

# **PART III**

## **MANAGEMENT FRAMEWORKS FOR THE HEALTH SECTOR**

## **CHAPTER 8**

# **FRAMEWORK FOR HEALTH PLANNING AND MANAGEMENT**

### **8.1 IDENTIFIED ISSUES AND KEY DIRECTIONS**

#### **(1) Need for a Strategic Master Plan to Guide Health Sector Development and Reform**

MOH's annual and 5-year plans have in the past been simply a collection of the plans of different departments/centres. They have therefore been based on sub-sector thinking, rather than on clear sector-wide perspectives.

Since the Lao health sector has limited capacity in terms of human and financial resources, MOH needs to be highly selective and strategic in its approach to health sector development and reform. MOH should have a strategic master plan that can guide resource allocation, integration and prioritisation of health sector development and reform.

#### **(2) Health Sector Development and Reform in Ways Suitable for the Characteristics of the Lao Health Sector**

MOH should take initiatives to promote health sector development and reform in ways suitable for the characteristics of the Lao health sector.

In the past, MOH has passively accepted project proposals of donor agencies and NGOs, which have their own mission goals and priorities. Projects driven by donor initiatives have therefore not always been in accord with the goals and objectives for the Lao health sector development, which must take into account the limited human and financial resources in Lao PDR.

#### **(3) Need for Concerted Efforts to Achieve a Grand Design of the Lao health sector**

Since in the past the Lao health sector development has depended almost entirely on donors and NGOs, only some provinces and districts have been covered by project activities, and the methods used have varied, even between nearby districts.

A grand design for the health sector is needed to guide health sector development and reform. And systematic and concerted ways of health sector development are needed in order to achieve the goal and objectives given by the grand design.

#### **(4) To Seek a Good Balance of Decentralisation and Central Control**

MOH manages vertical programmes supported by donor agencies. However, MOH does not have the power to impose its health policies and strategies over the provincial and district levels, because with the current decentralised system of government, MOH is not supposed to channel funds to the provincial and district levels. Therefore, MOH does not have enough power to effectively guide the activities of PHOs and DHOs, other than through vertical programmes.

DHOs have not yet developed the capacity to perform their devolved functions. At the same time, many DHOs do not have sufficient recurrent budgets (which are allocated from district chief offices) to run activities properly themselves, even though many functions (e.g. running district hospitals and health centres) have been devolved to DHOs.

It is necessary to seek a good balance between decentralisation and central control in health administration and management so that MOH policies and strategies can influence provincial and district health activities. For this purpose, it is necessary to establish a special budget system for allocating more recurrent costs to district levels, while implementing donor projects under the control and coordination of MOH. With more recurrent costs, DHOs can improve health activities by their own initiatives, in accordance with MOH policies and strategies.

#### **(5) Sector-Wide Coordination**

Co-ordination in the Lao health sector is poor, including that between MOH and PHOs/DHOs, between MOH and donors, and between donors.

In order to have better resource allocation in the health sector, it is necessary to implement sector-wide coordination involving key actors, such as MOH, PHOs, DHOs, donor agencies, donor projects, and NGOs.

Sector-wide co-ordination is needed at central, provincial and district levels, though different types of coordination are needed at different levels.

At the central level, guided by common plans, objectives and basic strategies, different actors should carry out their own activities, but they should coordinate by sharing information both formally and informally. MOH is key to this type of coordination.

The provincial level is the intermediary for coordination between the central and district levels. PHOs should coordinate vertical programmes and other MOH activities in terms of timing, budgeting and human resources, to enable planning and management to improve at the district level.

At the district level, it is more necessary but also easier to coordinate health activities and achieve inter-sectoral coordination so as to share resources than at the other levels.

**(6) Need for Maintenance of the Lao Health Master Plan**

MOH should take initiatives, in conjunction with health partners, to maintain, manage and implement the Lao Health Master Plan in a flexible manner. It will be necessary to review the recommended health master plan, and to formulate a new master plan in 10 years' time.

**(7) Improvement of Management Systems and Management Skills**

Both management skills and management systems are poorly developed in the Lao health sector. In particular, management decision-making systems have not yet been clarified for the decentralised context.

In order to improve this situation, various types of management skills are needed, as well as basic administration skills (including recording, book-keeping, data/information gathering, data analysis, and reporting).

**(8) To Improve HIS and National Health Surveys**

In the past, planning and project design have been carried out without adequate data and information. In fact, there is an overall dearth of reliable data and information on which to base a real understanding of the health sector. Furthermore, data and information which is collected through HIS is not then used for health planning and management.

It is necessary to improve HIS and national health surveys in order to improve the quality of health planning and management, and to encourage planners and managers to use the data and information obtained from HIS.

As for national health surveys, it is necessary to increase the size of samples in order to get valid estimates of provincial health indicators. As for baseline surveys of various health projects, it is necessary to establish standard methods so that data from different projects is comparable.

## **CHAPTER 9**

# **FRAMEWORK FOR HEALTH FINANCE**

### **9.1 INTRODUCTION**

This chapter presents the framework for analyzing the financial patterns in the Lao health sector and identifying key policy directions that can help reduce or solve existing problems and prepare the way toward achieving the goals stated for the year 2020. Key policy directions and possible measures are presented in Sections 9.4 through 9.5, and a discussion of these results is done in the last section.

The possible measures presented here should read as preliminary policy options rather than final recommendations. We hope that presenting them at this early phase will stimulate debate and help promote a consensus on the main issues and policy options, that will then make their way into the Health Master Plan under preparation.

The framework shown in Figure 9.4 is the basis for the approach used in this chapter, and focuses on the two main dimensions of health financing: the level of financial resources and its distribution by source, on the left hand, and its allocation to different purposes and uses, on the right hand. The former determines the sustainability of current programs and interventions and the feasibility of future plans. The latter determines how efficiently and effectively these interventions can be implemented and contribute to the improvement in the health status of the Lao population. Financing and resource allocation are two sides of the same coin, and must be integrated through adequate planning - both short and long term - and financial management. All these issues will be discussed in turn in Section 9.2.

Other considerations, such as equity in financing and the use of resources, the quality of the services provided, and other technical constraints, are included in the framework but without explicit relationships to avoid encumbering the graph, but they should be taken into consideration in planning and implementation. They will also become particularly relevant as financing and economic issues are integrated with medical, epidemiological, political, and socio-cultural considerations within the planning process that prepares and shapes the Lao health system for the years to come.

## **9.2 IDENTIFIED ISSUES**

Five main economic issues have been identified that can reduce the effectiveness of the Lao health system and jeopardize the government's plans for the future. They are presented in turn.

### **9.2.1 Level and Sustainability of Health Financing**

#### **(1) Overall level of resources**

The overall level of expenditure on health (US\$ 10-15 per capita in recent years) is low relative to averages for low-income countries and to neighbouring poor countries (over US\$ 20). As a proportion of GDP, it represents around 2%, also a low figure by international standards. This level of resources is inadequate relative to the country's health needs, to support of the existing network, and is hardly sufficient to pay for a minimum package of basic services for the whole population (which costs about 15 US\$ per capita per year). Underfunding of the public network results in low quality and effectiveness, as well as underused or unused facilities.

#### **(2) Inadequate distribution by source of funds**

Sector funding relies heavily on foreign sources (35% of the total) and especially on household spending (55%), while the government contributes a very low proportion (10%)<sup>1</sup>. This proportion was increasing until 1996-97, but has been greatly reduced since (see Table 9.1 and Figures 9.1 to 9.3)<sup>2</sup>. Foreign funding has increased, and cost recovery revenues have expanded (they now represent more than government spending), but they have largely substituted for the decreasing government expenditure<sup>3</sup>. In many facilities, Government budget represents only a relatively small portion of the resources consumed. A larger part comes from drug sales, user fees on the services and amenities provided, and in some cases donor funds (see Table 9.2).

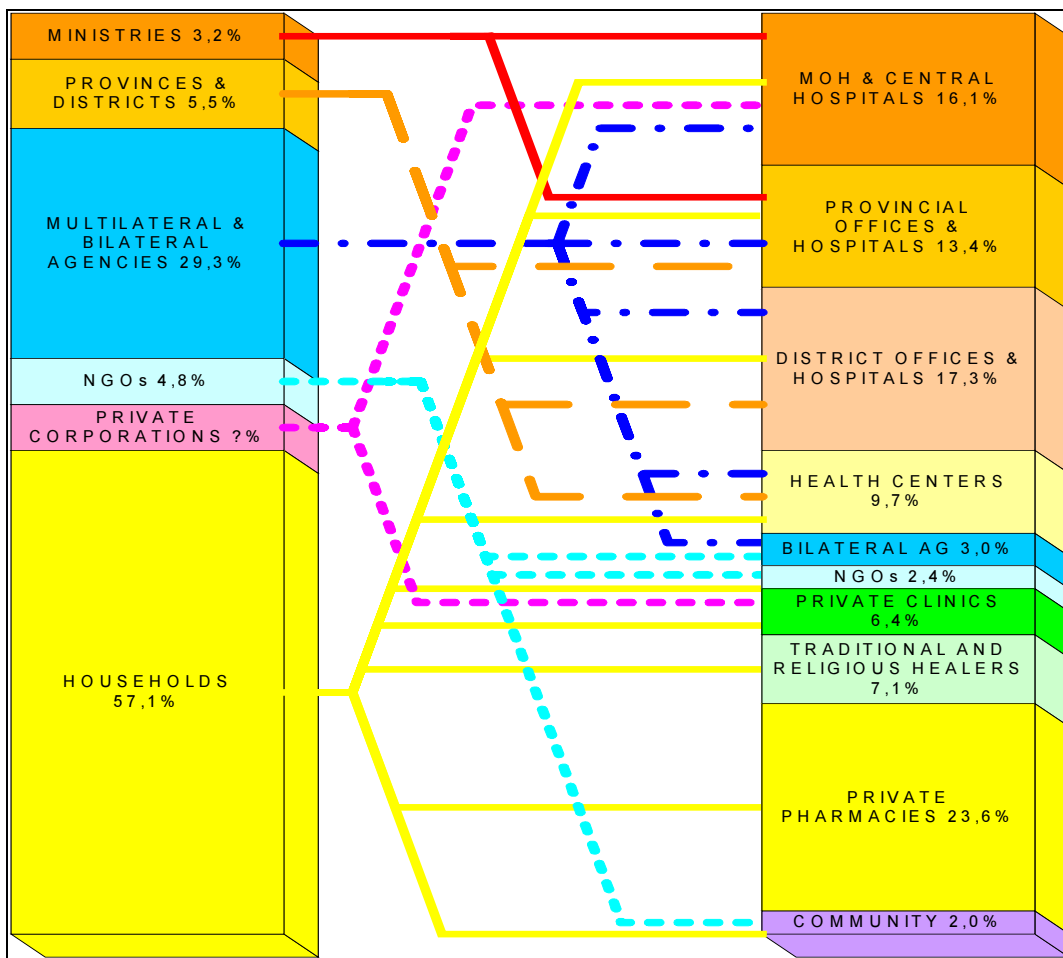
---

<sup>1</sup> In this document Government health expenditure is defined as budget expenditure from MOH and other ministries (Defense, Interior and Labour), and provincial governments; it differs from the concept of "public" health expenditure used for example in the PIP, which includes expenditure by donors.

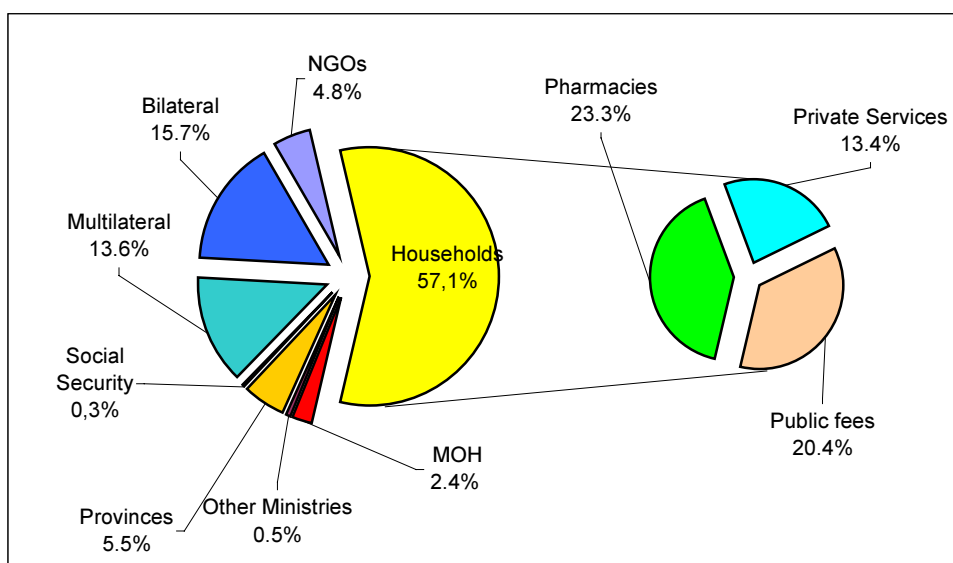
<sup>2</sup> The most recent year considered for analysis in this chapter is 1999-2000, as it was the latest with reported actual spending at the time of the study.

<sup>3</sup> Source: ADB II PPTA Feasibility Study and recent facility data analyzed by the author.

**Figure 9.1 Financial Flows between Sources (left) and Providers (right)**



**Figure 9.2 Distribution of Health Expenditure by Source (1999-2000)**



**Table 9.1 Trends in Government Health Expenditure**

Year	94-95	95-96	96-97	97-98	98-99	99-00	00-01
GDP current	1,419	1,726	2,201	3,745	8,700	13,495	14,950
Govt Budget	293.60	364.40	412.20	846.60	1,699.70	2,777.77	3,367.34
Govt Health Exp.	11,895	14,171	19,662	17,494	31,154	43,843	<i>65,664</i>
Id MOH	3,720	<i>4,792</i>	<i>8,800</i>	4,893	8,635	12,174	<i>23,607</i>
Id Provinces	7,974	9,379	10,862	10,922	19,269	27,569	<i>42,057</i>
PIP Health	7,755	13,830	9,250	34,400	30,090	109,250	<i>75,530</i>
Health %GDP	0.89	0.84	0.89	0.57	0.37	0.33	<i>0,45</i>
Health % Govt	4.05	3.89	4.77	2.07	1.83	1.58	<i>1,95</i>
Health % PIP	4.67	6.73	3.50	5.83	3.31	6.42	<i>3,77</i>

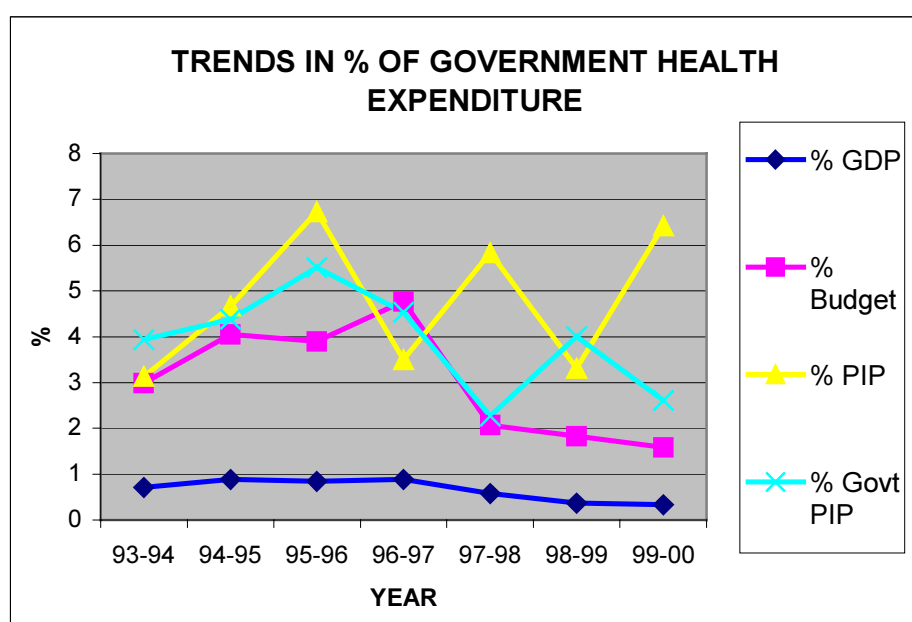
Notes: GDP current and Government Budget are in Billion Kip, Health Expenditure in Million Kip; Figures in italics are estimates or planned expenditure, others are implemented expenditure.

Sources: Government Budget 1999-2000; MOH; ADB II PPTA Feasibility Study; World Bank Public Expenditure Review 1997; Bank of Lao PDR; Annual Report to Committee.

**(3) Resources relative to government plans**

Current resources are most likely insufficient to pay for government plans, both medium and long-term (Horizon 2020). In particular, the continued expansion of the facility network in order to improve access in remote areas, as stated in the Strategy for 2020, will require considerable funding that exceeds the current level of resources. Health spending in the 2<sup>nd</sup> PIP (Public Investment Planning) has also been much lower than planned, especially from government sources: actual spending by the Government was 34,4% of planned, while donor spending was 46,8%. In this context, the goals and strategies for 2020 seem quite ambitious and feasibility is not assured.

**Figure 9.3 Trends in Government Health Expenditure**





**Table 9.2 Increase in Cost Recovery Financing in Some Facilities**

%	1995-96		1997-98		1999-2000	
	GB	CR	GB	CR	GB	CR
Mahosot Hospital	-	-	37,5	62,5	30,8	69,2
Friendship Hospital	-	-	56,3	43,7	-	-
Sethathirath Hospital	-	-	40,6	59,4	45,2	54,8
Luangprabang PH	60,5	19,8	39,6	60,4	36,2	63,8
Savannakhet PH	45,6	35,4	36,0	64,0	33,5	66,5
Champasack PH	100	0	40,1	59,9	25,1	74,9
Oudomxay PH	-	-	43,9	56,1	-	-
Khammouane PH	-	-	36,5	63,5	-	-
Bolikhamxay PH	-	-	29,8	70,2	-	-

Note: When the sum of Government Budget (GB) and Cost Recovery (CR) does not add up to 100% in 95-96, the remaining comes from international donors.

