Lessons learnt from three Mekong countries in implementing policies for the delivery of health services
Lessons learnt from three Mekong countries in implementing policies for the delivery of health services
Table of contents

Acknowledgements ........................................................................................................ iv

Executive summary ....................................................................................................... v

1. Background ............................................................................................................. 1

2. Method .................................................................................................................. 4

3. Findings ............................................................................................................... 9

4. Conclusion .......................................................................................................... 15

5. Recommendations .............................................................................................. 16

References ................................................................................................................. 17

Annexes

Annex 1. Comparison of health outcomes and characteristics of health-care systems ........................................ 18

Annex 2. List of research team members ....................................................................... 25
Acknowledgements

This publication and the study on which it is based were funded by the WHO Regional Office for the Western Pacific. However, the publication reflects the views of the research team and does not necessarily represent the decisions or policies of the World Health Organization.

The study of lessons learnt in implementing policies for the delivery of health services in Cambodia, the Lao People’s Democratic Republic and Viet Nam is a joint product of the research team. Professor Chang-yup Kim, Seoul National University, Republic of Korea, coordinated the development of the research method, the collection of data and the consolidation of the three country reports. Dr Eigil Sorensen, an independent consultant, consolidated and summarized the comparison of health outcomes and characteristics of the health-care systems in the three countries. Dr Bunnak Poch, Western University, Cambodia; Dr Sengchanh Kounnavong, National Institute of Public Health, Lao People’s Democratic Republic; and Dr Tran Thi Mai Oanh, Health Strategy and Policy Institute, Viet Nam, collected country-level data in their respective countries and drafted the associated report. WHO staff members from the Office of the WHO Representative in each country and from the Regional Office contributed their technical expertise during the development of the research method, data collection and analysis of the findings.

The Country Support Unit of the WHO Regional Office for the Western Pacific would like to acknowledge the Australian Government, Department of Foreign Affairs and Trade, and the Ministry of Health and Welfare, Republic of Korea, for making this study possible.
Executive summary

Cambodia, the Lao People’s Democratic Republic and Viet Nam have achieved remarkable economic growth and social development over the last few decades. The health status of people in these countries has also improved to a large extent since 1980s. And while economic performance indicators, such as gross domestic product (GDP) per capita, are similar, these countries have had significantly different health sector input and outcomes.

To reduce disparities among the countries and accelerate health development by mutual learning, especially based on subregional cooperation, it is necessary to identify potential determinants of varied input and outcomes in the health sector. Aside from national policies and strategies, experiences in implementation and operational actions at the subnational level offer countries opportunities to learn from one another.

Based on this rationale, the objectives of this study were formulated to: (1) investigate the extent to which each country’s respective health outcomes and health system input and process indicators are different; (2) identify the factors that potentially contribute to the performance of policy implementation at the subnational level; and (3) formulate a set of regional and county-specific recommendations that summarizes future steps that must be taken to improve policy implementation and narrow the gaps among countries.

The research method incorporated five steps: (1) formulation of an analytical framework; (2) selection of a policy; (3) data collection—literature review and field study; (4) data analysis; and (5) synthesis of findings. The research team was comprised of principal investigators, three country co-investigators, and WHO staff from the Regional Office of the Western Pacific and WHO country offices. The team worked together to develop the analytical framework, research design, and questionnaire and interview guides. The country teams piloted the interview guide and collected data from August 2012 to February 2013. Adapted from an analytical framework developed by Bhuyan, Jorgensen and Sharma (2010), this study formulated six dimensions that influence health policy implementation: (1) policy implementation structure; (2) leadership and advocacy; (3) stakeholder involvement; (4) resource mobilization and allocation; (5) operation and management; and (6) monitoring and feedback.

This study reveals the challenges in not only developing health policies at the national level, but also implementing these policies at the subnational level. The findings suggest that adequate economic and human resources are not always in place for effective policy implementation. Cambodia and the Lao People’s Democratic Republic are spending less on health than Viet Nam and need to invest in increasing the number of qualified nurses, midwives and medical doctors at the district level.

All three countries are operating within decentralized health systems that require clearly defined institutional roles and responsibilities among national, provincial and local governments. The private sector and non-state providers are increasingly prominent in health service delivery, while the involvement and oversight of non-state service providers continue to be weak.
For successful policy implementation, the policy structure and implementation process should be clearly defined. Strengthening of the subnational health system—and the district health system in particular—by providing integrated primary health-care services should be highlighted. Multisectoral and multilevel coordination is essential in seamless implementation of policy at the subnational level. The wide dissemination of policy information, down to the grass-roots levels, is also important.

Leadership is crucial in implementing policies and should be developed through effective training and education. Policy structure to motivate effective leadership and enhance managerial skills needs greater consideration. Financial and nonfinancial incentives should be available to managers and staff working at the subnational level. Capacity-building, including for technical competence, is also of utmost importance for leaders and managers at the every level of policy implementation.

Based on the findings and consultations within the study team and with outside consultants, recommendations were derived for the governments and for WHO. Two recommendations are offered for governments in strengthening activities in support of policy implementation at the subnational level. First, the structure and function of the health system at the subnational level should be strengthened by providing integrated primary health-care services. Secondly, training should be offered to leaders and managers at the provincial and local levels to enhance their leadership, technical competence and managerial skills.

Two recommendations are offered for WHO. First, the Organization should increase its focus in assisting the Mekong countries in planning, implementing and monitoring national programmes and health system strengthening at the subnational level. Secondly, WHO should adapt its structure, function and role in supporting policy implementation at the subnational level to align also with the needs of Mekong countries at the national and subregional levels.

For both WHO and country governments, further collaboration among the Mekong countries is recommended for effective policy implementation at the subnational level and for development of human resources and affordable health financing. Mekong countries are encouraged to conduct further research on health policy studies, especially implementation at subnational level, to provide direction for improved health outcomes and universal health coverage.
1. Background

1.1 Three Mekong countries: similarities and differences

Cambodia, the Lao People’s Democratic Republic and Viet Nam have achieved remarkable economic growth and social development in the last few decades. The health status of people in these countries has also improved to a large extent since 1980s. However, during the process of economic transition and the associated political, social and cultural changes, the countries have faced similar challenges associated with marketization, privatization, urbanization and disparities among various groups.

Even though economic performance indicators such as gross domestic product (GDP) per capita are similar, these countries have exhibited significantly different health sector input and outcomes. For example, the infant mortality rate in Viet Nam in 2010 (19 per 100 000 population) was much lower than in the Lao People’s Democratic Republic (42 per 100 000 population), although GDP per capita in those countries in 2012 was US$ 1528 and US$ 1446, respectively (International Monetary Fund 2013). The differences in health workforce and facilities explain only a part of the variations in health outcomes in these countries.

