

Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

**Ministry of Health
National Institute of Public Health**

**THIRD FIVE YEAR
Health Research Master Plan
2002-2006**

December 2001

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Preface

The 5th work plan is one of the six major work plans of the Ministry of Health on Health Research management and training. Scientific research activity was clearly stated in the 7th resolution of Lao People's Revolutionary Party Congress as most needed for the present period. The Council of Medical Sciences in the past, and the present National Institute of Public Health have coordinated the development of two five-year health research master plans: the first master plan (1992-1996), and the second master plan (1997-2001).

An evaluation of the second five-year health research master plan implementation reveals that health research activities have progressed significantly with a gradual improvement of the National Health Research Capacity in Lao PDR.

The development of health research in the past as well as at present is, however, under guidance and direct responsibility of the President of the Council of Medical Sciences through continuous and step by step efforts in improving health research activities in the Lao PDR to be relevant to the country and competent internationally.

Discussions among decision makers from various departments, senior technical staff, researchers from other sectors, and technical comments from external experts on prioritization of the third five-year health research master plan showed that although many constraints still persist and needed to be addressed in the next five-year master plan, there have been some significant improvements. For example, it was observed that during the second five-year health research master plan implementation, in - country research activities were grown gradually, the number of research staff was increased, many research projects were successfully implemented including those which were not in the Second Master Plan (unplanned projects). Many research results were disseminated and utilized, health managers and communities had given more interest in research activities and have used research results in decision-making. Access to

information technology had facilitated researchers in the country to access regularly to international references. All that had been mentioned becomes rationale for the development of the third five-year health research master plan.

The key thrust of the third five year Health Research Master Plan is to develop and improve health research capacity as well as to strengthen health research system in the Lao PDR in order to meet the need of the health system. This includes equity in health and access to health care services, effectiveness, quality and social justice for the health benefits of Lao people of all ethnic groups.

Acknowledgment

The Director of the National Institute of Public Health and the team have an honor and are grateful for the continuous trust and support from the Ministry of Health, such as Dr. Ponnem Dalalay, Member of Central Party Committee, Minister of Health; Dr. Davone Vongsak, Member of the National Assembly, Vice-Minister of Health; Dr. Bounkouang Phichit, Vice-Minister of Health; the Party; Director of Cabinet; Director of Planning Department; Director of Organization and Personnel Department; Director of Inspection Department; Centers; Hospitals; Schools and pharmaceutical factory no. 2 that had continuously encouraged and supported us, including evaluation of the implementation of the 2nd Five-Year Health System Research Master Plan and preparation of the third-five year health research master plan.

We sincerely wish to thank Mr. Aldo Dell Ariccia, Consultant for the European Union; Dr. Frederick Gay, Coordinator EC Regional Malaria Control Program in Laos, Vietnam, and Cambodia; Mr. Stephan Rousseau and Dr. Bouasy Hongvanthong, Director and Co-Director of the Lao-EU Malaria Control Program; and Mr. John Storey, project Consultant for their technical and financial supports that have successfully favored the evaluation of the second five year health research master plan and preparation for the development of the third-five year health research master plan.

Through these organizations, we wish to thank Professor Dr. Chitr Sitthi-Amorn, Advisor to the College of Public Health, Chulalongkorn University, Associate Professor Dr. Somchai Durongdej from the Faculty of Public Health, Mahidol University of Thailand for their consultancy and valuable technical assistance that had actively contributed to the evaluation as well as to the preparation of the development of the 3rd Five-Year Health Research Master Plan.

On this occasion, we are very grateful to the guidance of all levels of Ministry of Health both the Party and administration, all sectors surrounding the Ministry as well as others surrounding the Central administration, and all others within the country who participated in priority setting process aiming to the development of the third five-year health research Master Plan.

Your inputs will be recorded for ever in the golden history book of the National Institute of Public Health of Ministry of Health Lao.P.D.R.

Director of NIOPH
President of the Council of Medical Sciences



Dr. Boungnong BOUPHA MD,Ph.D

Executive Summary

The National Institute of Public Health has organized a participatory review of two inter-related documents, i.e., the evaluation of the Second Five Year National Master Plan for Health Research and the Third Five Year Master Plan for Health Research of Lao PDR. Both documents will be subjected to wide debates at the national level to be participated by stakeholders and international partners on November 29-30, 2001.

The Third Five-Year National Health research Master Plan has been developed through some active participation of key stakeholders convene by the National Institute of Public Health in collaboration with the Council of Medical Sciences (CMS) under the technical and financial support from EC-RMCP in Cambodia, Laos and Vietnam. Globalization and more inter-dependencies of nations and more political commitment for research by the government of Lao PDR have been some important considerations in developing the Third Five-Year National Plan for Health Research. The policy for research was clearly started at the 7th Party Congress resolution about a fostering of research activities in Lao P.D.R). Moreover, the National Institute of Public Health has accumulated more strength in some technical areas to provide training and give consultations in specific areas.

In addition to the need to continue some strong aspects of the Second Five Year Master Plan, some new components in the Third Plan need to be emphasized. First, the plan has developed a systemic approach to research coordination. The Third Plan has introduced the concept of national health research system to handle gaps, redundancy and fragmentation of health research carried out by various agencies to support health system and health care services. The national health research system requires more coordination to improve the efficiency, quality and social accountability of health research. It will introduce the assessment of performance of national health research system and the measurement of impact of health research. Second, in addition to the need for more training of the trainers in some technical areas, some new areas requires further

development. These include epidemiology, behavioral science, and health economics, and health policy-health systems – legislation research towards more equity, efficiency, quality and social accountability of health system. Third, more attention needs to be given to increasing research management capacity as well as capacities for resource mobilization so that the concept of health research system can be fully implemented. Fourth, the absorptive capacity of senior administrators and key officers for research product can be enhanced such as the needed exposures of key officers and senior managers at top level to the annual meeting of the Global Forum on Health Research. Fifth, annual national forum to disseminate health research products and to develop new research questions will be organized by the National Institute of Public Health and CMS at the national and inter-sectoral levels. Sixth, some technical monitoring and supervision will be facilitated by the National Institute of Public Health to make sure that research will be conducted at highest quality. Finally, the National Ethical Review Committee will be established to protect the subjects and fulfill the needs of researchers within the framework of the stated principles of agencies that controls and legislates the ethical issues associated with research.

Both documents have passed through a nation wide technical review organized by the National Institute of Public Health under the support of Lao EU-MCP. Among the reviewers were officers from other ministries, macro and micro departments including Human Resources Development Departments of Central Board, National Economics, Agricultural, Educational research Institutes and health Institutions, Macro and Micro departments, Ministry of Health. These are people who have helped in priority setting which has given input to the development of the Third Five Year National Plan for Health Research.

In addition to advocacy, coordination and advising functions, the National Institute of Health Research, who is directly responsible for the 5th Work Plan, will also be carrying out some research. Some funds have already been secured for several aspects of the plan such as the strengthening of primary health care services and referrals through

operational studies in specific target areas, which if proven effective will lead to some scaling up of PHC services and referrals. Also, some fund is also available for prevalence study of the burden of non-communicable diseases. Moreover, many research projects have already been committed by different agencies and by each work plan of the Ministry of Health. These projects will be carried out during the implementation of the 3rd five-year plan.