Sources: MOH and facility reports.

## 9.2.2 Resource Allocation

### (1) Allocation to recurrent vs capital expenditure

A large proportion of the government budget (48% of MOH budget and 33% of Government budget) goes to new capital and investment, especially in new buildings. As a consequence, little resources are available for operating and maintaining existing or new facilities, which rapidly decay and hinder the quality of care, increasing the cost of inefficiencies and waste.

### (2) Allocation by purpose or function

A large proportion of government personnel is allocated to administrative and support activities at the central, provincial and district levels (33,2%, 39,7% and 35,4% of personnel, respectively); trained and qualified personnel and financial resources are even more concentrated in administrative and support activities, while final activities, i.e. the provision of health services itself, receive a relatively small proportion of resources (see Table 9.3). According to the budget classification, 40-50% goes to Administration and Human Resource Development.

**Table 9.3 Distribution of Human and Financial Resources by Facility Level**

LEVEL	TOTAL PERSONNEL	%	POST & HIGH LEVEL	%	RECURR EXPEND %
MOH administr & support	612	5,4	375	19,6	10,0
Central Hospitals	1.231	10,8	395	20,7	13,0
Provincial Health Offices	1.533	13,5	380	19,9	16,0
Provincial Hospitals	2.328	20,5	344	18,0	20,5
District Health Offices	2.019	17,7	250	13,1	18,0
District Hospitals	2.438	21,4	152	8,0	15,5
Health Centers	1.221	10,7	13	0,7	7,0
TOTAL	11.382	100,0	1.909	100,0	100,0
Administration & Support	4.164	36,6	1.005	52,6	44,0
Central & Prov. Hospitals	3.559	31,3	739	38,7	33,5
District Hospitals & HC	3.660	32,2	165	8,6	22,5
VHVs and TBAs	9.692	-	-	-	?

Note: The distribution of Recurrent Expenditures is estimated based on the value of personnel expenditure.  
Source: MOH.

### (3) Allocation by type and level of care

Health staff and other resources are concentrated in central and provincial hospitals, while the district level, as the main provider of primary health care (including prevention and promotion activities), is staffed with only 32% of personnel and receives 20-25% of public resources. Budget classification shows that less than 10% of the MOH budget goes to prevention and promotion. Only 1% of budget goes to EPI (covering 4% of the program cost)<sup>4</sup>. In fact, much of preventive and promotion work can be performed by the nearly 10.000 Village Health Volunteers and Trained Birth Assistants, but these receive little, if any, public resources. Patients treated at higher facility levels cost significantly more to the health system, because referral hospitals, for instance, have to pay for their heavier infrastructure and technology.

### (4) Expenditure on drugs

An important issue in the Lao health sector is that more than 50% of total expenditure appears to be allocated to the purchase of drugs (see Table 9.4). This seems to be due to a perverse incentive throughout the system by which every party involved has an incentive to focus on drugs rather than services for care. First, public facilities have a strong incentive to sell drugs because it is their main means of raising revenue to complement the all-too-limited budget. Second, patients often prefer to purchase drugs (especially directly from private pharmacies) if they do not trust the quality of care offered by modern providers. Third, health professionals may also have an incentive to sell drugs informally as a way to increase their meagre salary.

<sup>4</sup> Source: WHO/Abt Associates study on the cost of the immunization program.

**Table 9.4 National Health Expenditure by Input (Preliminary Estimates)**

1999-2000	MOH	PROVINCES	HOUSEHOLDS	FOREIGN	TOTAL	%
TOTAL	12,174	27,568	286,775	171,194	497,701	100
Personnel	4,361	12,236	37,567	34,239	88,403	17,6
Drugs	500	732	245,766	25,679	272,677	54,5
Other supplies	1,470	2,322	3,441	25,679	32,912	6,6
Subsidies	664	2,909	0	?	3,573	0,7
Capital	5,178	9,369	0	85,597	100,144	20,0

Notes: In million kip. Does not include health expenditure by other ministries, which amount to 4,000 million kip in 1999-2000 but for which distribution is unknown.

Sources: MOH and provincial budget; Distribution for Households is from ADB II PPTA Household Survey (see Note to Table 9.7), and for Foreign has been estimated conservatively based on Vinard's (1993) distribution applied to 1999-2000 data from SPC Foreign Aid Report .

### **(5) The extension of the network**

The public network includes nearly 750 facilities, not including the almost 10.000 VHV's and TBAs. Many of these facilities are poorly staffed (Health Centres are staffed by 2 health professionals on average), poorly maintained, poorly equipped (availability of drugs is limited), provide low quality care, and, partly because of these factors, are little used by the population, and are thus ineffective. Limited public resources are stretched too thin across this relatively extensive network, leaving many facilities with limited resources to operate properly.

### **(6) Facility use and productivity**

Many health facilities are under-utilized: bed occupancy rates in 1999 were 44% in provincial hospitals, 30% in central and district hospitals, and around 10% in health centres. Ambulatory activities are also well below capacity in most facilities, and some health centres and district hospitals have no or few patients for several months. This obviously represents a considerable waste of resources, because personnel, equipment and some supplies are still mobilized in these facilities. It is not known for sure why public facilities are so under-utilised in a country with so many needs, but it appears to be a combination of low quality of care, inadequacy to local cultural preferences, difficulty to access (though people travel far to reach some hospitals or pharmacies), and misinformation of the public regarding service availability and fees charged. Given this pattern of inefficiency, it is safe to say that a large proportion of government resources - something in the order of 30-40% - is probably wasted.

On the other hand, health professionals working in public facilities often open their own private practice near or at the facility, sometimes draining clients and eventually resources from that facility. The extent of this is not known, but it may contribute to the low utilization rates reported in many facilities.

## **(7) Geographical distribution of funds, facilities and personnel**

Public health resources are concentrated in better-off urban areas, while populations in remote areas receive a low proportion of available resources. That is so in spite of the fact that health resources are in fact better distributed than overall government expenditure.

### **9.2.3 Cost Recovery and Revolving Drug Funds**

#### **(1) Inadequate management and operation in cost recovery**

Characteristics and operation of cost recovery policies vary widely across regions and facilities, relative to fee levels, management, and exemptions. Current regulation is loosely applied if at all, producing significant inequities and inefficiencies. However, this wide autonomy allows some flexibility that to some extent helps solving drug supply and access problems. Since Cost Recovery has been adopted, facilities and managers have learned with the initial mistakes and have corrected some of them, but significant problems remain, which reflect in inadequate financial reporting and uneven sustainability.

Revolving Drug Funds, which account for most of cost recovery in the public system, suffer from weak management, and inappropriate drug supply and control. Purchasing is often decentralized but with little standardization, at increased administrative costs, even though it probably allows for increased flexibility. Drug management is inappropriate, resulting in expired drugs or their inadequacy to local diseases or user preferences. RDFs often work much like private pharmacies, and in some cases, the fee level is close to or higher than prices in a pharmacy, because many RDFs, especially at the village level, purchase their drugs from nearby pharmacies. Monitoring and supervision is often weak or inexistent, with money kept in different bank accounts, and financial reporting is not unsystematic, not standardized, and not very reliable.

#### **(2) Financial sustainability**

The available information, in spite of its partial coverage and limited reliability, suggests that many RDFs are unsustainable in the long run<sup>5</sup>. A significant proportion of them have a current value that is lower than the original amount, in constant kip, invested when the funds were established. About ½ of the RDFs in provincial and district hospitals, 2/3 at health centres and the vast majority of village funds, appear to be in this situation (see Table 9.5), and an unknown number of funds already went bankrupt and have been deactivated. Even in some larger facilities, user fee and drug revenues have not kept up with inflation. More detailed information is needed to assess the extent to which this is

---

<sup>5</sup> For this purpose, a sustainable fund was defined as one capable of maintaining its original value in real terms – corrected by the general price index – plus a 25% margin.

due to inadequate management, an intentional reduction in the number of drugs included in the drug kit, a reduction in the real prices of the drugs, problems in the information reported, or other reasons.

**Table 9.5 Changes in RDF Real Value Over Time**

RDF LEVEL	INITIAL INVESTMENT	IN 2001 KIP	CURRENT VALUE	REAL CHANGE
Provincial hospitals	47.525	288.098	228.014	- 21%
District hospitals	6.945	18.755	23.485	+ 25%
Health Centers	3.330	12.519	6.057	- 52%
Villages	706	1.472	776	- 47%

Note: These are imprecise estimates, due to many errors in RDF reports.  
 Source: Author's estimates based on provincial and facility reports on RDFs, 2000.

### (3) Feasibility of cost recovery

In spite of the existing problems, cost recovery now accounts for an important part of the revenue available to public facilities (around 59% in Central Hospitals, 63% in Provincial Hospitals, and 33% in District Hospitals - see Tables 9.2 and 9.6<sup>6</sup>), and the MOH seeks to further expand RDFs in public facilities and at the village level. Because of the limited and shrinking budget resources for recurrent costs, many facilities have increased drug prices and service fees to levels higher than those found in private pharmacies. It is worth noting that the amount households inform paying as fees at public facilities is considerably higher than the amount reported at these facilities (Table 9.6); this is a strong indicator of an important informal private practice occurring at or related to public facilities.

Because of these issues, the user fees system as it presently works is likely to run into increasing problems, threatening its feasibility as a sustainable source of additional revenue. Several successful revolving funds have counted on financial and/or technical support by an international donor or NGO, and it seems likely that their success depends on this support.

<sup>6</sup> Based on the ADB II PPTA Feasibility Study, 1999, and recent data available for a sample of facilities.

**Table 9.6 Budget and Cost-Recovery Revenues at Facility Level**

Facility level	Budget <sup>1</sup>	Reported fees <sup>2</sup>	Household fees <sup>3</sup>
Central Hospitals (7)	4.303	8.455	22.940
Sample average (7)	-	769	-
Provincial Hospitals (17)	7.340	9.250	3.150
Sample average (11)	-	676	-
District Hospitals (122)	5.550	3.355	44.450
Sample average (32)	-	27,50	-
Health Centers (494)	2.510	988	31.830
Sample average (37)	-	2,00	-
Village Drug kits (1304)	-	1.020	-
Sample average (207)	-	0,75	-
TOTAL	19.703	23.068	102.370

Figures are in Million kips for 1999-2000. The distribution of fee payments reported by households may be biased, because the ADB study focused on 11 provinces and did not include Vientiane Municipality.

Sources: 1 MOH budget for 1999-2000; allocation to provincial and district hospitals and health centres is estimated from the distribution of personnel, since allocation of provincial budget was not available for each level of facility. 2 Reported RDF and user fees revenues. 3 ADB II PPTA household study in 11 provinces (see Note to Table 9.7).

#### **(4) Operation and feasibility of village revolving drug funds**

The problems identified in Revolving Drug Funds in general tend to be more severe at the village level, because of inappropriate supervision, lack of medical control on drug use, and lack of training of the VHVs that manage the funds. Evidence of existing village Revolving Drug Funds (V-RDF) indicates the presence of many other problems, including delays in supply/replenishment of drugs, expired drugs, inappropriate selection of drugs (villagers do not want to take available drugs), misuse of funds, high prices or prices set with no clear criteria, and failure to maintain the real value of the fund.

#### **(5) Protection of the poorer in cost recovery**

In spite of the existing regulation, cost recovery seems to penalize unduly the poor in many facilities, because 1) users are not well informed of the exemption policies, 2) exemptions are unequally applied throughout the country, 3) they often prioritise other categories than the poor (civil servants, monks, students), and 4) there is no consensus or standards on how to identify the poor. In the case of the civil servants, their exemption is especially inequitable since they are anyway entitled to reimbursement by their social security system.

### **9.2.4 Health Insurance**

#### **(1) Current schemes**

There are presently four main insurance schemes in the Lao PDR, one of them operating since the mid-90s and the other ones under implementation or consideration:

- Civil servants social security scheme, which covers civil servants on a reimbursement basis but shows several problems related to poor information, poor financial management and control, and delays in processing claims;
- Social security for the private sector, currently under implementation in Vientiane municipality;
- Community-based health insurance, at present in a preparatory phase;
- Health insurance are considered for particular groups not covered by the other schemes.

## **(2) Feasibility and willingness to pay**

As stated in the 1<sup>st</sup> Progress Report, insurance mechanisms are new to Laos, and most of the population does not as yet rely on financial mechanisms for their living expenses or savings. Feasibility and the willingness-to-pay for each of the proposed schemes is not established, even though health insurance is probably an interesting option in the medium-to-long term. In any case, health insurance usually does not increase the total amount of resources where out-of-pocket or user fee payments are important; in these situations, it merely organizes private spending in a more efficient and equitable manner.

## **(3) Management capacity**

Due to the lack of tradition and experience, the capacity for managing health insurance schemes in the Lao PDR is at present very limited. The only running scheme, the social security covering civil servants, suffers from significant problems related to weak management and control (lack of financial information, delays in claim processing, lack of information to users). In addition, civil servants' exemption from fees at public facilities without proper reimbursement from the Ministry of Labour often results in a transfer of revenue from the MOH to their social security scheme.

### **9.2.5 Financial Management**

#### **(1) Budget procedures and information**

Financial information is difficult to obtain, is not readily available, and is often unreliable, with a number of discrepancies showing up across different documents. Financial reports from most provinces and facilities do not follow any standard and are difficult to interpret. Rules and procedures for financial planning and budgeting do not appear transparent, so it is difficult to know what exactly each number means and how it compares with other figures. Particular issues relate to the inclusion of capital and recurrent costs within the Public Investment Program as “investment” in the Government’s budget, and the lack of clear definition of what part of Foreign funds is included in the budget. This results in some confusion with respect to what constitutes “government” and “public” expenditure,

the possibility of double counting, and as a consequence, a lack of precision in the estimated level of health expenditure in the country.

## (2) Weak financial management capacity

Financial management, especially at the regional, district and facility levels, is generally weak, resulting in somewhat reliable information and control, as well as inefficiencies and waste. The ongoing process of budget decentralization is not clear and procedures seem to vary significantly depending on the capacity of each province or district to manage the process.

**Table 9.7 Average Monthly Household Expenditure on Health in Kip**

		Total	%	Drugs	Medical supplies	Service fees	Other fees
ADB II Study	Total ADB Study	33,056	<b>100</b>	28,317	56	4,346	337
	%	<b>100</b>	-	<b>85.7</b>	<b>0.2</b>	<b>13.1</b>	<b>1.0</b>
	Central Hospitals	2,645	<b>8.0</b>	2,607	14	21	3
	Provincial Hospitals	367	<b>1.1</b>	218	16	0	133
	District Hospitals	5,139	<b>15.5</b>	5,095	0	17	28
	Health Centers	3,665	<b>11.1</b>	3,604	7	12	42
	<i>Subtotal Public</i>	<i>11,816</i>	<i>35.7</i>	<i>11,524</i>	<i>37</i>	<i>50</i>	<i>206</i>
	Villages	?	?	?	?	?	?
	Private Clinics	3,642	<b>11.0</b>	3,306	20	186	130
	Traditional Healers	1,127	<b>3.4</b>	0	0	1,127	0
	Religious Healers	2,983	<b>9.0</b>	0	0	2,983	0
	Pharmacies	13,487	<b>40.8</b>	13,487	0	0	0
	<i>Subtotal Private</i>	<i>21,239</i>	<i>64.3</i>	<i>16,793</i>	<i>20</i>	<i>4,296</i>	<i>130</i>
	LECS						
Total LECS II		4,246	-	3,921	30	188	108
%		<b>100</b>	-	<b>92.3</b>	<b>0.7</b>	<b>4.4</b>	<b>2.5</b>

Notes: The ADB study may not be representative of the whole country, because it covered 11 provinces and did not include Vientiane Municipality, where many patients go to the Central Hospitals. The small proportion of fees paid at Provincial Hospitals was due, according to the study, to a higher % of exemptions in the 11 provinces surveyed (59.1% against 16.9 at District Hospitals and 14.7 at Health Centres). Reports from these facilities indicate a higher level of fee revenues.

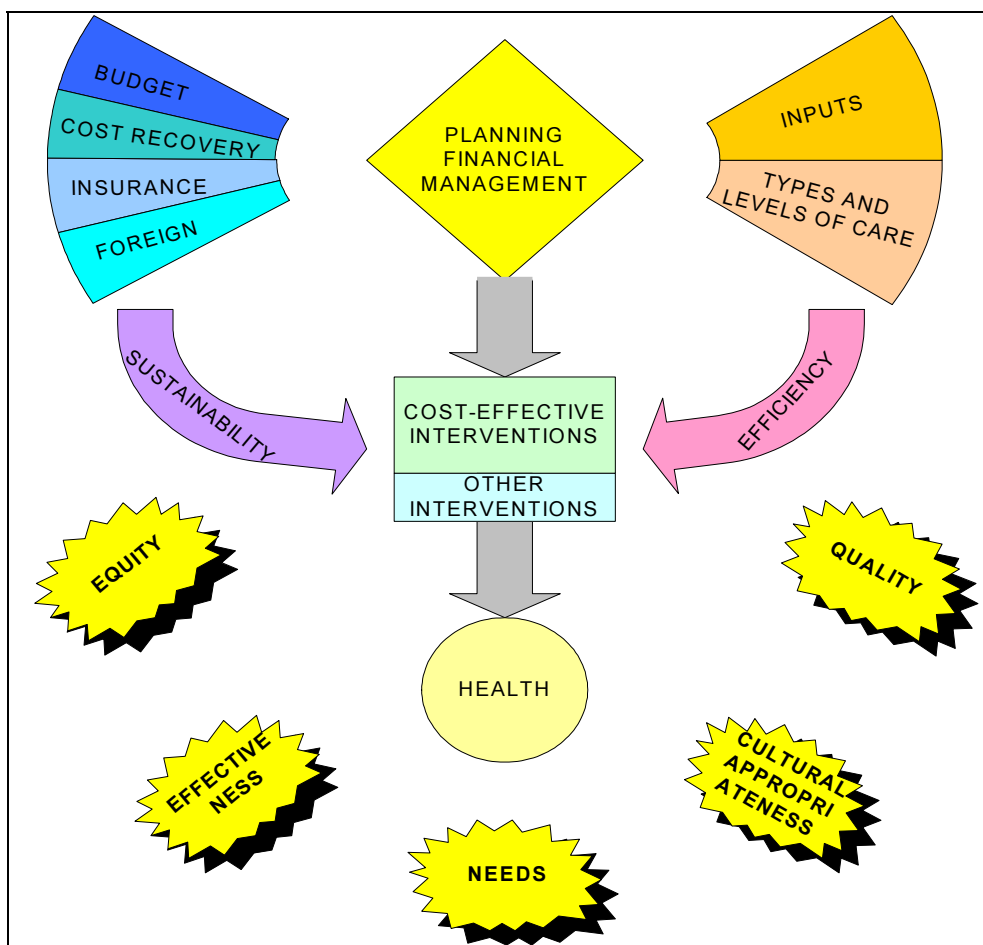
Sources: ADB II PPTA Household Survey and LECS II.