As input and outcomes are interrelated within health systems, the value of primary health care (PHC) has been refocused in order to strengthen the health system at all levels. WHO Member States in the Western Pacific Region endorsed the Western Pacific Regional Strategy for Health Systems Based on the Values of Primary Health Care at the sixty-first session of the Regional Committee for the Western Pacific in 2010. Consistent with previous editions of the World Health Report and WHO frameworks, this strategy highlighted operational-level action and linkage to subnational activities, in addition to national policies and strategies (WHO 2010).

To reduce disparities among the countries and accelerate health development by mutual learning, especially based on subregional cooperation, it is necessary to identify potential determinants of varied input and outcomes in the health sector. Aside from national policies and strategies, experiences in implementation and operational actions at the subnational level offer countries opportunities to learn from one another. Recommendations may be drawn from different country experiences for governments and WHO in improving health status, strengthening health systems and fostering cross-country collaboration.

---

1. See Exhibit 1 in the Annex.

2. World health report 2000, Health systems: improving performance; World health report 2006, Working together for health; Everybody’s business: strengthening health systems to improve health outcomes; and World health report 2008, Primary health care: now more than ever
1.2 Why policy implementation is an issue

Bhuyan, Jorgensen and Sharma (2010) define policy implementation as “the mechanisms, resources, and relationships that link health policies to programme action”. Policy implementation involves what actually happens after a programme or policy is developed or decided. Implementation refers to all activities focused on the actual operation of programmes, once they move from plan to action. It deals with not only the behaviour of the responsible administrative bodies and target groups of the policy, but also with diverse political, economic and social forces that affect the behaviour of those involved.

Understanding policy implementation is important because policies are not always implemented as intended. Assessing the policy implementation process can provide better understanding of what does or does not work and why it works or does not work to produce the intended outcomes in the actual setting:

... policy and programme assessments emphasize outputs (e.g., number of people trained) or outcomes (e.g., increased knowledge among trainees) but neglect the policy implementation process—which could shed light on barriers or facilitators of more effective implementation. Assessing the policy implementation process opens up the “black box” to provide greater understanding of why programmes work or do not work and the factors that contribute to programme success (Bhuyan, Jorgensen and Sharma 2010).

Most of the activities that affect the outcome of health policies and their implementation occur at a lower level. However, health policy implementation at the subnational level has been less highlighted than that at the national level. Also, the potential strengths of the subnational level are not fully achieved in terms of primary health-care strategy:

... where, given coordination by means of good planning and management, health professionals auxiliaries, workers from other sectors, and community members can assume collective responsibility for the health of the community. Unfortunately, this team potential is seldom realized. District plans are often poorly formulated or non-existent, targets are vague, and efficiency, effectiveness, and quality of services are seldom considered. The activities of various programmes and institutions continue to be piecemeal and poorly coordinated, while health services are concentrated in particular areas, leaving large population groups with little or no access to health care (Tarimo 1991).

Even in cases in which the government performs well at the national level in terms of policy and strategy, government at the subnational frequently fails to match that performance. The reasons for this vary. With the acceleration of decentralization and/or devolution of government, policy implementation at the subnational level requires more attention in understanding the variable performance of health policies and programmes.
1.3 Objectives of the study

The main objectives of the study were to:

1. **Investigate**...
   
   the extent to which each country’s respective health outcomes and health systems input and process indicators are different.

2. **Identify**...
   
   the factors that potentially contribute to the performance of policy implementation at the subnational level.

3. **Formulate**...
   
   a set of regional and county-specific recommendations that summarizes future steps that must be taken to improve policy implementation and narrow the gaps among countries.
2. Method

The research method incorporated the following five steps:

1. Formulation of an analytical framework
2. Selection of policy
3. Data collection (literature review and field study)
4. Data analysis
5. Synthesis of findings

The research team was comprised of principal investigators, three country co-investigators, and WHO staff from the Regional Office for the Western Pacific and WHO country offices. The team worked together to develop the analytical framework, research design, and questionnaire and interview guides. The country teams piloted the interview guide and collected data from August 2012 to February 2013.

2.1 Analytical framework

Based on an analytical framework developed by Bhuyan, Jorgensen and Sharma (2010), this study formulated six dimensions that influence implementation:

1. Policy implementation structure
2. Leadership and advocacy
3. Stakeholder involvement
4. Resource mobilization and allocation
5. Operation and management
6. Monitoring and feedback

Each dimension can facilitate or hinder policy implementation.

Policy implementation structure

Policy implementation is affected by the capacity of a statute to structure the entire implementation process through setting goals, regulating stakeholder participation and building basic implementation rules.
Policy content should be clear in terms of goals, objectives, strategies and time horizon. Only relevant and adequate policy content can be implemented as intended.

The formulation process is also important, including who has power to set the policy agenda and who has the dominant role in policy-making. If the policy has no necessary internal underpinning, it cannot be effectively implemented. Stakeholders, including those within the government, should be engaged to implement a policy successfully.

One of the principal obstacles to policy implementation is the difficulty of achieving coordinated action, especially among heterogeneous stakeholders. Thus successful policy implementation depends on the ability of the system to coordinate the implementing agencies. The implementation process can be further affected by the extent to which decisions and rules of implementing agencies are supportive of the policy and its goals.

**Leadership and advocacy**

Leadership is not confined to the political or highest-level decision-making. Any high-level actors and leaders, including international agencies and nongovernmental sectors, can affect the policy and its implementation through communication, coordination and cooperation.

Leadership is particularly important in the relationship between the national and subnational levels. As most health policies are made at the national level, the role of the national-level leadership is crucial if the policy is to be implemented at the subnational level.

Advocacy may also significantly contribute to policy implementation. Actors within the government and from civil society, the private sector, and the global community can facilitate a favourable environment for policy implementation.

Support from the public and media also should be emphasized.

**Stakeholder involvement**

Involvement of stakeholders in implementation can affect policy implementation either positively or negatively. Stakeholders include those within the government and in civil society and the public and private sectors.

**Resource mobilization and allocation**

There are financial, human and material resources required to effectively implement the policy. Responsible bodies should have workable plans to mobilize and allocate these resources.

**Operation and management**

Policy implementation involves cooperation and coordination with many other organizations at different levels and sectors. Unexpected failures or delays should also be managed.
New policy implementation may require extensive changes in terms of organization, system and functions. These changes should be managed carefully, as they may provoke conflict within and among organizations.

