

Extending Healthcare to the Informal Sector in Laos

This case has been written by Beñat Oñatibia Camara and Zhang Yingxin Louisa under the guidance of Associate Professor Phua Kai Hong and Visiting Professor Tikki Pangestu, Lee Kuan Yew School of Public Policy (LKY School), National University of Singapore and has been funded by the LKY School. The case does not reflect the views of the sponsoring organization nor is it intended to suggest correct or incorrect handling of the situation depicted. The case is not intended to serve as a primary source of data and is meant solely for class discussion. This case is based largely on interviews, publicly available sources and actual events, but some characters and events have been altered for the purposes of this case study. This case won the first prize in the Case Writing Competition 2012.

Copyright © 2013 by the Lee Kuan Yew School of Public Policy at the National University of Singapore. All rights reserved. This publication can only be used for teaching purposes.

Introduction

In early January 2000, the Minister of Health of Laos was grappling with a seemingly insurmountable healthcare problem in the country. Laos had just implemented a social health insurance scheme for the formal private sector to complement the existing civil servants insurance scheme. However, this left a huge vacuum in healthcare for the remaining 80 percent of the population in the informal sector¹. The Minister was scheduled to meet with the Cabinet to discuss a strategy to tackle this inequitable problem at the end of the month.

The informal sector was largely comprised of the rural population engaged in subsistence agriculture (an activity which contributed more than 50 percent of the country's GDP) and the self-employed. Many of this group were living below the national poverty line². A substantial proportion lived in remote, far-flung regions and had to travel long distances to access public health facilities where they had to incur high user fees and drug costs. This deterred them from seeking healthcare services and the Minister had witnessed the decline of healthcare access to the informal sector in the past few years.

The Minister was no stranger to implementing radical health reforms. Since his appointment as head of the Ministry of Health ("MoH") in 1996, he had pursued a series of public healthcare reforms such as the introduction of user fees and the Revolving Drug Funds (RDFs), a mechanism used to finance medicines in which drug supplies were replenished with monies collected from the sales of drugs after an initial capital investment³. Although these reforms had lessened budgetary stress on the government, they also exacerbated the inequity of the healthcare system.

Convinced that there was some way he could alleviate the problems of providing basic healthcare to the informal sector, he called upon Phoumi Vorasai⁴, the recently appointed Deputy Director-General of the Planning and Finance Department. The Minister wanted Vorasai to analyse the various health systems financing options to improve health coverage for Laos' informal sector so that he could recommend the best approach to the Cabinet.

Vorasai understood that this was a difficult task, as procuring additional funding from the government was a tenuous affair since tax revenues in Laos were low. The alternative of harnessing more financial aid from external donors would not be simple either, and was unsustainable in the long-term. In short, he had to address the issues of financing the system as well as effectively extending healthcare to the informal sector. There was a need to balance the trade-offs of efficiency versus equity, expediency versus sustainability and quantity in terms of coverage versus quality. There was also the issue of whether he could get support from other ministries which were closely linked to his strategies. He identified three approaches, all of which had their own challenges and drawbacks.

The first approach was to increase funding to provide subsidies of essential medicines through the RDFs such that healthcare would be affordable for the targeted group. This could

¹ International Labour Organisation. Lao PDR: Social security. *ILO Paper Series on Social Security Extension Initiative in East Asia*. ILO Subregional Office for East Asia, 2006. p.3.

² The national poverty line in Laos is based on nutrition; a person is poor if he consumes less than an amount that buys 2,100 Kcal/day (plus a 30 percent allowance for non-food items).

³ The initial source of funds for the RDFs came from the government, foreign assistance, and donations from several other sources.

⁴ Character's real name has been changed for privacy reasons.

be financed through an integrated approach from external donors and an increase in government funding.

The second option was to initiate Community Based Health Insurance (CBHI), a voluntary scheme where the participants would prepay a small premium which would be topped up by funding from external donors and the government, in return for pre-determined set of health services. External donors could provide assistance on a district or provincial level, the funding of which would be much more feasible.

The last approach was to create a mandatory national health insurance scheme. Premiums would be collected from the non-poor self-employed, and premiums for the poor would be subsidised by government and external donor funds. Social security contributions towards health would also have to be increased. By enlisting the informal sector into the insurance system in a gradual approach, the premiums from them would be pooled with the existing social security health fund. Such a scheme would enable cross-subsidisation from the formal to the informal population, and would involve working closely with the Social Security Office within the Ministry of Labour and Social Welfare.