## 9.3 OBJECTIVES

The key policy directions outlined here aim at increasing the economic feasibility and sustainability of the objectives stated in the “Strategy up to the Year 2020” paper, by focusing in the short run on improving the sustainability of sector financing and the efficiency in resource allocation. A major reason for emphasizing sustainability is that for a policy or plan to be implemented successfully, the adequate level of financial resources has to be allocated to it. In addition, resources need to be used rationally and efficiently, especially when they are scarce.



**Figure 9.4 Framework for Health Finance Analysis and Policy**

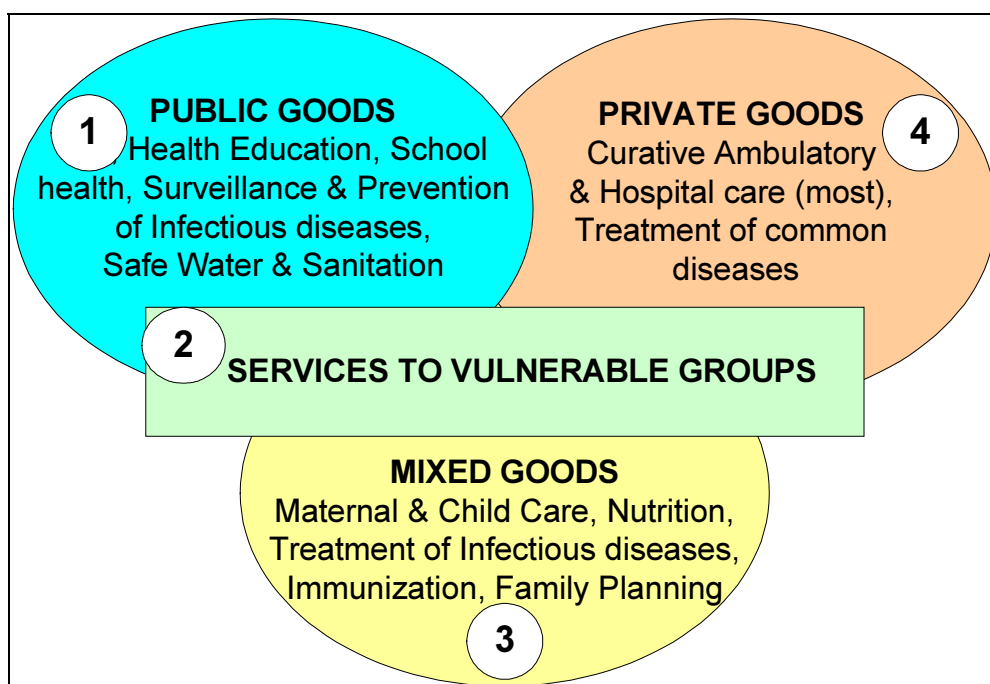


Even though the focus of this chapter is on health finance and allocation, some issues or strategies relating to the organization and operation of health services are touched on because economic consideration cannot be separated from the health plans and activities they relate to.

Finally, the measures regarding the allocation of public resources draw from the well-known public finance framework, which distinguishes three types of health services (see an adapted version in Figure 9.5) and recommends, from an efficiency point of view, prioritising allocation of public funds in the following order:

- Health services and goods with clear public goods characteristics, i.e., those aimed at populations rather than individuals and those with important externalities;
- Health services and goods with mixed characteristics, especially when directed to the poor and other vulnerable groups;
- Health services and goods that are mostly private goods, in the sense that they benefit only the particular persons who consume them.

**Figure 9.5 Public Finance Framework**



#### **9.4 KEY DIRECTIONS**

The objectives outlined above can be addressed through policy actions structured in four major policy directions, which need to be pursued in the short and medium-run (the next 5 years) as their effects will be gradual or may take some time to take hold.

(1) **Improve the financial sustainability of the health sector**

This can be achieved by increasing the level of funding from stable sources and ensuring adequate funding for the operation of the existing network. This implies mostly a reallocation of existing government resources across sectors and within the health sector.

(2) **Improve the efficiency in resource allocation and use**

This means making better use of scarce available resources by reallocating them within the health sector, narrowing the focus of government spending, focusing on improving existing activities rather than expanding, prioritising cost-effective health interventions and reducing waste.

(3) **Promote and rationalize the contribution of private sources**

Private sources already contribute the largest part of sector funding, but they need to be mobilized through more appropriate channels and be better balanced to improve equity; in the long run, health insurance should replace most user fees and out-of-pocket expenditures.

- (4) Improve the capacity of the Ministry of Health and health offices at provincial and district levels for incorporating economic and financial considerations in policy making, planning and monitoring, and sector regulation and supervision; improved financial planning, management and control are key to the success in designing and implementing appropriate policies.
- (5) Improve financial equity by reallocating financial resources and redistributing the burden of financing the health sector.

A major assumption throughout this chapter is that health spending is justifiable not only because of its welfare and equity implications, but also because of the economic returns produced by health investment. Experience from other countries, both developed and developing, have shown that investment in human capital (mostly health and education) is often as or more important than investment in physical capital (including infrastructure) in promoting sustainable development. Even though the burden of disease has not been estimated yet for the Lao PDR, it is reasonable to say that its level of disease imply significant economic costs in lost production due to premature death and preventable morbidity.

## **9.5 POSSIBLE MEASURES**

### **(1) Reallocate public funds toward health**

The GOL should increase significantly the proportion of its budget allocated to health by reallocating part of it from the economic sectors to health. A feasible minimum target level for health spending as a proportion of the government budget would be 5% (a level that has been reached before), and it could be increased gradually to 8-10% as has already been stated in several policy documents.

This measure is based on the assumption that the Lao Government will find it difficult to increase significantly its own general tax revenue in the short run; therefore, any increase in Government spending on health will have to come from a reallocation from the economic sectors. Also, foreign and private sources are not expected to increase much in the near future.

### **(2) Assess the feasibility of interventions and plans under consideration**

The Ministry of Health should emphasize realism and feasibility in planning for the medium and long term, by taking into more thorough consideration economic and other implications. This can be done in two ways. First, feasibility studies should be performed on the main programs and strategies considered for the future, before they are adopted. Second, the MOH should commend studies to estimate the operating costs of each type of facility, incorporate these estimates in health planning and budgeting, and seek to match available resources to financial needs as estimated. This would contribute significantly to

making better use of existing resources, because the appropriate level of resources needed to operate for each facility or program will be known and mobilized in advance, and resources will not be wasted in partially funded and unsustainable initiatives.

### **(3) Prioritise appropriate funding to recurrent costs**

Appropriate funding for the operation of existing facilities is imperative to ensure quality and effectiveness of care as well as financial sustainability and efficiency. On the other hand, foreign sources - such as multilateral and bilateral donors and NGOs - are very sensitive to global economic cycles, and donor countries' priorities; they thus should not be relied upon as a stable source of funds for facility operation, even while they are most needed and welcome for investment and the improvement of current activities.

MOH and provinces should therefore pursue financial self-reliance by prioritising the allocation of sufficient resources from their own budget to recurrent costs of existing facilities, thus reducing the proportion of public resources going to capital expenditure. Emphasis should go to ensuring an appropriate level of medical and other supplies and maintenance, exactly the items that are often missing or insufficient in public facilities. This policy should be implemented as soon as possible, to start building financial self-reliance and progressively reduce the dependency of the existing network on foreign funds. In addition, the government should only expand facilities and activities when it can mobilize resources to operate them appropriately.

“Software investment”, however, including human resource training and development and improvement in policy-making, planning, management and evaluation capacity, should definitely be the second priority for government funds and probably the first priority for donors in the short and medium term. In spite of the existing access problems, extension of the network should not be the country's priority for some time, until the existing system is upgraded and functioning.

### **(4) Identify and prioritise a package of basic services and cost-effective interventions**

In order to make the most of limited resources, the Government should assess and identify a set of cost-effective interventions, design a package of basic health services, and then prioritise allocation of financial resources to these interventions. How much will be needed in order to make this package available to the whole population or at least the majority of it depends on the exact components to be included in the package. Even though the cost-effectiveness of several Primary Health Care interventions is well known and the Public Finance Framework is clear on what activities deserve priority, the particular components need to be assessed in light of the country's reality and eventually regional differences. The Government should also reduce resource allocation to

administrative and support activities and shift part of these resources to PHC services at the district and sub-district level.

**(5) Improve public network rationality and effectiveness**

The MOH should rethink the design and extension of the public facility network, rationalizing it by improving the quality and effectiveness of care in viable facilities, setting up a minimal but effective referral system, and investing in and better integrating village-level activities (VHVs and TBAs) in the network through adequate training, supervision and drug supply. Closing down some facilities that are inoperative or unused, inadequately located (for example too close to each other), or cannot be staffed because of their location, can contribute to the network's rationality and reduce unnecessary costs. It should therefore be seriously considered. This may free some financial and human resources currently wasted, that can then be invested in quality improvement in the remaining facilities. Increased difficulty of access in remote areas, if any, can be mitigated by improving the effectiveness and support to VHVs and TBAs through better training and supervision.

**(6) Reduce emphasis and allocation to drugs**

Efficiency and effectiveness in the health system can be greatly improved by reducing its emphasis on drugs, presently representing more than 50% of health expenditure, essentially by changing the existing incentives to it. This can be achieved by increasing budget allocation to health (as suggested by Measure #1) and especially recurrent costs (Measure # 3), redefining and standardizing user and drug fee policies and levels (Measure # 11), and improving the quality and effectiveness of health care services (Measure # 5).

**(7) Prioritise vulnerable groups in resource allocation**

Vulnerable groups, i.e. those who depend on public services for maintaining and improving their health, should be the main target of public spending. Further work is needed in order to precisely identify these groups, but they probably include at least the poorer families (specific criteria for identifying them need to be defined) and those living in remote areas. Therefore, more resources should be directed to remote areas, to diseases that commonly afflict the poor, and to offer effective services at the bottom of the health system (as stated in Measure # 4).

**(8) Define and regulate a role for private providers**

The MOH should also define a proper role for private providers in the health system; up to now, private practices have been tolerated, but they can play a more active role in the health system, complementary to public providers. This is especially the case for private

clinics and traditional healers. On the other hand, private practice by government health professionals, at present informal, should be regulated; several countries have allowed officially government physicians to offer their services to private clients in public facilities, often by renting office space. This has advantages (increase income and motivation for these professionals, and retain them in public facilities, increase facility revenue) and disadvantages (potential equity issue when public and private clients are treated differently, control over use of public resources), but is usually better than tolerating informal practices.

**(9) Improve staff salaries and incentives**

Part of the additional funding proposed in Measure # 1 should be used to improve staff salaries and incentives; a new Human Resource policy should be developed that ensures regular salary payment and a system of site-based (reward for rural and remote areas work) and performance-based incentives with appropriate criteria and training (see Chapter 10).

**(10) Improve and standardize RDF management and information system**

Management in the user fee system (and especially RDFs) needs to be revamped and improved, especially the system for drug purchase and supply, and the management of funds. Fund managers need to receive appropriate training. The information system regarding user fees needs to be improved and standardized, so that its comprehensiveness and reliability is improved. Government allocation to cover for exemptions should be systematically recorded. Drug purchase and supply procedures should be standardized and be the responsibility of the level with the appropriate capacity (usually the PHOs), in order to reduce the costs of retail decentralized purchasing.

**(11) Revise and standardize user fee policies**

Policies regarding the operation of user fees (including RDFs) and exemptions should be revised, especially those on exemptions; once adopted or confirmed, they should be enforced. Though some flexibility in implementing national policies is welcome, the level of autonomy presently is excessive and often results in inefficiencies, inequities and mismanagement. A critical issue is to revise and change exemption policies, so that they clearly prioritise the poor over other categories. Civil servants should not be exempted because they are already covered by the Ministry of Labour's Social Security scheme.

A major issue that needs to be revised is the actual role of user fees: they should be seen as a complementary source of revenue, and not the main one, substituting for a decreasing government budget, as is the case in many facilities. Prices should be standardized (maybe with limited regional variation) but charged below market price (which requires reducing procurement costs). The government should systematically bankroll the value of

the exemptions given to ensure sustainability. An alternative to full exemption that could be contemplated is the introduction of a sliding scale, with different levels of fees paid by different people based on their ability to pay.

**(12) Coordinate insurance schemes to ensure equity and efficiency**

The different health insurance schemes under consideration or implementation should be coordinated within a larger plan to ensure that every Lao citizen is covered for its health care needs. They should be designed in such a way as to complement each other, rather than constitute isolated systems. The different schemes should be designed to ensure equity throughout the health system; an approach to do so would be to include some level of cross-subsidization across the different schemes. Integration of the different schemes is not recommended in the short run, but policy coordination and the development and use of one single pool of managerial expertise would certainly reduce costs.

It is common practice in many countries to separate the financing and provision functions mainly because they require different expertise; it would probably be more effective and economical to concentrate all financial and actuarial responsibilities in one single institution (most likely the Social Security Organization), while the Ministry of Health (with the PHOs and DHOs) can concentrate on what is its own responsibility and expertise, the provision of quality health services.

**(13) Stimulate and regulate the mobilization of private sector resources**

GOL should stimulate the mobilization of private resources by setting up or encouraging private schemes to provide coverage to certain population groups. Instituting health insurance for the formal urban private sector through the Social Security Organization, as is being done, is one option, even though careful planning and cautious implementation are necessary (see next Measure). The feasibility of the alternative of stimulating and regulating private insurance in the short-to-medium term is questionable in light of the little tradition in Laos of insurance schemes in general.

**(14) Implement gradually insurance schemes**

Given the limited experience and capacity to manage insurance schemes in the country, the government should avoid conducting several isolated experiences simultaneously, because each of them will require building managerial and actuarial capacity as well as administrative infrastructure and resources. It would be wiser to focus on one (or two at most) system at a time, first on a pilot scale, make it work satisfactorily, and learn from this experience, before extending it or adding new schemes. The civil servants scheme, because it is already running and its inefficiencies are costly, should be improved in the short run.

### **(15) Improve financial management capacity**

The MOH, in coordination with the MOF and/or international donors, should establish a comprehensive training program aimed at improving the capacity for financial management at all levels, but especially at the provincial and district levels. This program should include budgeting, financial planning, financial monitoring and control, and simple costing. Technical staff at the Social Security Organization should also receive training in actuarial calculation and claims processing.

### **(16) Improve the reliability and availability of financial information**

The MOH, in association with the Ministry of Finance and CPC, should clarify and standardize budgeting rules for the health sector, and ensure that they are followed at regional and local levels. Financial reports should be standardized according to clear rules and definitions. A policy of transparent financial information should also be adopted and encouraged at all levels. Financial information and budget analysis should be seen and used as a fundamental management tool rather than confidential information. Budget and Cost Recovery information must be made available and circulate freely, in order to contribute to strengthening financial management capacity.

### **(17) Adopt a simplified system of health accounts**

In order to improve coordination and integration in financial planning, management and reporting, the country should consider adopting a simplified version of a health accounts system. This would allow the identification of the financial flows between sources (such as government, households and corporations, foreign), financial intermediaries (such as social security and insurance companies), providers (the different kinds of public and private), and purposes or uses (type and level of care, target group, the different inputs, etc...). It would allow to revise and confirm the estimation of national spending on health (by eliminating possible duplications), and at the micro level, it would make possible to determine the real amount of resources available to each facility from the different sources. Such a system would contribute to improving efficiency in resource allocation by making explicit where and how resources are spent. A preliminary mapping of financial flows from sources to providers is shown in Figure 9.1, with the respective estimated proportions of national health expenditure.

## **9.6 DISCUSSION AND BACKGROUND INFORMATION**

### **9.6.1 Implications for Other Areas**

Health sector financing and resource allocation are just the economic dimension of the design and implementation of health policies. It must therefore be closely integrated with



the technical (medical, epidemiological, etc..) aspects of health planning and monitoring. Financial resources can only be mobilized and allocated when we know what to do with them. Several measures proposed here actually intersect with other areas and chapters in this report. For example, the contents of the proposed package of basic health services should be defined based on medical, epidemiological, social and economic considerations (see Chapter 14 for a consideration of a Primary Health Care package). Second, the recommended design and implementation of an incentive system for health professionals in the public sector should be developed jointly with Human Resource Development specialists.

### **9.6.2 Consensus on Certain Topics**

Several measures outlined here are not new; they have been made in previous studies done or commended by international organizations, and some of them have in fact been included in MOH policy documents, especially the “Health Strategy up to the Year 2020”. Among those we can mention the need for the Government to increase its spending on health and ensure appropriate funding of recurrent costs, for prioritising the poor and remote areas to reduce inequities, for prioritising PHC services, or for reviewing and improving cost recovery management and exemptions policies.

### **9.6.3 Open Questions**

Other issues and measures, however, are not yet consensual and are thus subject to debate. We hope that this document will stimulate and enrich such debate and encourage the emergence of a consensus. Among these policy issues we can cite the feasibility of health insurance in the short run and the advantages of a coordinated approach, the role of private providers in the system and especially private practice by public facilities professionals, the degree of regulation/standardization and local autonomy to be given to district and facility managers, the recommendation that network expansion be subject to economic considerations, or the appropriateness of closing down certain health facilities in the face of the difficulty in reaching remote areas.