Established strategy cannot fit every situation and context. One of factors for successful policy implementation is flexible adaptation of the plan and strategies to unexpected situations.

Meaningful actors at every level are required to have appropriate technical competence. Significant learning, training and information sharing are essential. Technical support should be available formally and regularly, within and among different levels and areas of actors.

Monitoring and feedback

Any phase of the policy process should be monitored with a high-quality information system. Timely and effective feedback enables policy-makers and implementers to make necessary decisions and facilitates intervention to improve the process of the policy implementation.

It is important to note that each stakeholder may have a different perspective on what constitutes successful policy implementation (Walt et al. 2008). A top-down approach is characterized by decision-making dominated by the governing elite and the adherence of implementers to the intentions of policy-makers. Conversely, a bottom-up approach involves strong influence by local implementers to adapt the policy to local needs and concerns.

2.2 Selection of policies for analysis

The target policies were primarily selected through group discussion by the research team. Considering objectives of the study and comparability of policies across the countries, the study aimed to focus on the policies for health-care delivery at the primary-care level. To make the boundary of the policies less obscure, specific policies defined by legislation or government initiatives in each country were selected.

In Cambodia, the selected policy of delivering essential services at the district level was the National Strategy for Reproductive and Sexual Health in Cambodia: 2006–2010. The policy focuses on health services delivery related to maternal and child health. The selection of this policy was based on the trend of health indicators revealing a rather successful reduction in maternal and child mortality rates over the past decade.

For the Lao People’s Democratic Republic, the primary health-care policy was selected as it was in effect for a sufficient length of time to elicit useful information on implementation experiences. Successful implementation of this policy at the subnational level is regarded as critical to improving access to essential health care and equity between geographical regions and ethnic groups.
For Viet Nam, the Law on Health Insurance was selected for assessment of its implementation at primary-care level, which includes district hospitals and commune health stations. First, this policy is one of main vehicles to ensure that health-care services are affordable and accessible for people at the grass-roots level. Second, if this policy is implemented well at primary-care level then it can help reduce overcrowding in hospitals at higher levels, which is one of the main problems in providing high-quality health care. Third, this is a key policy in achieving universal health coverage in Viet Nam.

2.3 Data collection

Data on health outcomes and characteristics of the health-care systems in the three countries were collected. The main source for the information on trends in health outcomes was WHO’s World Health Statistics, supplemented with country data sources when required. The three country co-investigators provided the information on the characteristics of the health-care systems.

Country studies that analysed determinants of policy implementation were extensively sought. These include published papers, government publications, informally published literature and government health information systems. Published papers were identified using keywords including primary health care, district health, policy implementation and community health. Retrieved databases and archives included PubMed, Google Scholar and the WHO archive (http://whqlibdoc.who.int).

Based on the analytical framework on policy implementation, a semi-structured questionnaire and an interview guide were developed, modified and adapted from the questionnaire developed by the United States Agency for International Development (USAID) Health Policy Initiative, Task Order 1 (Bhuyan, Jorgensen and Sharma, 2010). In the country studies, these questions were further adapted and tailored to reflect the backgrounds and roles of the respondents and their organizations.

Respondents in each country study were selected through a snowball (non-probability sampling) technique, starting with people who had been involved in policy-making and implementation and who also were knowledgeable about the determinants of successful policy implementation. Main targets were policy-makers and implementers at the national and district levels, including implementers from the private sector.

Selected policy-makers included:

1. Government leaders at the national level involved in policy-making and planning.
2. Leaders at the national level not from the national government, involved in health policy-making and implementation.
Selected policy and programme implementers included:

1. Staff from provincial and district governments responsible for policy or programme implementation.
2. Staff from nongovernmental or community-based organizations knowledgeable on policy-making and implementation.

The sites for the field study—two different districts in each country—were selected to reflect contrasting socioeconomic environments including economic development, ethnicity and geography.

On-site face-to-face interviews were conducted with 21 respondents in Cambodia and with 21 respondents in the Lao People’s Democratic Republic. In Viet Nam, focus group interviews were conducted for each group of policy-makers and implementers at the provincial, district and commune levels. All interviews were informal, open-ended and interactive. Nonverbal communication was also noted and observed by the interviewers.

In line with ethical considerations, consent was obtained from the participants prior to the interviews. The objectives of the study were explained in the informed consent form to facilitate full understanding and agreement from the respondents. The study team also obtained permission from the respondents to reveal their identities.

2.4 Analyses and synthesis of the findings

Country data were analysed based on the content analysis method and case study research (Krippendorf 2004; Neuendorf 2002; Yin 2003). Collected data were triangulated with other sources of information. Using the theoretical framework of the study, collected data were abstracted, synthesized and interpreted to determine how and why policies were implemented in their current manner (Sayer 2000; Yin 2003).

Once the preliminary analysis was complete for each country, the research team met to review and confirm the findings and explore the themes and issues that arose from the analysis. Consultations with the country experts, as well as health practitioners, were also considered in the findings. Country research teams held discussions with the principal investigators and refined the results.

Findings for each country were consolidated primarily by the principal investigators in an interactive manner through bilateral and multilateral discussions. The findings were also triangulated with information from other multiple sources. Experts from the WHO Regional Office for the Western Pacific, as well as WHO country offices, participated in refining the findings. In this regard, consolidation was not only based on the aggregation of the findings in each country or the derivation of common findings across the countries; it involved deriving new findings through abstraction, synthesis and interpretation, as suggested by Sayer (2000).
3. Findings

3.1 Comparison of health outcomes and characteristics of the health-care systems

An overview on trends in health outcomes and characteristics of the district health-care systems in Cambodia, the Lao People’s Democratic Republic and Viet Nam can be found in annex 1.

A comparison of health statistics over the last 20 years suggests that Viet Nam is at least 10 years ahead of Cambodia and the Lao People’s Democratic Republic in terms of health development. In 1990, Viet Nam had an infant mortality rate of 37 per 1000 live births and a maternal mortality rate of 240 per 100 000 live births. In the same year, the rates for infant mortality and maternal mortality in Cambodia were 87 and 830, respectively; for the Lao People’s Democratic Republic, the rates were 100 and 1600, respectively. All three countries have seen significant improvements in the health situation and the health outcomes of their people in recent years, but infant mortality and maternal mortality in Cambodia and the Lao People’s Democratic Republic remain more than double that of Viet Nam. In 2009, life expectancy at birth in Viet Nam was 72 years, compared to 61 years in Cambodia and 63 years in the Lao People’s Democratic Republic.

