Study on regulation and quality of pharmaceutical services HSR HPR	FDD.		5000+				
2. Study on smuggling drug in LAO P. D. R HSR	FDD.				7000		
3. Study on Food handling mixed with marihuana BMR	FDD.					5000	
4. Study on knowledge of Lao people in drug use HBR, HSR	FDD.			5000			
5. Study on food additive and preservative	FDD.			5000			
6. Study on factors causing self medication HSR HBR	FDD.		10.000				
7. Study on factors favorising the availability of banned and substandard drugs in Xiengkhouang province. HSR		XK.					2500
8. Study on factors expanding of drug revolving fund in hospital HSR		SVK.					4000

9. Pilot study on opium addiction detoxification by using traditional medicines, CLR		XK.		2000			
IV. Development of Human resources for health workplan			5000	3000	3000	3000	
1. Study on factors affecting the learning and teaching processes at the college of health technology HSR	CHT.			3000			
2. Study on efficiency and effectiveness in country short term training of some health projects HSR	OH-RD.		5000				
3. Study on factors promoting on the efficient performance of health workers HSR	OH-RD.					3000	
4. Evaluation on the capability of pharmacy students of the First to the Ninth promotion in the drug administration and management.	FMS				3000		
V. Management of Health Science Research workplan			10500	15000	10000		
1. The Health Transition and Health Sector Reform in LAO P.D.R (A cooperative study on the health sector reform and health transition in 8 Asian countries leadly by Japan HSR, HPR)	CMS		5000*				
2. Study on health resources allocation and their effective use (A cooperative study between LAO P.D.R and Japan)	CMS		4500*				
3. Study on the prevalence and causes of anemia among women of child bearing age in Vientiane province CLR HSR (A Cooperative study between LAO P.D.R and Malaysia)	CMS		6000*				
4. Need assessment survey for health legislation development.	CMS			5000*			
5. Evaluation of the implementation of the National Drug Policy towards the development of	CMS				10000*		

National Health Policy in collaboration with Swedish Institutes (Policy Diffusion in Health Care Focusing on the Pharmaceutical Sector: the Case of Lao PDR.), HSR, HPR.						
6. Prevalence of Sudden Unexplained Nocturnal Death Syndrom. (A Cooperative study between LAO P.D.R and Thailand) HSR.				10000*		
VI. Health Economic workplan.			5000	5000	5000	
1. Study on the average expenditure for medical care per person and per time at central, provincial. and district hospital.	CAB		5000			
2. Study on the statistical information system of the Ministry of Health HPR	CAB			5000		
3. Study on methods that effectively manage external assistance. HSR, HPR	CAB				5000	

Note : CMS = Council of Medical Sciences

MCH = Mother and Child Health Center

NIHE = National Institute of Hygiene and Epidemiology

FMS = Faculty of Medical Sciences

FDD = Food and Drug Department

OHRD = Organization and Human Resource Department

CHT = College of Health Technology

MH = Mahosot Hospital

SH = Setthathirath Hospital

LB = LuangPraBang Province

CAB = Cabinet of MOH

SYL = Sayabouli Province

VTM = Vientiane Municipality

HP = Huaphanh Province

BLS = Bolikhamsay Province

IEC = Information and Health Education Center

VTP = Vientiane Province

KM = Khammouane Province

SVK = Savannakhet Province

ECC = Eye Care Centre

CPS = Champasack Province

XK = Xiengkhouang Province

FH = Friendship Hospital

Annex II

Implementation plan for the 2nd Five-Year Health Research Master Plan (1997 - 2001)

Activities	Estimated Budget (US\$)				
	1997	1998	1999	2000	2001
I. Strengthening Research Capability in Lao . PDR					
1.Training and Seminar					
1.1 Training on HSR methodology and research design, supported by WHO	3 workshops, each for 20 -25persons / 5000\$, one workshop for southern provinces, one workshop for by provinces and one workshop for central provinces	2 workshops for health professional under Ministry of health, each workshop for 25 - 30 persons / 5000\$	1 workshop for health professional underMinistry of health, each workshop for 25 - 30 persons / 5000 \$		
1.2 Training of trainer for HSR, supported by WHO				25 persons / 5000	
1.3 Training on Data processing and Analysis		5000\$			
1.4 Training on reseach project Managements			5000\$		
1.5 Promoting new horizon in health by utilizing health indicators through research activities supported by WHO			5000\$		
2. study tours and Upgrading Health Research Personnels					
2.1 Study tour and exchange experiences on research Management at the different National Institutes of Australia, supported by WHO	1 person / 1 month /5000 \$	2 persons / 1 month /10000\$	2persons /1month /10000\$	2persons /1month /10000\$	
2.2 Study tour and exchange experiences on research and development health legislation in Singapore and Malaysia, supported by WHO	2 persons /1 month /7000\$				

