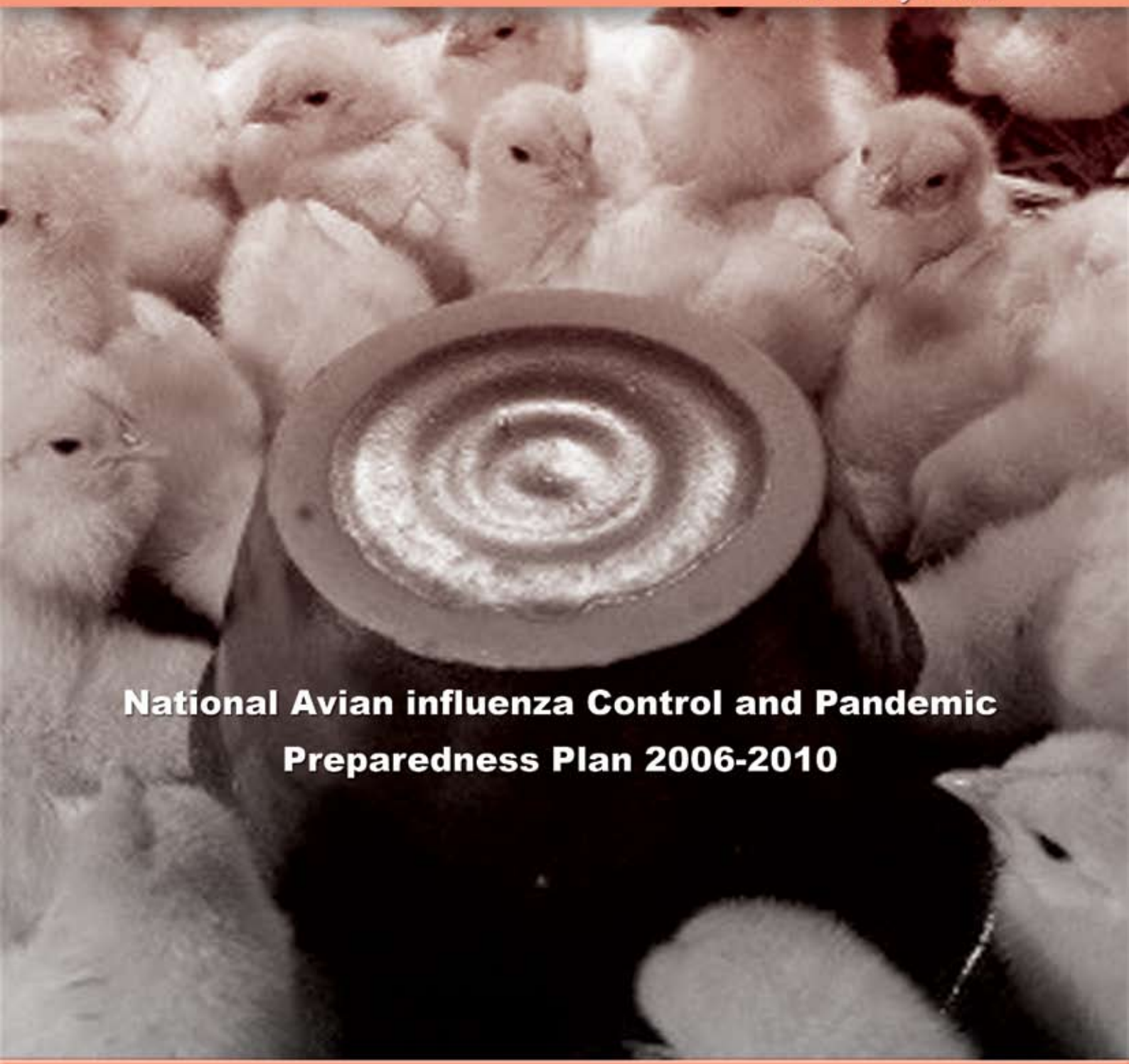
January 2006



National Avian influenza Control and Pandemic Preparedness Plan 2006-2010

Prepared by:
Government of Lao PDR and United Nations

Government of Lao PDR

National Avian Influenza Control and Pandemic Preparedness Plan 2006 - 2010

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and the United Nations

January 2006

Foreword

The current avian Influenza outbreak in Asia deserves our serious attention because of its harmful effects to respective nation's economy and, more importantly, on the health of the people in the region, a number of people have died as a result of this disease, and many more are at risk.