Expenditures on health, both in terms of total expenditure as percentage of GDP and per capita total expenditure, vary among the three countries. Total health expenditures have increased in all three countries over the last decade. Viet Nam spent US$ 77 per capita total expenditure on health in 2009, compared to US$ 41 in Cambodia and US$ 39 in the Lao People’s Democratic Republic. The total expenditure on health as percentage of GDP was reduced in Cambodia from 6.3% in 2000 to 5.3% in 2009, probably reflecting the large focus on rebuilding of the health sector after the Khmer Rouge period. The data would suggest that the expenditure on health is one of the determinants of health outcomes and emphasized that adequate resources are needed for effective policy implementation.

All three countries have high levels of private expenditures on health as percentage of total expenditures on health and also have high out-of-pocket expenditures. Although out-of-pocket expenditures may occur in public facilities, it may also suggest that the private sector plays an important role in health service delivery. People often turn to private clinics and pharmacies as they are easier to access, and the most complicated cases that require hospitalization go to public hospitals. The non-state health sector appears to be expanding rapidly in all three countries, but remains poorly understood and largely outside the scope of planning for public health.
Table 1. Trends in vital statistics in Cambodia, the Lao People’s Democratic Republic and Viet Nam 1990–2010

<table>
<thead>
<tr>
<th></th>
<th>Cambodiaa</th>
<th>Lao People’s Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality rate (IMR) per 1000 live births</td>
<td>1990 87</td>
<td>2000 77</td>
<td>2010 43</td>
</tr>
<tr>
<td></td>
<td>2000 77</td>
<td>2000 64</td>
<td>2010 42</td>
</tr>
<tr>
<td></td>
<td>2010 43</td>
<td>2010 42</td>
<td>2010 19</td>
</tr>
<tr>
<td>Under-five mortality rate (U5MR) per 1000 live births</td>
<td>1990 121</td>
<td>2000 103</td>
<td>2010 51</td>
</tr>
<tr>
<td></td>
<td>2000 103</td>
<td>2000 88</td>
<td>2010 54</td>
</tr>
<tr>
<td></td>
<td>2010 51</td>
<td>2010 54</td>
<td>2010 23</td>
</tr>
<tr>
<td>Maternal mortality ratio (MMR) per 100 000 live births</td>
<td>1990 830</td>
<td>2000 510</td>
<td>2010 250</td>
</tr>
<tr>
<td></td>
<td>2000 510</td>
<td>2000 870</td>
<td>2010 470b</td>
</tr>
<tr>
<td></td>
<td>2010 250</td>
<td>2010 470b</td>
<td>2010 59</td>
</tr>
<tr>
<td>Life expectancy at birth (both sexes)</td>
<td>1990 59</td>
<td>2000 50</td>
<td>2010 65</td>
</tr>
<tr>
<td></td>
<td>2009 61</td>
<td>2009 63</td>
<td>2010 72</td>
</tr>
</tbody>
</table>


Qualified human resources throughout the health-care system are essential for effective health service delivery to ensure the quality of health services. There are significant differences between the three countries in terms of availability of human resources as shown in Table 2.

Viet Nam has qualified staff including medical doctors at lower-level institutions. However, both Cambodia and the Lao People’s Democratic Republic have few medical doctors in the periphery. In the Lao People’s Democratic Republic, 88% of the staff members at the district level are mid- and low-level health workers, with physicians representing only 6% of district-level staff. In Cambodia, the highest level of staff members in health centres is assistant doctor, but in many rural areas the highest level is only health workers with a secondary nursing education. Viet Nam is significantly advanced, with medical doctors, nurses, midwives and laboratory staff at district health centres and medical doctors or assistant doctors, nurses and midwives at commune health stations (70% of commune health stations have medical doctors).³

### Table 2. Human resources in Cambodia, the Lao People’s Democratic Republic and Viet Nam

<table>
<thead>
<tr>
<th>Human resources</th>
<th>Cambodia</th>
<th>Lao People’s Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing and midwifery personnel density (per 10 000 population)</td>
<td>7.9</td>
<td>9.7 a</td>
<td>10.2</td>
</tr>
<tr>
<td>Physicians (per 10 000 population)</td>
<td>2.3</td>
<td>2.7</td>
<td>12.2</td>
</tr>
</tbody>
</table>


* a. 2.4 medical doctors/10 000 population (8.8 capital & 1.5 outside); 8.5 nurses /10 000 population (8.5 capital & 8.5 outside), Vientiane: Department of Personnel, Ministry of Health; March 2011

### 3.2 Key factors contributing to policy implementation at subnational level

The study revealed several factors common to the three countries that contributed to successful policy implementation.

**Policy structure**

Policy implementation is affected by the capacity of a statute to structure the entire implementation process, including setting the implementation structure, regulating the participation by stakeholders and building basic implementation rules, such as reporting and feedback. The implementation process set by the Government of Cambodia to reduce maternal mortality signifies the importance of the policy implementation structure. With the launch of the Fast Track Initiative in 2008, a fast-track record system was established through which all public health facilities have to report immediately the cause of any maternal death occurring in their facilities.

The basic policy structure, as in the Healthy Village project in the Lao People’s Democratic Republic and the Special Operating Agency (SOA) in Cambodia, is assumed to positively affect the factors related to the successful policy implementation, including political commitment, resources, motivation and incentives, and monitoring and feedback.

Multilevel and multisectoral coordination are important factors for successful policy implementation. Formulating the policies as a vertical or semi-vertical programme is one of main reasons for poor cooperation and coordination in implementation. In Viet Nam, effective implementation of the health insurance policy at the subnational level was significantly hindered by multiple flows of decision-making and action. For example, between the health facilities, the health insurance agency, the provincial Labor and Invalid Social...
Affairs Department, and the Finance Department, there were multiple issuances of insurance cards from these agencies for the same person.

Policy coherence is another factor for successful policy implementation. For example, in Viet Nam, lack of appropriate related policies, such as an adequate provider payment mechanism and an efficient referral system, limited the implementation of the health insurance policy at the district and commune levels.

In a decentralized environment, less clearly defined institutional relationships between the national, provincial and local governments could contribute to poor coordination in implementing policies.

**Dissemination of policy information**

Adequate dissemination of policy information, particularly to grass-roots level implementers, is necessary for seamless policy implementation. Findings from an assessment in Viet Nam revealed that the health insurance policy was disseminated mainly to the province and district hospital level, but not fully to commune health stations even though it is crucial for the commune health stations to provide adequate services to the insured patients. In other countries, policy information is also frequently not disseminated beyond the provincial level.