### **9.6.4 Difficulties and Obstacles**

The policy options outlined here, even in their present, preliminary stage, are very much interdependent. Some of them are critical in the sense that they condition the implementation of others. Such is the case for Measure # 1, increasing the proportion of the budget allocated to health. If this is not achieved, several other measures will not hold; for instance, in the absence of new resources from budget, there will be very little room for MOH and provincial governments to reallocate resources to recurrent costs, because most of the current budget is tied up with personnel (in the case of government budget) and capital expenditure (in the case of foreign funds). While increasing allocation to health implies reducing the resources available to the economic sectors, the suggested

increase is not likely to represent an important fall in these resources, and the difficulty may be more political (in the sense of a perception of the importance of investing in human capital) than economic.

Another significant difficulty lies in the level and pattern of civil servants remuneration. Evidence shows that not only salary levels are extremely low, and insufficient to allow minimal living conditions, but that they are not paid regularly, in some areas being paid in several months intervals. This is one important factor in several distortions mentioned earlier. Many of the measures proposed here assume that this situation will improve significantly, because no improvement in quality and effectiveness of care will happen if civil servants are not paid appropriately and regularly. And only partial solutions to this problem can be found and implemented within the health sector alone.

Finally, the suggested prioritisation in resource allocation to the district and village levels and a PHC package of services may be difficult to implement because it implies the devolution of power and economic clout from the large central hospitals, central offices - and to a lesser extent the larger provincial hospitals - to the lower level of the system. However, the role of these institutions in a health system is to support (both technically and as referral units) the provision of services at the lower level of the system, which needs considerable upgrading and support if the overall effectiveness and quality of the health system is to be improved and people in remote areas are to receive appropriate care.

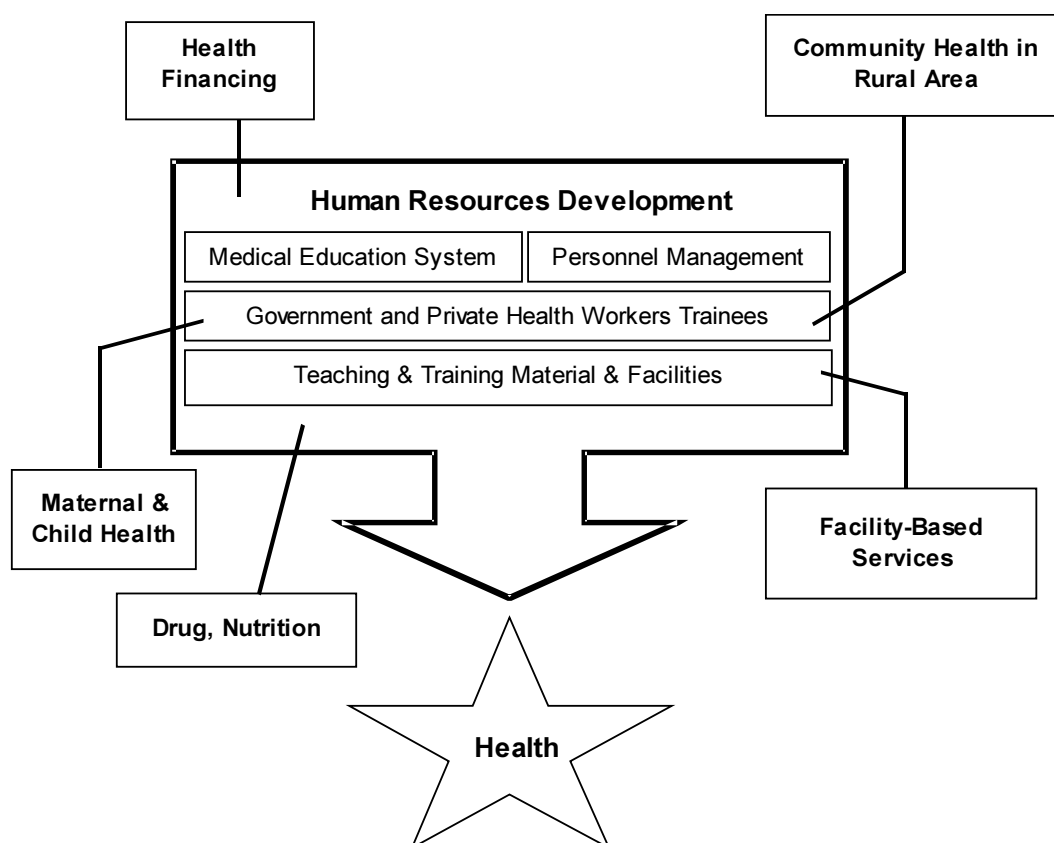
## CHAPTER 10

# FRAMEWORK FOR HUMAN RESOURCES DEVELOPMENT

### 10.1 INTRODUCTION

Human resources are the soul of any institution and the health system is no exception. For the Ministry of Health, human resource development appears to be intimately linked to a number of identified frameworks, principally the ones dealing with facility-based services, community health in rural areas, maternal and child health and health finances (Figure 10.1).

**Figure 10.1 Schematic Relations of Frameworks**



## **(1) Definition of the Framework of Human Resources Development**

The human resources development framework takes into account the implementation of professional quality for health workers, including their general and medical education, and clinical and technical skills. Also, following the same goals (better health care for more people) the strategic position of the health worker in the health system and society are examined.

## **(2) Aspects Covered**

### **1) Developing the Medical Education System**

Human resources development is focused on improving the teaching (teaching material and facilities, training of trainers) and training (improving hospital practices) systems for health workers.

### **2) Personnel Management**

It emphasises the need to consider carefully the distribution of health workers between urban and rural, especially remote, areas. Health workers should be deployed at the right time of their career and to an appropriate position in accordance with their education and skills and the Ministry's policy.

Quality of education must be the principal objective during pre-service training involving also hospital training by improving practising in an intensive manner and inculcating in health workers the idea of responsibility to society.

### **3) Teaching and Training Material and Facilities**

Health teaching and training opportunities are all contained in all health facilities (hospitals at all levels and health centres) and dedicated schools. Teaching and training materials need to be available at all stages of medical education for health workers.

### **4) Other Aspects**

Education and training for Private Health Providers such as Village Health Volunteers, Traditional Birth Attendants, and Village Health Providers should be considered as well as education and training for government health workers.

Trainer education should come essentially from the above with limited and focused knowledge from abroad.

### **(3) Relationship with other frameworks**

Facility-Based Services: Appropriate settings, access, teaching and training material are of importance.

Community Health in Rural Areas: Staffing remote areas remains the main challenge for both frameworks.

Maternal and Child Health: It involves health workers with specific qualifications and appropriate training.

Health Finances: Will help by improving the existing medical education system and also improving facilities and necessary incentives for health workers working in remote areas.

## **10.2 IDENTIFIED ISSUES**

The following issues have been identified as important from a long-term perspective on human resources development in the health sector.

- (1) Health staff are distributed unevenly between rural and urban areas. Deployment of medical doctors and middle-level paramedical specialists to the provincial and district levels has not progressed substantially in the past years, meaning that the shortage of these staff in rural areas will continue for the foreseeable future. In addition, deploying qualified staff to remote health centres is difficult. Staff do not want to be posted to remote areas for socio-economic reasons.
- (2) The closure of some provincial auxiliary nursing schools and higher enrolment requirements for the present auxiliary nursing schools have reduced opportunities for people in remote areas to be health workers, including ethnic minorities, as they are disadvantaged in terms of access to better general education. It might adversely affect the supply of auxiliary nurses in remote areas in the short- and medium-term.
- (3) Middle and high-level health personnel are now only trained in Vientiane Municipality, since three Medical Assistant Schools have been closed in the provinces. This threatens to accelerate the concentration of health personnel in Vientiane.
- (4) The current health status in rural areas, where the major diseases are infectious diseases and needs and demand for modern healthcare are not clearly recognised, suggests that “highly qualified generalists” and health workers capable of dealing with PHC are more needed now rather than specialists.
- (5) The level of knowledge and skills of health workers in health facilities varies considerably even within the same qualification and rank. As a whole, the quality of health workers is poor. As medical students, their academic achievement is not strictly examined and hospital based clinical practice is not adequately provided in limited time.

After they start working as health workers, their abilities as practitioners are hardly evaluated. Moreover, opportunities for continuing education to refresh and brush up on their knowledge and skills are quite limited. They rarely exchange experiences or teach and learn mutually.

- (6) Job descriptions for health workers are not clearly identified. Neither health workers nor the public have a strong awareness of their career profile and professional and social responsibilities. This fact results in poor health care services delivered by health workers.
- (7) Lack of teaching and learning materials, poor education facilities, and insufficient capacity of teaching staff hinder the quality of teaching and learning in all medical schools. Especially, lack of textbooks in Lao language prevents students who have insufficient foreign language proficiency from absorbing professional knowledge by self-learning. In addition, quality health workers cannot be produced without qualified teaching staff both in academic and clinical settings.

### **10.3 OBJECTIVES**

- (1) To mitigate the uneven distribution of health workers between urban and rural areas.
- (2) To encourage health workers to be strongly aware of their professional and social responsibilities.
- (3) To improve the knowledge and skills of health workers

### **10.4 KEY DIRECTIONS**

#### **(1) To decentralise the pre-service medical education system**

Needs and demand for modern healthcare is increasing in rural areas of the country. Therefore, from the long-term point of view, it is worth preparing to decentralise pre-service medical education. For instance, the existing Auxiliary Nursing Schools and Public Health Schools (Champasak, Savannakhet, Luangphrabang, Khammuan, and Vientiane province) should be strengthened. Among these schools, three former Medical Assistant Schools (Champasak, Savannakhet and Luangphrabang) have good potential to educate middle-level health workers.

It is suggested that a co-ordination committee, which will include representatives of all medical schools in the country, relevant departments in the Ministry of Education (supply side), and the Ministry of Health (demand side: the dept. of curative, hospitals, and provincial/district health offices), be created. The Department of Organization and Personnel will chair this committee and will be responsible for planning and implementation.

**(2) To facilitate access to professional health workers for people in remote rural areas**

In order to improve the access to healthcare services for people, including ethnic minorities, in remote areas, it is essential to deploy appropriate health workers at district and community levels and to facilitate the recruitment of ethnic minorities to the health profession.

**(3) To provide appropriate incentives for health staff working in remote rural areas**

Disparity between rural and urban areas in terms of distribution of health workers is still large. It is necessary to consider appropriate incentives for health staff to encourage them to work in rural areas. At least, regular delivery of the salary is mandatory.

**(4) To improve the qualifications system for health workers**

A reconsideration of the current system of ranking and qualification of health workers is recommended. Using the same title for different ranks of health staff, such as nurse, pharmacist, and laboratory technician for both middle- and low-level staff, obscures what kinds of service the staff member is able and obliged to provide to patients. Distinctive qualifications for each kind of health worker and corresponding job description should be defined.

**(5) To improve the education system for medical doctors**

In order to increase the number of skilled medical doctors with good clinical practice, it is necessary to improve the education system for medical doctors in such a way as to promote the career profile of a medical doctor as a long term education for physicians and practitioners with high personal and social responsibility.

The Dept. of Organisation and Personnel, of Curative Dept., Teaching hospitals and other relevant departments in the Ministry of Health are expected to coordinate with the Faculty of Medical Science in the National University of Laos and relevant departments in the Ministry of Education to introduce an integrated system for teaching and training and also a new licensing process under a general agreement.

**(6) To organise and sustain continuing medical education and training for all health workers**

It is essential to provide routine training opportunities for all health workers to refresh and brush up on their knowledge and skills as well as to inform them about new concepts and technologies.

A Continuing Medical Education System will be established for junior and senior health workers, giving official credit to attendants.

It is proposed that high priority should be given to middle-level medical assistants and “under-qualified” auxiliary nurses who received less than 2 years of pre-service education. It is strongly recommended to develop classroom type and on-the-job refresher training which can be routinely held at central, provincial, district, and health centre levels.

**(7) To enhance the culture of teaching and learning of health workers**

Health workers have the potential to teach each other and learn by themselves. Forming associations of health workers will facilitate networking and create various kinds of teaching and learning opportunities.

Moreover, in medical education schools, medical doctors should be encouraged to teach middle- and low-level health workers in pre-service training. Delivering lectures and/or participating in teaching classes could be a part of the Continuing Medical Education System earning credit towards licence renewal.

**10.5 POSSIBLE MEASURES**

The possible measures are summarised in Table 10.1.

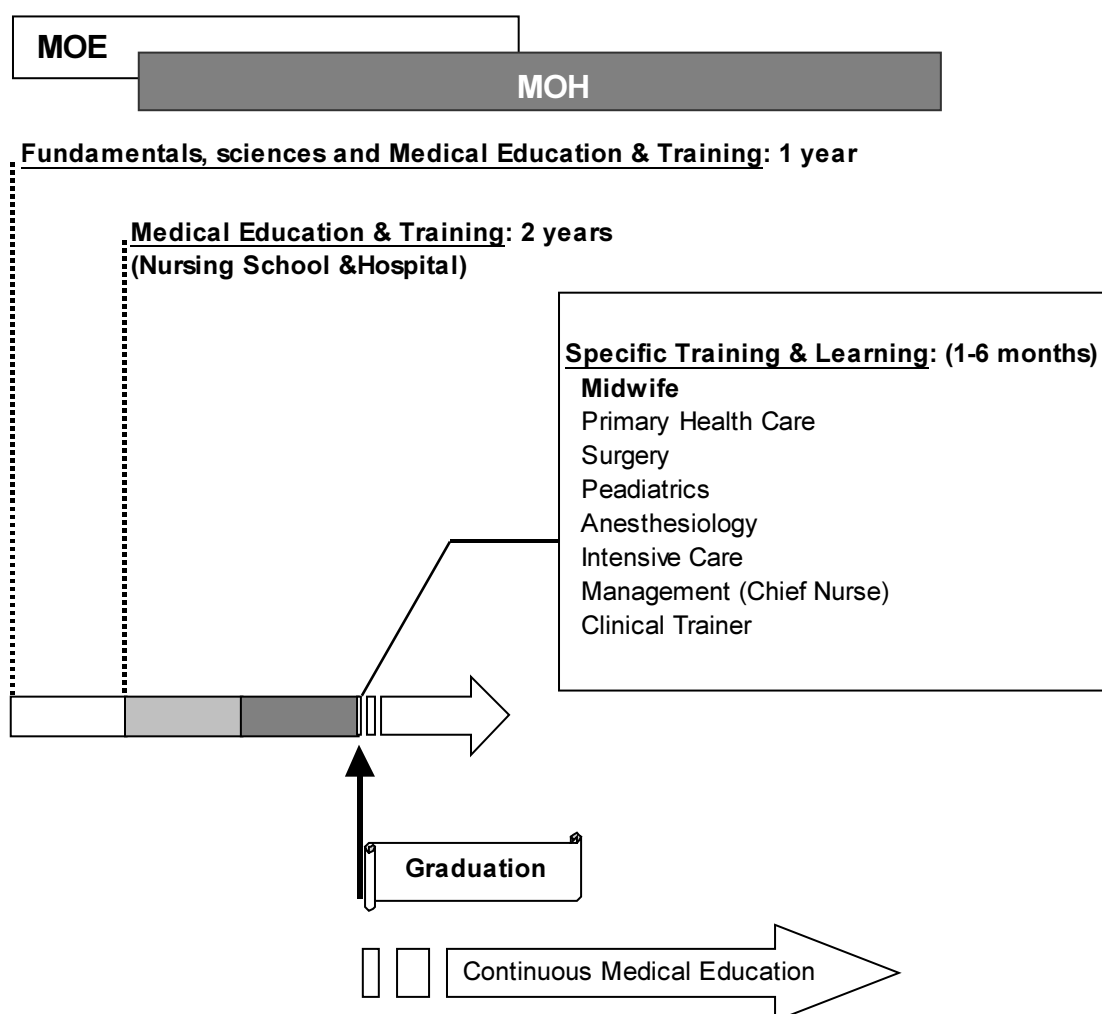
**Table 10.1 Summary of Framework**

	Possible measures	Key directions	Objectives
1	Upgrade Auxiliary Nursing Schools	(1)	(1)
2	Train PHC workers	(2)	(1)
3	Give incentives for health workers appointed in remote rural areas	(3), (2)	(1)
4	Define clear job descriptions and names of qualifications	(4)	(2)
5	Develop a multilevel evaluation system	(4), (7)	(2), (3)
6	Increase clinical skills for Good Clinical Practice of MD	(5)	(3), (2)
7	Establish a licensing system for MDs	(5), (4), (7)	(3), (2)
8	Create a Board of Physicians	(5), (4)	(3), (2)
9	Formally combine academic and hospital Medical Education System	(5), (4)	(3), (2)
10	Upgrade Medical Assistants to MD through Continuing Medical Education System	(5), (4)	(3), (2)
11	Establish a Continuing Medical Education system for high-level health workers	(6), (7)	(3)
12	Organise and implement routine education programmes for in-service health workers	(6), (7)	(3)
13	Create horizontal networks of health workers	(6), (7)	(3)
14	Facilitate and offer medical exchange programmes abroad	(6), (7)	(3)
15	Facilitate the production of professional documents in Lao language	(7), (6)	(3)
16	Invest in enhancement of facilities, materials and equipment in medical schools	(7), (6)	(3)
17	Invest in improving quality of teaching staff	(7), (6)	(3)
18	Give authorised status to health workers who are working, training, and teaching	(7)	(3)



- (1) **To upgrade existing Public Health Schools and Auxiliary Nursing Schools:** The 2-year nurse education course for the existing Public Health Schools and Auxiliary Nursing Schools in Champasak, Savannakhet, Khammuane, Vientiane, Luangphrabang, (and Oudomxay) provinces will be strengthened. Post graduation speciality training will be available for all nurses and delivered by the College of Health Technology (Figure 10.2).

**Figure 10.2 Nursing Education and Training**



- (2) **To train PHC workers to be posted exclusively at health centre level:** Those who have completed lower secondary school will be qualified to attend the 3-year PHC worker course.