Vorasai had to present the best strategy to the Minister – one that could lower the barriers to health access for the informal population and was feasible in terms of financing and administration; which option should he recommend?

Background on Laos

Laos was one of the least-developed countries in South-East Asia with a GDP per capita of US\$330 in 1999, and much of its population was impoverished. The single-party country had been running on strict socialist lines since 1975, but in 1987 the government had introduced the “New Economic Mechanism” which had triggered a process of trade liberalisation and encouraged private investment. Although this had led to economic growth of as much as 6 percent annually during the 1990s, the benefits of economic growth were concentrated in the urban areas especially in the Vientiane province, leaving behind a large proportion of its population mostly in the informal sector living on less than US\$2 a day. Still, poverty incidence had dramatically dropped from 46 percent in 1992 to 39 percent in 1997 to slightly above 33 percent in 1999⁵. Laos had no fewer than 4.2 million (80 percent) of its 5.2 million population working in the informal sector primarily in subsistence agriculture⁶.

Health-wise, the country had one of the highest fertility, lowest life expectancy and highest infant and maternal mortality rates in the region (see Exhibit 1). Malaria, pneumonia, influenza, diarrhoea, and dengue were the most common causes of morbidity, and of death (with the exception of influenza).

Reforms in the Health Sector

The public health sector largely operated on three main levels –the central level governed by MoH, the provincial level and the district level (see Exhibit 2). Besides the vertical health programmes run by the ministry that ran through to the lower levels⁷, the provinces and the

⁵ Lao Statistics Bureau Yearbook, 2000. Vientiane: Ministry of Planning and Investment, 2000.

⁶ *Ibid.*

⁷ Laos had 16 provinces and one special security zone, 142 districts and approximately 12,000 villages in 2000.

districts had much autonomy in running their own health programmes. Since the opening up of the economy, the ministry had been heavily assisted by international donors and NGOs.

There had been several key health reforms in Laos during the last few years. From 1975 to the mid-1990s, public health services were free but these services were extremely basic and had a limited reach for the population. Salaries of health workers were low, there were frequent and severe shortages of essential drugs and health infrastructure was in a dismal state under the free public healthcare regime. More tragically, the provision of these free services was financially unsustainable. To prevent the implosion of the healthcare system, user fees for public health services had been introduced under the Prime Ministerial Decree 52 in 1996.

The Revolving Drug Fund (RDF) had been expanded under the Prime Ministerial Decree 230 in 1997 to provide a steady supply of essential medicines from the central level all the way down to the village level through cost-recovery. Prices of drugs were to be sold at a mark-up over the purchasing price to cover administrative and logistical costs. Concurrently with the RDF, the Laos Government permitted the flourishing of private pharmacies to improve drug availability to the population.

In 1999, the Ministry of Labour and Social Welfare had established a social security scheme that covered the healthcare of employees in the formal private sector under the Prime Ministerial Decree 207. Managed by the Social Security Office (SSO) in the Ministry of Labour and Social Welfare, the social security contributions consisted of 9.5 percent of the salary with employers contributing 5 percent and employees contributing 4.5 percent; 2.2 percent was channelled to healthcare⁸.

Social security for the public sector had already been in existence since 1993. It was funded by the civil servants' contribution of 6 percent of salary and topped up by the government treasury as and when it was needed⁹. Beneficiaries of both the public and private sector schemes could receive ambulatory and in-patient care without the need for any co-payment. The healthcare providers were paid by the capitation method (received a fixed amount per insured person and dependents annually).

This now meant that both the public and private formal sector were covered for healthcare under the two social security scheme, while those in the informal sector, who were the most vulnerable of the population, were left to fend for themselves.

Health System Financing in Laos

Vorasai was acutely aware of the problems of financing Laos' weak healthcare system. The country's average annual healthcare spending of US\$11.50 per person was on the low side when compared to other low-income countries in the region¹⁰. The level of health spending in Laos was patently insufficient to provide for the country's health needs and to support the existing network. It could not even cover a minimum package of basic services for the whole population which would cost US\$15 per person, and was nowhere near the US\$34 per person

⁸ MOH Technical Working Group and JICA Study Team. *Lao Health Master Planning Study – Final Report Vol. 4*. Vientiane. November 2002. p9-11.

⁹ *Ibid.*

¹⁰ In comparison, Cambodia and Vietnam's health expenditure per capita were US\$19 and US\$23 respectively in 2000.

required to establish a close-to-client healthcare system as estimated by the World Health Organisation (WHO)¹¹.