Directives and guidelines should be in place to help those involved in policy implementation. In the framework of the SOA in Cambodia, annual work plans are formulated at each operational district, with a local context and in alignment with the national health policy.

**Political commitment**

Strong political commitment facilitates policy implementation at the national, provincial and local levels.

At the national level, formulating the policies with stronger political implications, such as an independent national plan, can attract concern and induce commitment from those engaged in the policy implementation. For instance, the Government of the Lao People’s Democratic Republic focused on the primary health-care strategy in the *Seventh National Socio-Economic Development Plan (2011–2015)* to use fund sources and implement policies on:

- establishing mobile medical units to travel to every village in remote rural areas, particularly those having a high risk of illness and maternal and child mortality, with at least four trips to be made per year; and
- investment in prevention and primary health care, construction of health centres in areas that do not have them, and improvement of existing health centres to raise their standards for providing timely health services.

Advocacy from key political players also contribute to enhancing awareness and recognition of the policy. In Cambodia, the influential figures in sending health messages included Ministry of Health networks and the First Lady, in her capacity as the chairperson of the Cambodian Red Cross, and her working team. Raising awareness of primary health care
is recognized in the media as the role of the First Lady, especially in relation to safe motherhood and health centre utilization. Large government organizations in the Lao People’s Democratic Republic, such as the Lao Women’s Union and the Lao Red Cross, are involved in health activities supporting promotion and prevention at the grass-roots level.

Political commitment of the local authorities, such as People’s Committee in Viet Nam, is another important factor in successful policy implementation. This commitment facilitates policy implementation through political functions, including through clearer directives and guidelines, mobilizing additional resources, and promoting coordination.

Leadership

Leadership is a crucial factor in implementing policies effectively. The functional elements of leadership are multiple and diverse: setting targets and roles, guiding programmes and activities, motivating implementers, performing supportive supervision, eliminating barriers, and facilitating coordination and communication.

As demonstrated by a district health director in Cambodia, leadership is developed through effective training and education. However, participation in training programmes depends on motivation of the leaders, which are in turn strongly influenced by policy structure, such as the need for a leader’s managerial capacity in the SOA structure.

Motivation and capacity of the managers and staff

Financial incentive is a crucial to staff retention and commitment. In Cambodia, incentives come from different sources, including the SOA, user fees, governmental financial incentives for safe births and others. Health staff members under SOA contracts receive a substantial monetary bonus, with an average around 250% monthly. Health workers at local levels reported that their bonus is about two times more than their government salary.

Nonfinancial incentives are also helpful. These include professional morale, the physical environment of health facilities such as accommodations and accessibility, positive feedback from supervisors, and adequate training and preparedness for high-quality service. In Cambodia, due to a shortage of nurses at health centres in rural areas, coupled with hesitation of new nurse graduates to work in rural areas, a new strategy of recruiting local nurse students was adopted. This strategy has worked well, with at least one primary nurse deployed to every health centre. In addition to individual incentives, institutional-level motivation also facilitates or hinders policy implementation.

Capacity-building is another factor of successful policy implementation. Target areas of capacity enhancement for the leaders and managers at every level are leadership and managerial skills. For staff members of health-care facilities, technical competence is highly prioritized.

Community and stakeholders involvement

Involvement from non-state and civil society actors contributes to effective and efficient policy implementation. Currently participation encompasses policy formulation, resource
mobilization, service provision, and supervision and monitoring. Main actors in the imple-
mentation process include nongovernmental organizations, religious groups, youth and
women’s groups. In the Sepol district of the Lao People’s Democratic Republic for example,
a nongovernmental organization (community activities), an international agency (maternal
and child health, and nutrition) and a foreign research institute (health demographic
surveillance system) are supporting the district health department in implementing the
policy. In Viet Nam, there is stakeholder involvement in the policy formulation process but
collaboration in implementation is limited due to the lack of a mechanism for collaboration
among related stakeholders.

The role of health workers at the community level is worth mention. Although there is not
sufficient evidence to support the conclusion, village health volunteers may be contributing
to strengthening the local health system, including human resources, health information
and service delivery. It was noted that the well-performing village health workers were one
of contributing factors to the good health indicators of a community in the Lao People’s
Democratic Republic.
4. Conclusion

Cambodia, the Lao People’s Democratic Republic and Viet Nam have seen rapid economic growth and falling poverty since the 1990s. They continue to undergo economic reform and a shift to a market economy. While all three have made significant improvements in their health situation and the health outcomes of their people, statistics suggest that, at the turn of the century, Viet Nam was at least 10 years ahead of the other two countries in terms of health development. A combination of political events may have contributed to this disparity, such as the devastating Khmer Rouge period in Cambodia and the efforts in rebuilding Viet Nam, with focus on health and education after the war. Cambodia and the Lao People’s Democratic Republic are smaller countries with a substantial population living in hard-to-reach areas. Those two countries also have a lower literacy level than Viet Nam, especially among women. However, Cambodia and the Lao People’s Democratic Republic have made significant improvements in the health over the last decade, although the rates for infant and maternal mortality still remain double those of Viet Nam.

This study shows the challenges in not only developing—but also implementing—health policies at the subnational level. The findings suggest that adequate economic and human resources are not always in place for effective policy implementation. Cambodia and the Lao People’s Democratic Republic are spending less on health than Viet Nam and need to invest in placing greater numbers of qualified nurses, midwives and medical doctors at the district level.

All three countries are operating within decentralized health systems that require clearly defined institutional roles and responsibilities among national, provincial and local governments. The private sector and non-state providers are increasingly prominent in health service delivery, while the involvement and oversight of non-state service providers continues to be weak.

For successful policy implementation, there should be clearly defined policy structures and implementation processes. Strengthening of the subnational health system, particularly the district health system, from the perspective of providing integrated primary health-care services should be highlighted. Multisectoral and multilevel coordination is essential for the seamless implementation of policy at the subnational level. Wide dissemination of policy information, down to the grass-roots levels, also is important.

Leadership is crucial in implementing policies and should be developed through effective training and education. Policy structure to motivate effective leadership and enhance managerial skills should be considered. Financial and nonfinancial incentives should be available to managers and staff working at the subnational level. Capacity-building, including for technical competence, is also essential for leaders and managers at the every level of policy implementation.
5. Recommendations

Recommendations are offered to governments to strengthen activities in supporting policy implementation at the subnational level

- The structure and function of the health system at the subnational level should be strengthened from the perspective of providing integrated primary health-care services.