As long as avian influenza still circulate among poultry animals and wild birds, there are always risks of future outbreak. The virus is unstable. The risk of re-assortment is high and can result in more pathogenic viruses that are easily transmissible. If such re-aassortment occurs, the world will face a pandemic with enormous social and economic consequences and severe threats to human health security.

Therefore, we need to be better prepared. We need better strategies and action plans to avert the risk. Accordingly, from now, in the months and years ahead, we hope that you will all share your visions and will join hands together with us to prevent and fight against this disease within the frame of National Avian Influenza and Pandemic Preparedness Plan 2006-2010.

The National Committee for the control of communicable diseases has been doing all it can to formulate, develop a comprehensive strategic plan for the prevention and control of avian influenza outbreak. However, to be sure, the Committee cannot fight the outbreak alone. We need more cooperation with various sectors, with our colleagues, including affected and non-affected countries, the UN system including International Organizations, NGO, INGos, consumer groups, individual experts, authorities as well as local authorities in order to implement effectively the National Avian Influenza Control and Pandemic Preparedness 2006-2010..

Vientiane, 17 May 2006
Minister of Health
Vice Chair of National Committee for the
Control of Communicable Diseases

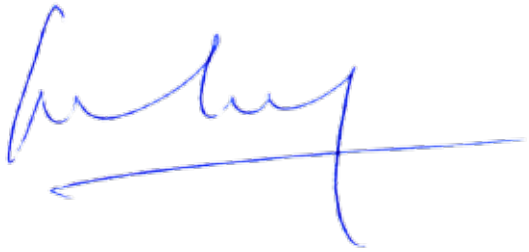
Dr. Ponmek DALALOY

Acknowledgement:

We would like to express our sincere thanks deep gratitude to the National Committee for the Control of Communicable Diseases, the National CDC Secretariat, Minister of Health, Minister of Agriculture and Forestry, to the UN Resident Coordinator, Ambassadors, WB Representative, EU Representative, ADB Representative to the Lao PDR, for their valuable advices in making the "Lao National Avian Influenza and Pandemic Preparedness Plan 2006-2010" available.

Special thanks to those who have been actively contributed to the development of the plan namely the UN Team, WHO and FAO Country Offices, Ministry of Agriculture and Forestry, Ministry of Health, Ministry of Foreign Affairs, Ministry of Justice, Ministry of Culture and Information, Mass Organizations, Mahosot Hospital, Friendship Hospital, Setthathirat Hospital, MCH Hospital. To the National Avian Human Influenza Coordination Office (NAHICO), and UN Technical Coordination Unit for their tremendous efforts in making the coordination, arrangement for meetings, groups works possible. Thanks to Cabinet, the Department of Hygiene & Prevention, Center of Laboratory & Epidemiology, Center of Information & Education for Health, Center of Medical Equipment Supplies Center of Water Supply and Environment Sanitation, Food and Drug Department, Department of Curative, Department of Planning and Financing, Department of HumanResources. Ministry of Health, Department of Liverstock and Fisheries, Department of Curative, Mahosot Hospital, Friendship Hospital, Setthathirat Hospital, MCH Hospital for their contributions in terms of deployment of staff working to finalize the plan of action for each strategy.

