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# Lao People's Democratic Republic
# Health Human Resource Study

## Analyses of Health Workforce Retention and Attraction Policies

**Final Report**

# Analysis of Health Workforce Retention and Attraction Policies in Lao PDR

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**By**

**Phouthone Vangkonevilay**
**Chanthakhath Paphassarang**
**Khampasong Theppanya**
**Outavong Phathammavong**
**Arie Rotem**

**General information**

**Research team**


1. Phouthone Vangkonevilay, BDent, Master of Public Health (Vice Rector of the University of Health Sciences, MOH)
2. Chanthakhath Paphassarang, BPHARM, MPH (Director of Health Research Division, Department of Training and Research, MOH)
3. Khampasong Theppanya, MD, MPH (Head of Organization Division)
4. Outavong Phathammavong DVM, MSc, PhD (National Monitoring and Evaluation Expert, Lao/027 LL-HSSP, Lux Development, Lao PDR)
5. Arie Rotem, PhD (HRH Consultant, Department of Training and Research, MOH)


**Peer review team**

Christopher H. Herbst, Health Specialist, Africa Region Focal Person on HRH, the World Bank

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**Address**


Department of Training and Research
Ministry of Health
Vientiane Capital, Lao PDR
Tel: +856-21-212221 and +856-21-217846;
Fax: +856-21-217846

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**List of Acronym**

| | |
|---|---|
| AAAH | Asia-Pacific Action Alliance on Human Resources for Health |
| CPS | Champasak province |
| DOP | Department of Organization and Personnel |
| DTR | Department of Training and Research |
| FGD | Focus Group Discussion |
| HiT | Health System in Transition |
| HRH | Human Resources for Health |
| KI | Key informants |
| KMN | Khammuane province |
| Lao PDR | Lao People's Democratic Republic |
| LPB | Luangprabang province |
| MA | Medical Assistant |
| MD | Medical Doctor |
| M&E | Monitoring and Evaluation |
| MOES | Ministry of Education and Sport |
| MOF | Ministry of Finance |
| MOH | Ministry of Health |
| MOHA | Ministry of Home Affairs |
| ODX | Oudomxay province |
| PHO | Provincial Health Office |
| PMO | Prime Minister's Office |
| SVNK | Savannakhet province |
| VTP | Vientiane Province |
| UHS | University of Health Sciences |
| WHO | World Health Organization |
| XK | Xiengkuang Province |

## Executive Summary

1. Lao People's Democratic Republic (Lao PDR) has a critical shortage and maldistribution of its health workforce. The Ministry of Health (MOH) and the Lao government have developed and endorsed a number of policies, Decrees and regulations to address this situation. However, it is acknowledged that enforcement, implementation, and monitoring of these policies needs to be further strengthened.

2. This study is part of multi-country study on rural retention policy analyses covered by AAAH to provide a qualitative analysis of recent supply-side policies designed to improve availability and access of human resources for health (HRH) in remote areas. It provides a chronological inventory of current government policies for improving rural retention of health workers with reference to the 16 recommendations made by the World Health Organization (WHO) in their 2006 Working Together For Health, which contains an expert assessment of the then crisis in the global health workforce and ambitious proposals to tackle it over the next 10 years. This study uses a policy analysis tool that focuses on policy formulation and implementation to analyze and compare three selected rural retention policies, with reference to their formulation, implementation and the outcomes achieved. The study recommends options for improving rural retention strategies including assessment of their relative effectiveness with a view to strengthening their content, overcoming implementation bottle-necks, and identifying opportunities for up scaling.

3. Majority of the sixteen recommendations of the WHO except a recommendation on better living conditions of the health workers have at least a policy, strategy and/or grey documents related to them.The three selected policies offer a comprehensive incentive benefit package to health workers including admission of students with rural backgrounds to health institutes; provision of financial incentive, career promotion and opportunity for continued education for those who work in rural areas. However, the implementation of these policies varies between training institutes on the admission side, and between the central and provincial level on the deployment side; only 10 of 17 Provinces have been enforcing and implementing the 2010 Decree Number 468/PMO on the provision of financial incentives for civil servants.

4. The analysis reveals a critical gap between policy intent and implementation. The reasons for this include: (a) insufficient human resources with capacity to effectively interpret and apply the policy into practice at all levels; (b) insufficient budget allocation (especially for Decree Number 468/PMO) resulting in unfunded mandates; (c) inadequate basic infrastructure for new staff at the rural facilities (housing, working environment); (d) absence of timely updated HRH database for supervision, and monitoring and evaluation (M&E) of the policies; (e) no unit in the concerned ministries or provinces tasked with the specific responsibility of implementing the policies. In addition, the consultative workshop held with key policy makers, managers and implementers noted that the absence of unity in reinforcing and implementing these policies might be attributable to the lack of awareness on the part of the policy makers and management in the concerned agencies.

5. Given such obstacles in implementation and enforcement of the retention policies, the study recommends approaches for bridging the gap between policy formulation and implementation. This includes: (a) including in policy formulation analysis of the financial and human resource requirements of the decrees being recommended in order to ascertain the feasibility of implementation; (b) having guidelines for implementation of the policies, and a reliable arrangements for M&E to monitor policy implementation; and (c) strengthening the health management capacity for policy enforcement.

## Introduction

1. Worldwide, Lao PDR has been identified among 57 countries with a critical shortage and skewed distribution of its health workforce, especially in remote and rural areas (Guilbert 2006, World Bank 2015). Healthcare education is provided by the public sector through nine public health training institutes in the country: The University of Health Sciences (UHS) in Vientiane Capital provides medical related programs including medicine, dentistry, pharmacy, medical technology, nursing basic sciences and post graduate studies, with the other institutions located at provincial levels: three Regional Public Health Colleges, four Provincial Public Health Schools and one Nursing School. The annual output from these institutions is approximately 2,000 (Department of Organization and Personnel (DOP), 2013).

2. More than 70% of the population in Lao PDR resides in the rural areas, where 88% of the workforce consists of mid- to low-level trained workers. According to the 2013 DOP data, there were 5.4 health workers per 1,000 population in urban areas, compared to 1.3 per 1,000 population in rural areas. The DOP's 2013 statistics show that there were 14,964 health staff under the Ministry of Health (MOH), of which 5,405 were mid- and high-level health workers who were actually providing health services in health facilities nationwide. This is equivalent to 0.8 qualified health care providers (medical doctor (MD), medical assistant (MA), nurse, and midwife) per 1,000 population nationally, a gradual increase from 2007 where the ratio was approximately 0.5. The WHO 2006 World Report: Working Together for Health which contained an assessment of the crisis in the global health workforce and ambitious proposals to tackle it over the next 10 years, recommends a ratio of 2.3 qualified health workers per 1,000 population; Lao's ratio is much lower than that. Table 1 shows the distribution of health workers by province and facilities level. Box 1 compares health worker (physicians and nurse and midwives) density per 1,000 population across countries in the Region.

**Table 1: Number and Distribution of Health Staff at Central, Province, District and Health Center level in 2013 (DOP 2014)**

| Name of province | N | N (%) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Province | | District | | Health center | |
| Central level | 3,061 | | | | | | |
| Vientiane Capital | 606 | 131 | (21.62) | 351 | (57.92) | 124 | (20.46) |
| Phongsaly | 430 | 132 | (30.70) | 233 | (54.19) | 65 | (15.12) |
| Luangnamtha | 435 | 167 | (38.39) | 180 | (41.38) | 88 | (20.23) |
| Oudomxay | 630 | 243 | (38.57) | 276 | (43.81) | 111 | (17.62) |
| Bokeo | 400 | 148 | (37.00) | 155 | (38.75) | 97 | (24.25) |
| Luangprabang | 937 | 386 | (41.20) | 384 | (40.98) | 167 | (17.82) |
| Huaphanh | 625 | 197 | (31.52) | 283 | (45.28) | 145 | (23.20) |
| Sayaboury | 774 | 180 | (23.26) | 389 | (50.26) | 205 | (26.49) |
| Xiengkhouang | 629 | 227 | (36.09) | 254 | (40.38) | 148 | (23.53) |
| Vientiane | 935 | 199 | (21.28) | 596 | (63.74) | 140 | (14.97) |
| Bolikhamxay | 578 | 159 | (27.51) | 269 | (46.54) | 150 | (25.95) |
| Khammouane | 915 | 343 | (37.49) | 376 | (41.09) | 196 | (21.42) |
| Salavan | 1,454 | 538 | (37.00) | 586 | (40.30) | 330 | (22.70) |
| Savannakhet | 668 | 176 | (26.35) | 334 | (50.00) | 158 | (23.65) |
| Sekong | 368 | 171 | (46.47) | 146 | (39.67) | 51 | (13.86) |
| Champasack | 1,103 | 494 | (44.79) | 401 | (36.36) | 208 | (18.86) |
| Attapu | 416 | 188 | (45.19) | 152 | (36.54) | 76 | (18.27) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sub-totals of Provinces** | 11,903 | (4079 | 34.27) | 5365 | (45.07) | 2459 | (20.66) |
| **Grand Total** | 14,964 | | | | | | |

**Box 1** health worker density per 1000 population

| | Physician per 1000 population, (2007-12) | Nurses and midwives per 1,000 population (2007-12) | Physicians, nurses and midwives per 1000 population |
|---|---|---|---|
| Cambodia | 0.2 | 0.9 | 1.1 |
| Indonesia | 0.2 | 1.4 | 1.6 |
| Lao PDR | 0.2 | 0.9 | 1.1 |
| Myanmar | 0.6 | 1.0 | 1.6 |
| Thailand | 0.4 | 2.1 | 2.5 |
| Vietnam | 1.2 | 1.1 | 2.3 |

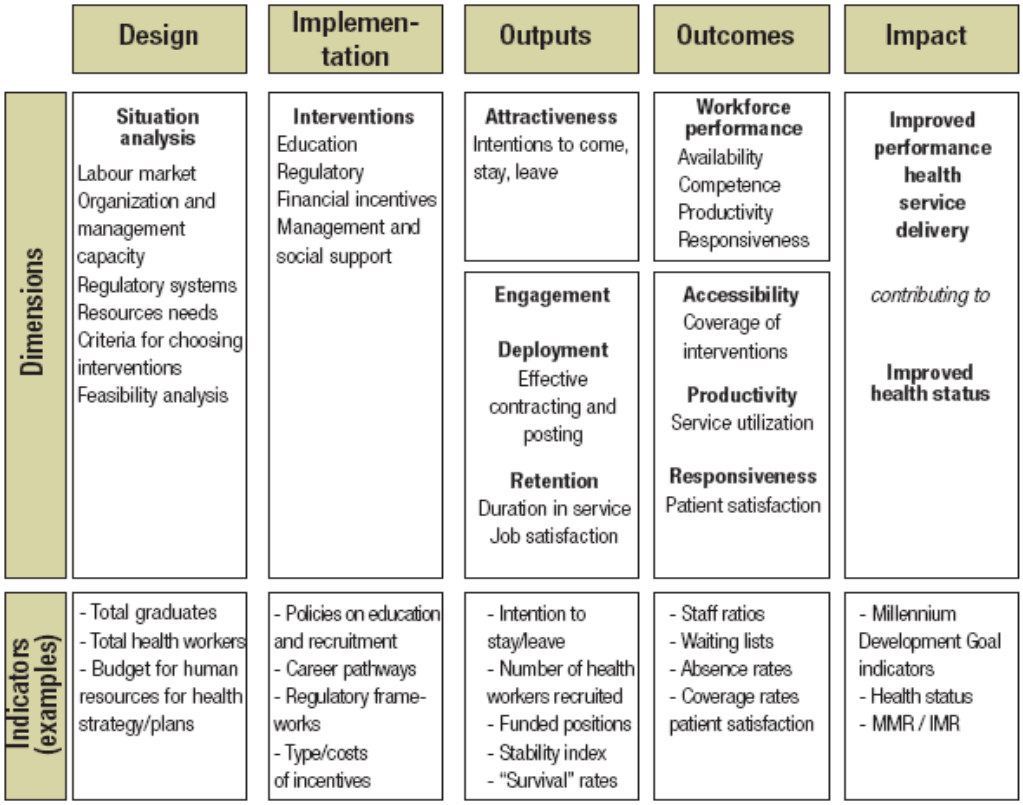
3. This study focuses on supply-side policies to determine the key challenges and policy implications regarding improved availability and retention of staff in remote areas. This possibly stems from, among other reasons, the following: (a) limited government quotas to recruit and place health workers in rural areas (i.e. in 2013 1,045 recruitment quotas were allocated to MOH, of which 882 (84.4%) were given to provinces, districts and health centers nationwide); (b) health workers' preference to work in urban areas with better income and professional career development opportunities; and (c) low self-confidence of new graduates to work independently in rural areas which is attributable to insufficient clinical practice during training, due in part to the excessive number of student intakes to training institutes. The shortage of middle and high level health workers at primary and secondary health care facility levels leads to a major gap in access to quality health care services between urban and rural areas.