Current Public Health Schools and Auxiliary Nursing Schools in Champasak, Savannakhet, Khammuane, Vientiane province, Luangphrabang, (and Oudomxay) will be in charge for delivering this course.

Communities where health centre staff are needed should select candidates. Existing private health providers in communities, as long as they meet the general education

requirement, can also be candidates as well as new graduates from lower secondary schools. Students are obliged to go back to their community as health centre.

It is recommended to deploy a registered nurse for the health centre where PHC workers are posted. The nurse will supervise PHC workers and be in charge of delivery and pre- and post-natal care. An education curriculum and job description for PHC workers should be developed in accordance with multipurpose domain. For example, EPI, prevention, hygiene and nutrition will be key components.

- (3) **To give incentives for health workers appointed in remote and rural areas:** by 1) providing free access to the welfare system for health workers and their immediate family (e.g. housing), regular health check ups, regular payment of salary, earning seniority points within the pension system, and career promotion based on years of service in rural areas; 2) regular supervisory visits from higher levels such as central level and provincial health office.
- (4) **To define clear job descriptions and distinctive name of qualification for health workers:** A clear job description needs to be generated for all ranks of health staff including their professional and administrative responsibilities and tasks. Table 10.2 is indicative of the field of responsibilities and Table 10.3 is a tentative classificatory system.
- (5) **To develop a multilevel evaluation system (Tests and certifications):** At all levels of the health education system (including pre-service and continuing medical education), health workers will be periodically tested on the ground of knowledge (school learning) and practice (training at fields, hospitals, health centres and communities) and certified by a final complete examination of knowledge and skills. Health workers with more administrative responsibilities (or seniors) will have to submit to their immediate supervisor a personal comprehensive annual report on their professional experience, progress and prospective plans.

**Table 10.2 Job and Task Description of Health Workers**

	Medical Doctors				Medical Student 5-7th year	Medical Assistant	Nurse		Pharmacist	Dentist
	Physician Surgeon	Internist	Resident	Fellow			Adults Paediatrics	Midwife		
<b>Patient</b>										
Interview										
Clinical Examination										
Severity Evaluation										
Hygiene										
Consultation										
Follow Up										
Chart Recording										
Chart Checking										
Good Practices										
<b>Diagnostic</b>										
Preliminary										
Full Diagnostic										
<b>Paraclinical Tests</b>										
Ordering										
Interpretation										
Checking Values										
<b>Therapy</b>										
Ordering										
Checking Posology										
Drug Distribution										
<b>Pregnancy</b>										
Prenatal Care				Gyn - Obs						
Delivery				Gyn - Obs						
Post Natal Care				Gyn - Obs						
Birth Spacing				Gyn - Obs						
Dietetics										
<b>Medical Education</b>										
Health Workers										
Public										
Contents										
<b>Managing</b>										
Records										
Material & Equipment										
Notifying Cases										
Epidemic Alert										

**Table 10.3 Classificatory System of Health Workers**

**Present System**

Ranking	Title	Training
High level	Specialist Post Graduate Medical Doctor Pharmacist Dentist	Post Graduation Programme Post Graduation Programme Medical education / FMS Bachelor of Pharmacy / FMS Bachelor of Dentistry / FMS
Middle level	Medical Assistant Nurse Hygiene Inspector Laboratory Assistant Assistant Pharmacist Physical-Therapist	Medical Assistant Registered Nurse-Midwife / CHT Hygiene Inspector / CHT Medical Science / CHT Assistant Pharmacist / CHT Physiotherapy-Rehabilitation / CHT
Low level	Pharmacy Technician Auxiliary Nurse Laboratory Technician	Pharmacy Technician Auxiliary Nursing School Laboratory Technician

**Proposed System**

Ranking/Title	Requirement
Professor of Hospital	Medical Doctor + clinical teacher
Specialist	Doctor + Post Graduate Education
Doctor	Medical Doctor Medical Assistant + Upgrading (5 Years CME)
Dental Doctor	Surgeon Dentist
Dentist	Dentist Bachelor
Nurse	Registered Nurse/Midwife Auxiliary Nurse (with 11 years GE) + Upgrading
Pharmacist	Pharmacist Bachelor
Hygiene Inspector	Hygiene Inspector
Assistant	Assistant Pharmacist Physical-Therapist
Medical Technician	Laboratory Technician Pharmacy Technician Auxiliary Nurse with 11 years GE Auxiliary Nurse with less than 11 years GE Primary Health Care Workers
Medical Engineer	Faculty of Engineering

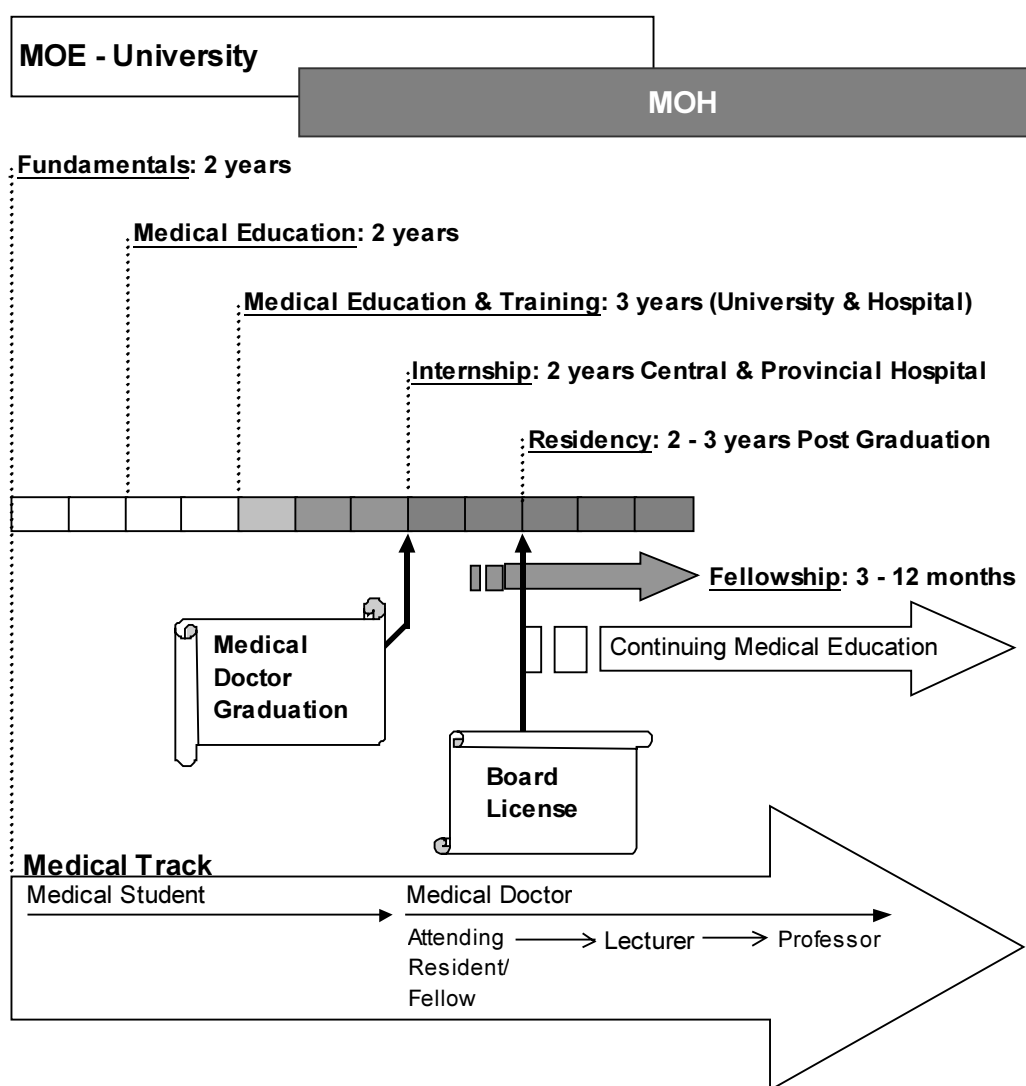
Abbreviation:

FMS = Faculty of Medical Science; CHT = College of Health Technology;

CME = Continuous Medical Education; GE = General Education

- (6) **To increase clinical skills for Good Clinical Practice of Medical Doctors:** 1) by improving the externship programme during the 5<sup>th</sup> and 6<sup>th</sup> year and extending it to the 4<sup>th</sup> year (central hospitals) for students in the Faculty of Medical Science; 2) by introducing a 2-year internship at central and provincial hospitals after graduation from the Faculty in order to acquire full skills, self confidence and autonomy as a responsible physician (Figure 10.3). The salary rank during the time of provincial duty (9<sup>th</sup> year) must be examined in order to at least match any other salary in the 11 + 8 education system.

**Figure 10.3 Education and Training for Medical Doctors**



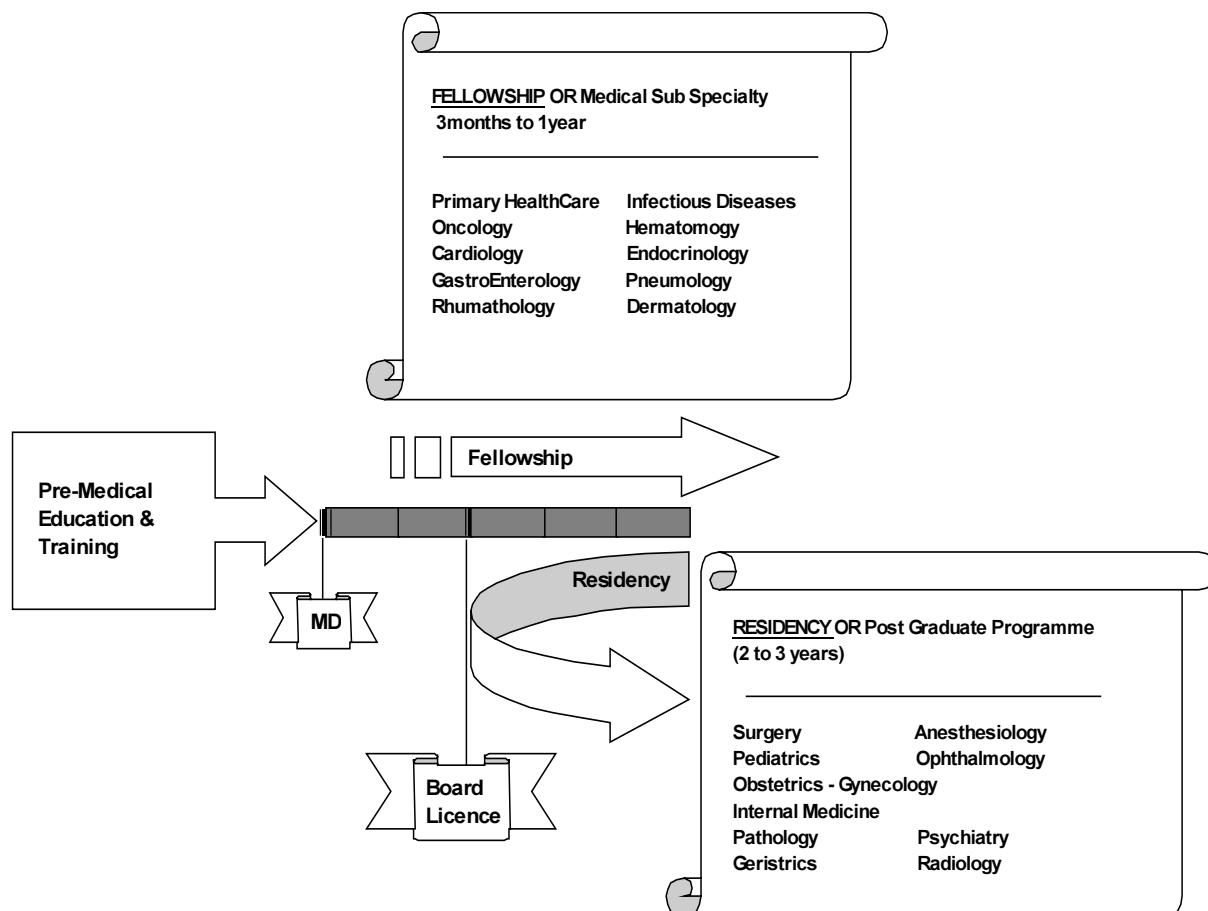
- (7) **To establish a licensing system for Medical Doctors:** A final test for Certification/Licensing for medical practice in the community and the hospital will be developed. After the two-year internship at the central and provincial hospitals, Medical Doctors will be allowed to sit a final test for board certification allowing medical practice at the national level including hospital, clinics and other private

facilities. The Medical licence, issued by the Board of Physicians, will be granted for a 2-year period and renewed on the basis of earning credits through the Continuing Medical Education system (refer to (8), (11) and Figure 10.3).

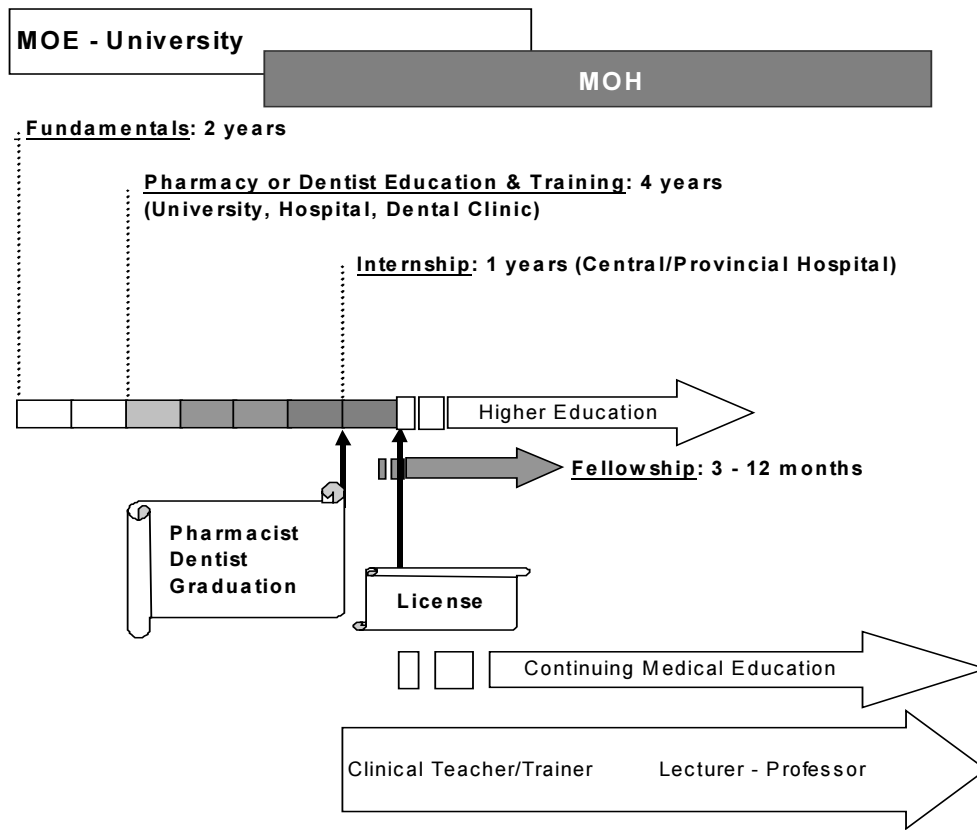
- (8) **To create a Board of Physicians:** A Board of Physicians will be formed by the different institutions responsible for teaching and training future medical doctors including the Ministry of Health, the Ministry of Education and training hospitals (University, Central, Provincial and District Hospitals). Beside other responsibilities the Board will authorise and renew licences for medical doctors as practitioners. The Board also will work closely with the Council of Medical Science.
- (9) **To formally combine the academic and hospital Medical Education Systems:** In order to harmonise most of the teaching and training components, a Memorandum Of Understanding (MOU) needs to be developed between the departments of the MOE and MOH in charge of the corresponding Faculties, schools and hospital teaching facilities. It will fix the duties and rights of all parties regarding teaching positions and ranking, student attendance (numbers and grades), skills and tests, the necessary teaching materials and teaching facilities. Addenda will be added to such MOU regarding any post-doctoral programme involving a University based Faculty (or other teaching institution) and Hospital based Training including national and donor programmes.
- (10) **To upgrade Medical Assistants to Medical Doctors through the Continuing Medical Education and licensing system:** In order to harmonise career and ranking of medical assistants within the functional categories of the health services, it is strongly proposed to develop a new upgrading system for medical assistants rather than the current system which requires them to attend a full-time 7 year course at the Faculty of Medical Science. A five year Continuing Medical Education system will deliver courses for a limited time each year in order to avoid extended periods of absence of Medical Assistants from their positions. The system will be applied to the latest graduate medical assistants to end in their 30s, between 35 to 39 years old (refer to (4) and Table 10.3).
- (11) **To establish a Continuing Medical Education (CME) system for Medical Doctors and other high-level health workers:** A residency programme (2 to 3 years) will be developed for medical doctors who want to enter a speciality as postgraduates. Such practitioners will also supervise as clinical teachers junior medical students. A fellowship programme (sub-speciality of 2 months to 1 year) will be developed for medical doctors, dentists and pharmacists. A fellow will also be involved in teaching within the range of their expertise including clinic and laboratory practices (Figure 10.4)

A higher education programme for dentists and pharmacists will be favoured to pave the way for a professional career as well as for medical doctors. It should be included in a general agreement between MOH and MOE concerning medical and paramedical education (Figure 10.5, Figure 10.6, and refer to (9)).