Director of National Avian Human Influenza
Coordination Office (NAHICO)



Dr. Bounlay PHOMMASACK

List of Abbreviations

AI	Avian Influenza
ARI	Acute respiratory infection
ASEAN	Association of South-East Asian Nations
BKK	Bangkok
BSL	Bio-safety Level
CDC	Communicable Disease Control
DHO	District Health Offices
DLF	Department of Livestock and Fisheries
DVM	Doctorate in Veterinary Medicine
EID	Emerging Infectious Diseases
EWORS	Early Warning Outbreak Recognition System
EWS	Early Warning System
FAO	Food and Agriculture Organization
FETP	Field Epidemiology Training Program
GIS	Geographic Information System
HC	Health Centers
HCW	Health Care Workers
HPAI	Highly pathogenic avian influenza
HSS	Department of Health and Human Services of the US Government
IEC	Information/Education/Communication
IHR	International Health Regulations
ILI	Influenza like illness
IOE	International Office of Epizoonotics
IT	Information Technology
KAP	Knowledge, Attitudes and Practices
LDCs	Least Developed Countries
MAF	Ministry of Agriculture and Forestry
MoH	Ministry of Health
Mtgs	Meetings
NAHC	National Animal Health Center
NAMRU	Naval American Research Unity
NAMRU-2	United States Naval Medical Research Unit
NCCC	National Clinical Care Committee
NCCCD	National Coordination Committee on Communicable Diseases
NCLE	National Center for Laboratory and Epidemiology
PH	Public Health
PI	Pandemic Influenza
PPE	Personal Protective Equipment
PPP	Pandemic Preparedness Plan
PSU	Provincial Surveillance Units
QA	Quality Assurance
RRT	Rapid Response Teams
TA	Technical Assistance
ToR	Terms of References
ToT	Training of Trainers
VHV	Village Health Volunteers
VVW	Village Veterinary Workers

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Introduction

Laos reported its first and only wave of avian influenza (H5N1) outbreaks in the poultry population in early 2004. It began in mid-January and ended on March 4th 2004. During this period, a total of 45 outbreaks were reported: 42 in commercial enterprises (including 38 in Vientiane Capital, 5 in Champasak and 2 in Savannakhet) and only 3 in villages. However, it is suspected that more outbreaks occurred in rural areas, but were either not detected or not reported. A total of approx. 155,000 poultry died of disease (one-third) or were culled (two-thirds) during the outbreak. No human cases were reported.[1] The Ministry of Agriculture and Forestry estimates that the investigation, response and management of these outbreaks cost approximately 4 millions dollars.

Section 1. Background

1.1 General information

Laos is a landlocked country that shares its border with the countries most affected by the recent H5N1 outbreaks, namely Vietnam, Thailand, Cambodia and China. These borders are largely permeable with legal and illegal crossing of food products, animals and people. Two-thirds of the country is mountainous which leads to remoteness and difficulty in communication, transport, service provision and development. [2]

The country has a population about 5,609,997 with the majority living in rural and remote areas. [3] It is divided into 16 provinces, Vientiane Capital and 1 special zone, 141 districts and 10,553 villages. [3] The population is ethnically varied with 47 distinct ethnic groups with different languages and cultures. Per capita average income is $ 375, and Lao PDR is thus classed among the Least Developed Countries (LDCs). [4]

The poultry population of Laos is of about 20 million, 80% are owned by subsistence farmers in all provinces. Village poultry are mostly for personal family consumption (eggs and meat) with little local marketing and distribution. The remaining 20% are held in more than 120 commercial enterprises serving the larger urban populations namely Vientiane, Luang Prabang, Champasak and Savannakhet. [1]

1.2 Current Health Care and Public Health systems situation

Health care system

Laos has one of the lowest health spending in Asia with about $12 per capita, with more than half disbursed by households for drugs and user fees.[2]

Vientiane Capital has 4 referral and 3 specialized hospitals and each province has one provincial hospital (including 4 regional hospitals). There are 125 district hospitals and 789 health centers distributed across the country.[2] Many health facilities have insufficient professional medical and administrative staff, limited essential drugs and fundamental equipment. [5] Specifically, in most hospitals, there are insufficient isolation rooms, the absence of adequate equipments for patients with severe respiratory diseases (e.g. ventilators) and no incinerators to dispose of dangerous infectious materials.

There is an absolute shortage of health workers compounded by maldistribution with most workers living in urban areas. Also, the skill level of health care workers tends to be low. [5] There are about 14,000 village health volunteers (VHV) who are or have been working on various programs such as the malaria and the drug-kit programs. Their training is very limited and variable (from a few days to 6 weeks).