The Third five year health research master Plan will be used for advocacy to the government, invite regional cooperation as well as negotiating with bilateral and multi-lateral development agencies for cooperative agreements.

The second five year health research master plan was formulated with the following objectives:

- 1) Continuously prioritizing of health research
- 2) Creating strong cooperation among policy makers, senior managers, health staff, researchers, and community leaders in the health system research
- 3) Strengthening individual and institutional research capacity, particularly in provinces
- 4) Strengthening national health research system network and cooperation with international communities, and
- 5) Promoting the use of research results in policy development for socio-economic development in the country.

In 1995, the national health work plan reduced from nine to six work plans of which the fifth work plan was on health research management. Sixty-five research projects were developed in the second five-year health research master plan. Details of each work plan are:

- Work plan 1: Prevention of diseases and health promotion with 35 projects under responsibility of the Department of Hygiene-Prevention.
- Work plan 2: Curative care and rehabilitation with 8 projects, under the responsibility of Curative care Department.
- Work plan 3: Consumer protection and supply of essential drugs with 9 projects, under responsibility of the Food and Drug Department.
- Work plan 4: Human resources development with 5 projects, under the responsibility of the Department of Organization and personnel.
- Work plan 5: Management of health research with 6 projects, under the responsibility of the Council of medical sciences.
- Work plan 6: Health economics with 3 projects, under the responsibility of the Cabinet of Ministry of Health.

2. Global vision on health research

During the past ten years, there has been an unprecedented global development, which has impacted health and equity. These changes have been evidence by the changing of governance regime of many eastern European countries, economic crisis in Asia, ethnic and territorial conflicts throughout the world, massive population movement and migration, national disasters, as well as globalization and information development and communication.

Unprecedented changes have also taken place in health areas. Thus, there have been new and rapid spread of health problems across national boundaries such as AIDS, drug resistant, malaria, and tuberculosis highlighting the inter-dependence and vulnerability of nations. There have been many significant scientific breakthroughs such as the genomes, new drugs and vaccines, new methods (reform efforts and health system performances). The world has been giving more attention to the relationship between health and poverty, climaxed by the Millennium Summit of World Leaders at the United Nations in September 2000. However, there have been more inequity and marginalization of those with the greatest burden.

There have been several new initiatives with the efforts to improve health. The World Development Report in 1993 advocated investing in health by helping countries to test the development of nationally defined health intervention packages in an attempt to redirect investment in equity-oriented health development. This has been led by the World Bank leading to the notions of health care reform to supplement the "Health for All" movement by the World Health Organization. The Ad Hoc Committee of the WHO proposed a five-step approach to resource allocation for strategic health research in 1996. Since then many health research networks have been developed such as the Global Forum for Health Research and private alliances such as partnerships between governments and pharmaceutical industries involvement in the neglected areas of health research. The Bill and Melinda Gates Foundation and the Rockefeller Foundation have redirected their efforts to new health research and health development agenda. The questions remain that: Do

these efforts contribute optimally to a strong and self-reliant national health research system? Do these efforts strengthen or weaken international efforts to support the national systems?

The International Conference on Health Research for Development in Bangkok advocated a need for revitalization of health research based on the following principles:

1). Vision for health research: health research must be driven by equity, focusing on the needs and priorities of countries within an interactive regional and global framework.

2). Key features: several key features have been proposed to drive the revitalization of health research, namely:

- Strengthen immediate work environment of health researchers in low and middle-income countries.
- Strengthen international networks, partnerships and alliances to make the voices of developing countries heard.
- Link health research closely with development agenda.

3). Develop an effective health research system

In general, health research system accumulates various elements such as researchers, institutes, and many different activities. Its primary purpose is to generate relevant quality information and being an issue that can promote, restore and/or maintain the health status of the population.

In specific, the health research system is an intersection of two complexes systems: health system and health research system. Each element has its own basic goal such as: health system is to produce health, whilst research system composes of research projects from multi-sectors (agriculture, education, economics, science-technology, etc.) in order to produce information that can be organized systematically that will later create knowledge. Therefore, an efficient health research system should have clearly defined goals and shared values. It needs some operating principles to support national policies and priorities; plans;

targeted financing; monitoring and evaluation; integration with health development; multi- and inter-sectorality; long term perspective; ethical code; communication and networking development; as well as subsidiary. An effective health research system will thus, have to perform some appropriate functions including stewardship; financing; knowledge generation; utilization and management of knowledge; capacity development; and governance. Therefore, improving efficient health research system will make it contribute highly in upgrading capacity of health system in the country.

3. Desirable characteristics of “Structures”

- Robustness of vision: advance health research for development at all levels in a comprehensive manner (5 functions).
- Competence and effectiveness: top notched technical advisor and effective external review process.
- Credibility and accountability with multiple stakeholders.
- Effective advocate and linkage with health development system.
- Capacity to generate research funds.
- Support lower level entities in their organizational effectiveness.
- Good governance (Internal Review Process).
- Cost-effectiveness.

An “action framework” of the conference highlighted five strategies for future international health research cooperation, including

- An emphasis of knowledge as a public good, and stressing the need for management, and more effective use of knowledge. This might include the desirable characteristics of a research system and the link between the research system and the health system. An input to the discussion might be the WHO Report on knowledge and health?
- The importance of the country level and the regional and global mechanisms to strengthen the national mechanism. This might be linked to the development of performance indicators to measure the research system performance.

- The need for capacity development as the core strategy for enhancing the production, management and use of health knowledge, particularly knowledge focused on reducing health inequalities.
- The better measurement of resource flows, increasing actual funding from countries themselves and as well as from international donors.
- A systematic effort to develop well-aligned global and regional structures, to support country initiatives through advocacy, monitoring and review mechanisms, and the development and use of “codes of good practice”.

The global vision and the changing paradigm in health, health services, and the health system situation in Lao PDR have implications on the development of the Third National Health Research Plan in Lao PDR.

Chapter II

1. Vision of the Lao PDR on health research in the 21st century

The scientific evaluation of the implementation of the second five-year health research master plan reveals that only 27 projects out of 65 projects were implemented in the various work plans. Most of the projects were implemented outside of the planned projects. It might be due to the fact that most of the projects were not internally funded since the government had given more priority to allocate resources mainly for diseases prevention and more importantly for health care services in high disease burden areas. Hence, there were many projects implemented outside of the second five-year plan. The unplanned research were mostly supported according to the donors' interests. However, it reflects the need for research and participation in research of many individuals and institutions in the country.

Table 1: Number of research projects classified by work plan

Work plans	Projects planned	Project accomplished	Emergent projects done	Total acceptably
Work plan 1	35	14	46	60
Work plan 2	8	22	14	16
Work plan 3	9	3	5	8
Work plan 4	4	1	2	3
Work plan 5	6	5	19	14
Work plan 6	3	2	4	6
Total	65	27	90	117

The findings reflect success in the implementation of the second five-year health research master plan supported by donor agencies and the government of Lao PDR for the projects implementation, both included and not included in the second five-year plan.

In line with the health research projects implementation, the training in health research for 193 health staff were conducted. Among them, 140 persons were trained in the country, while 15 persons were trained abroad, and 38 persons were both trained in country and abroad.