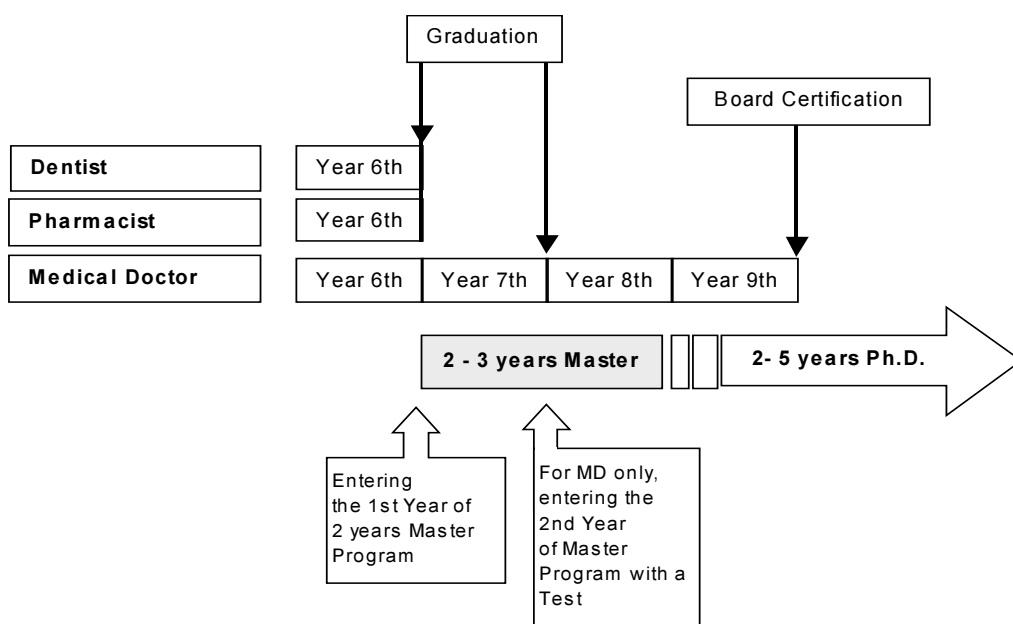
**Figure 10.4 Medical Education for Specialization (Medical Doctors)**



**Figure 10.5 Education and Training for Pharmacists and Dentists**



**Figure 10.6 Higher Education and Training for Faculty of Medical Sciences Graduates (Summary)**





- (12) **To organise and implement routine education programmes for in-service health workers:** by 1) developing a standardised framework of classroom-type refresher training which can be routinely held both at central and provincial levels, and 2) forming mobile teams from the central and provincial hospitals which will periodically provide on-the job training to district hospital staff on a routine basis.
- (13) **To create horizontal networks of health workers in order to expose them to various kinds of opportunities for learning and exchange:** Associations (Medical doctors' association, Pharmacists' association, Nurses' association, etc.) must be encouraged and partially funded at the beginning. Personnel and information networking can be facilitated at all levels (by editing internal reports, journals, posted notes and technical documents in Lao). Meetings and training can also be organised at hospital, district, provincial, regional, and central levels. Furthermore, exchange programmes between different national and international associations can be arranged (also refer to (14)).
- (14) **To facilitate and offer medical exchange programmes for the acquisition of international knowledge:** by 1) inviting teachers from abroad to the Faculty of Medical Science and other teaching institutions; 2) organising an annual conference on Medical sciences at the regional level; 3) giving more opportunities to study abroad for students and graduates for learning specialities; 4) favouring faculty members and clinical teachers to attend international congresses.
- (15) **To facilitate the production of high standard professional documents in Lao:** Editorial board for medical textbook; limited number of authors on a technical or conceptual document.
- (16) **To invest more in the enhancement of facilities, materials, and devices for teaching and learning in health worker education institutes:** the Faculty of Medical Science, the College of Health Technology, Public Health Schools, and Auxiliary Nursing Schools.
- (17) **To invest more in improving quality of teaching staff:** existing teaching staff in the Faculty of Medical Science, the College of Health Technology, Public Health Schools, and Auxiliary Nursing Schools, and prospective teachers and trainers among capable health workers.
- (18) **To give authorised status to health workers who are working and training as well as teaching:** For example, Medical Doctors who are working and training students and junior medical doctors in hospitals as well as teaching, are entitled to be called "clinical teachers" or "Professor of Hospital" at medical schools (refer to Table 10.3). Appropriate monetary incentives and career promotion should follow the status. It should be based on the criteria of MOH that are distinguished from those of MOE (such as professor of university or assistant professor, lecturer). In order to introduce this system, MOH and MOE should reach agreement upon it (refer to (9)).

Likewise, Dentists, Nurses, Pharmacists or other health workers, who are working in health facilities as well as teaching in schools, should also be entitled to have authorised status.

## 10.6 OTHER SIGNIFICANT DISCUSSION TOPICS

The following issues remain to be discussed in further detail.

Quotas for ethnic minorities: Special attention should be paid to ethnic minorities to increase their access to healthcare services. For example, special scholarships could be provided to ethnic minority school students to enable them to proceed to upper secondary school and then to nursing school.

Multipurpose learning: Beside the current medical education system with separate functions for different types of health workers, it has been suggested that attention be given to multipurpose training for middle level personnel. Such a training strategy will emphasise knowledge of curative services but also primary care, public health, and health management for the most important fields.

Midwives: In accordance with the major concern of improving mother and child health, midwife professional education needs special attention. Registered nurses need to be able to assist pregnant women and in delivery soon after completion of their 3 years at nursing school. In order for recent graduates to be efficient and reliable special training can be applied focusing on an intensive hospital based training program. It is proposed that an additional 3 to 6 months practical experience at central and provincial hospital focus on obstetrics, with specific short courses on reproductive health, post delivery care, pre and post natal care for mother and new born, birth spacing, hygiene (refer to Figure 10.2).

Special postgraduate programs for nurses need also to be available (e.g.: midwifery, use of surgical instruments, epidemiology (Public Health), management (chief nurse)) and shared, for instance, among the Faculty of Medical Science, the College of Health Technology, the National Institute of Public Health, and other centers/institutes under the Ministry of Health regarding their respective domains of expertise.

Medical Doctor's curriculum: It has been suggested that the present Medical Doctor's curriculum including duties (job description) be revised. More suggestions are needed. It has also been suggested to give learning opportunities for Medical Doctors to be Primary Health Care specialists with specific skills and responsibilities. A one-year course with practical trainings can be developed including optional courses and training (e.g.: family practice, sociology, health insurance)

Training for patient chart recording: The teaching and training of medical students (mandatory for students, interns, fellows to fill and/or check the validity of records) and nurses to learn how to record patient charts is needed. Students (4<sup>th</sup> and 5<sup>th</sup> years of medical study) should be in charge of recording Charts and computer database management at the ward level. Chart

recording should be supervised (checked) by Medical Doctors including interns, medical attendants and fellows.

Health Centre based workers: Health workers dedicated to work at the health centre need extra training in management, such as reporting, budgeting and planning, and communication skills. Extra training for these health workers should be taken into consideration. For example, the training should be delivered during the 3-year programme of nursing as optional courses or after special training with a certificate.

Rotation: In order to have the appropriate health centre staff and maintain their motivation (assuming 2 staff are posted at a health centre: a Nurse and a PHC worker), a rotation system for nurses should be not at the district level but at provincial level. A system for equitable rotation needs to be developed.

# CHAPTER 11

## FRAMEWORK FOR HEALTH INFORMATION SYSTEM INCLUDING GEOGRAPHIC INFORMATION SYSTEM

### A. FRAMEWORK FOR HEALTH INFORMATION SYSTEM

#### 11.1 Introduction

A health information system is defined “as a set of components and procedures organized with the objective of generating information which will improve health care management decisions at all levels of the health system”<sup>1</sup>. It is composed of subsystems, information process, management structure, and decision-makers. The five interrelated subsystems (Figure 11.1) are:

- epidemiological surveillance for notifiable infectious diseases, environmental as well as behavioural patterns and other risk factors;
- routine service reporting from all levels of the health system (may include community level reporting);
- special programmes reporting such as those for EPI, ARI, CDD, Leprosy, TB, malaria, and outreach (including mobile clinics);
- administrative subsystems including those for finance, human resources, drugs and other logistics, research, training, and document management; and
- vital statistics particularly births, deaths and population movements.

For information to be useful in improving management of health system, a health information system should have integrated sets of procedures for all the aspects of the information process (data collection, data transmission, data processing, data analysis, information reporting in a “usable” form, use of information for making decisions and actions at each level of the organization).

---

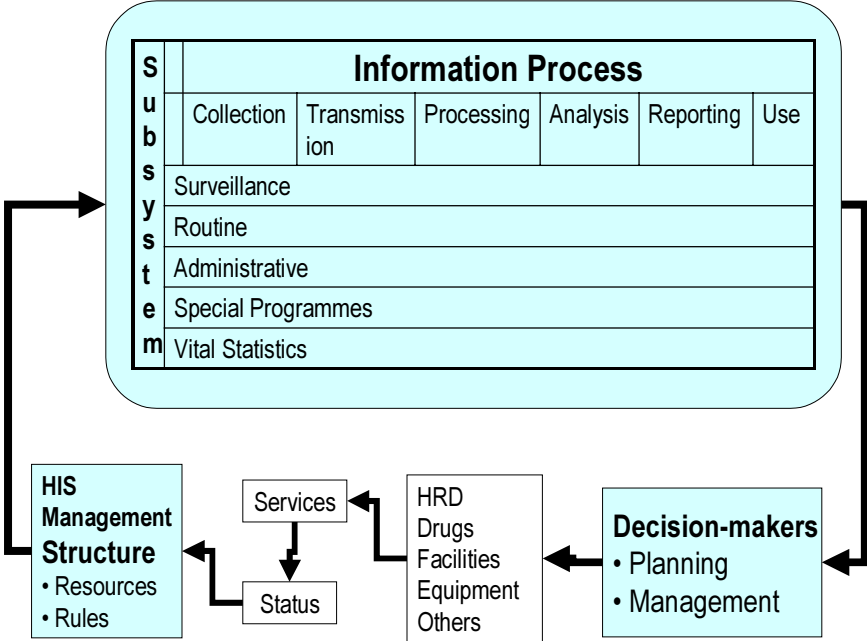
<sup>1</sup> Lippeveld T, Sauerborn R and Bodart C. Design and Implementation of Health Information Systems. France: World Health Organization, 2000.

On the other hand, for these sets of procedures to produce information that are of high quality and in a timely manner, a health information system management structure is required to have resources (e.g. human, financial, hardware and software). To efficiently manage these resources, the structure must have organizational rules that include health services standards, treatment guidelines, staff job description, bidding and procurement procedures.

Finally, the framework for a health information system includes the decision-makers, the intended users of generated information. Within and outside the MOH there are people who make decisions. They may be policy-makers, planners and managers. They may also be donors as well as the clinicians.

This chapter was based on review of literature about the surveillance systems (refer to PR1); and interviews and review of forms of the surveillance of notifiable diseases, routine and a few of the special programmes (i.e. ARI, CDD and Leprosy). Further analysis will be conducted in the next phase of the Health Master Planning Study.

**Figure 11.1 Health Information System Framework**



**11.2 Identified Issues**

**(1) Quality**

- 1) The MOH has been taking measures to strengthen its health information system. Last year, it proposed a draft of a new model to assist health officials, health staff and even village committees make rational decisions for “many health and health-related actions

such as client care, planning, administration and monitoring, and review of activities”<sup>2</sup>. Notwithstanding, it will need to take additional steps in improving accuracy, timeliness, representativeness, and sensitivity of information generated from the existing system or its sub-systems.

- 2) Inaccuracy of health information has been partly attributed to not having staff trained in making specific clinical diagnosis, to some staff writing symptoms instead of those in the International Classification of Diseases, and to inaccuracies in computation as well as in reporting, particularly those information that were submitted late.
- 3) Delay in producing the information is especially common in areas where physical access between health facilities is difficult, and where transportation and communication facilities are not as common.
- 4) Because not many people who need medical attention visit public health facilities, the existing health information system actually captures only the tip of the iceberg. Reporting of vital statistics on births and deaths is also handicapped by this phenomenon.
- 5) The MOH of Lao PDR has several offices responsible for the different subsystems of the health information system. Because of minimal coordination among the offices, at times some data (e.g. dengue and other morbidity data) are collected by more than one unit whereas others are missed (e.g. prevalence of malnutrition not routinely collected). Definitions and formulas for some concepts (e.g. women of child-bearing age) and summary statistics (number of births for the month) may be variable or unclear.
- 6) Some of the staff responsible for the sub-systems have expressed the need for training particularly in managing health information systems.

## **(2) Use**

- 1) The usefulness of the existing health information system varies. Officials at the national level, especially the program managers, use the information in formulating proposals, in making presentations for senior officials and in appealing to donors. They use information also for responding to outbreaks as well as for resource allocation. However, they are often limited to information that their own sub-systems collect. They hardly have access to those of other sub-systems.
- 2) For health officials at local levels, it seems information is collected primarily for central offices. Their decisions or actions are not often based on hard evidence or information because of many reasons. Some do not know how or when to use the information. Others know but they do not have the authority to make such decisions. A few others simply cannot rely on the reliability and validity of the information. In the latter case, the poor quality of information contributes to its unpopularity.

---

<sup>2</sup> MOH Planning and Finance Department, Statistics Division: *Health Information System Model: Records and Procedures from the Village up to the Province*. Draft as of May 2001.

### (3) New Challenge – The Decentralization Policy

- 1) The decentralization policy confers new responsibilities and authorities to provincial and district health officials. It entrusts them to make certain decisions and take actions. Therefore, the health information system has to be redesigned to support them in carrying out their new roles on top of their traditional ones. It has to suit their needs as well as the conditions in their localities. However, at this point, the MOH is still in the process of defining the specifics of the decentralization policy.

### 11.3 Objectives

The vision for year 2020 or beyond is for decisions and/or actions of policy-makers, planners, managers, and clinicians at all levels of the health system being based on evidence or information that are up-to-date and of high quality.

Towards this end, the strategic **objective is to strengthen the health information system of the MOH Lao PDR.**

### 11.4 Key Directions and Possible Measures

#### (1) To improve the quality of the existing health information system

##### Preliminary Steps:

- 1) For MOH to immediately institute simple measures that will improve accuracy by writing a **memorandum**
  - a. reminding some staff to write legibly when they prepare reports manually;
  - b. reminding statistics unit or officials receiving reports to immediately send feedback, which includes suggestions for improving the quality of information or of report itself;
  - c. informing all staff involve in the health information system to record data or information on the actual week, month or year (not on the period when they were received) even if they were submitted late;
- 2) For the MOH to promote conceptual consistency by requesting the author and publisher of the “**Training Modules for Lao PDR**”<sup>3</sup> to broaden its definition of HIS (“consists of databases of health information about people who have had contact with a health service”) to one similar to that in another WHO publication entitled “Design and Implementation of Health Information Systems”;

---

<sup>3</sup> The University of New South Wales. Training Modules for Lao PDR. (Prepared under contract with W.H.O. Western Pacific Region by the School of Health Services Management, University of New South Wales, in conjunction with the School of Public Health, Lao PDR). p. 5.7.

- 3) To improve representativeness of vital statistics on births, deaths and migration
  - a. For the MOH to coordinate with other government agencies such as the **National Statistics Centre and the Ministry of Interior**;
  - b. In the distant future, for health centres to introduce family health records of households within their service areas. The district and provincial hospitals shall be responsible for the family health records of people residing nearby these hospitals and far from a health centre. When patients are referred upward from a lower level facility or when they are referred downward from a higher level facility, the referring facility is responsible for preparing referral letters, copies of which must always be kept in the family health file. When families move residence permanently, the family health records must be transferred as well to the health centre (or district or provincial hospitals if they will live near these facilities) responsible to cover the area. When only individual members move residence, then individual health file should be transferred together with a summary of the family health record.
- 4) For the MOH to continually promote coherence in its policies, programs and projects related to development of the health information system and to regularly conduct internal evaluation by organizing a **HIS Coordination Committee** that will meet regularly and will be chaired by the head of the HIS Division;
- 5) For the MOH to ensure availability of financial resources to support and improve the health information system at all organizational levels and in all health facilities by working with donors in setting up and managing a **HIS Trust Fund**;

**Subsequent Steps:**

- 6) For the MOH to build capacities of HIS managers at the PHO and provincial hospitals by producing **manuals** on assessing, revising and managing health information systems, by conducting **training** programs so that they themselves can design and redesign area-specific health information systems;
- 7) For the designers of health information system to improve representativeness of the health status information by incorporating data **from sentinel communities, donor-sponsored projects and private clinics/hospitals**.
  - a. The offices responsible for health information sub-systems of notifiable diseases and other priority health events, which may be under-reported if only facility-based data are collected, shall establish sentinel communities (e.g. villages endemic for schistosomiasis or villages with outbreaks in the past 3 years) or sites (e.g. factories, workplace of commercial sex workers) as sources of data.
  - b. The office responsible for supervising private clinics and hospitals shall introduce training on EBDM as a prerequisite for registration or accreditation of private clinics and hospitals, as well as for renewal of their licenses or permits to operate.



- c. The office responsible for coordinating donor-sponsored projects shall encourage the donors to submit reports of their activities (not for evaluation purposes but to improve representativeness of information).
- 8) For designers of health information system to improve sensitivity of information in identifying good accomplishment by incorporating data items that reflect **performances of individual, unit and facility**.
- 9) For designers of health information system to improve timeliness by incorporating data items that will be useful for specific levels of the organization, by avoiding duplication of data items, by making the forms user-friendly, by rationalizing the schedule of collection so that it matches with the frequency of making specific decisions, and by developing area-specific mechanisms to transmit data;
- 10) For MOH to improve timeliness by providing all DHO and PHO with a **communication system** (e.g. VHF radio, phone, fax or internet) that can also be used for data transmission and to provide an enabling environment for staff by regularly providing them with **supplies and/or equipment** for recording, reporting and safekeeping of files;
- 11) For MOH to improve accuracy of information on health events
- a. by enhancing **clinical skills** of all staff through development, production and distribution of algorithms<sup>4</sup> (in the form of a poster or desktop flipchart) to diagnose and manage common health problems, and through training on International Classification of Diseases; and
  - b. by sharpening **computational and analytical skills** of staff responsible for data collection, processing and analysis, and for information reporting;
- 12) For the MOH to strengthen existing health information sub-systems other than the routine and epidemiological surveillance:
- a. The offices responsible for administrative information sub-systems to incorporate the data sets (financial, human resources, infrastructure, equipment) of the JICA Study Team that were gathered through various methods such as mapping workshops, facility-based surveys and review of documents;
  - b. The Statistics Units at the Central Hospitals and the PHO to understand the changing needs and expectations of its client, particularly of poor-performing health facilities, by introducing patient exit/satisfaction interviews and community-based surveys on health-seeking behaviours as part of the special programme sub-system;

---

<sup>4</sup> Based on published Clinical Guidelines of MOH.