The heavy reliance on foreign and external sources was equally troubling; 35 percent of total health expenditure was financed externally by international and bilateral development agencies and banks. Out-of-pocket household expenditure on healthcare was sky high and comprised 55 percent, while government spending¹² was a paltry 10 percent of total health spending (see Exhibit 3).

The average household expenditure on health was US\$6.70 per person, and although the amount spent on health was lower in rural areas, it was higher as a percentage of total household expenditure at 4.6 percent (compared to 2.3 percent for those living in urban areas)¹³. A third of this was spent in public facilities and the rest spent in private pharmacies or informal drugstores. The money went largely to medicine (92 percent), with the remainder going to the payment of service fees.

Having personally conducted the study on “Hospital Expenditure Findings” with the WHO a few months before, Vorasai had identified why the facilities charged so much for user fees and drugs. Half of government funding was primarily used for staff salaries, and a substantial chunk was spent on investment in new buildings (see Exhibit 4). Already underfunded, the hospitals had no choice but to charge high service fees and drug prices to finance their operating costs. He had found it shocking that for example, drug sales comprised 77 percent of revenues in central and provincial hospitals while this figure jumped to 90 percent in district hospitals. It was clear that the informal sector was the group most disadvantaged by this cost-recovery system, as the level of household out-of-pocket expenses was surely beyond their means.

Decentralisation of the Health Sector

Decentralisation throughout the 1990s had decreased MoH’s allocated share of government health expenditure from two-thirds in the 1980s to 28 percent in 1999¹⁴. Sixty-three percent of government health expenditure was allocated to the provinces and 9 percent to the Ministries of Interior and National Security which provided healthcare to the police and the military.

With an “upward revenue sharing” fiscal system¹⁵, Laos’ health sector’s functions were similarly devolved to provincial and district levels. The framework of decentralisation had been expanded just months ago and gave provinces wider fiscal autonomy in collecting and

¹¹ Commission on Macroeconomics and Health. *Investing in Health for Economic Development*. World Health Organization. Geneva, 2001.

¹² Government health expenditure is defined as budget expenditure from MoH, other ministries (Defence, Interior and Labour), and provincial governments on health.

¹³ As a percentage of total household spending these figures are high especially when compared with the proportion of food expenditure out of total expenditure (25 percent for the rural population and 41percent for the urban population).

¹⁴ MOH Technical Working Group and JICA Study Team. *Lao Health Master Planning Study – Final Report Vol. 4*. Vientiane. November 2002. p9-5.

¹⁵ In this system, revenues are collected at the provincial level, and surplus revenues collected by richer provinces are to be transferred to the central level to fund both central government expenditures and transfers for the provinces in deficit.

allocating revenues within envelopes set by the government, subject to MoF's approval¹⁶. Budget allocations depended mostly on negotiations between provincial governors and the central government. The province and district offices were responsible for running their respective hospitals and in their vicinities, but many lacked the recurrent budgets allocated from district chief offices to run the health services properly.

Another problem of decentralisation was that even though the purchasing of the drugs for the RDFs was done by the MoH, the procurement was done at the provincial level. Drug procurement committees in more rural provinces did not have the specialised knowledge to carry this out, and the health centres often had shortages of key drugs.

The MoH managed vertical health programmes supported by external donors, and was not supposed to distribute funds to the provincial and district levels. This posed a problem as this led to different goals, objectives and strategies amongst the various levels of governance, as the ministry effectively lacked the power to impose health policies at the localised levels.

Healthcare in Laos

Healthcare in Laos, mainly provided by public healthcare facilities, was plagued by myriad problems. In 2000, the country had 8 central hospitals, all in the Vientiane Municipality, 5 regional hospitals, 13 provincial hospitals, 121 district hospitals and 533 sub-district health centres¹⁷. While more than 300 private clinics were in operation¹⁸ (mostly in Vientiane), there were no private hospitals operating in Laos even though the government had permitted the opening of private hospitals in 1992.

There were 11,382 public sector health workers under the central and sub-national levels (see Exhibit 5). For every thousand Laotians, there were about 2 doctors and 6 health assistants. Considering the fact that the network of health centres was much more extensive than the network of central, provincial and district hospitals, the health centres received disproportionately less health workers and financial resources and were staffed predominantly by less qualified health workers. There was also a group of health workers employed by the Ministry of National Security and the Ministry of National Defence to cater to the healthcare needs of the police and military.

Anecdotal evidence suggested that the workers at the health centres were alarmingly inefficient, provided poor service and did not show up regularly. Not surprisingly, the health centre workers typically received low salaries, little training and there was a dearth of career development opportunities. In each health centre, there were on average only 2 health professionals and these centres were inadequately maintained and equipped with drugs and provided low quality service. Many health workers preferred to work in urban areas over the rural areas and there were problems of conflict of interest as many of the senior health workers were involved in private health practice outside of their official working hours.