4. Correspondingly, the Government of Lao PDR and the MOH have developed policies and strategies to retain and mobilize health workers to work in the rural areas. This study reviews the policies on promoting and retaining, as well as better distribution of, qualified health workers in rural areas. The policies selected for deeper analysis are (a) Prime Minister Decree Number 468/PMO on provision of financial incentives for civil servants to work in rural and difficult to reach areas; (b) Prime Minister Decree Number 82/PMO on civil service of the Lao PDR which highlights the two year compulsory service in rural areas for newly promoted civil servants, including health workers; and (c) the Instruction of the Ministry of Education and Sport (MOES) on recruitment of students with rural backgrounds that provides 30% special quota to outstanding students, ethnic minorities, and students from rural areas. The research team found that the three selected policies clearly recognize the need to improve the retention mechanism in order to solve the shortage and mal-distribution of health workers in rural areas, and lay out actions that are needed to address these issues. Notwithstanding these efforts, the lack of resources to fund, and capacity to enforce and implement the Policies at provincial and facilities' levels remains a major challenge.

## Study concepts and objectives

5. This study applies and follows the framework developed by Huicho et al., in 2010 (see Figure 1 below) to map the legislation, policies, strategies, regulations and official documents related to retention and attraction of certain categories of the health workers to work in rural and underserved areas in Laos. It also identifies the key stakeholders involved in the implementation of existing policies in order to answer the two research questions for Lao PDR: (a) what kind of policies have been developed and endorsed by MOH and/or line ministries to increase the number of qualified health workforce in underserved areas; and (b) what could be done to improve effectiveness of Policy implementation.

**Figure 1: Conceptual Framework by Huicho et al., 2010**



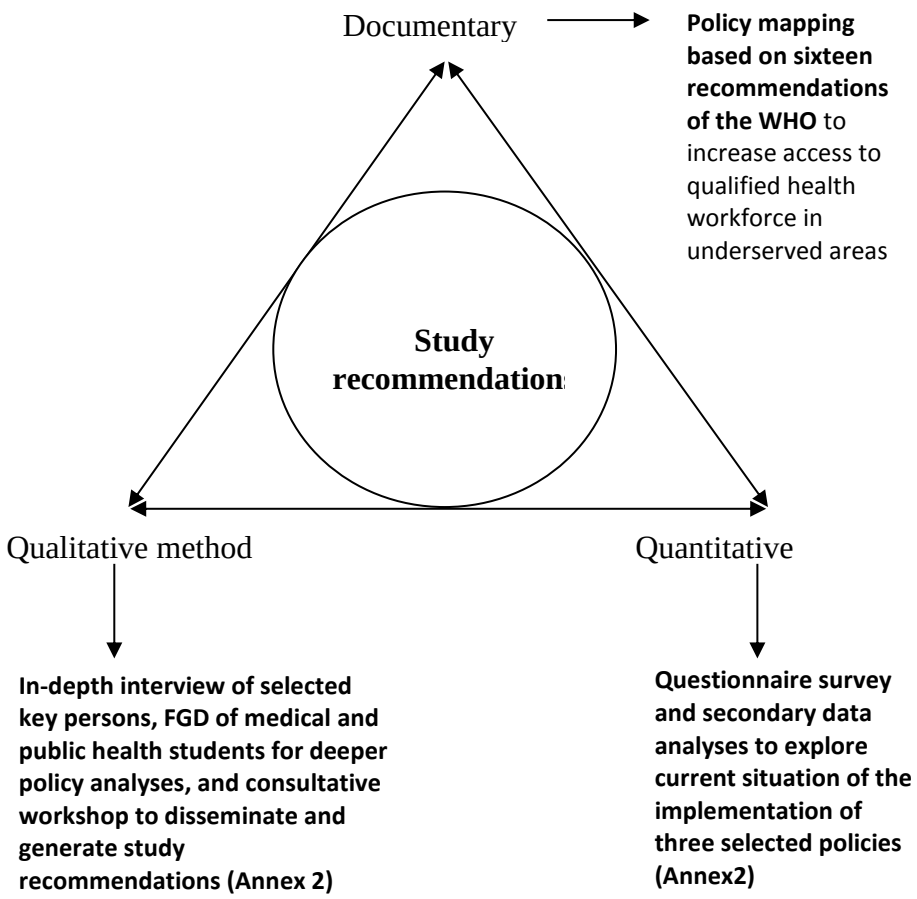

6. In the final analysis, the study offers a better understanding of the content, process and outcome of various existing government policies for retaining health workers in underserved areas in Lao PDR. The study aims to:

(a) Document a chronological inventory of all current government policies aimed at improving rural retentions of health workers against the sixteen recommendations made by WHO (see Annex 1);
(b) Analyze and compare three selected supply-side rural retention policies, from their formulation to their implementation and outcome, using a policy analysis tool that focuses on policy formulation and implementation (see Annex 2); and
(c) Recommend options for improving rural retention strategies, including assessing their relative effectiveness, strengthening their content, overcoming implementation bottlenecks and identifying opportunities for taking them to scale.

## Methodology

7. The healthcare services and training in Lao PDR are primarily provided by the public sector, particular in rural areas. This means the public sector, or the government, is producing and deploying health workers. The government is responsible for training, recruitment and retention of health workers in rural areas, therefore the study is designed to explore and analyze supply-side policies and their implications for attracting and retaining health workers in rural areas. The research team applied a triangular research method by Gilson 2012 (see Figure 2 below).

**Figure 2: Triangle Research Method by Gilson et al (2012)**




8. Following the triangular approach, the team conducted the research in three dimensions: (a) a documentary review to explore and map policies based on the sixteen recommendations of WHO to increase access to a qualified health workforce in underserved areas; (b) a qualitative method including in-depth interviews of selected key persons at policy-making and management level, focus group discussion (FGD) which target newly graduated medical students from representative public health institutes in the central, northern, and southern part of the country, and a consultative workshop to get consensus on the findings and recommendations; and (c) a quantitative method by sending questionnaires to be filled in by the head of the Health Personal Unit at each of the Provincial Health Offices (PHOs), analyzing existing data to explore the current status of implementing the three selected policies (Annex 4 presents details of the study design and research methodology). This report presents the findings and recommendations in two sections: in the result section, the policy mapping addresses the first objective, and the policy analysis section addresses the second objective. The discussion and policy implication section addresses the third objective.

## Results

### 1. Policy mapping

9. The research team visited concerned departments under MOH, MOES and the Ministry of Home Affairs (MOHA) to collect documents related to attraction and retention of health staff in rural areas. This exercise gave the team a sense of the extent to which the policies were followed and

enforced by the concerned departments and the ministries. Of the 43 documents reviewed, 25 related to the study objectives on attraction and retention of health staff in rural areas.

10. Several attempts have been made by the Government of Lao PDR and the MOH to address the shortage and skewed distribution of qualified health workers, especially in rural areas (at District and health center levels) where the majority of the population reside. The followings documents were selected for review due to their assumed importance for improving the supply of HRH in remote areas:

- In 2003, the Government endorsed Prime Minister Decree Number 82/PMO on civil service of the Lao PDR which provided for the two years compulsory service in rural areas among newly promoted civil servants, including health workers;
- In 2005, MOH, in collaboration with the WHO, conducted the first HRH Analysis; the results were published in 2007, and provided the policy makers with evidence of a shortage of HRH;
- In early 2010, WHO published a report on health worker incentives in Lao PDR which found limited scope to manage and effectively administer any type of incentive scheme at both national and local level, and the need for a policy debate about the type of incentives that should be considered for use. The report also provided recommendations and a roadmap in determining and implementing incentives in Lao PDR.
- In 2010, MOH, in collaboration with WHO, organized a national workshop on rural retention. The workshop convened health policy makers and both national and international experts to discuss the Lao PDR health workforce and identify possible solutions;
- In 2010, MOH developed Health Personnel Development Strategy by 2020, endorsed by the Prime Minister, which focuses on five areas (pillars) for human resources in health (production, management, utilization, gender, and incentives-financial and non-financial);
- In 2010, the Government endorsed Prime Minister Decree Number 468/PMO on the provision of financial incentives for civil servants to work in rural and difficult to reach areas, indicating that civil servants (including health workers) who were assigned to work in geographically targeted areas of the Decree will receive, in addition to their salary, an amount equivalent to 30% to 50% of their basic salary;
- In 2011, the first large scale study on health worker incentives in Lao PDR was carried out by MOH in collaboration with the CapacityPlus of the United States; it recommended different incentive schemes for Lao PDR MDs, MAs, and mid and low level midwives – parts of this finding has been published elsewhere in a peer review journal (Rockers, Jaskiewicz et al. 2012). The costing exercise of these incentive schemes was completed in late of 2011; and
- In 2012, the Minister of Health endorsed Ministerial Regulation Number 103/MOH on compulsory service of newly graduated medical/nursing/midwifery students in provincial and district hospitals, and/or health centers.

11. As indicated above, Lao PDR has many policies to address the distribution of health workers in rural areas. The key contents of the policy documents relate to education promotion, regulation on new civil servants, financial incentive to health workers in rural areas, and professional/personal support for productivity; Annex 1 shows a chronological arrangement of the relevant documents based on the 16 WHO recommendations. However, according to the 2013 study on Health Systems in Transition (HiT), these policies are often not enforced or implemented.

### *1.1. Education*

12. The research team found **five** policy documents relating to recommendations in the education domain. Two policy papers were identified relating to continuing education: Prime-Minister Decree Number 468/PMO developed by the MOHA, and Regulation of Ministry of Health

Number 103/MOH developed by the MOH which address the issue of continuous professional development after completion of the condition for service in rural areas. There are **three** documents relating to recruitment of students from rural backgrounds to health training institutes, including the instruction of MOES, Education Law and Minute of the 7th National Health Meeting. Of these policies, the instruction of MOES clearly indicated that 30% of the total number of annual student intake in public academic institutes should be awarded to students with excellent performance, students who are from an ethnic minority, and students who are from poor districts as defined by the government. The instruction, however, gives priority on the education and agriculture sectors by providing 50% of the allocated admission quotas for these sectors.