- Leaders and managers at the provincial and local levels should have the opportunity to benefit from training to enhance their leadership, technical competence and managerial skills.

Recommendations for WHO

- Increase the focus on assistance to Mekong countries in planning, implementing and monitoring national programmes and health system strengthening at the subnational level.

- Refine the structure, function and role of WHO in supporting policy implementation at the subnational level according to the needs of the Mekong countries at the national level, as well as subregional level.

Recommendations for WHO and country governments

- Further collaboration among the Mekong countries for effective policy implementation at the subnational level, as well as development of human resources and health financing, should be explored.

- Mekong countries are encouraged to conduct further research on health policy studies, including implementation at the subnational level, to provide direction for improved health outcomes and universal health coverage.
References

- International Monetary Fund. World Economic Outlook Database. Washington, DC: International Monetary Fund; 2013.
## Annex 1

Comparison of health outcomes and characteristics of health-care systems

### Exhibit 1: Trends in health outcomes and expenditures on health

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao People's Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infant mortality rate (per 1000 live births)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>87</td>
<td>100</td>
<td>37</td>
</tr>
<tr>
<td>2000</td>
<td>77</td>
<td>64</td>
<td>27</td>
</tr>
<tr>
<td>2010</td>
<td>43</td>
<td>42</td>
<td>19</td>
</tr>
<tr>
<td><strong>Under-five mortality rate (per 1000 live births)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>121</td>
<td>145</td>
<td>51</td>
</tr>
<tr>
<td>2000</td>
<td>103</td>
<td>88</td>
<td>35</td>
</tr>
<tr>
<td>2010</td>
<td>51</td>
<td>54</td>
<td>23</td>
</tr>
<tr>
<td><strong>Maternal mortality ratio (per 100 000 live births)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>830</td>
<td>1600</td>
<td>240</td>
</tr>
<tr>
<td>2000</td>
<td>510</td>
<td>870</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>250</td>
<td>470 b</td>
<td>59</td>
</tr>
<tr>
<td><strong>Total fertility rate (per woman)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>2.6</td>
<td>2.7</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Life expectancy at birth (both sexes)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>59</td>
<td>50</td>
<td>65</td>
</tr>
<tr>
<td>2009</td>
<td>61</td>
<td>63</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total expenditure on health as % of gross domestic product (GDP)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>6.3</td>
<td>3.3</td>
<td>5.3</td>
</tr>
<tr>
<td>2009</td>
<td>5.3</td>
<td>4.3</td>
<td>6.9</td>
</tr>
<tr>
<td><strong>Private expenditure on health as % of total expenditure on health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>79.6</td>
<td>64.9</td>
<td>69.1</td>
</tr>
<tr>
<td>2009</td>
<td>63.4</td>
<td>71.7</td>
<td>62.5</td>
</tr>
<tr>
<td><strong>Out-of-pocket expenditure as a percentage of private expenditure on health</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>89.5</td>
<td>91.8</td>
<td>95.6</td>
</tr>
<tr>
<td>2009</td>
<td>66.8</td>
<td>70.7</td>
<td>92.7</td>
</tr>
<tr>
<td><strong>Per capita total expenditure on health at average exchange rate (US$)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>19</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>2009</td>
<td>41</td>
<td>39</td>
<td>77</td>
</tr>
<tr>
<td><strong>Population living in urban areas (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>20</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td><strong>Literacy rate, adult total (% of people aged 15 and above)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>73.9</td>
<td>72.7</td>
<td>93.4</td>
</tr>
<tr>
<td><strong>Human Development Index</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>138</td>
<td>138</td>
<td>127</td>
</tr>
</tbody>
</table>


Exhibit 2: Key elements of the district health systems

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao People’s Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population density (population/km²)</strong>(^a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>74</td>
<td>27</td>
<td>265</td>
</tr>
<tr>
<td><strong>Human resources</strong>(^b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– Nursing and midwifery personnel density (per 10 000 population)</td>
<td>7.9</td>
<td>9.7 (^c)</td>
<td>10.2</td>
</tr>
<tr>
<td>– Physicians (per 10 000 population)</td>
<td>2.3</td>
<td>2.7</td>
<td>12.2</td>
</tr>
</tbody>
</table>

**District health facilities and delivery system**

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao People’s Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cambodia</strong></td>
<td>The district health system consists of a referral hospital (RH) and health centres (HCs). All RHs are located in more urban areas of districts. There are health posts (HPs) in remote areas. Tertiary services are provided by national hospitals based in Phnom Penh.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lao People’s Democratic Republic</strong></td>
<td>The health sector is organized in four levels, attached to the government administrative system: the central; regional or provincial; district; and health centre. The health services delivery network covers from the central to village level in areas of health promotion, disease prevention, primary health care and medical care. Inpatient care is provided by government hospitals categorized as secondary care in district hospitals. Tertiary care level is provided through central, regional and some provincial hospitals.(^e)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Viet Nam</strong></td>
<td>The health sector is organized in four levels, attached to the government administrative system, including the central, provincial, district and commune. The health service delivery network covers from the central to village level in areas of prevention, primary health care (PHC), medical care and population/family planning (PFP). A nationwide grass-roots health-care network has been established, including district, commune and village levels. About 98.7% of total communes have health stations.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Distribution of health workers**

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao People’s Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cambodia</strong></td>
<td>At health centre level, the highest educational level of health staff is assistant doctor, but many in rural areas staff members have only secondary nursing education. Regarding midwives, health centre Category C has only a primary midwife, while Category B has a secondary midwife.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lao People’s Democratic Republic</strong></td>
<td>The staff members at district level are mid- and low-level (88%)(^f) health workers, with physicians representing only 6% of district-level staff.(^g) Health centres are almost totally served by low-level (81%) and mid-level (18%) staff. There are only eight doctors working in health centres.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Viet Nam</strong></td>
<td>District hospitals have medical doctors, assistant doctors, nurses, midwives, laboratory staff, pharmacists (or secondary pharmacists), administrative staff. District health centres have medical doctors, nurses, midwives and laboratory staff. 70% of commune health stations (CHCs) have medical doctors or assistant doctors, and 97.5% of villages have village health workers (VHWs). In addition, the health stations have nurses, midwives and a few primary pharmacists.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## The administrative structure of local authorities (provincial and district) and their role in management of health