¹⁶ Subnational administrations raised around three-fifths of total revenues and spent almost half of total expenditure.

¹⁷ Department of Statistics, Ministry of Planning and Investment, Lao PDR

¹⁸ State-employed doctors with at least 7 years of practical experience in the public sector were permitted by the government to run private clinics after working hours if they were still working in public health facilities or on a 24-hour basis for doctors who had retired or had been properly discharged.

Even in urban areas, health services were sub-standard, though they were of much better quality in comparison to the rural health centres. After allocating the majority of the government funding towards the salaries and capital, what was left for operations and maintenance of the facilities was inadequately little, leading to rapid deterioration of the health facilities and an abysmally low quality of healthcare. This led to the population's high mistrust of the public health facilities, with only 28 percent of those who fell ill seeking health services at public health facilities¹⁹. The biased distribution of human and financial resources in favour of the central institutions and provincial levels meant that the district and village levels, where most of the poor were concentrated, were the most severely underfunded.

All these explained why a country like Laos had public healthcare facilities that were so underutilised. Naturally, this translated into a substantial wastage of government resources. Bed occupancy rates were absurdly low at 44 percent in provincial hospitals, 3 percent in central and district hospitals and 10 percent in health centres, while ambulatory activities were rarely used in most health facilities²⁰.

Healthcare for the Informal Sector

The MoH did have service fee exemptions in public health facilities for the poor and other groups in society such as monks, students and civil servants according to Decree 52 which was established in 1995. But in reality, exemptions granted were few and far between. According to a technical officer from the WHO, the discretion ascribed to each health facility to decide whether or not to grant the fee exemption led to wide variations in this practice throughout the country²¹. Lack of standards on identifying the poor and the poor not knowing that exemption policies existed made the situation worse. Moreover, it was illogical that civil servants, who were already eligible for health expenditure reimbursement from their social security scheme, were within the exemption.

Although it was true that service fees were low, users still had to pay for the medicine which was exorbitant considering the little that the informal population earned, and the RDFs only served to worsen the problem. "The RDF was more lip-service to primary healthcare than anything else," observed a technical officer from the WHO who was then working on a project with the MoH, "because they (RDFs) often charged higher prices than private pharmacies, and some RDFs even bought their drugs from private pharmacies nearby."²² The RDFs were neither well regulated nor well controlled, leading to exploitation of this revenue source by health service providers.

Vorasai was also keenly aware that the negative impact of the Asian Financial Crisis in the late 1990s on government revenues had only served to compound the exploitation of RDFs. Since the RDFs were the only non-tax earmarked revenue for the public health facilities, the decrease in earmarked funding had led to hospitals over-prescribing and even charging as much as 40 percent over drug costs to raise revenue. This was in clear violation of MoH's regulated prices of a maximum of 25 percent over purchasing price at central and provincial hospitals (lower mark-up of 15 and 10 percent for district hospitals and health centres

¹⁹ State Planning Committee and NSC. Lao PDR Lao National Health Survey, Vientiane. 2000.

²⁰ MoH Technical Working Group and Japan International Cooperation Agency Study Team. *Lao Health Master Planning Study. Volume 2*. Vientiane. November 2002. p9.7.

²¹ From interview with authors.

²² From interview with authors.

respectively)²³. But, he also knew that the stipulated level of mark-up was usually not enough to cover the administrative and logistical costs of providing the drugs.

As such, the informal population largely avoided visiting such health centres, except in dire circumstances. When ill, they most commonly resorted to self-medication or visiting one of the multitudes of private pharmacies or informal drug sellers which were much cheaper options, albeit not the most effective in curing illnesses. “The drugs dispensed by the private and informal drug sellers were usually of low quality and were often wrongly prescribed,”²⁴ observed the deputy chief in the Medical Administrative Division of MoH at that time.