Public health system

The current surveillance system in Laos is organized as follows: the National Center for Laboratory and Epidemiology (NCLE), located in Vientiane, is supported by 18 provincial surveillance units (PSU) and 141 district health offices (DHO). The NCLE plays the roles of surveillance, case and outbreak investigation, and response and research. The NCLE acts also as a public health (PH) lab and a national reference lab. A total of 29 permanent staff work at the NCLE. Among them, 10 trained staff in epidemiology and public health are in charge of the surveillance and control of 16 communicable diseases.[5] Influenza, avian influenza and influenza-like-illness (ILI) are currently not part of the reportable diseases, although adding them is in process.

The PSU has an average of 2-4 staff with variable levels of training. The district level staff are generally not qualified in epidemiology, have to carry out many public health programs and work also at the district hospital.[5] The health centers (HC) and some district health offices (DHO) do not have functioning means of communication (telephone, fax, radio), so they have difficulty to report in a timely fashion any health event to the higher level. Because of the general lack of capacity, the NCLE staff often have to conduct outbreak investigation and response throughout the country, leaving no time for other tasks.[5]

The laboratory structure is similar with the PH lab at the NCLE, 4 central labs in Vientiane and 4 regional, 13 provincial and 125 district level laboratories. Even though the NCLE act as the PH and the national reference lab, it does not currently have the capacity to perform influenza diagnosis. It does not achieve bio-safety level (BSL) 2 status. Suspected AI

specimens have to be shipped to a neighboring country for testing and then on to reference laboratories for confirmation.

The overall performance of the national and peripheral lab are relatively low due to inadequate (i) human resources (insufficient number of trained lab technicians) and (ii) financial resources (insufficient of equipment and supply of reagents).

With the NCLE, the U.S. Naval Medical Research Unit (NAMRU-2) has implemented a computerized reporting system. It is a symptom-based surveillance system that collects data on a daily basis from the outpatient and emergency rooms and sent to the NCLE. However, only monthly reports are produced. [4] These data are not used to their full capacity.

There is no seasonal influenza vaccine program in Laos and the routine EPI immunization coverage rates have been falling in recent years to about 45% for DPT3.[2]

In response to the SARS crisis in SE Asia in 2003 and AI in 2004, there was the establishment of the National Coordination Committee on Communicable Diseases (NCCCD) under the order (no.02)/decree (no.17) of Prime Minister in early 2004, the Secretariat of the NCCCD members from 14 Ministries and the Communicable Disease Control (CDC) Task Force (technical staff from the Ministry of Health (MoH) and the Ministry of Agriculture and Forestry (MAF)). In comparison to the response to SARS in 2003, the response of the MoH to the outbreak of AI in 2004 seemed to be much better planned and structured.[5] A new decree (no.377), which was issued in December 2005, will give more authority to the National Committee on Communicable Disease Control (CDC) and will be chaired directly by the Prime Minister.

1.3 Current Animal Health Situation

There has been a chronic shortage of veterinarians serving Lao agriculture and no veterinary college presently exists. Of a total of 69 fully qualified veterinarians, 12 are employed at the Department of Livestock and Fisheries (DLF) main office at Vientiane, Lao P.D.R. Approximately 893 government personnel are involved in animal production and animal disease control programs at the national, provincial and district levels. There are a total of 785 livestock officers located at 12 provincial livestock offices. Laos currently has 5177 active village veterinary workers (VVW) distributed in over 11,180 villages who are responsible for administering animal health services for cattle, buffalo & pigs (50%), dogs and cats (30%) & poultry (20%).[6]

The level of surveillance for highly pathogenic avian influenza (HPAI) since the last reported case has been variable. The last positive case of HPAI occurred in March 2004. From May to November 2004 DLF and the Food and Agriculture Organization of the United Nations (FAO) conducted a survey of randomly selected backyard chicken flocks in all 18 provinces. No HPAI virus was detected. A modest level of surveillance has been undertaken since that time with no further detection of HPAI virus.[7]