### *1.2. Regulation*

13. Regarding recommendations on regulation of new civil servants, **three** policy documents were identified: Prime-Minister Decree Number 82/PMO on rural compulsory service for newly promoted civil servants, the Regulation of Ministry of Health Number 103/MOH, and the Minute of the 7th National Health Meeting concerning compulsory service in rural areas. Article 16 of Decree Number 82/PMO (developed by the Public Administration for Civil Service Authority, which is now MOHA) stipulates that "newly recruited civil servants shall work at the district or village level for at least 2 years within the first 5 years of their employment". The MOH Regulation Number 103/MOH requires that in order to obtain their professional working permit (professional license) and obtain a permanent civil service contract (which will prioritize the person to receive opportunities for career development (i.e. continuing education) with 95% of basic salary, the person must perform three years of rural practice for newly graduated medical/non-medical students working for health sector. In practice though, new graduates who are recruited as civil servants in the health sector are required to serve three years in the rural areas and this service complies with the requirement of two years' service for newly recruited civil servants in accordance with the Decree 82. It is not clear, however, if graduates who served the three years compulsory rural service in the health sector and subsequently joined the civil service will be exempted from the Decree 82.

14. There were two documents related to recommendation on subsidized education for return of service. First, the Regulation of the Ministry of Health number 1948/MOH on provision of scholarship to health staff and second the updated Regulation of the Ministry of Health number 094/MOH on provision of scholarship to health staff. The regulations indicated that for health staffs who received opportunity for continue education must return and work at the same place where they were posted for the period twice that of their training period. More investigations are needed to understand the adherence and enforcement of this regulation.

### *1.3. Financial incentive*

15. For financial incentives, two policy documents which were endorsed in 2010 were identified: Prime-Minister Decree Number 468/PMO and Personnel Development Strategy by 2020. Decree Number 468/PMO clearly indicates the financial incentives that civil servants will receive during the period of their service in the rural areas would be between 30% to 50% depending on Government's classification of the area. The Personnel Development Strategy only mentions the need for financial incentives to attract and retain health staff in rural areas.

### *1.4. Professional/Personal Support*

16. The recently endorsed Personnel Development Strategy by 2020 of the MOH highlights the importance of a safe and supportive working environment for health staff, but does not provide a clear definition on safety and supportive working environment, nor specify areas for improvement

or targets. There are no guidelines indicating how to translate the Strategy into practice, and/or a roadmap and timeframe to achieve its goals. During the 7th National Health Meeting, the issue related to recommendations on out-reach support was discussed; in particular the idea of rotating staff from central level to technically assist the provincial level, the provincial level to assist their districts, and the district to assist health centers and villages. The Minute also made recommendations for a career development program.

## 2. Policy analysis

17. The policy analysis focuses on the three policy papers concerning retention of health workers in rural areas in the Lao PDR. The selected policies are (a) Instruction of MOES on recruitment of students with rural background issued in 2008; (b) Prime Minister Decree Number 82/PMO issued in 2003; and (c) Prime Minister Decree Number 468/PMO, endorsed in 2010. The team selected these three policies for deeper analysis since these policies were considered the most relevant policies on retention (in particular health staff in rural areas), and they had been endorsed for a number of years thus enabling evidence of their impact to be studied. With inputs from qualitative data, the team explored the awareness, implementation, and impact of these policies on the recruitment of students with rural backgrounds, compulsory services for new civil servants, and financial incentives provided for any civil servants working in rural areas.

### *2.1. Recruitment of students with rural background*

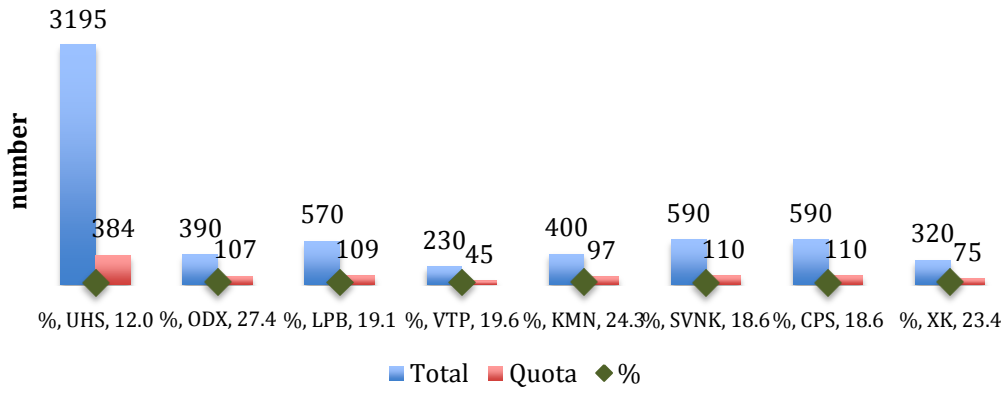
18. The instruction of MOES on recruitment of students from rural backgrounds to training institutions was introduced in 2008. The instruction clearly indicates that 30% of the annual intakes into training institutions under the MOES (including the Faculty of Medicine of the National University of Lao PDR now known as the UHS) should be provided to outstanding students, students from ethnic minority groups, and students from the poor and rural districts nationwide. It aims to promote equal access to higher/tertiary education to disadvantaged groups.

19. The instruction has been applied to training institutions under the MOH by providing approximately 15% of the annual intake in health training institutes (including UHS) to students with a rural background. Students who are eligible under the quota should be from rural and/or poor district (as defined by the government) and have completed the national entrance examination. This means that 85% of the annual intake are for top achievers in the examination, regardless of socio-economic, or geographic status. The remaining 15% of the admission places should be offered to students from poor/rural districts who did not fall into the top 85%. The 15% quota is allocated on a competitive basis among students from poor/rural districts, selected from the top entrance examination scores. All students who are accepted into training will be exempt from fees for tuition and dormitory only, but the costs relating to moving to the school, or any daily allowance during the period of study, are not covered. This might be one of the barriers for students from families with low socio-economic status.

20. The results from quantitative analysis using administrative data covering 2009-2013 from all of the health institutes (UHS, 4 public health colleges, 3 public health schools, and 1 nursing school) indicates that the UHS (located in the capital city in the central part of the country) had the lowest percentage of rural student intake annually (12.1%) while Oudomxay Public Health School in the north had the highest percentage (27.4%) (See Figure 3). In UHS, among five faculties where data were available, the highest percentage of rural student intake was found in the Faculty of Dentistry (14.8%), while the Faculty of Nursing, and Faculty of Medicine were found to have the lowest percentage (9.6% and 11.0%, respectively) (see Figure 4). The research team also looked at the percentage of rural student intake by professional degree and found that the percentage of rural

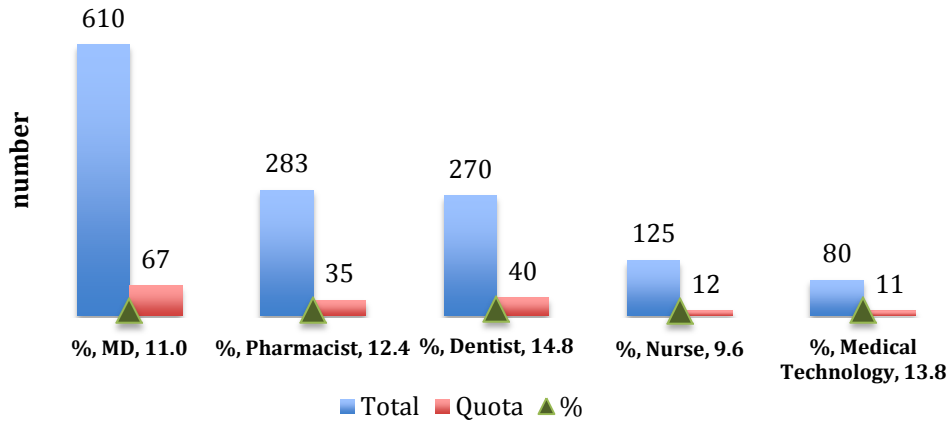
student intake into diploma courses (two-year curriculum) was the highest (19.5%), and intake into high diploma courses (three-year curriculum) was the lowest (7.7%) (see Figure 5)

**Figure 3: Percentage of Special Quota for Admission of Students from Rural Backgrounds by Public Health Institutes in Lao PDR**



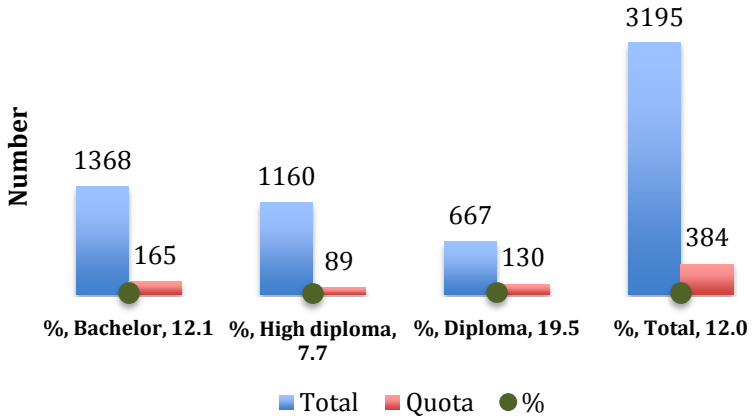

Source: MOH-DOP 2013

**Figure 4: Percentage of Quota for Admission of Bachelor Students with Rural Background in UHS by Faculty from 2009 to 2013**




Source: MOH-DOP 2013

**Figure 5: Percentage of Quota for Admission of Student with Rural Background to the UHS by Professional Level from 2009 to 2013**




Source: MOH-DOP 2013

### *2.1.1. Awareness and perception of the policy*

21. Only a few of the key informants (KI) who participated in this study were aware of the instruction of MOH to provide special admission quotas into training institutions to students from rural and poor districts. The rationale given by the KIs for developing the policy were grouped as follows: extension of health services network to cover remote and rural areas; increasing rural students' opportunities for admission in health education institutions; and expectation of returning to work at the hometown in quota recipients.

22. Dissemination of the instruction content seems to have concentrated on the policy makers at central and provincial level. None of the students from medicine or nursing who joined FGDs were aware of this instruction, nor reported having classmates admitted under this special quota. The majority of the KIs believed that information regarding this instruction had not reached all priority areas of the MOH, while others said that they are not sure if the information already reached everybody.

> *"I am not sure but I think distribution of instruction is not covered because of limited budget from the government for dissemination" [KI02]*

> *"It is not covered because it relates to transparency and accountability in selection of students, and insufficient budget" [KI16]*

23. Inaccessibility to information of this instruction among rural and/or poor students, therefore, might have some negative impact on selection rural students.

> *"I think it does not cover, and allocation admission quota to students is not based on the local need" [KI04]*

> *"I think it is not covered because some poor districts did not send students to our school" [KI17]*

24. Positive perception on the instruction is observable from the majority of the KIs who thought the instruction is relevant to the Lao HRH situation and believe that it can contribute to solving the problem of the shortage of health workers in Laos. However, some KIs indicated that this instruction alone can only partly contribute to HRH development in Laos, and that it should be implemented in combination with other measures.

> *"It can improve only quantity of human resources for health but quality is another issue; there is variation in basic knowledge between urban and rural students. We sometimes give them an exception" [KI04]*

> *"It could not solve a problem without transparent and accountable selection mechanism" [KI05]*

> *"It can solve a problem of shortage of health staff if quotas are really allocated to rural students, not students from big cities or from elite families" [KI11]*

> *"It can solve a problem because they will return to their hometown after graduation but my concern is on skill and experience of graduates" [KI18]*

### *2.1.2. Policy implementation: what are challenges?*

25. Most of the KIs recognized that the instruction has been enforced and implemented by all of the health training institutions under the MOH, as well as public universities and colleges under the MOES nationwide. However the KIs pointed out some potential challenges relating to implementation of the instruction during in-depth interviews in response to questions posed to explore constraints or challenges relating to four domains: (a) human resources (teachers); (b) training facilities; (c) appropriate training curricula for rural students; and (d) the existing HRH database. Not surprisingly, most of the KIs agreed that low admissions of students from rural backgrounds are due to (a) inadequate preparation for higher education so many students from rural backgrounds cannot pass the entrance exam; (b) low capacity of training institutions to accommodate students due to faculty constraints and quality of teachers; (c) the location of most training institutions in urban areas, which add more transportation and living cost to students from rural areas; and (d) limited financial support to poor students from rural areas discourages them from accessing higher education. It was also noted that the HRH database needs to be updated in a timely manner to ensure the accuracy of the database in order to place new graduates to areas with severe shortages of health workers.