In extreme or life-threatening circumstances, in order to access the public healthcare facilities, they would have to sell possessions like animals, stored rice or even land to pay for the services, borrow from relatives and friends or forego the healthcare. The medical expenses could be so massive compared to their meagre earnings that it could push the individual or family into poverty, often forcing them to postpone or delay getting healthcare services. As the deputy chief recalled, “It was only when working at the hospital as a physician that I understood the high risk of catastrophic health spending, as many low-income people had to leave the hospital before the due course of treatment was over as they did not have enough money to pay the medical bill.”²⁵

Physical access to these health centres was also a major deterrent. As each district spanned large distances, some villagers who lived in the more rural parts of the province would have to walk for hours through forests and crossing rivers to reach these district health centres and this would mean losing at least a day’s pay from not working on the farm. It was reported that it took 108 minutes for the rural population to get to a health facility in stark comparison to 19 minutes for the urban population, and 3 hours for those living in the remote highlands which lacked infrastructure compared to 48 minutes for those in the lowlands.²⁶

Health Insurance for the Informal Sector

From Vorasai’s standpoint, he was inclined towards starting a health insurance for the informal sector. While drug subsidies could help them to a certain extent, health insurance would help to risk-pool and avoid catastrophic expenses. Health insurance at the community level for informal populations had already been employed in several countries and had seen wide-ranging results. Mandatory national health insurance was one step closer to achieving universal health coverage, but it had been less successfully implemented in low-income countries due to its heavy strain on financial resources.

He knew that the minister would favour the option that would minimise such a strain on government coffers. If indeed the MoH undertook the strategy he recommended and the scheme proved successful, Vorasai would have the chance to rise to the highest position within his Department.

²³ MOH Technical Working Group and JICA Study Team. *Lao Health Master Planning Study – Final Report Vol. 4*. Vientiane. November 2002. p98.

²⁴ From interview with authors.

²⁵ From interview with authors.

²⁶ Department of Statistics, Ministry of Planning and Investment, Lao PDR, Lao Expenditure and Consumption Survey 2002/2003 (LECS III), Version 1.1 (June 2010).

Financing Prospects

Vorasai knew better than anyone else the difficulty in increasing funding from the government. Although the government health budget had been gradually increasing in terms of raw figures since 1999 (see Exhibit 6), taken as a percentage of total government expenditure, it had plummeted in the last few years. As a proportion of GDP, government health expenditure had always been low, but after the Asian Financial Crisis, it had plunged from slightly below 1 percent to 0.3 percent. Although the country's economy was starting to pick up after the recent Asian Financial Crisis, its recovery would be a slow and lengthy process. In this light, would the government be able to provide additional health financing for this endeavour? With poor administrative capacity and the small formal sector, taxes collected by the government were meagre. "The truth of the matter," pointed out one of the MoH staff in the Planning and Finance department, "is that health policy always follows the money."²⁷ In a poor country like Laos, it was inevitable that no matter how much one sliced the economic cake, the slice allocated to health would be paltry until economic growth accelerated.

New resources from budgetary and non-budgetary sources had to be mobilised, but from where? The most ideal situation would be an earmarked sin tax that could help to justify it being used for health financing. The Minister could try to negotiate for such an arrangement with the MoF, but the likelihood of them agreeing to this was low. The reality was that such taxes would probably be allocated to more powerful ministries instead of to the MoH.

Since the 1990s, international development banks such as the World Bank and the ADB, as well as a wide array of bilateral donor agencies like the Australian Agency for International Development, the Swiss Red Cross and the Japan International Cooperation Agency, had implemented projects in Laos' health sector. In 1998, total donor assistance was US\$13.7 million. However, these were mostly vertical programmes with a narrow focus and were usually limited to several districts, a province or spanned a few provinces. Amongst the external donors, agencies and NGOs, and between MoH and the donors, there was little coordination, leading to huge variations in scope, activities and methods of the projects.

Vorasai recognised that the potential of pooling together the financial aid from external donors for an integrated approach towards healthcare would surely improve the healthcare coverage of the informal sector. But, did the MoH have the administrative capacity to coordinate such an approach? More importantly, such funds would not be indefinitely sustainable; and if mainstreamed into recurrent expenditure for regular services, it would be hard to wean off dependency from this source of financing in the future.

The MoH had the highest chances of receiving financial assistance for such an extensive programme from the multilateral agencies like the World Bank and the Asian Development Bank (ADB), but with the development banks' strong emphasis on transparency, would they be amenable to providing financial assistance for this purpose? One of the staff in the Asian Development Bank observed that the ADB and external donor agencies generally did not have a high level of trust in the Laotian government due to the lack of transparency, accountability and monitoring mechanisms.

²⁷ From interview with authors.

Vorasai's Policy Options

It was up to Vorasai to choose the best option to recommend to the minister in order to improve health coverage for the informal population. His first option to provide subsidies of essential medicines to them through the RDFs was to be financed through a combination of government revenues and an integrated external donor funding approach. Vorasai knew that this would be a steep uphill task. Even if the medicines were subsidised during distribution to the RDFs in the provinces, he could not be sure that the provinces and districts would not try to sell them at higher prices. The difficulties of monitoring such a programme in Laos' decentralised health system would be immense.