2.3 Upgrading HSR trainers in Malaysia, supported by WHO	2 persons /1 month /7000\$	2 persons /1month /7000\$	2 persons /1 month /7000\$	2 persons /1 month /7000\$	
2.4 Training on HSR and research design in foreign countries	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 pers. /2 weeks /15000\$
2.5 Training on HSR management in foreign countries	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 persons / 2 weeks /15000\$	3 - 5 pers. / 2 weeks /15000\$
2.6 Cooperation for strengthening research capability in Institutional Linkage Programme with Chiang Mai University					
2.6.1 Attending workshop on dissemination of HSR finding	2 persons / ChiangMai/ 3 days/500 \$				
2.6.2 Training on Information System and Epidemiology for Research, in ChiangMai		1 workshop / 10 persons /20000\$	1 workshop / 10 persons /20000\$		
2.6.3 Training on PAR for AIDS control		1 workshop / 10 persons in ChiangMai /10000\$	1 workshop/ 10 persons in Chiangmai or LuangPaBang /10000\$		
2.6.4 Training for upgrading potential of skill and knowledge for health staff at the grassroot level to develop health system, in ChiangMai		1 workshop / 20 persons /38000\$	1 workshop / 20 persons /38000\$		
2.6.5 Seminar on research evaluation of all projects		1 seminar / 10 persons /6000\$	1 seminar / 10 persons /6000\$		
II. Conduction of Research					
1. Support small scale health research projects, 2 projects / year	3000 - 5000 \$	3000 - 5000 \$	3000 - 5000 \$	3000 - 5000 \$	3000 - 5000 \$
2. Support a cooperation of HSR inter-country, 1 - 2 projects / year, supported by International organizations	20.000 - 30.000 \$	20.000 - 30.000 \$	20.000 - 30.000 \$	20.000 - 30.000 \$	20.000 - 30.000 \$
III Research Findings Dissemination					

1. Attending a conference on the conclusion of health transition	2 persons / in Japan / 3000\$				
2. Organizing 1 st National HSR conference " Strategy for better health toward the year 2000 " supported by WHO		80 persons / 10.000			
3. Organizing workshop on dissemination research result, supported by WHO			one workshop for 100 persons / 5000		100 persons / 5000
			5,000US\$		
4. Organizing a scientific forum between Vietnam-Lao hosted by NEI of Vietnam	1/10persons /5000 \$				
5. Organizing a scientific forum between Lao-Vietnam hosted by CMS		1/10persons /5000 \$			
IV. Facilities for Research Activities					
1. Publishing HSR and Research design books, supported by WHO	500 books / 2500 \$				
V. Supervision and monitoring					
1. Supervision and monitoring of HSR projects supported by WHO	1000 \$ / year	1000 \$ / year	1000 \$ / year	1000 \$ / year	1000 \$ / year
VI. Evaluation					
1. National workshop on Evaluation of implementation II nd 5 yearplan and set up III rd 5 year plan					10.000 \$
VII. Health Legislation Development Project					
1. Supply necessary equipments to health legislation division of CMS, supported by WHO	10.000 \$				
2. Consultant of health legislation, supported by WHO	1 person / 2month / 13.000 \$				
3. Technical seminar on health legislation, supported by WHO		1 seminar / 5000 \$		1 seminar / 5000 \$	
Total	134,000 \$	187,000 \$	177,000 \$	93,000 \$	81,000\$

Annex III

**Key persons within the country and foreign country who contributed to the
preparation of the 2 nd Five-Year Health Research
Master Plan 1997 -2001**

No	Name	Position
	I. From within the country	
1	Dr. Pone Mek Dalalay	Minister of Health
2	Dr. Davone Vongsack	Vice Minister of Health
3	Dr. Bounkouang Phichit	Vice Minister of Health
4	Dr. Khemphet Vanthanouvong	Director of Cabinet, MOH
5	Dr. Nao Bouta	Deputy Director of Cabinet, MOH
6	Dr. Khampieu Sihakhang	Head of Planning and Cooperation Division, Responsible for the 6th Work Plan
7	Mr. Khamhoung Heungvongsy	Director of Human Resource Development and Organization Department, Responsible for the 4th Work Plan
8	Dr. Phouthone Vangkonevilay	Deputy Director of Human Resource Development and Organization Department
9	Dr. Somchanh Saysida	Chief of Human Resource Development Division
10	Dr. Vilayvang Phimmasone	Deputy Director of FDD
11	Dr. Thanome Insane	Chief of Administrative Division of FDD.
12	Dr. Somchay Pholsena	Director of IEC
13	Dr. Vilay Phuthalat	Chief of Informative Division
14	Dr. Pany Sananikhom	Head of Research team, MCH
15	Dr. Khamsing Menolath	Deputy Dean of Faculty of Medical sciences
16	Dr. Ketsomsouk	Technical staff, of Faculty of Medical sciences