Laboratory capacity for the national government is a major constraint to improved surveillance for HPAI. FAO has supported the purchase of essential equipment required to detect HPAI for the National Animal Health Center (NAHC) in Vientiane. The laboratory staff was trained on test methods just mentioned as well as quality assurance and bio-safety and bio-containment procedures. Some personal protective equipment (PPE) is available and shared between the MAF and MoH. [7]

A public awareness campaign was carried out during and following the outbreak period and included distribution of leaflets to provincial and district animal field officers to farms and villages in Vientiane. In addition, radio and televisions messages were developed and broadcast in Vientiane. Several booklets and handouts were also produced to educate bird owners and VVW on the signs of HPAI and preventive measures such as bio-security. [7]

In 2005, a few Agriculture Ministerial Orders (0012, 0075,1067) and Department Order (172) were issued to ban the importation of poultry and poultry products from neighboring countries with HPAI.

Section 2: The Plan

2.1 Overview

The plan, which will span over a period of 5 years, from 2006 to 2010, was developed by the Government of Lao P.D.R. with the technical assistance of a UN inter-Agency team[1]. It combines animal and human health interventions and encompasses the prevention and control of AI in Laos as well as the preparedness and response in case of an influenza pandemic.

It is based on the 5 following strategies:
Strategy 1: Development of Disease free avian influenza management
Strategy 2: Disease surveillance and Response in Humans during outbreak
Strategy 3: Laboratory and Curative Care
Strategy 4: Health education and Community Action
Strategy 5: Strengthening of Institutional and Legal Frameworks

The newly created Communicable Diseases Control Secretariat endorsed the Plan on January 9, 2006. It was then decided that the Strategy 1 would be under the leadership of the MAF, Strategies 2 & 3 under the MoH, Strategy 4 under the Ministry of Information and Culture and finally Strategy 5, under the Ministry of Foreign Affairs. This demonstrates clearly the multi-sectoral approach of the Plan.

The plan has been developed with a 5-year timeframe that has been prioritized according to short and long term needs (see Table I). However estimates of the 3-year needs have also been calculated (see Tables II and III).

[1] The UN inter-Agency team is composed of representatives of the N Resident coordination office, WHO, FAO, UNICEF and the WB.

Summary of estimated costs of National Avian Influenza Control and Pandemic Preparedness Plan of Lao PDR for 5 years with prioritization and estimated timeline						
		ST*	**ST**	**LT***	**LT**	**TOTAL**
Strategy 1	Development of an avian free management system	3,905,000	900,000	1,800,000	3,900,000	**10,505,000**
Strategy 2	Disease surveillance and response in humans during outbreaks	1,210,800	344,000	0	186,000	**1,740,800**
Strategy 3	Laboratory and Curative Care	2,513,700	682,000	2,191,000	20,327,000	**25,713,700**
Strategy 4	Health education and Community Action	1,125,000	0	250,000	645,000	**2,020,000**
Strategy 5	Strengthening of institutional and legal frameworks	3,539,500	13,030,000	280,000	241,000	**17,090,500**
Overall Plan		**12,294,000**	**14,956,000**	**4,521,000**	**25,299,000**	**57,070,000**

NOTE: The contingency funds (e.g. for farmer compensation for culled chickens) have not been included in this table. These funds will be dealt at the regional level

Summary of estimated costs of National Avian Influenza Control and Pandemic Preparedness Plan of Lao PDR for 3 years with donor commitment and financial gaps			
	(US$'000)	(US$'000)	(US$'000)
	Priority activities* Years 1, 2, 3	Donor Commitment	Financial Gap
Strategy I. Development of a disease free avian management system			
Sub-total	**4,805**	**330**	**4,475**
Strategy II. Disease surveillance and response in humans during outbreaks			
Sub-total	**1,211**	**436**	**775**
Strategy III. Laboratory and curative care			
Sub-total	**3,609**	**895**	**2,714**
Strategy IV. Health Education and Community Action			
Sub-total	**1,250**	**430**	**820**
Strategy V. Strengthening of institutional and legal frameworks			
Sub-total	**3,679**	**100**	**3,579**
total	**14,554**	**2,191**	**12,363**
NOTE: The contingency funds (e.g. for farmer compensation for culled chickens) have not been included in this table. These funds will be dealt at the regional level			
*** Calculation method = 100%(ST*) + 50%(LT*)**			