The financing of this scheme posed a huge challenge too. Vorasai was doubtful that the government would have the financial capacity for such large recurring costs. The external donors and agencies were presently financing area-focused vertical programmes in individual provinces or regions; would they be amenable to such a large, integrated, country-wide project? Especially since the external donors were not fully convinced of the MoH's accountability procedures, this would be an additional barrier to overcome. The trade-off between expediency and sustainability would be a key consideration in determining the extent to which external donors should be financing such a scheme.

Or, should he initiate a CBHI scheme? This could be piloted in several districts and expanded over the years, initially subsidised by external donors. The donors could find this option more acceptable as it would mean financing CBHIs only in certain provinces or districts which was much more financially manageable. Gradually, the government could take over subsidising the premiums. However, smaller risk pools within the community would also result in lower average contributions and consequently less healthcare benefits.

While CBHI was a popular option used in many countries with a large informal population and could potentially be more financially sustainable, there was no guarantee that the uptake would be significant due to its voluntary nature. There was a high risk of adverse selection which would heavily strain the fund, and the population would not be very trusting of the district-level health schemes. Even if the premiums were set at a minimal level of US\$1 to US\$2 per person annually, this amount was equivalent to a few days of food and was no small sum for the informal population. The remaining payment to providers would have to be covered by the government and external donors yet again. He was also unsure if the provinces and districts had the administrative capacity to collect these premiums. Enforcement of the collection premiums would be a large problem, and the administration costs of this could outweigh the revenues from the collection itself. The poorest and most in need of health insurance would be the least likely to enrol in such a programme, while the non-poor ones could opt out.

The final option of starting a compulsory national health insurance would mean partial or even full subsidisation of premiums for a substantial proportion of the informal sector, although many self-employed professionals would be able to pay the full premiums. Subsidisation of the poor could be financed by the government, integrated assistance from external donors, and increased social security contributions from the formal sector. Enrolment would be a major issue and it would be tough to identify which informal workers should be subsidised. Vorasai thought of going through cooperatives, village groups, occupational groups and community-based organisations for help in enlisting the informal

sector. While this option was a much more comprehensive approach that would cover more of the population than the others, the trade-off was that the benefits from such an insurance scheme could not be very high if the funds were spread out so thinly.

Also, even though this would need a huge financial commitment from the government and from external donors, the assistance required would gradually decrease as Laos' economy grew, and as more people joined the formal sector. Raising the contribution rates from the formal sector would require working closely with the Ministry of Labour and Welfare's Social Security Office, but this department would be extremely wary of collaborating with the MoH on this scheme. Any attempt at cross-subsidisation from the formal to the informal population could severely deplete the Social Security Office's coffers since the social security scheme only reached a very small part of the population at that time.