It is noticed that dissemination and use of the research results were very small and could be very much improved in the future. Up to 88.2% of the research results were published, 29.4% were published in the national journal. 11.7% of the research results were used by policy makers, whilst 88% were used by donor agencies that supported the projects, particularly those outside second two-year out of the planned research projects of the 2nd five year plan.

In addition, there has been a quality assessment of the research results and quality of the training. For example, in May 1999, the Council of Medical Sciences evaluated its training on designing health research methodology in 3 regions of the country. The evaluation revealed that in only one training on health research methodology, trainees could not write research proposals and were not able to conduct the research. Two to three training had helped trainees in clearly understanding the research process and trainees were able to write research proposals and could conduct the research after getting funding support under technical assistance from expertise individuals or external experts.

The health research in the 21st century will become an integral part of action and human resources development program within the health research system. Research as the brain of the health system will be an important process of the national development. In the past, within the country, there have been some efforts to study impacts of health research on health improvement and distribution of the disease burden between higher and lower social classes, between different income groups, and between urban and rural areas. More information that reveals major inequality in terms of major burden of diseases profile between population subgroups is desirable and need to be more systematically studied. More systematic use of information on the burden of illnesses is needed to guide the

development of action agenda (which may need operation research) and research agenda (which may need some development in basic biomedical and social science research).

In addition to health problems that need to be addressed step by step through systematic health research, monitoring of the flow of resource for research may be initiated to tract the balance of resource spent on problems of the affluent and the under-privilege, similar to tracking resource flow of the global level which has revealed the 10/90 disequilibrium in the global burden and investment in health research.

The Lao PDR has participated with development agencies of similar ideology to tackle disequilibrium between individuals and between subgroups by involving stakeholders in the research prioritization. Since Lao PDR have limited resources, the country needs to balance interest of constituencies. We need to enhance coordination among the major players in research for effective implementation, by considering local requirements involving in the tool development for the research according to the levels of communities (village, district, regional, and national) in order to make health research step by step beneficial for health, equity, and social development, which will create a basis for the real sustainable development.

2. Mission of the National Institute of Public Health

The National Institute of Public Health has its high mission in coordinating, conducting research and training, contributing to meet the community needs in equity, liberating step by step poverty and sustainable development by taking health research as a powerful tool for:

- Promoting the decision making at operational and political level on evidence based
- Improving appropriate mechanisms for health care reform to ensure step by step the quality of health services.
- Generating new knowledge for developing elements of the health system at different levels

- Developing learning and teaching process based on quality assurance of training to attain step by step international standard, which is the preparation of human resources for research development to solve the remaining health problems, and to be able to tackle with new challenges.

3. Objectives

3.1 General objective

The general objective of the third five-year health research master plan is to meet the need of the health system, which includes equity in health and access to health care services, effectiveness, quality and social justice.

3.2 Key specific objectives

The key specific objectives of the national and local health research systems are:

- To coordinate the health research
- To prioritize and develop long term strategic plans
- To establish health research according to needs and to national and local priorities
- To conduct health research aiming at meeting the ultimate goals of equity and development in accordance with the principles and the social values
- To respond quickly to the needs and challenges, and provide evidence based research findings for decision making to all stakeholders
- To ensure that appropriate knowledge produced is efficiently used and linked to policy, planning, and service delivery
- To create synergy and promote a collaboration and multi-disciplinary and multi-sectoral linkages
- To advocate and be vocal when the broader systems are not reflecting goals, values, and principles originally set up for health system; and
- To mobilize resources for research and development

4. Priority setting process

Priority setting is a process which includes important elements such as: problem definitions, stakeholders analysis, ideal control situation to achieve the goal, literature review, description of information gaps pertaining to the situation, review of comparative advantage to the principles based on limited financial and human resources in order to focus on solving prioritized problem according to the priority setting for health research of this phase.

Five steps are used in ranking priority for health research based on recommendations from the Ad Hoc committee established by the World Health Organization in 1996. This type of health research priority setting is different from priority setting for the implementation of health programs or from that of any other activities. Some key questions for setting health research priority include:

- What is the burden of diseases, including their impacts to the population, mortality, morbidity and disability?
- Why does the burden persist? How cost-effectiveness are the present interventions?
- What proportion of the burden can the Lao government reduce and what cost will be used?
- How cost-effectiveness can the future interventions be? This means that research should be directed to find an intervention with high impact as a result.
- What is the present resource flow and risk factors? This is because some of the conditions might already receive a large resource.

In addition to asking the above questions, the participants in the priority setting process also took into consideration determinant individuals, communities' levels, and other Ministries than Ministry of Health. Some consensus on scoring was used to give relative importance to research areas according to real situation and possibility and the changing context. Problems or diseases with potentials for being tackled by research with the highest scores are considered as first, second, or third priority respectively.

Chapter III

Strategies for health research

1. Framework for research projects according to health work plans

In the development of the third five-year Health Research Master Plan (2002-2006), the Council of Medical Sciences and National Institute of Public Health has used the results of the evaluation of the implementation of the second five year Health Research Master Plan (1997-2001) as the basis. The strong points in the second five-year plan will be expanded and the weak points will be resolved in the third five-year plan. In setting the priority of health research, actions have been taken on the research topics which has not yet been implemented in the second five year plan and the other research topics suggested by health specialists. The criteria and guideline of World Health Organization for setting the priority of health research has been used and consensus achieved following the scoring mentioned in Chapter II. The six major health work plans of Ministry of Health have been the framework for setting research priority. A national consultative meeting was organized and participated by the responsible officers and key persons for each of the six major health work plan. During the consultative meeting for health research priority setting, some unanimous consensus on priority areas within each of the six major work plans has been achieved with some degree of precision. The National Institute of Public Health in coordination with departments concerned for each work plan has worked towards refining the issues/areas/research topics. Through such consultative interactions, some topics were appropriately edited, adjusted and adapted to represent the real situation and applicability. The products of the consultative process have been reflected in detail in the work plan.

1st Work plan: Disease prevention and health promotion

The issues/areas/ research topics prioritized includes:

1.1 Mother and Child health

1.1.1 Study on prevalence of STD's among women attending 3 central hospitals in Vientiane municipality

- 1.1.2 Health status of adolescent migrant in Vientiane Municipality
- 1.1.3 A district model of integrated reproductive health services in Oudomxay province
- 1.1.4 Study on cervical cancer
- 1.1.5 Survey on contraceptive methods in Luangprabang province
- 1.1.6 Study on factors contributing to extra uterine pregnancy
- 1.2 Mosquito born diseases**
 - 1.2.1 Study on community compliance on impregnated bed net to prevent malaria
 - 1.2.2 effectiveness of the use of ABATE to prevent Dengue fever in Lao PDR
 - 1.2.3 Study on drug for treatment malaria resistance to Plasmodium Falciparum
 - 1.2.4 Study on mosquitoes resistance to chemical substance
 - 1.2.5 Pilot implementation of early warning outbreak recognition system (EWORDS)
 - 1.2.6 Case-control study on infectious etiology of hemorrhagic fever
 - 1.2.7 Spatial and temporal dynamics of dengue severe infection. Indicators of risk in the central plain of Thailand and Vientiane
 - 1.2.8 Survey of Nipale and Lyssa viruses
- 1.3 AIDS**
 - 1.3.1 Behavioral risk survey on STD/HIV/AIDS
 - 1.3.2 AIDS Sentinel Surveillance and STD Periodic study

2nd work Plan : Curative Care and Rehabilitation

The issues/areas/ research topics prioritized includes:

- 2.1 Improvement of quality of treatment service using the evaluation of health technology
- 2.2 combination of treatment with modern and traditional medicine
- 2.3 Priority diseases burden based on mortality

3rd Work Plan: Consumers protection and essential drug supply.