> *"The database is very important for producing information and providing updates on health staff. We also need to map out areas with severe shortage of health staff" [KI15]*

> *"We should have a database to use for monitoring and evaluation of the instruction implementation" [KI21]*

26. Students from poor/rural districts who are admitted to health training institutions will use the same curricula and be graded in the same manner as those who passed the national entrance examination. While limited access to secondary education in rural areas leads to a low supply of quality secondary students, and these students require extra support to reach the standard of other students, such support is currently not available. In this regard, the research team explored whether the existing curricula was appropriate for rural students with a weaker education background. The response of the KIs to this question was varied; some believed that the current curriculum was suitable and should not be adjusted for rural students, while others expressed the need for special/additional curricula for rural students (i.e. intensive pre-university preparation program, in particular for basic sciences, foreign language, and computer sciences) to minimize the educational gap between urban and rural students.

> *"MOES planned to develop intensive courses on the weekend for rural students to improve their basic education level" [KI06]*

> *"I think there should be special intensive courses for rural students to improve their foreign language knowledge" [KI09]*

> *"I think there should be preparatory courses for rural students to improve their basic education level" [KI12]*

> *"We need to develop and improve proper curriculum for rural students, especially on basic sciences and foreign language" [KI15]*

> *"If possible we should develop special curricula for rural students who have lower basic science knowledge than urban students. The new curriculum should reflect local need" [KI33]*

*"Rural students don't have foreign language knowledge, especially in English, and they learn slower than students from urban areas" [ST3-1]*

*"We cannot compare rural students with urban, especially in foreign languages; many of the rural students have had no foreign language at their schools; for example myself, I did have English class at my school" [ST3-3]*

### *2.1.3. Measurement of impact of policy implementation*

27. As reported earlier, many KIs noted the absence of accurate and timely updates to the HRH database, particularly at sub-national level, making it difficult to use for M&E of impact of policy implementation. Some also mentioned the need to improve or strengthen their organization database in order for its M&E system to function for implementing the policy. The lack of an up-to-date database, along with no specific organization, department, division and/or unit under the KIs' organization being responsible for policy implementation as well as M&E of its implementation was noted.

*"There is no monitoring and follow up for this policy implementation so far" [KI09]*

*"I think monitoring and evaluation is not well functioning and there is a lack of continuity of this exercise, and many times there is no evaluation report" [KI10]*

*"There is monitoring and evaluation but not regular and systematic" [KI24]*

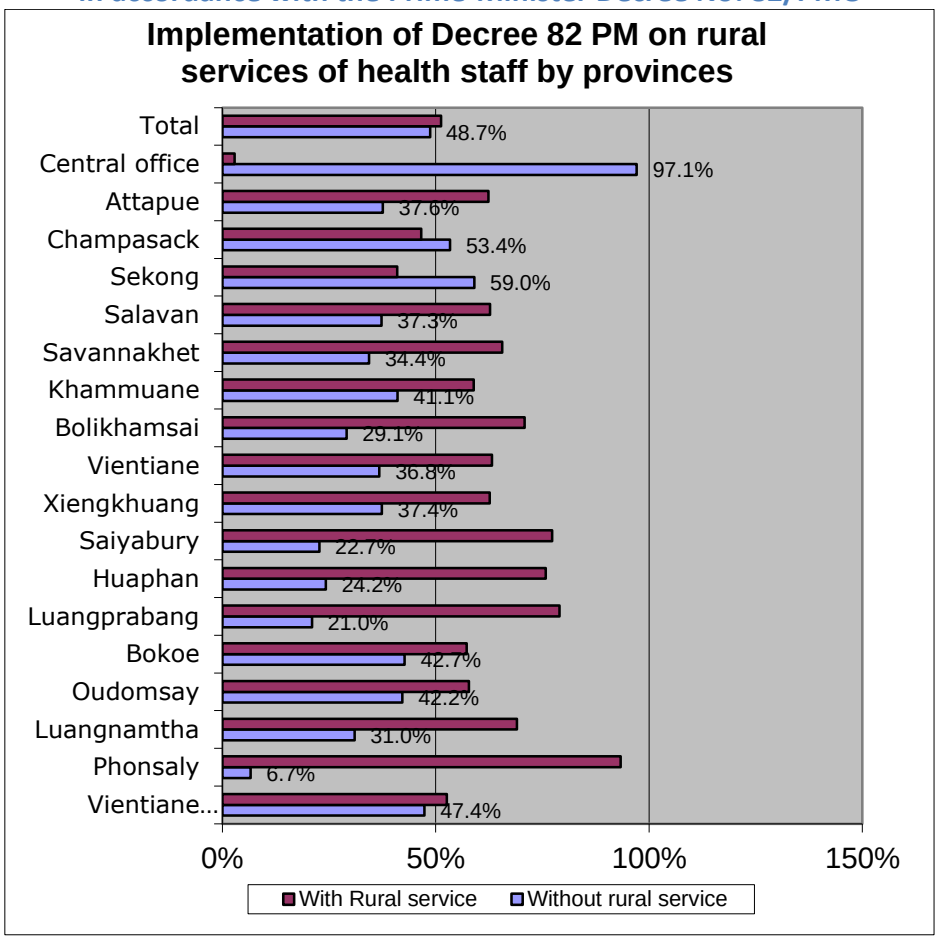
## *2.2. Compulsory services in rural areas among new civil servants*

28. Decree Number 82/PMO on civil service of the Lao PDR does not stipulate any incentive for compliance or penalty for non-adherence to the Decree. The Decree was developed by the MOHA, and was endorsed in 2003. The general purpose of this Decree is to define the principles, rules and responsible organizations for civil service management in the Lao PDR. Article 16 in Chapter IV of the Decree clearly states that newly recruited civil servants shall work at the district or village level for at least 2 years within the first 5 years of their employment. The Decree applies to all public sectors (Prime Minister's Office 2003). While the Decree requires at least two years' compulsory services in rural areas for a public sector to issue the permanent civil servant contract, the MOH Regulation Number 103/MOH requires at least three years for a health worker to obtain the contract. This seems to confuse relevant departments in the MOH as to whether they should follow the MOH regulation or the Decree 82/PMO.

29. The results of quantitative analysis show the reinforcement and implementation of the Decree varies across provinces, making it unclear if the Decree is being adhered to or complied with. To calculate the percentage of staff with rural experience, the research team surveyed among staff that were recruited from 2003 to 2010, the year when the MOH Decree was endorsed. Additional questions were added to the HRH database report format of the DOP, and sent out to the division of personnel of the PHO. The length of rural experience was defined as a cumulative period of time spent in rural service. Figure 6 to Figure 10 show the percentage of health staff with and without rural experience; Phongsaly Province had the highest percentage of health staff with rural experience (91.3%), while Vientiane capital had the lowest percentage (2.9%). The percentage of health staff with rural experience by ethnic group was examined and a higher percentage of health staff with rural experience among ethnic minority groups than Lao was remarkable; male health staff were more like to have rural experience than female staff. The proportion of staff with rural

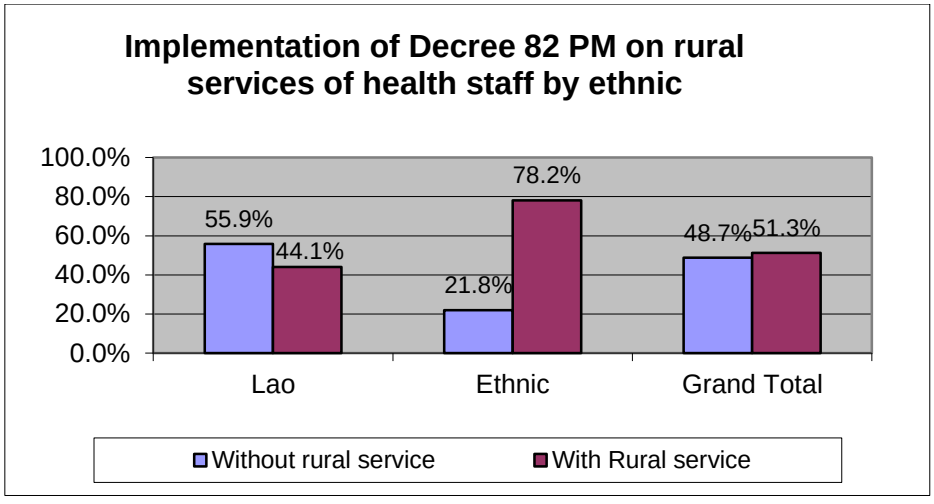
experience in low and mid level staff is higher than higher level staff, and a higher proportion of staff with rural experience was observed in the nurse, community midwife and medical assistant cadres. Having rural experience should not be attributed solely with this compulsory mandate, as it is known that many other factors play a role in whether health workers ending up in the rural areas.

**Figure 6: Proportion of Health Staff with Rural Experience by Province in accordance with the Prime-Minister Decree No: 82/PMO**