**(2) To popularise the use of information for more effective and efficient policy-making, planning and management at all levels of the health system**

1) Manual Development and Training

- a. For the HIS Coordination Committee, jointly with technical consultants, to develop a training manual on EBDM;
- b. Using the Manual, for the MOH to train all its policy-makers, planners, managers, and clinicians on basic concept of and challenges in implementing EBDM, on types of information that will be generated by the new health information system, on when and how to use information, and on decisions/actions that can be taken with specific information;
- c. For the leaderships of the MOH, PHO, DHO, and all health facilities to promote the culture of EBDM by doing an echo training for all staff within their jurisdiction and by incorporating an orientation on EBDM in all future MOH training programs;

2) Actual Use

- a. For MOH officials to include the use of supporting information or evidence as a criterion in evaluating plans or proposals;
- b. For MOH to require all heads of DHO, PHO and MOH to use the reports in conducting supportive supervision over all health centres, all DHO/district hospitals, all PHO/provincial hospitals, regional hospitals and central hospitals at least once;
- c. For MOH to require all heads of DHO, PHO and all other MOH offices to use data generated from the health information system in evaluating performance of staff, units or facilities, in staff promotion, and in granting other forms of incentives;
- d. For MOH to require all heads of DHO, PHO and all other MOH offices to use data in all planning workshops as well as to present and compare main indicators at annual health meetings;
- e. For local health staff to coordinate with local authorities in incorporating health information on existing village land use maps or in designing, constructing and maintaining a village or people's health information board that can be used for showing a map of health and health-related facilities, posting up-to-date vital and health statistics, and posting health bulletins;

3) Monitoring of Use

For MOH officials responsible for the health information sub-systems and their counterparts at the PHO to monitor and evaluate the practice of EBDM within their jurisdiction, and to submit the results to the leaderships of the MOH and PHO;

- (3) **To design a new unified health information system that will be used by decision-makers in carrying out their responsibilities and authorities in accordance with the decentralization policy**
- 1) For the MOH to formulate the Implementing Guidelines of Decentralization Policy clarifying the functions that are decentralized at all levels, the decision-makers, and their job description and decision-making authorities while ensuring integrity of the overall organization as well as of the national health information system;
  - 2) For the HIS Coordination Committee to organize workshops among representatives of decision-makers (policy-makers, planners and managers) whose objectives include defining the decisions they have to make in accordance with the Implementing Guidelines of Decentralization Policy, the frequency decisions are made, and the information and feasible indicators needed to make those decision;
  - 3) After defining the decision and indicators, for the HIS Coordination Committee to organize provincial workshops among local HIS managers, whose capacities have been enhanced previously, with the end in view of designing a new unified health information system through defining data sources, developing data collection instruments, and developing feasible systems for data transmission, processing, analysis, and information reporting; and
  - 4) For designers of health information system to observe principles of simplicity and flexibility to accommodate changing information needs and indicators as well as adapt to advances in technology in the local areas.

## 11.5 Discussion

In general, high quality information is needed by all people who are in the position of responsibility. The use of information is even more critical in the health sector where there are multiple priorities and at times competing interest among stakeholders, where decisions are made in a milieu of scarce resources, and where actions taken can be a matter of life and death. Imagine policies and regulations being crafted based merely on whims, intuitions, visions, or dreams. Imagine clinical decisions that are based on inaccurate and obsolete information. Imagine managers and planners looking at one side of the coin only and not having access to full information. Ergo, prioritising the health information system in the development of the health sector is simply an understatement.

Where should one start in strengthening the health information system? One can start with simple doable measures – writing a memorandum to clarify points not yet elaborated in existing guidelines; revising existing manuals and documents to reflect a broader concept of a health information system that includes at least the five subsystems; and coordinating with other government agencies that can provide the information needed by the health system. Although time is needed to realize them, establishing a Coordination Committee and Trust Fund is proposed to be an initial step. Officials responsible for some of the sub-systems

recognize the need to work with one another. Somebody has to take the leadership, though, and that somebody or his office has to be authorized. The concept of Trust Fund is introduced because sustaining the health information system requires resources that cannot depend on services fees, particularly in poorer areas. The sincere and recent expression of support from donors to improve the system can be tapped to launch the Trust Fund.

Building the capacities of officials and staff will also take time. One of the training programs should be aimed at inculcating skills in assessing, designing and managing a health information system and not solely at formulating a new system. They should learn these skills so that in the future they can initiate improvements on their own. They should learn so that they can respond to the changing requirements of decision-makers.

Reforming the health sector requires defining the details of new policies. Because the decentralization policy entrusts authorities to officials down to the district level, redesigning the HIS becomes inevitable. To redesign, one needs to know the extent and the limits of powers so that one can consequently identify the types of information needed. Formulating and finalizing the Implementing Guidelines for Decentralization is therefore a precedent activity before a new unified health information system can be designed.

In the final analysis, a critical component of the overall strategy to strengthen the health information system of MOH is promoting the use of information. However, promoting the use is easily said than done. It requires a strong commitment from the leadership of all offices and facilities. It requires a transformation to a culture that appreciates the value of high quality information and recognises people who manage based on facts. Because such a culture is necessary in the health sector, then there is no recourse but to start cultivating the culture of information.

## **B FRAMEWORK FOR GEOGRAPHIC INFORMATION SYSTEM (GIS) FOR THE HEALTH SECTOR**

### **11.6 Introduction**

This chapter addresses the Geographic Information System (GIS), which is widely been used as a planning and management tool for spatially dependent information systems such as health care.

The need of health care varies in space and health care planning and management and the organization necessarily has a spatial component. Population characteristics such as age, sex, income, ethnicity, occupation, education, and life expectancy are not uniform in space. Further, certain epidemics are closely related to environmental hence to the spatial variation of a country. Therefore, demand for health care and pattern of demand largely influenced by

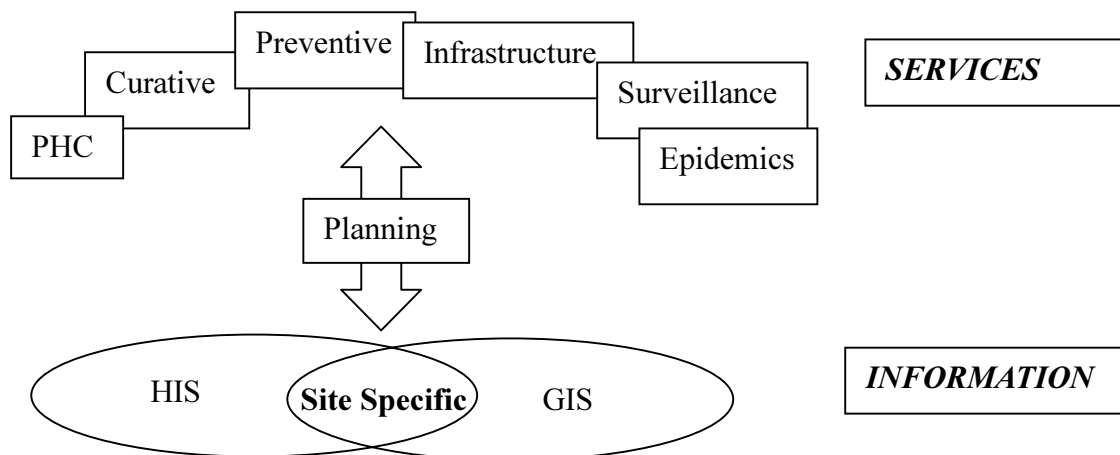
spatial characteristics. Also, the spatial dimension is important in utilization behavior, as accessibility is a major determinant of the use of health facilities.

Considerable attempt has been given in Lao PDR of the need for equity in providing health care facilities for every citizen with some consideration of remote areas. Still the accessibility factor remains as a barrier leaving number of isolated communities where health care facilities are sparsely provided. Areas that have difficult physical accessibility due to undulating terrain are neglected.

In order to support to develop an efficient primary health care system, WHO is emphasizing the need of a health information system (HIS) that enable monitoring of health services. A health information system provides information for the management of health program and services. In particular it is essential for monitoring the health situation, the performance of promotive, preventive and curative health services and activities and the utilization of health resources.

It is observed and documented that a HIS system is not sufficient to address the spatial component of varying needs of health care facilities, demands and accessibility. This component could only be addressed by a GIS system that is developed either as an independent information system or more effectively as an integrated part of HIS.

The whole HIS and GIS system is linked to the health care system irrespective to the field of application, end-user, facility, service, human resources etc. as all of these required proper planning, management, and monitoring to continuous efficient, quality and cost effective health services. Services, including facilities and human resources need to address according to needs and most of the time. Contribution of HIS and GIS and their conjunction assistance to planning and management could be depicted in the following diagram;



## **11.7 Identified Issues**

### **(1) Spatial Variation of Needs**

Need of health care varies from place to place and this spatial component of demand is not given enough weight in the health care planning leading to uneven distribution of health care facilities with respect to the distribution of communities. This includes accessibility, ethnicity, literacy, income and other external factors. This leads to isolated communities with marginal or no health services within their accessibility.

### **(2) Equitable Resource Allocation**

Financial, equipments and human resources in the health care system is very limited and efficient system of allocating the available resources need to be considered. With a vision of achieving equity by 2020, MHO has attempting to increase number of medical staff, acquisition of equipments. This does not mean that the vision will be accomplished in instantly, but MOH has to find a way to invest the limited resources with an appropriate prioritization method integrate in resource allocation at the planning stage.

### **(3) In-adequate Utilization of Information**

Strength of information, either GIS or HIS is not given enough consideration at planning and management of health facilities. Collection of information is carried out as a routine work but it is not visible that the information collected are adequately used in planning of health care system.

### **(4) Insufficient Spatial Data**

Spatial data of Lao PDR are still in poor condition and there is a poor coordination among data creating agencies for sharing. It could be expected that the time will solve this problem, but MOH need to find the best possible solution to have its spatial database to integrate its planning strategies with spatial components of health care needs.

### **(5) Need of Human Resources**

GIS is not more than a data handling, data management and data analysis tool that required technical capabilities of the system and understanding of utilizations for required information extraction, abstraction and derivation of possible strategies for better planning and management. Current human resources within MOH with proper understanding of GIS context are very limited or non-existence and the knowledge is insufficient for appropriate use for effective planning of health care facilities.

## **11.8 Objectives**

The goal of this framework is to develop directives for an appropriate GIS system for health sector in Lao PDR. In order to achieve this vision in the long run, the following objectives are targeted:

- (1) To define the basic structure of a GIS unit in MOH
- (2) To identify the efficient way in collecting information for a GIS database for present needs
- (3) To develop initiatives to progressive success in utilizing GIS for health sector planning and management
- (4) To define direction for constructive use of GIS system

## **11.9 Key Directions and Possible Measures**

### **(1) MOH administrative role**

An administrative unit responsible for GIS should be established. Mandate of the unit should be defined considering needs of all level in health sector. Clear guideline should be established in organizational structure (vertical and horizontal) within MOH. The role of vertical program should not be overlooked and feed- back to provincial, district level must be considered as important as reporting to the higher authority.

### **(2) Functions of a GIS unit**

Functions of the GIS unit should be identified and recognized within MOH. Sufficient management guidelines need to be established to coordinate current activities related to GIS within MOH and other related centers. The unit should be responsible for:

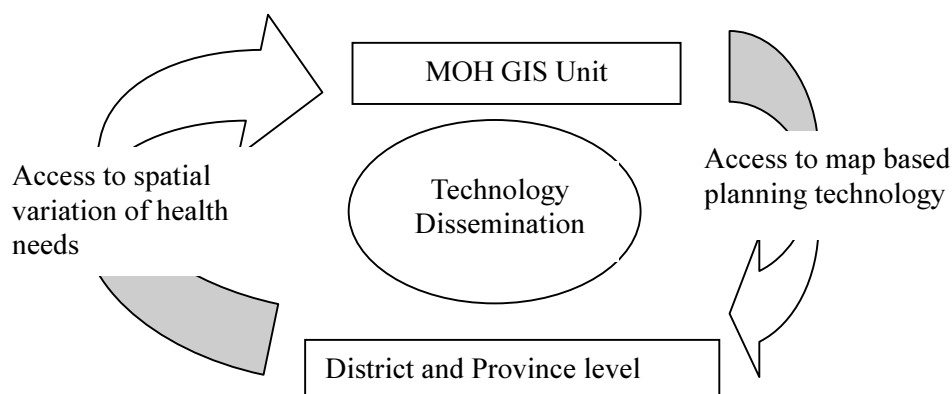
- spatial data collection
- spatial database maintenance
- integration of HIS information with GIS
- district to village level data collection in defined time frame
- feedback to horizontal and vertical units
- develop awareness training programs
- be aware with development of GIS technology
- carryout spatial based research activities with the collaboration of research centres, national university, university hospital

**(3) Initial structure of the GIS unit**

- Computers with sufficient capacities
- Medium level GIS software packages
- Printing capacities
- Data archiving capabilities
- Technical staff with basic knowledge of GIS basics, data structure etc.
- Mid-level manager with planning experience preferably in the health sector

**(4) Human resource development**

- Basic training on GIS for technical staff should be provided locally or internationally. Short-term training, 2-3 times spanned out for about two years would be commendable. Use of Lao PDR data during training would be helpful in developing realistic data analysis methods and tools.
- Awareness training should be provided to mid-level managers of the unit and related units to gather appropriate knowledge of utilization of GIS for planning and management. Current usage of GIS is limited to mapping. Appropriate training programs for mid-level managers could enhance their capacities in exploiting better use of GIS
- Local level (province and district) training on map based planning approach should be provided by MOH staff. The initial stage needs to be conducted using maps rather than computers. This could help them adjusting to future digital environment once the facilities reach them.
- At the initial stage, it should not consider establishing computer-based system in regional and local level until MOH unit gain sufficient knowledge of GIS and its application





## **(5) Development of GIS Database**

- National administrative information can be collected for Geography department located under the Cabinet
- Present village locations are inaccurate and emphasize should be given to update these through local level workshops (JST approach). This can be taken up by province basis. Financial commitment from MOH at central level is required to cover this aspect
- Information that are available from statistical centre, agriculture ministry could be acquired at the central level but have to verify for various coding systems
- Advisable to have provisions in HIS system to include spatial units coding system to easy integrate statistical data
- Create an administrative link with vertical programs (GIS users) to share the data to reduce cost.
- Spatial unit (province, district, village, roads etc,) should maintain within the main GIS unit sharing among other horizontal program. These information should be provide to the other programs or units by the GIS unit requesting to follow the administrative units
- Quality of the database depends on its accuracy. Therefore, financial commitment should be made to update spatial data in regular interval. Once in 4-5 years could consider as an appropriate time span. It is ideal to carryout this activity integrated to local workshops.
- Present data aggregation at central level should be changed to maintain the original source of data. Information collected at district level could easily be linked with GIS system as the initial stage to start using for recognize spatial variability of epidemics, diseases and health needs.

## **(6) Application Development and Research**

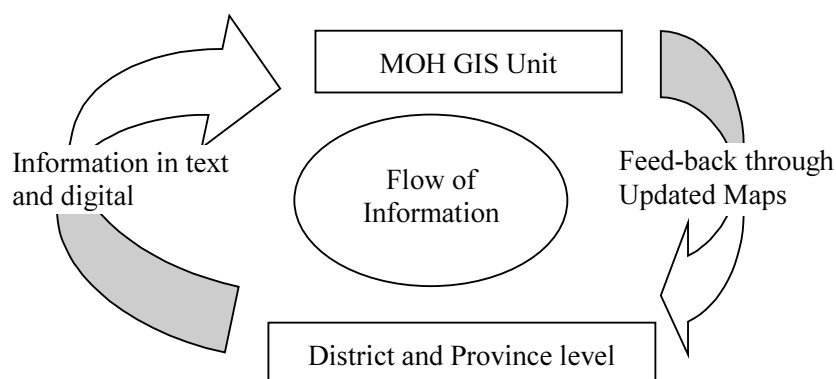
It should be a mandate of GIS unit to conduct research and identify appropriate usage of GIS data. Technical staff is insufficient to conduct research in health care field. This should be carried out with the collaboration of University Hospital and other research units. In parallel to database development and human resource development, few topics could be taken up for research guided by central hospital or university hospital medical researchers. Some areas that could consider at the beginning are:

- Identify isolated health facilities
- Location of priority areas for investments
- Delineate facility service areas
- Recognize the areas need for volunteers
- Epidemic areas and any spatial relationship for given epidemic

## (7) Dissemination

Information is collected with positive participation of staff at all levels of the system. It is important to educate all the involved about their use and how important they are for activities of better health care system. To develop self-motivation of staff that are involved in information collection and decision making need to be kept informed by providing updated maps and results of planning aspects conducted based on information. It is always voiced that feed back from central level is poor for the effort of staff in district level. Ideally, the GIS unit should provide the following to lower level annually or where it is necessary:

- Maps depicting administrative boundaries, village locations and facility locations
- Service area maps of health facilities
- Population distribution of villages
- Possible endemic areas given for external factors for prepare for out-breaks
- Spatial presentation of Statistical information
- Future MOH and National plans



### 11.10 Discussion and Background Information

This section is devoted for discuss experience of GIS related activities of the JICA Study Team during the course of the work up to now. The discussion focused on digital data availability, their accuracy, problems related to data collection, sources and availability of socio-economic data and prospects of developing a health related database.

#### (1) Acquisition of Spatial Data

It was found that digital data related to administrative boundaries including international, provincial and district are not maintained by a single authority or distributed by a single authority. This faces a problem of reliability of data. If the source is different it may

possible to find difference in boundaries creating additional problem of matching them. Then the question of the legitimacy arises which is unanswered yet.

Most difficult spatial data source is village data available as point sources. There is no proper or legitimate coding system in numbering villages. The source used in the present study has been developed by UXO project and used in Geography Department and many more agencies. Further, the position accuracy of these data are not verified and the reliability is questionable.