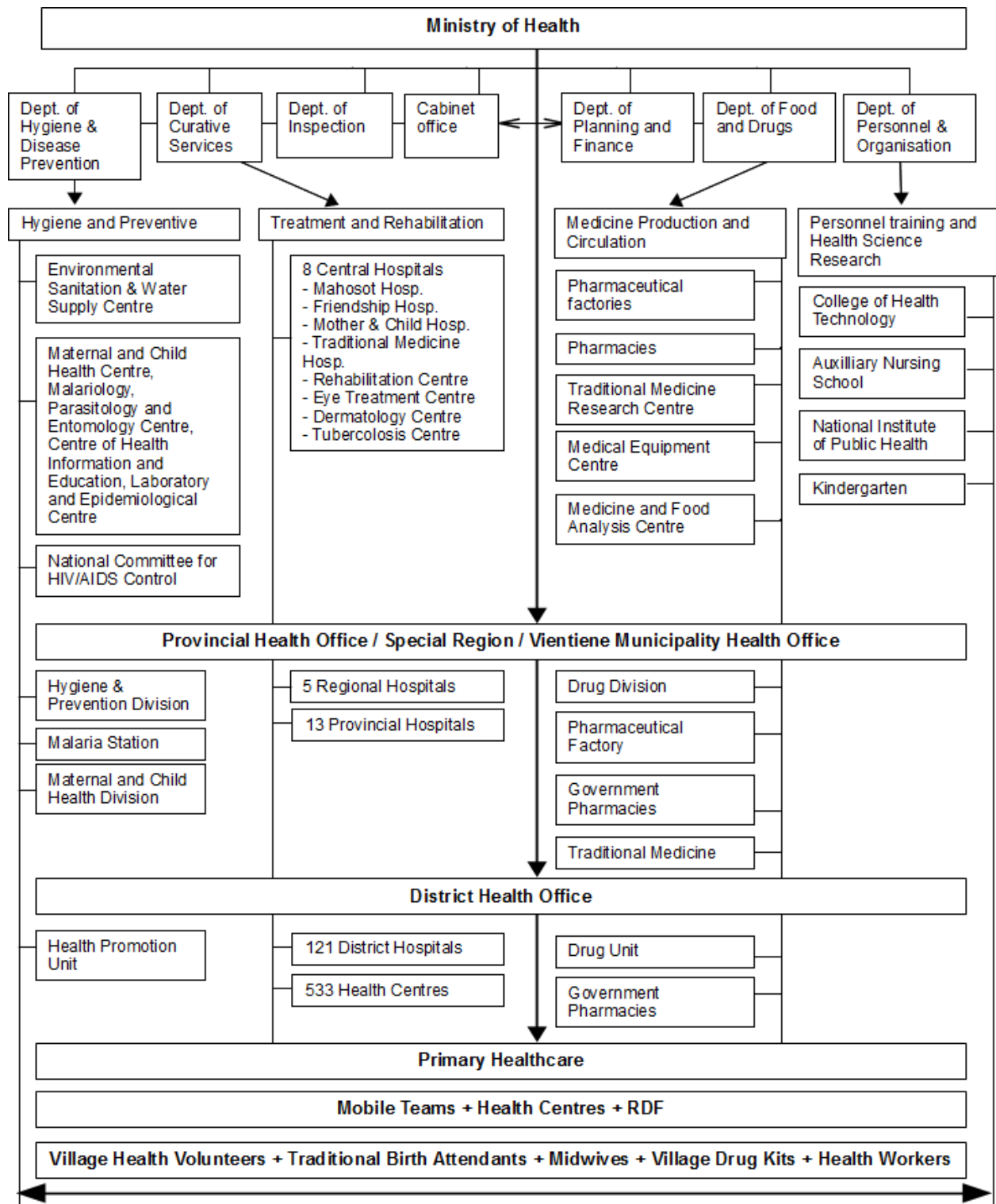
Vorasai needed a credible strategy to address the Minister's concerns. Which option should he take?

Exhibit 1: Health Indicators of Countries in South-East Asia

<i>Year</i>	Total Fertility Rate(per woman)	Life expectancy (years)	Infant Mortality Rate (per 1,000 live births)	Maternal Mortality Rate (per 100,000 live births)
	1995-2000	1995-2000	1999	1980-1999
Lao PDR	5.3	52.5	93	650
Cambodia	5.3	56.5	86	470
Myanmar	3.3	55.8	79	230
Indonesia	2.6	65.1	38	450
Vietnam	2.5	67.2	31	160
Philippines	3.6	68.6	31	170
Thailand	2.1	69.6	26	44
Malaysia	3.3	71.9	8	39
Brunei	2.8	75.5	8	0
Singapore	1.6	77.1	4	6

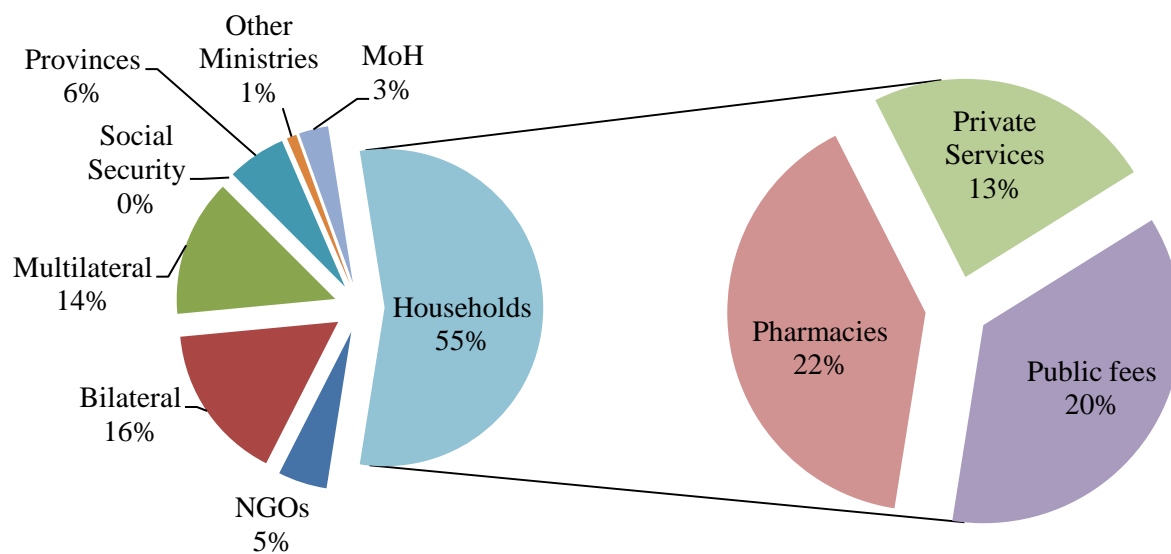
Source: UNDP: Human Development Report HDR. Oxford University Press, Oxford, 2001.