The issues/areas/ prioritized research topics includes:

- 3.1 Study on drug addition among students in primary schools and secondary schools
- 3.2 Clinical trial on opium detoxification by traditional medicine
- 3.3 Unsafe ingredient in food
- 3.4 Evaluation of Revolving Drug Fund in Bolikhamxay province

- 3.5 Evaluation on training needs assessment of the existing pharmacist
- 3.6 Improving performance of drug therapeutic committee in Lao PDR
- 3.7 Antibiotics use as self medication for reproductive tract infectious and pamphlet testing for intervention among adult population in Lao PDR
- 3.8 Improvement on quality in service of 3rd category pharmacy in Vientiane province
- 3.9 Accessibility for essential drug of population in Lao PDR

4th Work Plan: Development of Human Resources for Health.

The issues/areas/prioritized research topics includes:

- 4.1 Study on factors affecting the learning and teaching process at College of Health Technology
- 4.2 Study on factors promoting on efficient performance of health staffs
- 4.3 Study on effectiveness of roles and functions of health organization from top to bottom

5th Work Plan: Management of health Research and Training.

The issues/areas/ prioritized research topics includes:

- 5.1 Development tools for information on population drug use in Lao PDR
- 5.2 Assessment of health reform in Lao PDR.
- 5.3 Benefit of decentralization and integration of malaria control
- 5.4 Health research system performance assessment
- 5.5 World health survey
- 5.6 Prevalence of non-communicable diseases in Lao P.D.R.
- 5.7 Strengthening of operational research in PHC in Lao P.D.R.

6th Work Plan: Health economic and administration

The issues/areas/ prioritized research topics includes:

- 6.1 Optimal methods for using valid information to develop master plan for health sector for 2010, 2015, and 2020
- 6.2 Optimal management methods that effectively deal with resources from external assistance

2. Strategic for Strengthening Research Capacity

Research capacity strengthening is a vital strategy for developing a strong health research system in general, and in particular for supporting the decision making process at different levels of health system, i.e., at operational, managerial as well as policy level. Therefore, priority setting for research areas or topics is needed to link to the development of plans for research capacity strengthening in the future. Through this priority areas and topics, the consultation were also performed with institutions concerned to define priorities of human resources required to generate high quality research which will give the highest benefit for health promotion and improving health services at each level of the national health system. Research capacity strengthening is needed at several levels, including individuals, working units, institutes, centers as well as national levels. Thus, the ultimate national goal is to introduce health research system linkage into the managerial process for the development of sciences to serve as the driving force for improving the quality of medical and health services. The strategies for strengthening research capacity include the organizational reform, development of human resource for research and improving management of health research.

2.1 Management of health research and training work plan

The health strategy in Lao PDR through the implementation of the nine major work plans in the past and up to date six major work plans has given emphasis to management of health research and training. For example, one of six work plans is devoted for management of health research activities and public health post-graduate training. Management of health research and training is considered a key factor enabling the development of research culture, health sciences, the development of internal and international research networks, and it is the basic for getting the technical as well as financial support from international communities.

2.2 Organizational reform

As a starting point for adapting the infrastructure of the implementation of health research within country, Lao government has given some directives by separating the technical role from the management role. The National Institute of Public Health was established at the end of 1999 and has acted as technical body for research and training management. The Council of Medical Sciences of the Ministry of Health has functioned primarily as the administration unit for health research and has become a think tank for the Ministry of Health. As the technical institution for research, the National Institute of Public Health is a national focal point in promoting, coordinating, providing consultancy and conducting health research and public health post graduate training and is responsible for the research capacity strengthening plan. The National Institute of Public Health also has had a close coordination with the Department of Organization and Personnel, and the Regional Francophonie Institute for Tropical Medicine in Vientiane

2.3 Health Research, and training Policy

In order to be reference and guidance for strengthening health research capacity and post graduate training, the National Institute of Public Health and the Council of Medical Sciences have applied the Medical Science Technology Policy of the Health sectors in strengthening health research capacity and post graduate training. The Medical Science Technology Policy of the Health Sector has been developed in the past (1992) and subsequently modified. The Medical Science Technology Policy of the Health Sector has been used to develop and apply the management policy for health research and public health training up until now. It becomes a basic condition for strengthening the health research capacity within country.

2.4 Management and coordination of research activities

All health research projects (inside or outside plan): clinical, operational, health system, epidemiology, behavioral, participatory action research should be developed based

on priority health research areas and the representatives of various sectors concerned should be involved with the aim of obviously solving a concrete problem.

All health research proposals, after having been studied thoroughly within team members and organization concerned, should be submitted to the Ministry of Health through the input of technical advice from National Institute of Public Health/Council of Medical Sciences. In addition, clinical research also needs input from the National Ethics Committee for Health Research.

Projects, that principle investigators have no experience in research, should have advisor, supervisor or mentor who is a senior technical expert with research experience or foreign expert to assist the project until its project completion.

The National Institute of Public Health/Council of Medical Sciences play a major role in managing and, coordination between projects and donors, and are able to provide the information within country and foreign countries and its technical advice based on real needs.

2.5 Short term health research capacity strengthening

In order to meet the needs of researchers for research capacity strengthening in the future the financial support is needed to conduct the short term training course within the country and foreign countries for those who has already been trained but have no opportunities to implement the research. The necessary topics to be provided in the training included such as:

- Training on Comprehensive Health System Research Methodology
- Training on Participatory Action Research
- Training on Epidemiology for Research and on data processing and analysis
- Training on Health Economic Research
- Training on Clinical Research

- Training on Behavioral research
- Training on Management of Health Research and focus on Leaderships once a year, a
- Research ethic development workshop once a year, and,
- Training on Research Report Writing

The course would select 25 - 30 participants in each session, participants will develop a small research proposal and some money will be provided for implementing the project. These participants will come back to attend the workshop on data processing and analysis, project management, report writing and dissemination of research findings.

In addition, during the implementation of the third five year plan, three workshops on training of the trainers for health research will be conducted by selecting the participants who has experiences in implementing health research from central and provincial levels to be a trainer in the future. Each course would select about 25 participants.

2.6 Long term health research capacity strengthening

To meet the needs of researchers to improve health research capacity both qualitatively and quantitatively, the National Institute of Public Health has received both technical and financial supports from Germany Government (through GTZ) for strengthening institutional capacity for long term period 2002-2010. In parallel with the building of premise of National Institute of Public Health, which is expected officially to be functional at the beginning of 2002, two staffs annually from NIOPH will be sent to upgrade their knowledge into master or Ph.D. degree. Moreover, 2-3 staffs will be sent for study tour to upgrade their qualification in their field. In addition, the GTZ will support the project for strengthening of operational research in PHC services and referrals in Lao PDR as well as the study on the prevalence of non-communicable diseases. Thus it paves the way for the development of self-sufficiency in research capacity over a long term. In parallel with the long-term capacity strengthening, the capacity of health staffs would be improved through several other activities, such as Training for upgrading of skills, Training on the qualification of short term health management and activities to

upgrade health staffs for the 2nd Master in Public Health (taught in French) potentially starting at the beginning of 2002, and the 1st Master in Public Health (taught in English) potentially starting at the beginning of 2003. The curriculum of health research methodology has been included in every training curriculum, aiming for developing health research capacity in both short and long term.