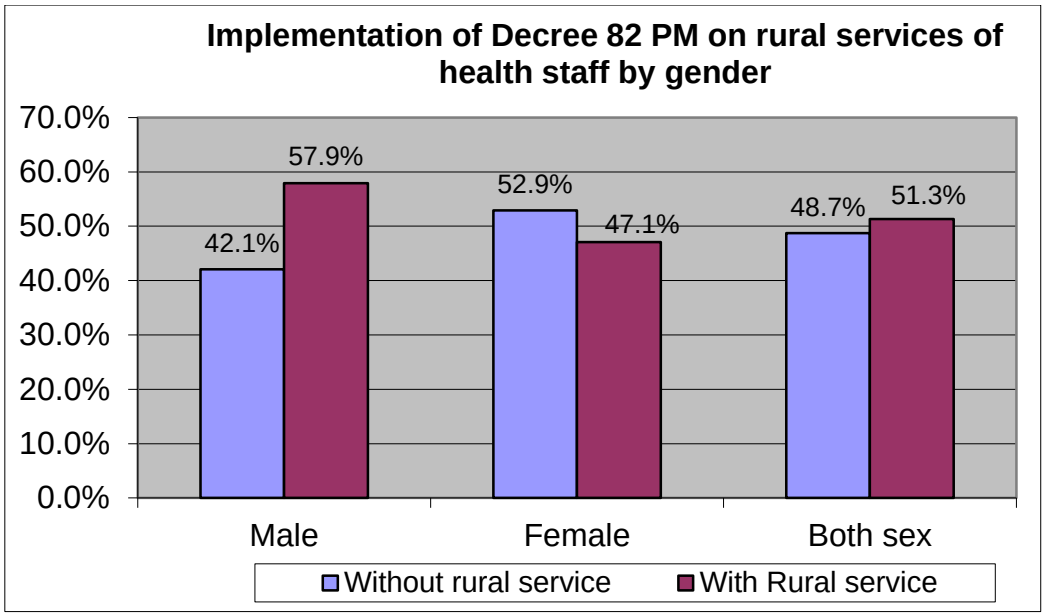

Source: MOH-DOP 2013

**Figure 7: Health Workers with Rural Experience by Ethnic Group**



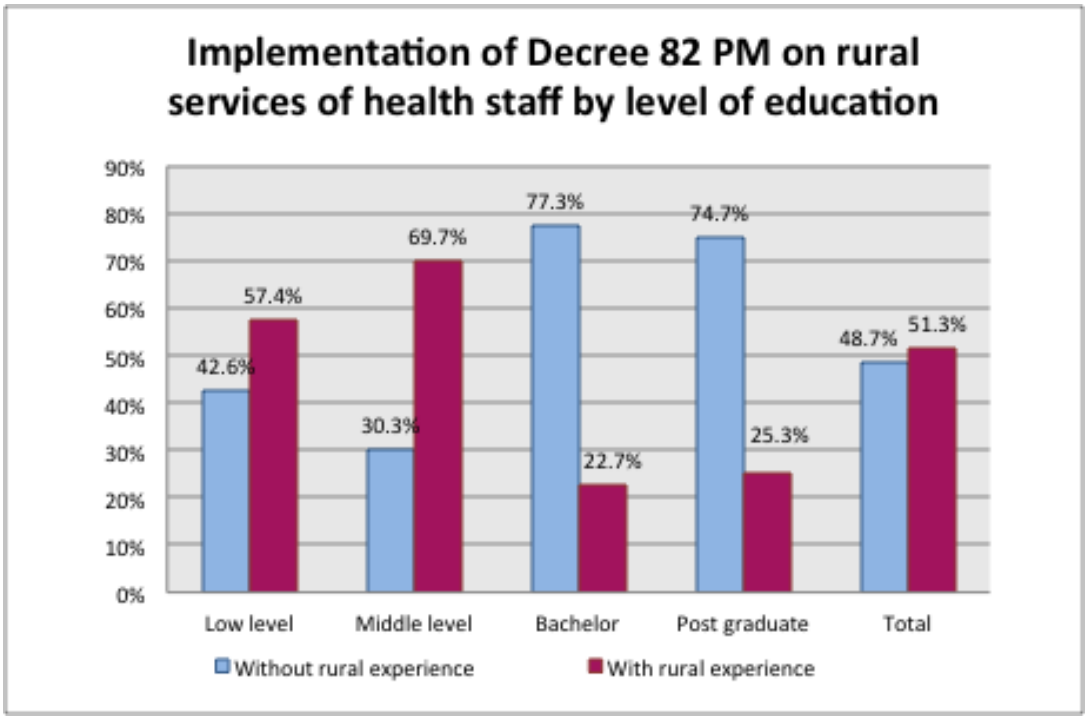

Source: MOH-DOP 2013

Figure 8: Health Workers with Rural Experience by Gender



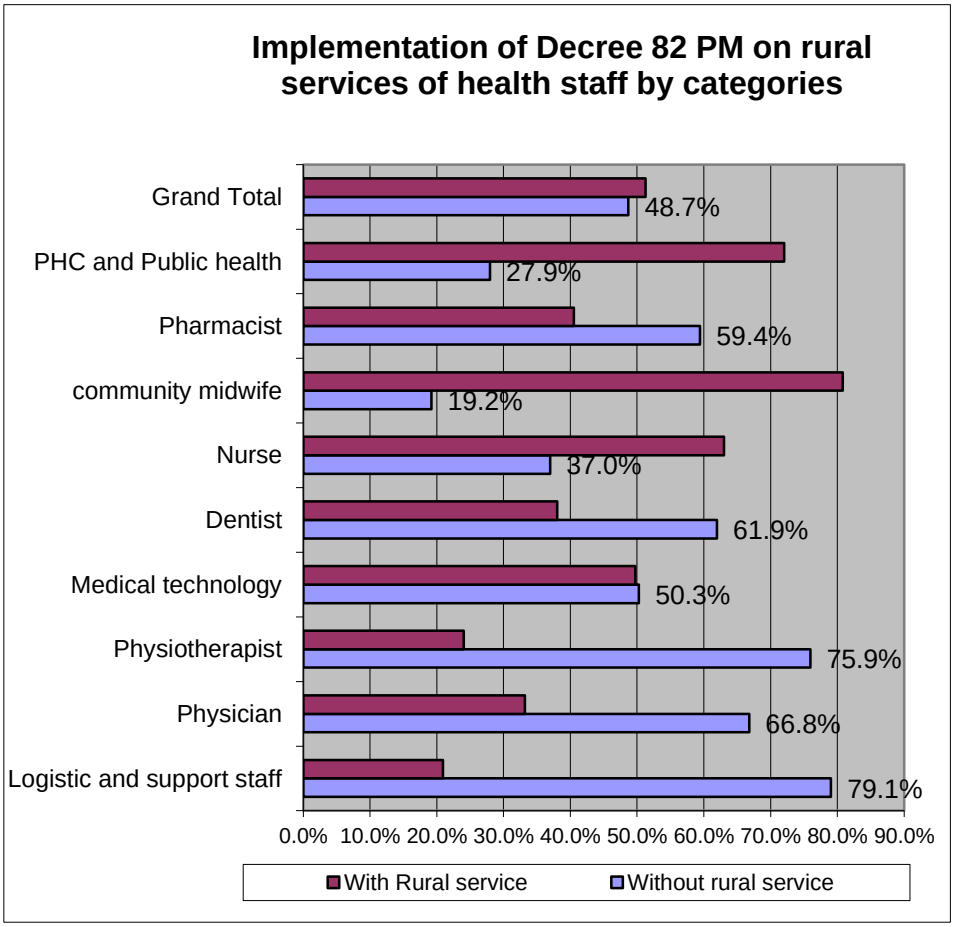

Source: MOH-DOP 2013

Figure 9: Health Workers with Rural Experience by Education Level




Source: MOH-DOP 2013

**Figure 10: Health Workers with Rural Experiences by Professional Category**




Source: MOH-DOP 2013

### *2.2.1. Awareness and perception of the policy*

30. The majority of KIs indicated that they were aware of this Decree; however, there were a few KIs who just said that: "I have heard". The rationale they gave for the development of the Decree can be grouped into three: (a) to gain rural experience among new civil servants; (b) to tackle the shortage of civil servants in rural areas; and (c) to improve the quality of health services in rural areas.

31. Similar to the views expressed about the MOES instruction, the majority of the KIs had a positive perception about the Decree, expressing that the Decree is appropriate in the Lao socioeconomic development and the situation of the Lao health workforce, and believed that it will contribute to HRH development in Laos. Nevertheless, some KIs pointed out that the Decree alone would not have much influence the HRH development and more work was needed to effectively implement the Decree.

> *"It can be applied to districts with well-developed infrastructure to receive new staff; for poor districts though, it is difficult to apply, especially providing daily allowance for staff" [KI05]*

*"It is not appropriate to apply this Decree to all health cadres e.g. to reallocate a surgeon to a hospital without surgery capacity" [KI11]*

*"It is difficult to apply to all cadres of health staff and we should consider the work place and equipment for reallocated staff to use their skill and knowledge" [KI10]*

*"We are currently implementing this Decree but it is difficult because there is no regulation to strongly enforce; I think we need a specific law on it" [KI17]*

*"The Decree is appropriate for the current situation but it should be revised from time to time to adjust to the situation" [KI15]*

### *2.2.2. Policy implementation: what are challenges?*

32. Despite the high awareness and positive perception toward the Decree, the research team identified some challenges based on results from in-depth interviews of KIs. These include: insufficient number of health staff to replace staff that are allocated for rural service in accordance with the Decree; insufficient infrastructure, in particular dormitory, vehicle (motorbike) and supportive work place (building and equipment); limited government budget to finance the implementation of the Decree; absence of or outdated HRH database; and lack of coordination between central (MOH) and provincial (PHO) levels.

*"There should be a dormitory at district hospital and health center, and a vehicle for allocated staff during their length of stay" [KI15]*

*"It is all about a salary that is supposed to come on time and on a regular basis, and needs community participation" [KI09]*

*"Allocation of financial support to the Decree implementation should be a priority of the government; salaries should come on a regular basis and on time; and there should be more incentives" [KI15]*

*"The human resources for health database is the weakest point; moreover, there is no system for monitoring and evaluation of the implementation of the Decree" [KI10]*

*"Provincial Health Office responds by sending new staff to districts and health centers every year but the recruitment process, including examination, is done by the MOHA for the general examinations and MOH for health related tests; therefore, many volunteer staff, who have been sent for many years, could not pass the civil servants recruitment examination (to be a civil servant?) " [KI05]*

33. In fact, the biggest failure of the Decree is that it is not enforced. KIs provided different suggestions for how to effectively reinforce the Decree. They by and large had the same opinion that punitive actions should be avoided against those who refuse to temporally accept rural posts in accordance with the Decree Number 82/PMO. Instead, a number suggested positive reinforcement such as social support, development regulations and/or policy implementation guidelines, and having civil servant contracts with terms of reference that clearly indicate the conditions of service, such as compulsory service in rural areas, would be an alternative way of convincing and attracting new staff.

*"It should have some actions against those who refuse to accept rural post e.g. halting their career promotion" [KI15]*

*"We should provide some incentive to encourage them to accept rural posts with their willingness instead of strong action against them" [KI18]*

*"A good way would be making a contract with them before recruitment because they may have different backgrounds and difficulty in accepting rural posts even for a short period" [KI26]*

### *2.2.3. Measurement of impact of policy implementation*

34. Again, the absence of an updated HRH database for Decree 82 seems to have strong links with the ability to implement the policy. Most of KIs mentioned that there is no specific organization, department and/or unit other than the DOP or personnel department/division responsible for implementation of this Decree.

*"HRH database is the weakest point; moreover, there is no system for monitoring and evaluating the Decree implementation"* [KI10]

*"Monitoring and evaluation of the Decree implementation is not a routine exercise; we noted that when health staff accepted rural posts, it was difficult for them to get the incentives referenced in the Decree, e.g., training opportunity and other type of incentives" [KI14]*

*"There is the human resources for health database used for this Decree implementation but it is not regularly updated" [KI22]*

*"There is a monitoring and evaluation mechanism but it does not function well" [KI15]*

## *2.3. Financial support to civil servants to work in rural areas*

35. While many health workers or new graduates prefer to work in urban areas, the policy on financial support to civil servants working in rural areas was developed to encourage them to move to serve in the rural, remote, and difficult to reach areas. The Prime Minister Decree Number 468/PMO on the provision of financial incentives was developed by the MOHA and was endorsed in late 2010. The Decree stipulates that an additional 30% to 50% of the basic salary is to be paid to civil servants who work in rural areas classified by the MOHA. The Decree not only applies to health staff but also the civil servants in all the public sectors in Lao PDR, except the military. Aside from financial incentives, the Decree also offers training opportunities, including political and professional trainings. The main source of funding for the implementation of this Decree is allocated by the central government through the Provincial Governor. It is understood that the Decree was initially implemented in 10 provinces: Luangnamtha, Huaphanh, Oudomxay, Luangprabang, Vientiane, Bolikhamxay, Khammouane, Savannakhet, Champasak and Salavan. However, there has been a delay in implementing the Decree nationally, and there is no official explanation for this; there has also been no study on the impact of this delay. Given the limited data, the team is unable to provide the causes of the delay in this study. Therefore the team suggests further study to understand the reasons and impact related to the delay in implementing the Decree.

### *2.3.1. Awareness and perception of the policy*

36. Many of KIs said that "I have heard about the Decree", however a few of them were not even aware of this Decree prior to the interview. The majority of the KIs described relevant rationale for the development of the Decree, including encouraging, attracting or motivating civil servants to work in rural areas by giving them incentives.