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cambodia</strong></td>
<td>The hierarchical administrative structure of local authorities includes provincial (governor and provincial council), district (governor and district council), commune (chief and commune council), and village (chief). The councils (at the three levels) oversee and manage health facilities in their territories. They also assist and support the implementation of health service delivery and management of health system through council meetings, such as deciding on visit fees, solving emerging issues, providing places for outreach health activities and coordinating with health partners.</td>
</tr>
<tr>
<td><strong>Lao People’s Democratic Republic</strong></td>
<td>The Provincial Health Office (PHO), an agency under the jurisdiction of the provincial government (PG) headed by the governor, advises the governor on health affairs in the province, provides budget for health services provision, and performs tasks and obligations as authorized by the governor. The PHO works under the control of the PG in terms of direction, organizational management, payroll and operations, but is also under the control of the Ministry of Health in terms of technical direction, guidance, monitoring and inspection. The PHO is accountable to the PG and Ministry of Health. The district hospital director is appointed by the PHO under guidance of district governor, budget for district health offices (DHOs) comes from the district governor, PG and the Ministry of Health.</td>
</tr>
<tr>
<td><strong>Viet Nam</strong></td>
<td>The Provincial Department of Health is under the umbrella of Provincial People’s Committee and is responsible for oversight and management of every health-care activity in the province including curative care, preventive care, rehabilitation, food safety and reproductive health. All health facilities receive funding from the government budget. For the better-off provinces, funding comes from both central budget and local budget, but for the poorer provinces the funding comes only come from central budget. The budget allocated for provincial and district hospitals is based on number of beds, while the budget allocated for district health centres and commune health stations is based on number of staff and number of population in each area. The District Insurance Agency signs contracts via district hospital for the services provided.</td>
</tr>
</tbody>
</table>

## Role of private sector and other non-state providers in service delivery and primary health care

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cambodia</strong></td>
<td>Nongovernmental organizations provide clinics for the poor or specific populations, such as women; reproductive health and family planning services; and collaboration with an operational district (OD) and an HC in services delivery to marginalized populations. Private clinics have an important role in providing health services to those who can afford to pay. Services comprise regular health check-ups and non-complicated health issues, while patients are usually referred to the state hospitals when their health problems are complicated. There are also private hospitals for those who are more affluent. Pharmacies and drug stores can sell medicine to patients without prescription. This is convenient for minor sicknesses, but is also used by the poor who cannot or do not want to pay a doctor’s fee.</td>
</tr>
<tr>
<td><strong>Lao People’s Democratic Republic</strong></td>
<td>Private clinics and pharmacies serve the paying patients who can afford to pay user fees. Basically, a private clinic is owned by a medical doctor, medical associate or medical assistant. Similarly, a private pharmacy is owned by a pharmacist. It is common practice for government health professionals to conduct private practice in their clinics and drug stores. The majority of private clinics and private pharmacies in the country is owned by government staff members who work in public health facilities during official hours and run their own businesses outside of official hours. A new private wing is being established in two of the central hospitals in the capital city. There were 222 private clinics in the country in 2010.</td>
</tr>
</tbody>
</table>
### Viet Nam

Results from national surveys and studies\(^1\) show that the non-state sector provides 60%–75% of outpatient services and up to 4% of inpatient services.\(^1\) While the non-state health sector is rapidly developed, it remains poorly understood and largely outside of planning for public health. There were more than 65 000 non-state health facilities as of 2009. Of which, about 30 000 are private medical facilities and 93 are private hospitals. The non-state pharmaceutical sector now has become a major actor in the pharmaceutical market. There is a network of 39 172 drug retailers, most are privately owned.

### Health information system, including data of health utilization and feedback system

#### Cambodia

The national level collects and publishes health data annually in the *National Health Statistics Report* of the Ministry of Health. The health data in these reports are disaggregated by ODs, the lowest level of disaggregation that is sufficient for every OD to assess and compare their performance with other ODs.

In addition, Special Operating Agencies (SOA) ODs have performance reports provided to donors and higher levels and these performance indicators are reflected into their subsequent annual planning, taking into account weaknesses and strengths. Such planning serves as the base for SOA contracts.

#### Lao People’s Democratic Republic

Recent progress in information includes development of the *National Health Information System Strategic Plan (HISSP)* 2009–2015. Implementation progress has included the publication of an annual *National Health Statistics Report (NHSR)* by the Ministry of Health. Fiscal year 2009–2010 saw the first publication of this report using consolidated national data collected from health centres through the Health Management Information System. However, the health information systems have some critical problems related to underreporting, unreliability, duplication, non-uniformity, etc. Mechanisms for information collection, analysis, transfers, dissemination and absorption are extremely limited and lack coordination. The unified national health statistics database is absent. There is lack of effective analysis and use of data for planning.\(^5\) The vital registration system exists in some project areas but lacking in most of the areas.

#### Viet Nam

The policy regulation framework has not been well developed, and resources allocated for health information systems are insufficient. There is a lack of guidelines for data collection, verification, supervision mechanism, a quality control system and mechanism for information feedback. Using health information systems data for resource allocation and plan development is still limited. Furthermore, weak data on the private sector for management and planning purposes, and lack of sharing information between health sector and other sectors, and within health sector as well.\(^\text{m}1\)

### Engaging people and communities in health provision and health planning at community level

#### Cambodia

Outreach health activities are key for engaging the community, sometimes with health staff alone, sometimes in collaboration with local nongovernmental organizations. Examples are immunization outreach, vitamin A outreach, etc.

#### Lao People’s Democratic Republic

DHOs provide outreach activities in collaboration with HC staff under support of nongovernmental organizations in some project areas. During outreach activities (vaccination, deworming, vitamin A distribution conducted four times per year). VHVs and village health committees in each community facilitate the health staff, but the role the community in supervision in health is still weak.

#### Viet Nam

The role of civil society and community in supervision of health provision and health planning is very weak.\(^\text{m}\)
### Village health workers and volunteers

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Village health support groups, consisting of village chief and village health volunteers (VHV), who are not health staff and have no salary, but receive incentives only or some pay by nongovernmental organizations serve as a critical bridge between health centre and the community. VHVs have basic but necessary knowledge about health care.</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>The village health committee selects and supervises the VHVs, usually 2–3 (male and female) per village. The VHVs mainly provide basic curative care and run a village revolving drug fund (5764 drug kits are available for whole country). VHVs do not receive any salary except fees for transport during the meeting and training workshop.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>97.5% of villages have village health workers (VHWs). VHWs who work in rural areas receive allowance from the government budget (in hardship areas, receive allowance equal to 50% of basic salary, in rural areas receive allowance equal to 30% of basic salary); those who work in urban area do not receive any allowance.</td>
</tr>
</tbody>
</table>