Other activities directly or indirectly may also helpful in strengthening of research capacity. For example, the Department of Organization and Personnel has a plan for the development of human resources for health in Lao PDR. In this plan, 16-20 health staffs will be sent to study the master degree in various disciplines within country and other countries, and 1-2 staffs will study more advanced in Ph.D degree. Most of these activities will pave a foundation for research capacity strengthening in Lao PDR and eventually leads to health research sustainability.

2.7 Income generation for NIOPH

Sources of income for National Institute of Public Health will be generated to assist the NIOPH functioning and maintaining its activities as:

- renting meeting room, training room, computer room, and tools for conducting survey
- providing technical advice for research
- assisting in conduct feasibility study
- carrying out translation (simultaneous or writing)
- assisting in data processing and analysis
- running periodic Training/teaching/lecture
- conducting projects/programs evaluation

2.8 Tools for exchanging ideas and promoting research

In order to disseminate research findings and exchange ideas within country and promoting Lao research works into international arena, NIOPH will publish 1000 copies of a quarterly bulletin of health sciences. The bulletin will contain information from research

findings conducted within country as well as research information from foreign countries such as through the Internet search. The bulletin will be published in 2 languages, Lao and English. In addition, some important findings including, those from the participatory action research, will be also sent to publish in the general bulletins view mass media to provide broad knowledge to the public, with the hope that people will change in their risk behavior.

In parallel, NIOPH will provide the library and rearrange according to Dewey system (Dewey decimal classification). In collaboration with Regional Francophony Institute for Tropical Medicine in Vientiane, librarians will be trained in Switzerland and in Vientiane, and the Internet network will be also connected between two Institutes.

3. National and international partnership on health research

3.1 National partnership on health research

The second health research master plan was developed based on evidence available in various agencies and departments. The third five-year health research master plan was developed with participation from various people at all levels: policy, managerial, and technical. It is hoped that research projects, implemented in the third five year, will have significant contributions to centers, hospitals, schools in the MOH, and some provinces. On the other hand, the National Institute of Public Health and the National Statistical Center of National Planning and Cooperation Committee experienced to conduct successfully the first national health survey in Lao P.D.R. In the upcoming five year, several key institutions have agreed to enhance collaboration in areas of common interests, e.g., the National Statistical Center, the National Educational Research institute, National Economic Research Institute, National agricultural Research Institute, and National Sciences-Technology and Environment Research Institute. At the same time, NIOPH has secured a close collaboration with IFMT in teaching, research, and management such as a sharing of library and information, Intra network, classroom, conference room and computer room.

3.2 International partnership on health research

To promote health researches capacity for a long-term promotion of health and equity towards development, collaboration, coordination and international partnership is indispensable. International partnership can help stimulate effort towards shortcutting the process of development, enhancing capacities of researchers, and strengthening the health research system in the country.

Therefore, in implementing of the 3rd five year health research master plan in the nearest future, NIOPH signed a contract on collaboration in research and training with Switzerland Institute for Tropical Medicine, and Hanoi School of Public Health of RS Vietnam. Also, there will be a continuation of collaboration with IHCAR Karolinska Institute of Sweden in research and training with technical and financial support from SIDA in development and implementation some health system research projects to promote National Drug Policy implementation in Lao PDR. JICA will support the training of district health managers in quality health management. WHO and COHRED will support the strengthening of health research system. Lao-EU malaria control program and EC-RMCP will support some research projects related to malaria control program and research ethics development in Lao P.D.R. Continuing collaboration will be maintained with USA Embassy for the exchange of lecturers; with Community Medicine Department Tokai University of JAPAN for some pilot research projects; and with Health system research Institute of Thailand in exchanging experiences on the training and research. Collaboration with SEAMEO-TROPED on research and teaching in nutrition will also be maintained. In addition, the collaboration with school of Public Health of Nancy France in Post-graduate Public Health training will be continued.

4. National Ethic Review Committee

It is recognized of all over the world that research involved human subject will be accepted only if it passes through appropriate ethical review. For this purpose, it is essential that all clinical and biomedical researches should be reviewed by a national ethic

committee that will be officially established to protect the human right of the subjects. The existing international and national guidance for ethical review of clinical and biomedical research, will guide an establishment of National Ethical Review Committee. The committee will not only review ethical issue of research proposals but also monitor and supervise all implementation phases of research project until the completion of the projects and how to utilize of research findings.

For these purpose, it is essential that researchers, members of national ethical review committee, policy makers, health managers, and others will receive an appropriate training on research management, on basic principles of ethics in health research and self. Most of health practitioners as well as researchers from various sectors participated in the first workshop on research ethics development in Lao P.D.R. under financial and technical support from EC-RMCP in Lao P.D.R., Vietnam, and Cambodia. The workshop aimed to upgrade knowledge and understanding on ethics for clinical and biomedical researches and to brainstorm ideas pertaining to critical issues in preparing National Ethic Review Committee for health research in Lao P.D.R.

The establishment of the National Ethic Review Committee expects to be completed in the year 2002. The National Ethical Review Committee for health research will consist of individuals from various sectors e.g. health specialist, basic scientist, lawyer, policy maker, sociologist, philosopher, religion representative, and community representative. This committee is to play a role in reviewing research proposal involving human subjects aiming to protect right, safety, and well being of all current research subjects or someone who might involved in research. Research goal is important but not higher than health and well being of research subjects. The National Ethical Review Committee will responsible in reviewing research projects before their implementation and ensuring that approved research proposals will regularly assess on research ethics so that some balancing of the risk and benefit including the protection of the subjects will be ensured. At the same time, it will be fully responsible for taking into consideration the benefit and the needs of researchers within the framework of the stated principles of agencies that controls and legislates the ethical issues associated with research.

The NIOPH will be the convenor of the National Research Ethic Review Committee because the NIOPH has been assigned by the MOH to be responsible for the coordination and administration for the Council of Medical Science's work, and all training on health research. To implement these functions, the National Ethic Review Committee for Health Research in Lao P.D.R. will adhere to the principles of development of standards of action plan based on real situation, culture and constraints of the country. Any step of reviewing, documentation, decision-making, communication, storage of information, time and process of reviewing will be strictly implemented in a transparent manner.

5. Dissemination of research results and translation its into action

Dissemination of research results or new knowledge is one important part of research process. To increase the chance for beneficial knowledge for translating into action, effective mechanisms should be developed for knowledge to be shared among researchers and disseminated widely to various target groups in appropriate ways. One important aspect is the translation of the results into policy, action and integration with basic knowledge/technology. These will lead to the quality improvement and modernization. For these purposes, NIOPH with CMS will organize forum for dissemination of research results annually by inviting concerned individuals from public, private, government and non-government organizations. Then, research results that are interesting will be selected for dissemination at international forum. At the same time, these research results will be printed out annually as references. The disseminated research results as well as the post-graduate thesis will be collected and assessed for feasible study to recommend and further utilize beneficially.