37. Although the Decree has only recently been endorsed, few of the participating KIs were involved in the development process. Most of them perceived that the Decree is appropriate for the current situation and contributes to the Lao HRH development. However, some expressed that the provision of financial incentive as addressed in the Decree cannot make much contribution to the HRH development.

> *"It can only solve the problem of shortage of health staff when other interventions or policies are in place" [KI02]*

> *"This Decree is linked to the Decree Number 82/PMO on civil service of the Lao PDR. If Decree Number 82 is enforced, it will support implementation of the Decree Number 468/PMO" [KI04]*

> *"The Decree can temporarily contribute to the human resources for health development; it depends on changing socioeconomic circumstances, and what other types of incentive are needed for health staff" [KI15]*

> *"Financial incentive is just one of a number of incentives for health staff" [KI23]*

### *2.3.2. Policy implementation: what are the challenges?*

38. As mentioned above, the Decree is currently being implemented in 10 provinces and there is no document assessing the outcomes of its implementation. By asking for the opinions of participating KIs, the research team identified some challenges such as (a) the limited budget allocations from the central and provincial government to support Provincial implementation of the Decree; (b) the incentive provided is based on geographic conditions, but due to the weakness of the M&E system (including the lack of an up-to-date HRH database at national and sub-national level), it is not possible to accurately capture the number of health workers in rural areas; and (c) lack of standard procedures and instruction on how to request the budget for the incentive from provincial and central governments.

39. Indeed, there is high opportunity cost for a health worker to remain serving in rural areas, because living in rural areas prevents him/her from opportunities for upgrading, being able to have a larger private practice, the ability to carry out social networking, better living conditions, and better education for his/her children. Although the participating KIs did not point to those opportunity costs directly, the answers below confirmed that they are missing the opportunity to maintain and/or upgrade their professional skills due to work environment constraints, including working in health facilities that cannot accommodate their professional improvement.

> *"The quality of district hospitals and health centers should be improved and well equipped to attract and retain new staff, and it should have dormitories for them" [KI15]*

> *"We should consider the quality of the health facility to attract health staff" [KI26]*

### *2.3.3. Measurement of impact of policy implementation*

40. Similar to the MOES's instruction and Decree Number 82/PMO, an accurate HRH database is required at national, provincial and district level in order to monitor enforcement of the Decree (468/PMO) nationally. Administratively, MOHA is responsible for M&E of the implementation of this Decree, consequently there is no department, division or office under MOH assigned to monitor and evaluate implementation of the Decrees concerning attraction and retention of health staff in rural areas.

## Discussion and policy implications

### 1. Discussion

41. The Lao Peoples Democratic Republic Health System Review which was recently published by the WHO Asia Pacific Region (WPRO 2014). The study recognized that the government strategies and policies are often not fully implemented and enforced, and proposed recommendations to scale up implementation of developed policies in Laos as follows:

- Strategies, policies and related plans should be well-defined, realistic and doable.
- Capacity and commitment are needed to translate research findings into evidence-based policy, and to translate policy into programme implementation.
- Implementation plans must be fully aligned with relevant policies and strategies.

42. The primary objective of this study was to map out existing policies, strategies, ministerial regulations and instructions, and other unofficial documents which are related to attraction and retention of health staff in rural areas and to systematically study current situation of reinforcement and implementation of the selected policies.

43. Sixteen WHO recommendations on health worker attraction and retention were used as a stencil of the policy mapping. Of these recommendations, except better living condition, we found at least there are some policy, strategy and/or grey documents. In regard with number documents (policy, strategy, regulation, instruction, etc.) related to sixteen recommendations of the WHO, Laos seems to have the highest number of documents than other five countries participated in the multi-countries rural retention policies analysis by the AAAH in 2012. Nevertheless, density of qualified health workforce (MD, Nurse and Midwife) in Laos was not different or lower than those countries (WHO 2009). This might provide evidence to confirm the observation by the Lao PDR HiT study above on problems of reinforcement and implementation of existing policies in Lao PDR; there are still gaps between policy and implementation.

44. Under the second objective, the research team explored in detail three selected policies. These three policies together provide a comprehensive health worker incentive benefit package, including admission of students with rural background to health institutes, financial incentives, career promotion and opportunities for continuing education. However, the implementation of these policies varied across health professional training institutes and provinces, e.g., the proportion of students with a rural background who were admitted differed among the institutions, courses and degrees; the percentage of health staff who had undertaken rural service differed between provinces (since 2010, only 10 out of the 17 Provinces were enforcing and implementing Decree Number 468/PMO on provision of financial incentives for civil servants).

45. Lack of consistency in reinforcing and implementing these policies might be attributable to the result lack of awareness of the beneficiaries about the policies (policy implementers, local authorities and potential beneficiaries); insufficient human resources with the capacity to manage the policy implementation at national and sub-national level; insufficient budget allocation, especially for Decree Number 468/PMO; inadequate basic infrastructure (such as housing/ dormitory) for new staff who accepted rural posts, and poor working environment at the district hospitals and health centers; absence of an up-to-date HRH database for supervision, and M&E; no specific unit within the organization of the concerned ministries and provinces charged with the responsibility for implementing these policies; and no, or unclear, policy implementation guidelines for the implementers, as mentioned during the consultative workshop.

## 2. Study limitations

46. This study had some limitations that should be taken into account in interpreting its findings. Firstly, the research team mainly interviewed policy and decision makers (such as directors of departments and centers under MOH, rectors and deans of the UHS, and directors of provincial health offices, provincial hospitals and schools), therefore the findings of this study might not completely reflect the reality at the district level. Secondly, the response rate of the participating KIs was 59.3%, which is low, however, from a qualitative point of view, it seems to have had little impact on the study's findings. Finally, although the research team applied both qualitative and quantitative approaches in this study, it is not possible to make a scientific link between the findings from the two approaches.

## 3. Policy implication

### *3.1. General recommendations*

47. The research team proposes the following recommendations to strengthen the policy reinforcement and implementation in the Lao PDR based on findings from this study and consolidated results of consultative workshop:

(a) **Ensure that policy formulation is based in sound analysis and includes the resource requirements for implementation.** . The types of policy packages to be supported or improved should be identified based on a solid labor market assessment, looking at both the demand and the supply side dynamics. Such an assessment would also show what policies might be needed for the different cadres, and an updated and more rigorous assessment may be needed in Laos to prioritize the policies. Often supply side policies are recommended, without taking into account labor market demand challenges (i.e., a disproportionate amount of financing for the recruitment of health worker flows to urban areas, secondary and tertiary level hospitals, as opposed to primary care facilities in rural areas). Prior to endorsement of a new policy, the feasibility study and costing should be completed in order to provide a concrete overview and inform on its implementability. It is important to have participation, not only from the MOH, but also from relevant sectors, in developing health worker retention related policies. This will not only ensure the awareness among them but can also help to identify challenges, especially financing, for implementing the policy after endorsement.

(b) **Develop implementation guidelines for all the existing health worker retention policies.** Such guidelines should include a roadmap and action plan for policy implementation, which is well defined, indicates the responsibility of various organizations, along with the committed funding sources. Departments charged with the responsibility to implement

policies need to have sufficient resources to reach all levels of implementation and target professional groups.

(c)

(d) **Strengthen the the M&E system, including an up-to-date HRH database at national and sub-national level, to effectively enforce the policies.** More investment in this area is needed to strengthen the current database of the Department of Organization and Planning. Any efforts to implement policies (or improve the effectiveness of implementation) should not only take into account the required costs, but also the possibility of opposition from medical and political associations; for example, reforms in health worker education (to make it more applicable to rural needs for example) often receives opposition from medical and nursing associations.

(e) **A more comprehensive approach to policy development and implementation is critical so that different policies can reinforce each other.** Global evidence suggests that an isolated policy is unlikely to affect the picture on the rural/urban distribution of health workers. Policies that are implemented should be accompanied by an assessment to determine their impact on labor market dynamics. More long-term efforts are needed to obtain adequate evidence; for example a study that follows a cohort of students out of university and tracks them through their career and links their choices to different policies and interventions, could be a useful tool for assessing the impact of policies on the supply-side behavior of health workers.

## *3.2. Specific recommendations*

48. In addition to the general recommendations, the research team also proposes the following specific recommendations for each of the policies reviewed.

### *3.2.1. Recruitment of students with rural background*

49. More attention should be given to dissemination of the instruction of MOES ensuring students and authority of poor target districts receiving appropriate information. Dissemination should be specific for districts with severe shortage of health staffs and should be based on real need of the districts.

50. Selection of students with rural background is done through the entrance examination. Although MOH increased the number of examination centers from 7 to 14, it is still difficult for poor students from rural and remote districts to overcome financial barrier such as transportation and accommodation fee during the examination. This issue was raised during a consultative workshop. Therefore, for priority districts or districts with severe shortage of health staff, selection process should be done in these districts in close collaboration with local authorities including district education office.

51. Based on our findings and discussion in consultative workshop, some areas should be improved to effectively implement the instruction such as student intake database of the MOH and health institutes, appropriate or pre-university curriculum or bridging course to improve basic scientific knowledge and foreign language of rural students; strengthen M&E system with assigned organization to responsible for this instruction; and the scholarship for rural students should cover the cost of tuition fee, study materials, food and accommodation.

### *3.2.2. Decree on civil service of the Lao PDR*

52. To effectively and equally reinforce and implement the Decree on civil service of the Lao PDR on rural compulsory service among newly promoted civil servants, it requires specific HRH database, well assigned responsible unit and individual at national and sub-national level as well as a M&E functioning system. For this, it is necessary to add few selected proper indicators for tracking implementation of the Decree implementation into the HRH database of DOP and provincial health office. Means, condition or positive reinforcement for staff that refuse to accept rural post as addressed by the Decree should be appropriately defined, endorsed and enforced to all civil servants equally. It still needs to continue to disseminate or orientate the Decree especially to new civil servants. Making labor contract with new civil servants would be an alternative way to ensure the Decree's reinforcement.

53. The policy is deemed important, potentially for recent graduates on a time bound basis in order to obtain the permanent civil servant contract. Some of the suggested strategies by the research team could be withholding confirmation of actual degree until rural service is carried out (making this rural training a mandatory part of the path towards becoming a health worker), rewarding health workers with rural placements with an extra certification/specialization matched with a salary increase or bonus, or allowing such workers preferential allocation in continuous professional development training opportunities. Furthermore, health workers who do not carry out rural services could be asked to pay back a proportion of the cost that they were provided by the government for their training (i.e. health workers would be able to buy themselves out of the obligation). Overall global experience shows that mandatory placements do not always work very well, unless accompanied by many other policies. Evidence from countries including Ethiopia has shown that many of the better-connected health workers are often able to bypass mandatory service, and that this can lead to demotivation of others. More evidence should be provided before agreeing to invest into this policy over others.

### *3.2.3. Decree on financial incentive for civil servants*

54. Dissemination of this Decree should be strengthened and accelerated by the MOHA in collaboration with all concerned ministries especially MOF. The dissemination should be focused on priority area of the government. For health sector, more effort should be done to identify health worker cadre and targeted areas based on reality of health worker shortage and health related goals highlighted in the health sector master plan. It is necessary to have specific unit within concerned departments especially DOP under the MOH to respond for the Decree implementation. M&E system and supportive supervision should be well developed and systematically implemented. Lesson learnt from 10 provinces currently implementing the policy should be carefully reviewed before expanding to other provinces. Unfunded mandate is one of the major bottlenecks for effective implementation.

55. There are indications from the KIs that the financial incentive policy alone may not be sufficient to motivate health workers to move from urban to rural areas. Indeed, some of the discussions with the KIs indicated that "financial is just one of the other incentives (needed) for health staff". Overall, the global literature has shown that interventions at the educational level (such as implementation of rural pipeline policies) tend to be far more effective than financial incentive policies given the extremely high opportunity cost that comes with rural practice (and the lack of funding to adequately offset that).