### District health management support systems

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>Each OD health system should have a well-defined management structure, roles and responsibilities, a two-level health system and an effective referral system and they should implement a health coverage plan. In addition, they should have programmes to improve skills of health staff and their optimal use, and they should properly manage the budget and other resources. Management structure of OD has three levels: health management team responsible for management of daily activity; OD technical team responsible for providing support and advice; and an OD development committee to serve as a bridge between OD and community, and making sure that health services meet peoples’ needs.</td>
</tr>
<tr>
<td>Lao People’s Democratic Republic</td>
<td>Under the district health committee, DHO director boards and district governors, the DHO supervises services in the district hospital and health centres. The DHO works under the control of the district governor in terms of direction, organizational management, payroll and operations, but is also under the control of the PHO for technical direction, guidance, monitoring and inspection. The district level also has district hospitals (including outreach activities) and district units for preventive medicine such as mother and child health unit, immunization unit, hygiene and prevention unit, etc. The local government support both political and administrative issues.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>The district health managers, including director boards of district hospitals, district health centres (responsible for preventive care) and district health units. District hospitals and district health centres are under the management of Provincial Department of Health in terms of technical direction, monitoring and inspection. The district health unit is under the management of District People’s Committee in terms of administration. The management activities are supported by regulation/guidance from Ministry of Health with identified indicators and also a reporting mechanism.</td>
</tr>
</tbody>
</table>

---

a. [http://en.wikipedia.org/wiki/List_of_population_density](http://en.wikipedia.org/wiki/List_of_population_density) (accessed on 9 November 2012). Figures used are mainly based on the latest censuses and official estimates (or projections). Where there is not such updated national data available, figures are based on the 2012 estimates provided by the Population Division of the United Nations Department of Economic and Social Affairs.


c. 2.4 medical doctors/10 000 population (8.8 capital & 1.5 outside); 8.5 nurses /10 000 population (8.5 capital & 8.5 outside), Vientiane: Department of Personnel, Ministry of Health; March 2011.

d. Vientiane Capital has 5 central hospitals, 3 specialized centres (ophthalmology, dermatology, and rehabilitation centre) and 2 military and police hospitals. Other 16 provinces have one provincial hospital in each province of which 4 provincial hospitals have been upgraded to regional hospitals (Champasack, Savannakhet, Luangprabang and Oudomxay provinces).
e. For specialized services by specialist health professionals e.g. health expert, specialist, medical doctors, nurses, therapists, diagnostic professionals.

f. Low-level education (e.g. high school) – level 2; Mid-level education certificate (minimum three-year course) – level 3 step 3 (3/3).

g. At hospital of all levels, there are medical doctors, assistant doctors, nurses, midwives, laboratory staff, pharmacists (or assistant pharmacists), and administrative staff.

h. The private health sector is expanding in particular favorable economic growth since 2000, mushrooming in urban areas with over 2000 private pharmacies, 600 traditional medicine practitioners and about 500 private clinics.


### Exhibit 3: Access to primary health care

<table>
<thead>
<tr>
<th></th>
<th>Cambodia</th>
<th>Lao People's Democratic Republic</th>
<th>Viet Nam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenatal care coverage – at least four visits (%)</strong></td>
<td>59</td>
<td>n.a.(^a)</td>
<td>n.a.(^b)</td>
</tr>
<tr>
<td><strong>Births attended by skilled health personnel (%)</strong></td>
<td></td>
<td>71</td>
<td>37 (^c)</td>
</tr>
<tr>
<td><strong>Measles (MCV) immunization coverage among 1-year-old children (%)</strong></td>
<td>93</td>
<td>64</td>
<td>84 (^d)</td>
</tr>
<tr>
<td><strong>Children aged &lt; 5 years with ARI symptoms receiving antibiotics (%)</strong></td>
<td>39</td>
<td>52</td>
<td>55</td>
</tr>
<tr>
<td><strong>Children aged &lt; 5 years stunted (%)</strong></td>
<td>40.9</td>
<td>47.6</td>
<td>30.5</td>
</tr>
<tr>
<td><strong>Unmet need for family planning (%)</strong></td>
<td></td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td><strong>Outreach of primary health care to ethnic minorities</strong></td>
<td>Improvement in health status in remote areas habited by minorities and tribal communities is slower than in other areas. Two major activities addressing limited access include building health centres or health posts in remote areas in rural provinces, such as Rattanak Kiri and Modul Kiri, and promoting outreach activities across the country by community health volunteers to reach remote communities.</td>
<td>The existing mobile team is an outreach health service organized at each level of the health system from the health centre to the highest level that allows health services to reach a larger group of beneficiaries including the most remote populations and ethnic group four times per year. Main activities included immunization, growth monitoring, health education, hygiene, etc.</td>
<td>In remote areas where the health services are not accessible for people, mobile health teams (including commune health workers and medical doctors from district levels) are sent to village level to provide immunization or for health check-ups.</td>
</tr>
</tbody>
</table>


\(b\) 86.7 (Health Statistics Yearbook 2011. Hanoi: Ministry of Health; 2013. But, percentage of antenatal care 3 or more than 3 times in 3 trimesters).


Annex 2

List of research team members

Principal investigator
• Professor Chang-yup Kim, Seoul National University, Republic of Korea

Co-investigators
• Dr Bunnak Poch, Western University, Cambodia
• Dr Sengchanh Kounnavong, National Institute of Public Health, Lao People’s Democratic Republic
• Dr Tran Thi Mai Oanh, Health Strategy and Policy Institute, Viet Nam
• Dr Eigil Sorensen, Consultant

From WHO country offices
• Mr Richard Duncan, Office of the WHO Representative in Cambodia
• Dr Sovanratnak Sao, Office of the WHO Representative in Cambodia
• Dr Valeria De Oliveira Cruz, Office of the WHO Representative in the Lao People’s Democratic Republic
• Mr Thongleck Xiong, Office of the WHO Representative in the Lao People’s Democratic Republic
• Mrs Thi Kim Phuong Nguyen, Office of the WHO Representative in Viet Nam

From the WHO Regional Office for the Western Pacific
• Dr Kidong Park, Country Support Unit
• Dr Kunhee Park, Country Support Unit
• Mr Joshua Nealon, Malaria, Other Vectorborne and Parasitic Diseases
• Dr Gabit Ismailov, Division of Health Security and Emergencies
• Dr Howard Lawrence Sobel, Maternal, Child Health and Nutrition
• Dr Manju Rani, Health Information, Evidence and Research
• Mr Sjieuwke Postma, Health Services Development
• Ms Laura Hawken, Health Services Development