5.1. Dissemination methods

Research results will be disseminated in various ways starting at the team level, departments, provincial, and national levels. Research results will also be printed out as

references for potential users of the product. Departments, agencies and potential beneficiaries will be invited to participate since the beginning in formulation of research questions, reviewing research proposals, updating progresses throughout implementation, and exploring ideas for dissemination and effective research results utilization that can lead and translate these findings into the real action.

5.2. Consultative meeting and dissemination workshop of research findings at department levels

Translation of research results into action is to make sure that users have their inputs in the formulation of research questions and could access to the research findings at department level. The activities in this area will include primarily consultative meeting at department level during priority setting of research areas and questions as well as a dissemination of research results. The consultative meetings can be done at department levels, encourage concerned parties to identify research problem as well as the utilization of research results. In order to make consultative meetings successful, there will be some need for a good management at the department level with integration of researchers, policy-makers, decision-makers of concerned departments, and other stakeholders in consultation in order to solve specific/hot issues and translating research results into policy and action. Encouraging to disseminate regularly and the utilization of research findings between bilateral and multilateral co-operationship.

5.3. Participation of decision-makers in priority setting and utilization of research findings

To translate research results into action, in addition to activities at department level, there is a need to promote a participation of decision-makers at all levels in priority setting of research topics and recommend the utilization of research finding. Decision makers at all levels outside the departments who might participate in the activity include senior managers, researchers and technical staff and responsible officers dealing with

multidisciplinary and multi-sectoral for national health research master plan. Involvement of other sectors will be very important to facilitate the utilization of research results directly at national, provincial and departments levels.

5.4. Engage relevant clients of research results throughout research process

Authorities at each level, agencies, centers, schools, hospitals and implementing institutions, funding agencies, and especially beneficiaries community from various government ministries will participate and co-ordinate with researchers throughout the research process from the development of research proposal until the completion of projects implementation. All of these parties will identify expected outcome and will prepare to participate in utilization of research results.

5.5. Communication of research results

Communication of research results will develop and implement as part of follow up activities that will include the following:

- 1) Identification of specific target audiences;
- 2) Statement of objectives in oral or writing form or presentation of the product efficiently as goal's expectation;
- 3) Use of appropriate message and medium for a given target audience;
- 4) A work plan; and
- 5) An evaluation plan.

5.6. Creation of Web site

A new challenge is how to access regularly to health research information in the country and in the world, so NIOPH will create potential research project Web site to

It is expected that indicators for evaluation will consist of quality of research findings that will affect decision making to develop and strengthen health research system and make it more responsive to the needs of health system.

At the end of implementation of this third five-year health research master plan, evaluation will be conducted to shed light on the inputs, processes and outcome of health research system. Evidence-based evaluation process will be carried out to assess the various activities stated at the master plan of action based on a systematic review and analysis, according to the value, cost-effectiveness and efficiency of all elements of the programs. These results will show strength and weak points and constraints facing during implementation period. Results of the evaluation process will be written a scientific report and disseminated through journal and conferences and will serve as an important basis in developing the next five year health research master plan.

6.3 Governance

Governance is a means by which a society steers its staff towards agreed goal (Lee, 2000a). With regard to health research, governance requires appropriate functions and interactions between concerned organizations at institutional, national or international levels to health research system so that health research system will respond appropriately to the knowledge need of the health system within a country. The following five functions will be taken as good governance: i.e., 1). Stewardship (that means quality leadership, productive Lao strategic direction and operates in coherent manner with good ethical basis of the partnership and solidarity, and respecting each other; 2). financially secured; 3). knowledge generation; 4). knowledge utilization and management and 5). capacity development.

Based on these principles of good governance, the NIOPH will include in the teaching curricula on research methodology to disseminate and introduce to all research

institutions/units at all levels the concepts of good governance. This will be the first step to implement as well as to manage effectively health research system in Lao PDR.

7. Incentive system

7.1 Policy

Policy is another important means by which institution steers itself toward the projects. Research policy is clearly started at the 7th Party resolution about a fostering of research activities in Lao P.D.R. The establishment of the National Science Council is an important reference in research implementation. For international relations, there has been more productive collaborations with concerned international and regional organizations e.g. ASIAN Subcommittee of Sciences. Particularly for health research activities under the leadership of the Ministry of Health, in addition, there is a National Institute of Public Health, which is a national focal point for co-ordination as vertical and horizontal research activities and programs.

7.2 Incentives

Incentive is important to foster and to actively encourage research activities. At present, a general incentive system of national science council has not existed yet. Each section of the NIOPH and CMS has managed and will continue to develop incentive process for researchers under their responsibility in order to foster health research activities within country. Incentives for researchers can be in various types e.g. acknowledgement, award certificate of appreciation, opportunity for the study tour or opportunity for attending international scientific conference, opportunity for graduate study at master or doctoral levels. As for researchers and trainers, incentives can be provided in the form of academic promotion to be a Lecturer, Associate Professor or Professor.

On the other hand, facilities that provided by responsible organization such as time, place, materials, and transportation are good starting points for organizing incentives. The creation of a good research environment and changing the mentality for research is also important. Staffs should be encouraged to do research as a part of their work to solve problems, improving quality of work, improving their own knowledge. Research should not be considered an additional job or a burden to their routine work. In addition, local organizations, departments concerned, centers, schools, hospitals, and Ministry of Health should provide financial support for research implementation as well as seeking fund from international agencies to support small research projects. These will be an opportunity for young researchers to improve their skills through learning by doing and to strengthen, step by step, their own capacity as well.

8. Procedures for reviewing research proposals

Research project will be developed based on clearly identified development plan and priority setting. The plan and priority must be developed through a consultative meeting at different levels with all stakeholders to ensure its application. These primary stakeholders should include policy makers, senior managers in country, international scientists, public health consultants, director of provincial health department, project staffs of Ministry of Health, and community representatives.

The process for reviewing the research proposals should be open and transparent. The best proposals according to priority setting should be funded. Opportunities for participation by Lao ethnic people should be given a priority so that research may bring health benefit to them by contributing step by step to poverty reduction, for equity and development.

For these purposes the following activities will be implemented:

1. There will be an establishment of Ad hoc committee of CMS to give technical advises in planning a progress of health research and facilitate in collaboration with other projects.

This committee will consist of researchers, representative of each work plan, consultants, and others in health sector or in other sector or representative from international agencies under presidency of committee member responsible for research activities of CMS, MOH.

In each meeting, this committee will consider a need to open national meeting concerned with important research proposal or proposal from abroad or as assigned by the MOH. The committee will meet once per year or by demand according to the need. The meeting should be a continuous meeting from symposium where researchers presented research results on new area to assess a progress and quality of on going research project implementation. The meeting will give opportunity to supervise research progress and to start searching new area for research for the next step. With consideration of funds/award supporting researches in, addition with consideration of quality of the project or relevant research findings to be submitted for international award. Topics for each health research symposium will be considered by this committee.

2. Award process to give fund for quality research proposal based on fiscal year research funding from Sciences Technology and Environment agency/ National Council of Sciences Technology and Environment, from Ministry of Health, and from international donor support within the country or local/external foundations to motivate research process in Lao PDR. Competition process to give award to proposed researches should be transparency, fairly and to meet all scientific procedures which consider part of research process development as well as researcher's development at national arena, on the other hand, it's creating step on toward the world arena in the future.