Summary of estimated costs of National avian Influenza Control and Pandemic Preparedness Plan of Lao PDR for 5 years separating prioritized and desirable costs					
	A*	B*	C*	D*	
	Priority activities Yrs 1,2,3	Desirable activities Yrs 1,2,3	Priority activities Yrs 4,5	Desirable activities Yrs 4,5	Total- 5 yr-plan
	(US$'000)	(US$'000)	(US$'000)	(US$'000)	(US$'000)
Strategy I. Development of a disease free avian management system					
Sub-total	**4,805**	**2,850**	**900**	**1,950**	**10,505**
Strategy II. Disease surveillance and response in humans during outbreaks					
Sub-Total	**1,211**	**437**	**0**	**93**	**1,741**
Strategy III. Laboratory and curative care					
Sub-Total	**3,609**	**10,846**	**1,096**	**10,164**	**25,714**
Strategy IV. Health Education and Community Action					
Sub-Total	**1,250**	**323**	**125**	**322**	**2,020**
Strategy V. Strengthening of institutional and legal frameworks					
Sub-Total	**3,679**	**13,151**	**140**	**120**	**17,090**
Total	**14,554**	**27,607**	**2,261**	**12,649**	**57,070**

NOTE: The contingency funds (e.g. for farmer compensation for culled chickens) have not been included in this table. These funds will be dealt at the regional level.

*** Calculation methods:**

A= 100%(ST*) + 50%(LT*)

B=100%(ST) + 50%(LT)

C= 50%(LT*)

D= 50%(LT)

2.2 The Strategy

Strategy 1: Development of Disease free avian influenza management

To prevent and control HPAI in backyard and commercial poultry, a number of messages have to be disseminated to the general population, VVW, poultry producers and fighting cock owners on safer practices such as separation of human and poultry living areas, reducing the mixing of various avian species, movement control of poultry and safe slaughtering practices. Incentives (such as compensation) are needed to promote cooperation with culling of poultry affected by HPAI. Preparedness and contingency planning is needed to develop compensation schemes, regulations and outbreak response plans.

In order to have rapid detection, response and investigation of AI outbreaks, it is necessary for provincial, district and village level to be trained in implementing an early detection/ early warning human resource network. Present laboratory capacity does not match current and future demands for accurate and rapid testing for HPAI and will require funding to expand laboratory space, upgrade the bio-safety level, increase training and develop molecular methods. Improved data quality is required to better define HPAI outbreaks and trends. The result will be improved policies based on sound field data.

In the long term, there is a need to support the creation of a Veterinary school so the expertise required to direct and implement the National Plan and to have a sustainable national animal health system is available.

Strategy 2: Disease surveillance and Response in Humans during outbreak

To determine trends over time, detect any unusual rates of influenza and to identify groups at risk, the implementation of an influenza surveillance system, as part of the routine weekly surveillance, is needed as soon as possible. Surveillance data will also help guide prevention and control strategies. Both laboratory and symptoms-based (influenza-like-illness (ILI)) surveillance are necessary. Initially, the influenza surveillance will be implemented as a pilot-project in 3 hospitals located in Vientiane and then in the other provincial hospitals.

The expansion of the current hospital and symptoms-based system “EWORS” to all provincial hospitals could also be useful for timely detection of unusual events including unusual severity/outcomes and clustering. However, the data needs to be more meaningful and timely and be integrated with the national routine surveillance system.

Moreover, the integration of human and animal health surveillance data is crucial to follow the progress of the disease geographically and over time.

An early warning system (EWS) has to be put in place quickly by using the current hospital and public health channels but also reports of rumors from the village health volunteers (VHV), general public, NGOs, embassies, etc. To this effect, education and training of VHV to detect and report any unusual health events will be done as part of the National AI/PI communication strategy (see Strat. 4). Decentralization of verification of rumors, outbreak investigation and response through the training of provincial and district rapid response teams (RRT) across the country is desirable. Joint human and animal investigation through these RRT is proposed. Increasing the surveillance and laboratory capacity of the country is critically needed and should be done before a pandemic hits.