## **(2) Integration of Socio-Economic Data**

Socio-economic data are available at National Statistical Center. These data are acquired in 1995 national survey. Availability of data are in village level and some of the data acquired for the study are population, drinking water, electricity, ethnicity, income. Though these data are available in digital format, the village coding used by the National Statistical Center is not similar to the coding system of National Geographic Department. Considerable time is required to re-coding these information to integrate in the GIS database. This work is currently in progress and believes to finish within few weeks.

## **(3) Information at Central Level**

It is unfortunate to see that most of the information available at MOH and other health sector institutes are aggregated into provincial or national level. In reality, the information are collected at very base level but there is no procedure or system for maintaining the source of original data. Utilization of these data is very limited and it is not possible to identify for spatial need of health care system by investigating these data.

One of the initiative toward a GIS system should be to continue the data collection system being adopted at present but set up provisions to maintain the original source before aggregating. This may not involve extra burden on MOH except for suitable computer system and software package.

## **(4) Field Survey**

During the past year, Study Team made every effort to collect data at the national level and in the meantime to pay attention to collect data in the field. Due to limitation in financial resources and time, selected areas are under the field survey. These surveys are geared to collect information mainly to recognize social patterns, hospital activities, drugs, accessibility etc., and it was decide to integrate these information in the current GIS database. Village coding system is used to link the fieldwork information to the database.

## **(5) Provincial and District Workshops**

Study Team was very successful in conducting map-based workshops to disseminate proper use of maps for planning. During the past year, workshops were conducted in Oudomxai, Khammuane, Sekong, and Borikamsai. District health staff, provincial health staff and MOH staff participate in these workshops with the direction of the Study Team.

It was targeted to educate the participants the strength and potential of map based planning and in the meantime to collect data that are not available at central level. Participants are requested to attend workshops with information from their areas and requested to develop health volunteer distribution maps, drug revolving fund availability maps, ethnic groups distribution maps, accessibility to health facility map and health facility service area maps. Having created these maps, constructive discussions were carried out to look for possibilities to enhance the health care system in each area selected for mapping.

This approach is very useful in achieving following;

- To transfer technology at local level and prepare the local staff for digital mapping that would available in few years time
- To collect health related information that are not available at any level for recognize demand patterns

## CHAPTER 12

# FRAMEWORK FOR GENDER PERSPECTIVES IN THE HEALTH SECTOR

### 12.1 INTRODUCTION

The Lao PDR is a signatory to the Convention on the Elimination of all forms of Discrimination against Women (CEDAW), and has also ratified the “Platform for Action” from the Fourth UN Conference on Women in Beijing in 1995. Moreover, the Constitution of the Lao PDR (1991), recognizes the equality of women and men in terms of property, voting rights, and political, socio-economic, cultural and familial activities. Discrimination against women regarding wages and salaries is forbidden. In other words, the Lao PDR is expressly in favour of gender equality. The mass organization, the Lao Women’s Union (LWU), represented by a Central Committee but which also includes representation in every Ministry, including the Ministry of Health, works to ensure the protection of women’s and children’s rights throughout the Lao PDR.

Gender issues related to the health sector mean going beyond the biological differences between males and females. “A gender approach in health, while not excluding biological factors, considers the critical roles that social and cultural factors and power relations between women and men play in promoting or impeding health” [of both males and females].<sup>1</sup> The inequalities between women and men can “create, maintain or exacerbate exposure to risk factors that endanger health” (WHO, 1998). The *Policy on Primary Health Care* (MOH, January 2000) recognizes ongoing gender inequalities when it states that “disparities in health status between household members . . . should be eliminated.” Nonetheless, gender-differentiated information in the health sector in the Lao PDR is difficult to come by. There are some statistics available in publications such as the *Report on National Health Survey*, 2001, but they have not been analysed in depth. It would be necessary for gender analysis studies to be conducted to show how gender issues in different ethnic groups in the country, and in different settings, affect the health status of women and men, or boys and girls differently.

If the goal of “*Health for All*” is to be achieved, women’s role in the health sector cannot be overlooked. Throughout the cities, towns and villages of the Lao PDR, women are primary

---

<sup>1</sup> *Gender and Health: Technical Paper*, WHO, Geneva 1998.

caregivers in their families, and the burden of illness within the family often falls on their shoulders. At the same time, given women's reproductive role in the family, they are primarily responsible for the nutrition and cleanliness of the family and its immediate surroundings. They are also largely responsible for ensuring the household's supply of water for domestic purposes. In rural areas, they are also largely responsible for collecting firewood. These responsibilities, as with the roles and responsibilities of males, are determined by existing, socio-culturally defined gender roles and tasks which vary somewhat from ethnic group to ethnic group.

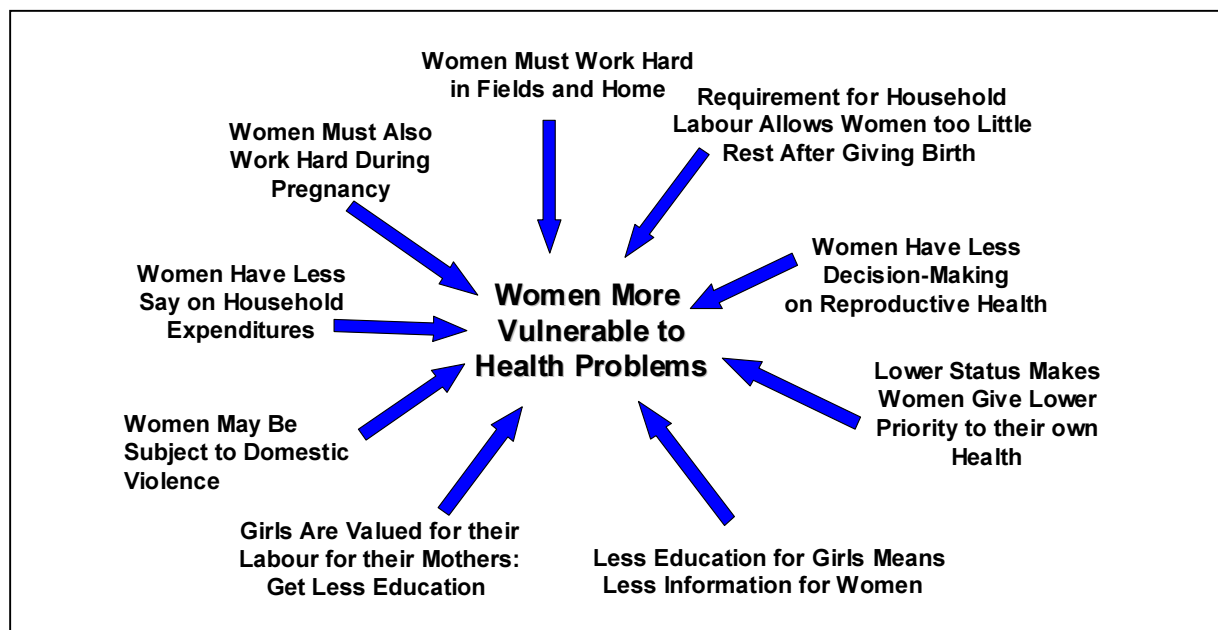
Overall, rural women's general health status in the Lao PDR is poor, with for example, additional risks to their health from their need to continue field and heavy housework into advanced stages of pregnancy. Women's lower literacy and Lao language skills (the latter if they are from ethnic minority groups) and their weaker decision-making position in many households, mean that they have less access to health services, and less opportunity to influence them to be more responsive to their particular needs. In order to address such issues, the health sector as a whole, from senior decision-makers to researchers to field-level health workers, must become more sensitized to gender issues than at present, recognizing that gender issues are everyone's issues, and that the integration of gender issues in the planning and implementation of all health policies and programmes will have a positive impact on achieving the goal of "*Health for All*."

Gender issues which have an impact on women's health status will be highlighted below. Any special findings regarding men's health will also be highlighted. The evidence presented below is the result of qualitative surveys which had been carried out by the MOH-JICA STUDY TEAM in the provinces of Oudomxay (2 villages), Vientiane (1 village), Sekong (3 villages) and Khammouane (2 villages). Such issues have also been highlighted in other studies carried out in the Lao PDR.<sup>2</sup> Gender-related priorities within the different frameworks of the Health Master Plan will be mentioned as relevant by the authors of the particular chapters. The various field and other surveys carried out by the MOH-JICA STUDY TEAM, and by other organizations, give some indications as to key gender-related issues in the health sector at field level.

---

<sup>2</sup> See in particular references at the LWU's Gender Resource and Information Development Centre library. There are studies on Lao women's participation in household and village decision-making, gender and social issues in land titling, gender issues in agriculture, and on women, marriage and family.

**Figure 12.1 Gender Issues as Determinants of Rural Women's Health**



## 12.2 IDENTIFIED ISSUES

### 12.2.1 Community Level

Socio-economic and living conditions, especially including gender issues, are major determinants of health in the rural areas, and thus district health care service development cannot be isolated from the consideration of gender issues.

Women's health is negatively impacted by their continuing disadvantaged status in terms of access to education. Female literacy rates lag behind male literacy rates in every province, municipality and special region of the country. Girls are taken out of school earlier than boys in order to assist their mothers with the more tedious household and farming tasks, and are often married at a very young age. (See GRID, July 2000.)

Although there are fewer female- than male-headed households, such households suffer especially from a lack of access to information. Also, if there is no adult male labour available in the house, the female household labour force will have even less opportunity to seek health services outside of the village.

Girls from ethnic minorities with lesser access to education mean usually that they have lesser Lao language skills. This, in turn, means that as they grow up, they have lesser access to valuable information about health, and about different development opportunities. Boys and men have more access to information, but do not necessarily pass it on to their sisters, mothers or wives.

Women's health is negatively impacted by the gender division of roles and tasks in the family. It is often expected that women should provide the major workforce in both the fields and home (gender studies which have been done with different ethnic groups all point to the same conclusion). This expectation, along with its relatively strict implementation in most ethnic groups, means that women's chance to rest is highly restricted. This becomes especially problematic when they are either sick or pregnant.

Men's health may also be negatively impacted by the type of work they do. In upland farming systems, for example, men are involved in heavy labour for clearing fields. This result in them suffering from various body pains, such as back and shoulder aches.

Additionally, men's health is negatively impacted by their social pursuits in the village related to consumption of alcohol and tobacco. Men are more likely to complain of stomach problems (possible ulcers, for example) which they themselves relate to heavy drinking and smoking.

In terms of reproductive and sexual health, women are disadvantaged. Women have seemingly less say in determining marital sexual relations, and the observation from traditional Lao Theung and Lao Soong villages is that decision-making regarding the desirable number of children is more a male, than female decision.

Men seem less inclined to control their own fertility, with male sterilization and condom use virtually unheard of in the rural areas visited, while methods to control female fertility in the remoter rural areas are also not widely and regularly available. Nonetheless, birth spacing programmes are directed mostly at women.

Women's sexual health is also negatively impacted by men's sexual behaviour, including non-condom use in combination with multiple partners. Women are then more likely to suffer from the complications of untreated STDs such as gonorrhoea and chlamydia (picked up from their husbands who had multiple partners).

Women's health is negatively impacted by large numbers of closely spaced pregnancies (with, as mentioned, men having more clearly the say in marital sexual relations). There is a general "blindness" regarding this issue in the villages. Women themselves seldom mention that the number of births should be controlled in terms of improving their own health status. (See also Chapter 15 on MCH).

Socio-culturally determined food taboos for women during and immediately after pregnancy generally have a negative impact on their health. (For example, they may be denied certain meats and vegetables for several months.) The underlying reasons for these taboos may have to do with gender biases in the allocation of scarcer food resources within society, with the preference that adult males receive these resources more than adult females. (See Chapter 16 on Nutrition.)



Another gender difference between women and men is the effects of malaria. If a pregnant woman gets malaria, it may contribute significantly to the woman suffering from chronic anaemia (WHO, 1998). Therefore, while it is important for all family members to sleep under bed-nets, it is absolutely crucial for pregnant women to do so, and malaria prevention messages should be tailored accordingly.

Another gender issue which could have an impact on women's and girl's susceptibility to malaria is their task of fetching water, early in the morning and again in the evening. The places where they fetch water may also be mosquito breeding grounds, thereby constantly exposing women to the vector.

Although a definite conclusion cannot be drawn, it is possible to make the preliminary observation that socio-culturally determined gender biases lead to "longer suffering" in women than in men before they seek qualified healthcare. The results of the National Health Survey 2001 (p. 47) show, for example, that women have a higher tendency toward self-medication than men. (Men are clear household decision makers in Lao Theung and Lao Soong groups regarding both the allocation of household labour and use of household cash resources.)

Health education messages which reach the villages have largely been imparted in a one-way communication style. Particularly in areas where women cannot speak the Lao language, their ability to understand and internalise such messages is very limited.

### **12.2.2 Approaches to Women's Health**

Women's health is largely defined by policy makers in terms of maternal health. It is clear, however, that women's health issues do not relate simply to them being mothers. Young women's health status nor elder women's health have yet to receive enough attention in the Lao PDR. There is as yet no holistic approach to women's health.

Women's specific health issues seem to be lagging behind in the overall concept of provision of primary health care services. In all villages visited by the MOH-JICA Study Team, for example, women mentioned a need for adequate services to help them with gynaecological problems. "Women's problems" tend to remain neglected.

It would appear that senior policy-makers are not yet sensitised enough regarding gender issues in health. Most of them have not received any gender awareness training. There have been inadequate gender analyses done in the health sector to help increase policy-makers' awareness on relevant gender issues in health. Health research designs have not integrated gender concerns. Therefore, health sector policy and programmes and their implementation do not reflect gender differences in health status between males and females in the Lao PDR.<sup>3</sup>

---

<sup>3</sup> Globally, there is recognized gender bias in medical research, with topics often chosen by men and which reflect male research concerns (WHO, 1998).

### **12.3 OBJECTIVES**

- (1) Health sector decision-makers' gender sensitivity is increased;
- (2) Gender issues are successfully integrated into MOH policies and programmes, and there is ongoing monitoring of gender-differentiated information from policy, programme and project implementation.
- (3) Local health services are responsive to both women's and men's needs and demands, whether for themselves or for their children. (As part of PHC promotion efforts: PHC programme and programme components.)
- (4) Women's active participation in, and sense of ownership of, local health networks is promoted by having all PHC measures carried out in health catchments/zones planned also with local women. (As part of PHC promotion efforts: PHC programme and programme components.)
- (5) There are gender-differentiated results available from health research projects to assist policy-makers to formulate policies which reflect health needs of both males and females throughout the Lao PDR.
- (6) Concepts related to health care and primary health care include more holistic approaches to women's health and which consider their needs not only as reproductive-aged mothers, but as young women, never married women, and post-menopausal women as well.

### **12.4 KEY DIRECTIONS<sup>4</sup>**

While gender issues impact both women's and men's health and quality of life, equity concerns result in a greater focus on changes in the health sector which will have more benefits for women than men.

As both women's and men's health is a product of gender issues which impact all aspects of their daily lives, gender issues must also be considered in all aspects of sector-wide health system development, from making concerted attempts to facilitate women's improved access to all health services which they require for themselves and their children, to improving health education messages based on understanding gender differences, to improved health programmes based on gender analyses.

All committees dealing with health issues in the district (see Chapter 14) should include women representatives from the different stakeholders, and include discussions on gender issues which negatively (or positively) impact women's health.

---

<sup>4</sup> There is no attempt here to include key directions having an impact on women's health which are already included under MCH and Nutrition.

Women should be recruited to work as rural health staff with PHC job descriptions.

Health facilities—such as Health Centres and District Hospitals—should be made “more attractive” to women, and therefore have private examination rooms, female technical staff, and especially those staff with the skills to treat women for common gynaecological problems.

Special efforts by the LWU and other local stakeholders in the districts will need to be made to increase women’s confidence to become more involved in decision-making related to the further development and provision of local health services.

## **12.5 POSSIBLE PROGRAMMES AND MEASURES**

### **(1) For MOH Decision-Makers and High Level Officers:**

Assess a selection of current policies and programmes for their gender sensitivity, and find materials for gender case studies for training purposes;

Gender training and orientation for selected MOH decision-makers and senior staff;

Use case study approach to create awareness among MOH decision-makers on the necessity for gender sensitive policy and programmes;

Develop MOH gender training team of male and female staff to provide training on gender and health for Provincial and District staff.

### **(2) Gender Differentiated Monitoring.**

Integrated with capacity building measures for Health Management, select several programmes and projects to introduce gender-differentiated indicators;

Devise gender-differentiated indicators for policies and programmes;

Ensure that all monitoring exercises include consideration of gender-differentiated indicators, and that any changes to policies and programmes reflect gender differences.

### **(3) Gender-Differentiated Statistics in Health Information Systems at all Levels.**

Provide training to Health Statisticians and Information Managers at all levels on incorporating gender-differentiated statistics in Health Information Systems (This should be integrated with programme to support the further development of Health Information System as a management tool);

Select several provinces and districts to pilot the incorporation of gender-differentiated information;

Based on experiences and lessons learned from the pilot provinces and districts, expand gender and HMIS programme to reach all provinces and districts.

- (4) Sensitisation of Health Researchers on Gender Differences, so that Gender Analysis becomes part of Research Design.

Provide training to health researchers on gender issues in health (as part of support to health research sub-sector);

Assist NIOPH to develop guidelines for researchers on incorporating gender issues into all relevant research designs;

## **12.6 DISCUSSION OF MAJOR ISSUES**

Under the direction of the Lao People's Revolutionary Congress Resolutions, health service provision must pay more attention to vulnerable groups at the grassroots level, especially including mothers and children. This underscores the need to address women's health needs directly. A problem, however, is in finding appropriate mechanisms which will allow women to have greater voice in expressing their needs and demands of the health sector. Women are neither constitutionally nor legally disadvantaged in the Lao PDR. Nonetheless, they have a lower status than men, and their continuing lesser access to educational opportunities results in them having less access to information, less opportunities for development, and less opportunities and confidence as decision-makers in both household and society. Solutions to addressing ingrained gender inequities will of necessity be long term ones. The challenge is to find the right steps to take in the short term which will address gender inequities in the long term. Among the most important of these steps is the sensitisation of senior policy makers.