Office of funding support of the council of medical science will:

- Draft a form for submitting research proposal;
- Research proposal should based on problem solving and development;
- Some research proposal might ambitious and need more funding support than other, so it will be difficult to consider than a small project;
- Reviewing research proposal can start afterwards

3. Proposal that received funds from other agencies by concerned institutions should inform NIOPH for management and co-ordination as research focal point, which facilitate in reporting to MOH quarterly or annually. On the other hand, it will be technical support when needed.

Chapter IV
Operational Plan for
the third five-year health research master plan (2002-2006)

4.1 Plan for strengthening health research capacity short-term and long term

Training activities	Estimated participants / Estimated budget (US\$)					
1. Short term Training of resources for research	Funding agencies	2002	2003	2004	2005	2006
1.1 Training on Health system research		25/ 2500	25/ 2500	25/ 2500	25/ 2500	25/ 2500
1.2 Training on participatory research		20/ 2000	20/ 2000	20/ 2000	20/ 2000	20/ 2000
1.3 Training on epidemiology research, data processing and analysis	EC-RMCP	20 / 3200	20 / 3200	20 / 3200	20 / 3200	20 / 3200
1.4 Training on data collection, processing and analysis	EU-Lao MCP	20/1000*				
1.5 Training on clinical research		20/ 2000	20/ 2000	20/ 2000	20/ 2000	20/ 2000
1.6 Training on behavioral research		20/ 2000	20/ 2000	20/ 2000	20/ 2000	20/ 2000
1.7 Training on research management and leadership		20/ 2000	20/ 2000	20/ 2000	20/ 2000	20/ 2000
1.8 Training on research report writing		25/ 2500	25/ 2500	25/ 2500	25/ 2500	25/ 2500
1.9 Training of trainer on HSR methodology		20/ 2000	20/ 2000	20/ 2000	20/ 2000	20/ 2000
1.10 Research ethic development workshop	EC-RMCP	50/7000*				
1.11 In service training	GTZ					
1.12 Training of trainers in health management	GTZ					
1.12 Training in quality of health management	JICA	15	15	15	15	15

Training activities	Estimated participants / Estimated budget (US\$)					
2. Long term Training of resources for research	Funding agencies	2002	2003	2004	2005	2006
2.1 Master in Public Health (French language)	French government	20/ 158,300		20/ 158,300		20/ 158,300
2.2 Specialist in surgery (French language)	French government	20/ 158,300		20/ 158,300		20/ 158,300
2.3 Specialist in obstetric- gynecology	French government	20/ 158,300		20/ 158,300		20/ 158,300
2.4 Specialist in pediatric	French government	20/ 125,000		20/ 125,000		20/ 125,000
2.5 Specialist in anesthesio-reanimatology	French government	20/ 108,300		20/ 108,300		20/ 108,300
2.6 Master in Public Health (English language)	GTZ			20	20	20

* Fund available

4.2 Areas/ Prioritized topics in the third five year health research master plan (2002-2006) by each work plan

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
1. Disease prevention and health promotion work plan							
1.1 Mother and child health							
1.1.1 Study on prevalence of STD in women attended three central hospitals-	Mother and child health hospital, Mahosot hospital, and Sethathirath hospital	WHO Geneva	23, 492*				
1.1.2 Health status of migration youth living in Vientiane municipality	Mother and child health center	WHO Geneva		16, 500			
1.1.3 Model on integrated reproductive health service at district level, Oudomxay province	Mother and child health hospital	WHO Geneva		32, 400*			
1.1.4 Study on cervical cancer in women attending Mahosot hospital		WHO Geneva		5, 000*			
1.1.5 Study on nutrition status of school children in urban and rural villages of vientiane municipality	Mother and child health center						
1.1.6 Survey on family planning in Louangprabang province	Mother and child health center and LPB province				12, 000		
1.1.7 Study on factors related to extra uterus pregnancy					15, 000		

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
1.2 Mosquito born diseases							
1.2.1 Study on the perception of people on IBN used to prevent malaria	NIOPH	Lao EU	3000*				
1.2.2 Effectiveness of ABETE to prevent dengue in Lao P.D.R.	Vientiane municipality health department						
1.2.3 Study on resistance of mosquito to chemical substance	MPE Center	Lao EU					
1.2.4 Study on drug resistance of Plasmodium Falciparum	MPE Center	Lao EU					
1.2.5 Pilot implementation of early warning outbreak recognition system (EWORDS) 1.2.6 Case-control study on infectious etiology of hemorrhagic fever 1.2.7 Spatial and temporal dynamics of dengue severe infection. Indicators of risk in the central plain of Thailand and Vientiane 1.2.8 Survey of Nipale and Lyssa viruses	CLE	NAMRU	23,000*	33,000*	51,000*	51,000*	51,000*

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
1.3 HIV/AIDS							
1.3.1 Behavioral risk survey on STD/HIV/AIDS 1.3.2 AIDS Sentinel Surveillance and STD Periodic study	NCCA	FHI, WHO, Trust					
1.4 Water and sanitation							
Study on influencing of Arsenic to the health of Lao population	CSE	WHO, UNICEF	21,000				
2. Curative care and rehabilitation work plan							
2.1 Causes of death among Lao people	Mittaphap hospital						
2.2 Study on cosmetic surgery in disability patients	Mittaphap hospital						
2.3 Tuberculosis in Lao people	TB center	Geneva	5000*	5000*	5000*		
2.4 Study on causes of hepatitis in Vientiane Lao P.D.R.	Mahosot	Welcome Trust, Oxford Tropical Medicine	1300*				
4.3 Study on unexplained fever	Mahosot	Welcome Trust, Oxford Tropical Medicine	6000*				
2.6 Study on causes of infection in central nervous system	Mahosot	Welcome Trust, Oxford Tropical Medicine	5000*				

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
2.7 Efficacy of chloramphenicol with tab. Ofloxacine in treatment of thypoid fever	Mahosot	Welcome Trust, Oxford Tropical Medicine	1,200*				
2.8 Efficacy of anti-malaria drug	Mahosot	Welcome Trust, Oxford Tropical Medicine	10,000*				
2.9 Study on vit. B1 deficiency	Mahosot	Welcome Trust, Oxford Tropical Medicine	2,000*				
2.10 Study on dengue fever	Mahosot	Welcome Trust, Oxford Tropical Medicine	2,000*				
3. Consumer protection and essential drug supply work plan							
3.1 Improving DTC performance in 8 hospitals, Lao P.D.R.	Mahosot hospital, CMD, Mittaphap hospital	SIDA	9,000*				
3.2 Antibiotics use as self medication for reproductive tract infections and pamphlet testing for intervention among adult population in Lao P.D.R.	Sethathirath hospital, VTM health department, provincial health department	SIDA	9,000*				