56. Given that the young are both cheaper, and generally more willing to work in a rural area than older health workers (in part because they are also more altruistic but also because they have less to loose), the incentive policy could be targeted to recent graduates only, to incentivize immediate rural work placements. Doctors and nurses who are already established in the labor market in urban areas will require a far greater incentive to offset the opportunity cost that comes from 1) leaving a family and education for children, 2) leaving opportunities for professional development and specialization, 3) and loosing additional income that comes from teaching or working in the urban private sector (i.e. dual practice, moonlighting etc.).

### *3.2.4. Other recommendation to move forward*

57. In moving forward, the research team would recommend that the government carries out a comprehensive, up to date labor market assessment, looking closely not just supply side labor market dynamics, but also demand side dynamics (i.e. what are the challenges of rural primary level facilities in hiring health workers even if there is a sufficient supply) before identifying the policy package to prioritize and improve. And before they are invested into, a detailed assessment on costing these policies as well as potential opposition from associations should be carried out and managed appropriately. Once these policies are implemented (with strong involvement from MOH, MOES, MOF etc.), they need to be accompanied by evidence generation from the start to monitor and determine their effectiveness.

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## Annex 1: policy mapping

| **Policy mapping based on WHO recommendations** | | | | | | |
|---|---|---|---|---|---|---|
| Recommendation | Main content of policy | Year of Launch | Scope of implementation (national or sub-national) | The expected outcome | Targets of health professionals | Reference |
| **A. Education** | | | | | | |
| 1. Students from rural backgrounds | 1. *Instruction of MOES: provide 30% special quota to outstanding student, ethnic minority and student from rural areas. MOH applies this instruction to provide quota for student from rural area 15% of total annual recruitment into health institutes | 2008 | - Nationally | - Increase % admission of student with rural background to university and colleges on health | - All curriculums from mid-level to high level | MOES |
| | 2. Education law: government to provide equal opportunity in accessing to quality of education for student in remote and rural areas | 2008 | - Nationally | - Increase opportunity to access to quality of education in student from rural areas | - All curriculums from mid-level to high level | PMO, MOH & MOES |
| | 3. Minute of 7th National Health Meeting: address appropriate recruitment of minor ethnic student and student from rural background to university and colleges on health | 2013 | - Nationally | - Increase % admission of student with rural background to university and colleges on health | - All cadres | MOH |
| | 4. Minute of the 5th National conference for health training institution managers: to increase entrance examination centers from 7 centers to 14 centers in different 14 provinces (out of 17 provinces nationwide), to recruit student to the UHS | 2011 | - Nationally | - Increase % admission of student with rural background to the UHS | - MD, Dentist, Pharmacist, Nurse and Medical Technology (Laboratory) | MOH |
| | 5. Minute of the 6th Technical Working Group: recruitment of newly graduated high school student to SBA high diploma training course without entrance examination giving priority to minor ethnic student and female student. | 2010 | - Nationally | - Produce 1,500 SBA to supply in Lao health system by 2015 | - SBA | MOH |
| 6. Health professional schools outside major cities | College of Health Sciences of Savannakhet province<br>College of Health Sciences of Champasack prov.<br>College of Health Sciences of Luangprabang prov. | 2010 | - Nationally<br>- Nationally<br>- Nationally | Increase opportunity to rural students | Mid and high level: nurses, community midwife, PHC workers | MOH, MOES |
| | Nursing Sciences School of Vientiane Province<br>School of Public Health of Oudomxay Province<br>School of Public Health of Xiengkhouang province<br>School of Public Health of Khammouane Province<br>PHC Training Center of Salavan province | 2000<br>1975<br>1975<br>1975<br>1998 | Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally | Increase opportunity for rural students | mid-level: PHC workers, technical nurses, community midwife | |

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| 7. Clinical rotations in rural areas during studies | Through implementation of current medical curricula:<br>Medical Doctor (revised)<br>Family Medicine | <br><br>2011<br>2006 | <br><br>5 provinces<br>4 provinces | <br><br>To enhance clinical skill in rural settings | <br><br>MD<br>FamMed | <br><br>UHS |
| 8. Curricula that reflect rural health issues | PHC workers low level<br>PHC workers middle level<br>PHC worker high level<br>Medical Doctor (revised)<br>Family Medicine<br>Community midwife<br>Assistant Pharmacy (revised)<br>Pharmacy (revised)<br>Assistant Dentistry (revised)<br>Dentistry (revised)<br>Technical Nurse (revised) | 2000<br>2008<br>2009<br>2002<br>2002<br>2009<br>2011<br>2011<br>2011<br>2011<br>2003 | Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally<br>Nationally | Provide knowledge and skills for community's health diagnostic, problems solving and involvement of community participation | Health professionals required to be staffed at district and health center level | MOH, MOES |
| 9. Continuous professional development | 1. Health ministry regulation number 103/MOH: new staff who complete its term addressed in this regulation, has eligibility to apply for continuing education<br><br>2. *Prime-Minister Decree number 468/PMO on provision of incentive to civil servants in remote, isolated and difficult areas: civil servants including health staff who work in remote, isolated and difficult area under this Decree will be priority for professional development and political study | 2012<br><br>2010 | - Nationally<br><br>- Only areas classified by the government | - Attraction and retention of health staff in remote, rural and difficult areas<br><br>- Attraction and retention of civil servants including health staff in remote, isolated and difficult areas | - All cadres<br><br>- All cadres | MOH<br><br>MOHA/PMO |
| **B. Regulatory** | | | | | | |
| 1. Enhanced scopes of practice | Scope of Nursing<br>Scope of Midwifery<br>Nursing Regulation<br>Standards of Midwifery Practice | 2008<br>2009<br>2008<br>2009 | - Nationally<br>- Nationally<br>- Nationally<br>- Nationally | Increase access of quality of services in rural areas | Nurse and Midwife staff | MOH |
| 2. Producing new types of health workers | Village health workers, pilot in 2 prov. And now curriculum under revision for up scaling production | 2012 | Remote areas where no access to health facilities and drug kits | Increase access to health care (equity in health) | Village health volunteers, middle school graduates | MOH, MOES<br>MOHA |
| 3. Compulsory service in a rural area | 1. *Prime-Minister Decree number 82/PMO on civil servicer of the Lao PDR: Chapter IV, article 16: compulsory service in rural area: In article 16, civil servants who have been promoted to be permanent staff in first five years should provide compulsory services in rural areas at least two.<br><br>2. Health ministry regulation number 103/MOH: Three | 2003<br><br>2012 | - Nationally<br><br>- Nationally | - Increase number of qualified civil servants including health staff in rural areas<br><br>- Increase access to qualified health | - All type of civil servants<br><br>- All cadres | PMO<br><br>MOH |

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| | compulsory service in rural areas among newly graduated student: first year at provincial level, and second and third year at district and community level | | | staff s of people in remote and rural areas | | |
| | 3. Minute of the 7th National Health Meeting: to give particular attention to compulsory service in a rural area among newly graduated student | 2013 | - Nationally | - Increase access to qualified health staff s of people in remote and rural areas | - All cadres | MOH |
| 4. Subsidized education for return of service | 1. Health ministry regulation on provision of scholarship to health staff number 1948/MOH: health staff that became permanent staff more than 3 years is eligible to apply for scholarship. Staff who completed study under this regulation, should return to their workplace and work at least two times of the study period | 1998 | - Nationally | - Retention of health staff in remote, rural and difficult areas | - All cadres | MOH |
| | 2. Health ministry regulation on provision of scholarship to health staff (new edition): health staff who became permanent staff at least 3 years for central level, 2 years for provincial level and 1 year for staff from remote, rural and difficult areas is eligible for continuing education. Staff who completed study under this regulation, should return to their workplace and work at least two times of the study period | Drafting | - Nationally | - Attraction and retention of health staff in remote, rural and difficult areas | - All cadres | MOH |
| **C. Financial Incentive** | | | | | | |
| 1. Appropriate financial incentives | 1. Prime-Minister Decree number 468/PMO on provision of incentive to civil servants in remote, isolated and difficult areas: provision 30%-50% additional money from basic salary based on areas, and receive advance money equal two months' salary for re-settlement. | 2010 | - Only areas classified by the government | - Attraction and retention of civil servants including health staff in remote, isolated and difficult areas | - All cadres | MOHA/PMO |
| | 2. Health Personnel Development Strategy by 2020: in pillar 5 on health personnel incentive: improve and implement health personnel incentive such as better payment for health personnel to meet cost of living, socio-economic development, knowledge and skill, better performance or work achievement | 2010 | - Nationally | - Attraction and retention of health staff in remote, rural and difficult areas | - All cadres | MOH |
| **D. Professional / Personal support** | | | | | | |
| 1. Better living conditions | | | | | | |
| 2. Safe and supportive working environment | 1. Health Personnel Development Strategy by 2020: in pillar 4 on equity and equality of opportunity addressed one of the priority works on improvement environment for better performance, ensure safe work environment, and avoid sexual violence and discrimination of ethnic, religion economic status and others. This also addressed as one of non-financial incentive in pillar 5 of the strategy | 2010 | - Nationally | - Attraction and retention of health staff in remote, rural and difficult areas | - All cadres | MOH |

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| 3. Outreach support | 1. Minute of the 7th National Health Meeting: Rotate health staff from central level to assist provincial level, provincial level to assist district level, and district level to assist health center and community | 2013 | - Nationally | - Human resources for health capacity building | - No specify | MOH |
| 4. Career development program | 1. Minute of the 7th National Health Meeting: promote all contracted staff in remote and rural areas to be permanent staff<br>2. Continuous professional development (CPD) Piloted in Luangprabang province. This CPD to include in licensing system | | - Nationally | - Retention of qualified health staff in remote and rural areas<br>- Improve quality of service in rural areas | - All cadres | MOH |
| 5. Professional networks | Association of health professionals in different specialties such as medical association, dentist, cardiologist, anesthetists, etc | | | | | |
| 6. Public recognition measures | Award for People's health workers,<br>Award for Revolutionary health workers<br>(Regulation drafted by MOH) and proposed to MOHA | Process to be endorsed | Nationally | Motivate health workers in rural areas | All cadres | MOH, MOHA |

*Notes: "*" is the policy related to attraction and retentions of health workers serving in rural areas, which is selected policies for analyses in the study.*

## Annex 2: In-depth assessment of three selected policies aiming at retaining health workforce working in rural, remote or areas where health workers are most needed.

| **Three selected policies** | Assess the problem stream:<br><br>Why these policies emerged? | Assess the policy formulation processes:<br><br>How different actors, in what context, exert their powers, defending their position and influencing the final policy decision? | Analyze the policy contents:<br><br>Did the intervention respond to the problem stream and guided by evidence? Is it feasible, acceptable and effective in solving problems? | Analyze implementation:<br><br>How policies was implemented, scope, responsible agency. Are policy communications effective, relevant? Stakeholder's engagement ensuring acceptability? Resource adequate to support implementation? Political, financial commitment? M&E system? Indicators for measuring progresses? | Outcome assessment:<br><br>What are main outcome? in line with objectives, targets achievable? Deviation and unintended outcomes? Increased number of health workers staying in rural areas, mean duration of stay in rural post, turnover rates, unfilled post rate, health workforce density urban versus rural; job satisfaction of rural health workers, patient satisfaction, improved coverage of health services. |
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| Policy one: describe the policy | | | | | |
| Policy two: describe the policy | | | | | |
| Policy three: describe the policy | | | | | |

## Annex 3: Agenda of consultative workshop

Participants: Keys policy makers, participated KIs at management and implementation level from concerned departments and ministries.

| Day | Time | Activities |
|---|---|---|
| Day 1 | Morning | • Register<br>• Opening remark<br>• Presentation on Background of study<br>• Presentation on preliminary results of study |
| | Afternoon | • Presentation on preliminary results of study on policy to recruit student with rural background<br>• Presentation key discussions<br>• Group work<br>• Presentation of findings from group work<br>• Prioritization of findings and development of recommendations |
| Day2 | Morning | • Presentation on preliminary results of study on policy to Prime-Minister Decree on compulsory service in rural areas<br>• Presentation key discussions<br>• Group work<br>• Presentation of findings from group work<br>• Prioritization of findings and development of recommendations |
| | Afternoon | • Presentation on preliminary results of study on policy to Prime-Minister Decree on provision of financial incentive for civil servants<br>• Presentation key discussions<br>• Group work<br>• Presentation of findings from group work<br>• Prioritization of findings and development of recommendations<br>• Closing remark |

## Annex 4: Methodology

### 2.1. Study site

59. To better understand the retention policies for health workers in rural areas and how it is implemented, the study selected are five public health institutes from the central, northern, southern part of the country, which admit students with rural backgrounds. These were the University of Public Health Science (UHS), Public Health Colleges in Luangprabang, Champasak, and Savannakhet Provinces, and the Nursing School in Vientiane Province.