17	Mrs. Chanthanome Manotham	Director of Health Technology College
18	Mrs. Somchanh Thammavong	Deputy Chief of Administrative Division of H.T.C
19	Dr. Sithat Insysiengmay	Director of Hygiene and Epidemiology Institute.
20	Dr. Khanthong Bounleu	Chief of Virology Division of HEI
21	Dr. Chanpheng Thammavong	Deputy Director of Mahosoth Hospital
22	Dr. Methouna Souanavong	Chief of Internal Medicine of Mahosoth Hospital
23	Dr. Douangchanh Vanthanouvong	Director of Friendship Hospital
24	Dr. Eksavang Vongvichit	Deputy Director of Friendship Hospital
25	Dr. Bounhong Southavong	Director of Traditional Medicine Institute.
26	Dr. Ounneua Keothongtan	Technical staff, TMI
27	Dr. Snanh Chounlamany	Director of Pharmaceutical Factory No II.
28	Dr. Phetsana Choummanivong	Director of Pharmaceutical Factory No III.
29	Dr. Vithoune Visonnavong	Director of Eyes Care Centre
30	Dr. Khamkhoun Holanouphap	Technical staff
31	Dr. Vongsanith Mongkhounvilay	Deputy Director of Curative Care Department
32	Dr. Alounny Phanlavong	Deputy Director of Hygiene and Prevention Department
33	Dr. Bounlay Phommasack	Deputy Director of Vientiane Municipality Health Department
34	Dr. Oukeo Khounthalavong	Technical staff of MHD
35	Dr. Boualakot Keomaiphit	Deputy Director of Prime Minister Office

36	Dr. Khampei Phongsavath	Deputy Director of Sethathilath Hospital
37	Dr. Sinouanchanh	Chief of Ophtalmology Division of S. H
38	Dr. Khamliene Pholsena	Director of Hygiene and Prevention Department, Responsible for the 1st Work Plan
39	Dr. S. Salamany	Director of Curative Care Department, Responsible for the 2nd Work Plan
40	Dr. Kongkeo Chounlamountry	Deputy Director of Food and Drug Department, Responsible for the 3rd Work Plan
41	Dr. Bounsuan Phomsoupha	Coordinator of the World Bank Project
42	Dr. Bouaphanh	Coordinator of the ADB Project
	<u>II. Sciences-Technology and Environment Organization.</u>	
1	Prof. Souli Nanthavong	President of the Science - Technology and Environment Organization
2	Mr. Somphone Phanousith	Chief of the Cabinet of the Science-Technology and Environment Organization.
3	Mr. Khamphanh Thampithack	Director of Science Research Technology Department
4.	Mr. Nhun Sisavath	Director of Industrial Property Standardization and Metrology Department
	<u>From Provinces</u>	
1	Dr. Vath Vongsouthi	Deputy Director of Health Department of Savannakhet Province
2	Dr. Outhone Anothai	Deputy Director of Savannakhet provincial hospital.

3	Dr. Bounthome Hadsady	Director of Health Department of LuangPrabang Province
4	Dr. Sychanh Himpaphanh	Head of Research Team, LuangPrabang Province
5	Dr. Chanh Samone	Head of Research Team, Khammouane Province.
6	Dr. Bouasone Synouanethong	Director of Health Department of Xiengkhouang Province
7	Dr. Syvai Vongthongchit	Head of research team, Xiengkhouang province
8.	Dr. Khamla Phouthonsy	Deputy Director of Health Department of Sayaboury Province
9	Dr. Thongchanh Anouphanh	Head of Research Team of Sayaboury Province
10	Dr. Virack Vidamaly	Director of Health Department of Vientiane Province
11	Dr. Soukphathai Sopaseuth	Deputy Director of Health Department of Vientiane Province
12	Dr. Soukvongkeo Maivanh	Director of Health Department of Houaphanh Province.
13	Dr. Vilayphone Phomvongsi	Head of research team Houaphanh Province.
14	Mr. Phomma Sisanonh	Deputy Director of Health Department of Bolikhamsay Province.
15	Dr. Khamviene Phengphakeo	Technical staff of Bolikhamsay Province.
16	Dr. Toukham Vanhmysai	Director of Health Department of Champasack Province
17	Dr. Phetsamone Phonebandith	Head of Research Team, Champasack Province.
	<u>From Foreign Organization</u>	
	<u>I. From IDRC-CANADA</u>	
1	Dr. Randy Spence	Director general of IDRC- CANADA Regional office at Singapore.

2	Dr. Wilfredo Areyes	Regional Inspector of IDRC-CANADA at Singapore.
3	Miss Goh Ai Ling	Assistance program manager of the IDRC-CANADA office at Singapore.
4	Dr. Somchai Durongdej	Consultant of IDRC - CANADA, Deputy Dean of Faculty of Public Health, Mahidol University.
	II. From WHO	
1	Dr. S.T Han	Director general of WHO, regional office for the Western Pacific
2	Dr. Kean	Deputy Director general of WHO, regional office for the western Pacific.
3	Dr. Shirai	Research promoter of WHO, regional office for the Western Pacific.
4	Dr. Chen ken	Research promoter of WHO, regional office for the Western Pacific.
5	Dr. Karel Stephen	WHO Expert to Lao PDR.
	III. From COHRED	
1	Yvo Nuyens	Coordinator of the COHRED
	IV. From Health System Research Institute, Thailand	
1	Dr. Somsack Chunharas	Director of HSRI , Consultant of COHRED