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
3.3 Improvement the third class pharmacies in Vientiane province	FDD	SIDA	9,000*				
3.4 Accessibility to essential drug of population in Lao P.D.R.	FDD	SIDA	9,000*				
4. Development of Human resources for health work plan							
4.1 Evaluation of training program on family planning program in Lao P.D.R.	HRFHD, MOH	WHO/ SIDA/ INEL	18,000*				
5. Health research and training management work plan							
5.1 Developing tools for assessing drug use of Lao population	NIOPH	SIDA	6,000*				
5.2 Health sector reform assessment	NIOPH	WHO					
5.3 Benefit of decentralization and integration on malaria control program	NIOPH, MPEC, IFMT	TDR, WHO	25,000*				
5.4 World health survey	NIOPH	WHO					
5.5 Assessment of health research system performance in Lao PDR	NIOPH	WHO					
5.6 Prevalence of non-communicable diseases in Lao P.D.R.	NIOPH	GTZ	10,000*	10,000*	10,000*		
5.7 Strengthening of operational research in PHC in Lao P.D.R.	NIOPH, PHC Unit MOH	GTZ	50,000*	50,000*	50,000*	50,000*	50,000*

Areas/ Prioritized topics	Responsible organizations	Funding agencies	Proposed Budget (US\$) for each year				
			2002	2003	2004	2005	2006
6. Health economic management work plan							
6.1 Master plan in health sector to the year 2020	The Cabinet	JAICA					
6.2 Study on methods that effectively manage external assistance	The Cabinet						

* Fund available

4.3 National and international conference to promote research and training

Activities	Funding agencies	2002	2003	2004	2005	2006
1. Workshop to disseminate research findings in country						
2. Second SEAMEO-TROPMED Nutrinut meeting to promote research and training in nutrition	SEAMEO-TROPMED GTZ					
3. Lao-Vietnam-Cambodian symposium	MOH, Pasteur Merrieux , EC- RMCP, Lao EUMCP	50 person/ 10,000		60 person/ 10,000		60 person/ 10,000

4.4 Attending International Sciences seminars/conferences

Types of seminars and conferences	Funding agencies	Person/Estimated budget				
		2002	2003	2004	2005	2006
1. 19 th – 20 th consultative meeting on health research system in Asian pacific region	WHO	1-2			2-3	
2. Asian Annual meeting on health research		1-2	1-2	2-3	2-3	3-4
3. Global forum for health research	World forum	1-2		3-4		
4. World summit Conference on Health research	WHO					
5. International training course on methodology in clinical research	EC-RMCP	2/3,000				
6. Study tour for members of NECHR	EC-RMCP	10,000				

4.5 Development of tools for training and disseminating research findings

Types of tools for training and disseminating	Funding agencies	Estimated budget				
		2002	2003	2004	2005	2006
1. Writing guidelines for health research project management						
2. Writing guidelines on indicators for measuring research capacity in each level (individual, institutional, and national)						
3. Writing guidelines on quality assessment of research projects for funding support or giving award						
4. Translating new health research methodology guide (WHO)	WHO					
5. Translating guidelines on health research system						
6. Health science bulletin Lao-English						
7. Translation and printing of ethics documents	EC-RMCP /EU-MCP	6,212				
8. Finalizing, editing and printing of standards operating procedures for establishing NECHR	EC-RMCP /EU-MCP	2,000				

Annex 1:

1. List of national officials involved in the preparation of the third five-year health research master plan

A. Advisers

- | | |
|----------------------------|-------------------------|
| 1. Dr. Ponnem DALALOY | Minister of Health |
| 2. Dr. Davone VONGSACK | Vice Minister of Health |
| 3. Dr. Bounkouang PHICHITH | Vice Minister of Health |

B. Responsible persons for preparation the third year health research master plan

- | | |
|-------------------------------|---|
| 1. Dr. Bounnong BOUPHA | Director of National Institute of Public Health, Project leader |
| 2. Dr. Kongsap AKKHAVONG | Vice Director, National of Public Health, Deputy Project leader |
| 3. Dr. Keonakhone HOUAMBOUN | Head of Health System Research Division, Participant |
| 4. Dr. Sengchanh KOUNNAVONG | Deputy Head of Health System Research Division |
| 5. Dr. Somphou OUTHENSACKDA | Deputy Head of Health Information System Development |
| 6. Dr. Sounthone OYPOULIKOUNE | Deputy Head of Administrative Division |

2. List of international officials involved in the preparation of the third five-year health research master plan

- | | |
|-------------------------------------|--|
| 1. Mr. ALDO DELL' ARICCIA | Counselor EC Delegation to Vietnam, Cambodia and Lao PDR |
| 2. Dr. Frederick Gay | Co-ordinator EC-RMCP |
| 3. Dr. Stephane P. Rousseau | Co Director Lao- EU- MCP |
| 4. Dr. Bouasy Hongvanthong | Co Director Lao EU- MCP |
| 5. Dr. Jonh Storey | Lao EU-MCP |
| 6. Prof. Chithr SITHI-AMORN | Expert – consultant EC-RMCP |
| 7. Ass. Prof. Dr. Somchai DURONGDEJ | Expert – consultant EC-RMCP |

Annex 2:

List of the participants attended the research priority setting workshop

No.	Name	Organization
1	Dr. Somboon Phomtavong	Dean of School of Public Health, NIOPH
2	Dr. Soulisack Mingboup	Deputy Dean of Public Health, NIOPH
3	Dr. Keonakhone Houamboon	Head of Health System Research Division, NIOPH
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11	Dr. Savatdy Kingkeo	Head of Statistic Division, The Cabinet, MOH
12	Mr. Bounfeng Phoumalaysith	Minister's secretariat, The Cabinet, MOH
13	Dr. Somchanh Saysida	Department of Human Resource for Health, MOH
14	Dr. Khamsing	Director of Inspection Departments
15	Dr. Samlane Phonpida	Director of Center of MPE
16	Dr. Bounhong Southavong	Director of Center for Traditional Medicine
17	Dr. Vithoune Visonnavong	Director of Ophthalmology Center
18	Dr. Lasamy Vongsack	Director of Food and Drug Quality Analysis
19	Dr. Sithath Insisiengmay	Director of laboratory and epidemiology center
20	Dr. Phouthone Southalack	Deputy Director of NCCA Office
21	Dr. Sivong Sengaloundeth	Head of Drug control, Food and Drug Department
22	Dr. Phouthone Sithideth	Deputy Dean, Faculty of Medicine, National University
23	Dr. Somchith Boupha	Deputy Director of College of Health technology
24	Dr. Ketkeo Boupha	Center of Health Information and Education, MOH

25	Dr. Chanphoma Vongsamphanh	Director of Vientiane municipality health department
26	Dr. Vanliem Bouaravong	Deputy Director of Friendship hospital
27	Dr. Phoukhieng Douangchak	Friendship hospital
28	Dr. Vang Chu	Deputy Head of Cardiologist Division, Mahosot hospital
29	Dr. Heuanekham Sansomsack	Mahosot hospital
30	Dr. Xayadeth	Head of ORL Division, Mahosot hospital
31	Dr. Douangdao Souk-Aloun	Head of ICU Unit, Mahosot hospital
32	Dr. Paliphonesouk Insisiengmay	Head of Pediatric Division, Sethathirath hospital
33	Mr. Khamkeo Panyasily	Deputy Director of Agricultural Institute
34	Mr. Khamphay Sisavanh	Director of Educational Research Institute
35	Dr. Soukthavong Thammasith	Educational Research Institute
36	Dr. Soulioudong Soundara	Director of Sciences Technology Environmental Institute
37	Mr. Dalachith Latxavong	Deputy Director of Human Resources Development Department