### 2.2. Study Design

60. This study analyzed Government policies for a deeper understanding of health workforce retention and attraction legislation, policies, strategies, regulations and official documents endorsed by MOH and concerned ministries such as MOHA, and MOES. It looked at the implementation of these documents to identify strengths and weaknesses, pros and cons, constraints and challenges to their implementation, and explored policy implications with a view to increase the effectiveness of their implementation in order to increase the number of qualified health workforce in rural and underserved areas nationwide. This study applied a triangular research method to provide comprehensive and scientific evidence to Lao MOH (Figure 2), which included document review, qualitative research, and quantitative research as follows:

Method 1: A document review was carried out by the research team and assigned data collectors. The review focussed on the national policy, strategy, regulation and law, ministerial formulation, department guidelines, and other related grey documents which relate to promoting better access to quality health care in rural and underserved area by increasing the number of qualified health workers. The study applied the WHO health policy and system research method to ensure the highest quality of research findings.

Method 2: Qualitative research method such as in-depth interviews were applied to interview selected key persons and policy-makers e.g., Directors of Departments under MOH, MOHA, and MOES for a better understanding of how the above-mentioned documents were developed; what is the current situation of their implementation; and focus group discussions of key players such medical and nursing students to confirm if they received proper information about the documents reviewed, and what their perception was towards these documents. A consultative workshop was conducted to share the results of the research to selected key policy makers in the MOH, MOES and MOHA, and to hear their opinions relating to the relevance and applicability of this research for the Lao context.

Method 3: Quantitative research method: Secondary data analysis was performed, using administrative data from all the health institutes and the HRH database of the DOP, to describe the current situation of selected policy implementations.

### 2.3. Study process

61. This study consisted of three steps to answer the study objectives ensuring reliability and validity of the findings aimed at providing scientific evidence to Lao policy makers and to be comparable with findings from three other countries. Three steps were:

- Step 1: Policy mapping (addressing objective 1). This consisted of a documentary review. Investigators visited various government offices in and outside of the MOH to gather

documents related to health workforce retention and attraction. All documents were copied and brought to UHS and/or DTR where the review processes took place. The review was based on sixteen recommendations of the WHO to increase access to qualified health workforce in underserved areas using an agreed matrix from the AAAH workshop in Bangkok (see table 1).

- Step 2: Policy analysis (addressing objective 2). Based on result of the policy mapping, the three most relevant policies were selected for the policy analysis. The research team members agreed upon the following three documents on health workforce retention and attraction for further analyses: (a) Instruction of the MOE on recruitment of student with rural backgrounds; (b) Prime-Ministry Decree Number 82/PMO on compulsory service in rural area; and (c) Prime-Minister Decree Number 468/PMO on provision of financial incentive for civil servants. In addition to these documents, the research team also included a newly endorsed ministerial regulation of MOH, Number 103/MOH on compulsory service in rural area among new graduates, which has been enforced and implemented since 2012, for our deep analysis.

- Step 3: Policy recommendations (addressing objective 3). A consultative workshop with all relevant stakeholders such as policy makers, health professional council representatives, international partners, etc., was conducted to solicit recommendations given the results of the in-depth assessment of three selected rural retention policies plus one. Such active engagement by policy makers ensures ownership and policy actions to improve policies and effectiveness of interventions.

62. A qualitative method was applied using the three selected policies plus one by applying the policy analysis tool (Gilson 2012; Gilson, Erasmus et al. 2012), reviews of literature, in-depth interviews of KIs and focus group discussions of medical and public health students. These were convened to investigate the following questions:

- Assess the problem stream: why these policies emerged?
- Assess the policy formulation processes: how different actors (MOH, MOES, MOF, MOHA), medical and nursing schools, politicians, civil society, health professional councils, health professional associations, academia, student bodies, public and private healthcare providers), and in what context, exert their powers, defending their positions (either supportive or defensive) and influencing the final policy decision. Were the affected beneficiaries consulted and engaged in the policy formulation?
- Analyze the policy contents: did the intervention respond to the problem stream and was it guided by evidence? Is it feasible (political, financial, social, programmatic), acceptable by all stakeholders in particular the front line health workers, and effective enough in solving the identified problems? How did the policy evolve over-time?
- Analyze implementation: how policies were implemented, the scope (national/sub-national) which is responsible for implementation--are they credible, equipped and capable to implement the policy? Are policy communications effective? Are interventions relevant to health workers? Were all stakeholders engaged to ensure acceptability? Were resources secured and adequate to support implementation? Are there adequate and continued political and financial commitments? Is the M&E system put in place? What are the indicators for measuring progresses and achievement against what baseline data? What was the resistance and enabling factors by different actors? Any evaluation research conducted to guide policy reorientation?
- Outcome assessment: what are the main outcomes of implementation? Are outcomes in line with the objectives and targets? Any deviation from the original plan and what are the unintended outcomes? What progress indicators were used e.g. increased number of health workers staying in rural areas, mean duration (in years) of stay in a rural post, turnover rates,

rate of unfilled post, density of health workers in rural and rural areas; job satisfaction of rural health workers, patient satisfaction in remote and rural areas, coverage of health services.

63. The quantitative method using secondary data analysis was also used to analyze the current situation of three selected policies implementation to accomplish findings from qualitative method explained earlier.

### 2.4. Study participants:

64. To achieve the study's objectives a wide range of KIs, from policy-making level down to medical, nursing and midwife students, were identified and invited to participate in the study. At the beginning of this research design process, the research team aimed to recruit approximately 126 KIs, of which 41 were policy makers, 25 were medical educators from University of Health Science and 8 provincial colleges and schools, and 60 medical, nursing and midwife students with rural backgrounds.

### 2.5. Study implementation:

***Study preparation:***

65. Research proposal, data collection matrix and questionnaires were translated from English into Lao language by the researchers. A set of proposals was consequently submitted to the MOH for its approval. The research team obtained official approval from the Health Minister on 26 April 2013 to implement this research.

66. The translated research proposal, data collection matrix and questionnaires were circulated among researchers to double check its consistency of translation and wording. Minor wording changes were made ensuring that it was understandable for data collectors.

67. Data collection teams were formed in tandem with the submission of the research proposal to the MOH. Data collectors were trained subsequently on research protocol, data collection matrix and questionnaires.

68. A set of proposals was again submitted to the National Ethic Committee for Health Research, and the National Institute of Public Health for ethical clearance. The research team gained the ethical clearance on 8 May 2013.

***Data collection:***

69. Data collection is divided into three phases as follow:

- Documentary reviews: Research assistants visited all departments and centers under MOH, and MOHA from 8 May to 31 May 2013 to initially screen existing official documents related to retention and attraction of civil servants, including health workers, in rural areas. All identified documents were copied and brought back to the DOP, and UHS where documentary reviews by investigators took place.

- In-depth interviews: In-depth interviews of KIs was carried out between 10 and 21 February 2014. Invitations and in-depth interview questionnaires were sent to selected KIs prior to making an appointment to conduct the actual survey. According to our original plan, 59 invitations for an appointment were sent out to KIs from MOH, UHS, directors of provincial

health office, Directors of Public Health College (Champasak, Savannakhet, Vientiane province and Luangprabang) and line-ministries; however only 35 (59.3%) of the KIs were interviewed.

- Focus Group Discussions: These were also conducted at the same time as the in-depth interviews of KIs. The focus group discussions of MDs and Nurses was carried at DOP while those of midwives was carried out at Champasak Public Health College. Two focus group discussions were conducted for each health worker cadre. In total, 6 focus group discussions were conducted which included 37 MDs, nurses and midwives.

- Quantitative survey: Two quantitative approaches were applied in this study:
  + Questionnaires were sent out to the provincial health offices nationwide by DOP. Provincial health personnel completed questionnaires and sent them back to the DOP by the end of May 2013. The data obtained was merged with the HRH database of the DOP for further analyses.
  + The research team obtained data on medical and public student recruitment from 2009 to 2013 from DOP, UHS and Provincial public health schools.

- Consultative workshop: A workshop was held on 13 March 2014 at Lanxang Hotel in Vientiane capital with participation of 25 selected policy-makers from MOH, MOES and MOHA; Directors of central hospitals, provincial health offices and provincial hospitals; rector/directors/deans from the University of Health Science, and provincial public health colleges and schools; and representatives of key development partners. The workshop began with a presentation by the research team leader on preliminary results of the study and recommendations, followed by questions and answers, and discussion to solicit the realism and applicability of the study's recommendations for the Lao context. This was an informative and participatory workshop which fed into finalization of the study's recommendations.

### 2.6. Data analysis

***Qualitative***

70. In-depth interviews of KIs were taped where consent was granted and were transcribed in Lao language within 24 hours after the interviews and then translated into English for analysis and report writing. One interview assistant attended the interviews and took note of conversion. Focus group discussions were carried out by one facilitator and an assistant. Conversations during the focus group discussions were recorded and noted down by the assistant.

71. Content analysis was applied to identify dominant themes and sub-themes raised by interviewees. The qualitative data was analyzed based on a matrix agreed to during the AAAH workshop in Bangkok (see Annex 1 and 2).

72. Interpretation of the content and themes which emerged and other results of qualitative analysis were done by consensus among research team members.

***Quantitative***

73. The research team analyzed to estimate percentage of annual admission of students with rural background by total annual admission from all the health institutions using administrative data from individual institutions. The research team also analyzed to determine percentage of permanent health staff in central and provincial health departments with rural experience by sending out a data collection matrix to all concerned departments. The data obtained was merged with the HRH database of the DOP. Data cleaning and analyses were done in Microsoft Excel for Windows.

## 2.7. Ethic consideration

74. This study was approved for research ethic from the National Ethical Committee for ethics and permission to conduct this study was obtained from the MOH. Written or verbal inform consent was obtained from KIs and students before in-depth interviews and focus group discussions, respectively. Participants were advised that this was an anonymous study and data, especially voice recordings, would be used for purposes of the study only, and would be deleted after finalization of report. Participants were also advised of their rights of participation and that they could terminate or stop an interview at any time if they felt uncomfortable or did not want to continue their participation.

## 2.8. Dissemination of Results and Publication Policy

75. The deliverable consists of publication in international and national journals, policy briefs and a dissemination workshop to relevant policy makers. The Alliance will publish a technical report and present the results on the Alliance website.