Exhibit 2: Organisational Structure of the Ministry of Health and the Levels of Healthcare



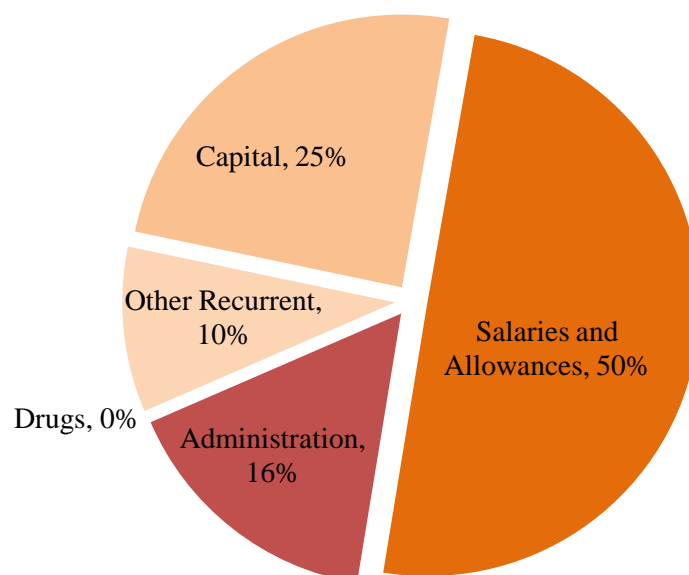
Source: MoH, 2002

Exhibit 3: Composition of Health Expenditure by Source in 1999



Source: MOH Technical Working Group and JICA Study Team. *Lao Health Master Planning Study – Final Report Vol. 4*. Vientiane, November 2002.

Exhibit 4: Composition of Government Health Expenditure by item in 1999 (for MoH and Provinces)



Source: World Bank, 1997; ADB, 1999a, as contained in MOH Technical Working Group and JICA Study Team. *Lao Health Master Planning Study – Final Report Vol. 4*. Vientiane. November 2002.

Exhibit 5: Distribution of Human and Financial Resources in Public Health Facilities in 1999

<i>Facility level</i>	Number of Personnel	Percentage (%)	Recurrent Expenditure %
MoH admin & support	612	5.4	10.0
Central hospitals	1,231	10.8	13.0
Provincial health offices	1,533	13.5	16.0
Provincial hospitals	2,328	20.5	20.5
District health offices	2,019	17.7	18.0
District hospitals	2,438	21.4	15.5
Health centres	1,221	10.7	7.0
Total	11,382	100.0	100.0

Source: MoH, 2001

Exhibit 6: Trends in Government Health Expenditure from 1994-1999

Year	1994	1995	1996	1997	1998	1999
GDP current (billion kip)	1419	1,726	2,201	3,745	8,700	13,495
Government budget (billion kip)	294	364	412	847	1,700	2,778
Govt health expenditure (million kip)	11,895	14,171	19,662	17,494	31,154	43,843
- Spending by MoH (million kip)	3,720	4,792	8,800	4,893	8,635	12,174
- Spending by Provinces (million kip)	7,974	9,379	10,862	10,922	19,269	27,569
Govt health exp as % of GDP	0.89	0.82	0.89	0.47	0.36	0.32
Govt health exp as % of Govt exp	4.05	3.89	4.77	2.07	1.83	1.58

Note: Figures in italics are estimates or planned expenditure, others are implemented expenditure. Exchange rate used: US\$ 1.00 = 10,000 Kip

Source: Government Budget 1999-2000; MoH; ADB II PPTA Feasibility Study; World Bank Public Expenditure Review 1997; Bank of Lao PDR; Annual Report to Committee, as contained in The Study on the Improvement of Health and Medical Services for the Lao People's Democratic Republic - Lao Health Master Planning Study Volume 2, Japan International Cooperation Agency, 2002.