Planning and guidelines on PH measures to be undertaking in case of an AI outbreak or a pandemic will be done by a group of PH experts but will be integrated within the Health pandemic influenza preparedness plan (see sectoral plan- Strat.5).

Strategy 3: Laboratory and Curative Care

Laboratory

The capacity for accurate and timely detection of AI/PI would depend on appropriate collection, handling and transportation of specimens from the local/district/provincial level to the national level and the appropriate testing at the NCLE. Guidelines have to be developed and training done for the field workers and lab technicians to ensure bio-safety. In the short-term, the national reference/PH lab has to be upgraded to have the capacity to identify influenza virus using techniques that do not require virus propagation (BSL2) and in the long-term, to have sufficient BSL to perform virus isolation. This has to be coupled with provision of appropriate diagnostic equipments (e.g. PCR machines), reagents and provision of appropriate PPE.

Curative care

In the case of an AI outbreak or a pandemic, health care workers (HCW) will be the front line dealing with the sick people. It is to be expected that a substantial proportion of HCW will become ill. Their role will be crucial and they need to be trained in infection control interventions/practices in order to adequately protect themselves and their patients. Training will need to be paired with provision of PPE and appropriate isolation room and equipment.

Clinical guidelines on triage, appropriate investigation of suspected cases, recommended treatments, necessity for hospitalization/ICU and for the management of mass fatalities need to be developed and HCW need to be trained adequately. Rapid reporting of any suspected case to the public health authorities will be required. Planning for expanding curative care capacity in temporary facilities and determining essential activities to be maintained in existing facilities during a pandemic is also needed.

Strategy 4: Health education and Community Action

AI has raised a lot of concern in the population. The prevention and containment of AI cannot be done without involving the community. For this reason it is essential that effective and widespread awareness about AI is propagated in the community with an explanation of the steps necessary to contain the disease. The messages will be mainly disseminated through the existing mass community organizations such as the Lao Women Union, the Buddhist organization. Some school outreach will be done through the existing systems such as the Blue Box Program. Moreover, the mass media, particularly the radio, will assist in broadcasting those key messages. The messages need to be adapted to the current knowledge, attitudes and practices of the populations and need to be culturally sensitive.

The MoH and MAF should work closely together for the consistency of their messages and avoid duplication. As mentioned earlier, the MAF with the support of FAO has already done a lot of work in this field. It was suggested that the village health volunteers (VHV) be trained in part jointly with the veterinarian village workers (VVW), so the messages communicated to the community are consistent and that collaboration between them is initiated. The village workers will also be trained to look for and report any unusual health events in the poultry and human population.

Some preparedness activities will be undertaken. For example, the Information/Education/Communication task force established for the development and implementation of the above AI/PI Communication Strategy will also work jointly with the CDC Secretariat on developing/testing messages in pre-pandemic period.

Strategy 5: Strengthening of Institutional and Legal Framework

While efforts to strengthen surveillance, outbreak investigation and response, curative care and mobilization of the population continue, the risk of a potentially imminent pandemic must be recognized. This is why the development of a comprehensive Pandemic preparedness and response plan is crucial.

The strengthening of the CDC Secretariat by the new decree is likely to increase its capacity and decision-making power. In a crisis, it is important to have a recognized leader. In the same manner, one Communication/information unit is key during a pandemic to have consistent messages, control what will be said and address false rumors. Training in risk communication for the identified spokespersons is important. Key messages and materials dealing with what the government is doing to cope with the situation and what the public can do to protect themselves and their families/co-workers will be developed and tested.

The development and testing of pandemic preparedness and response plans at national, sectoral and provincial levels will be done. The involvement of NGO and private stakeholders is needed.

Stockpiles of PPE, antivirals and other medicines and supplies will be done. Planning for vaccination, if vaccines become available, will be made.

An appropriate legal framework to support surveillance/reporting and PH measures consistent with the new International Health Regulations (2005) needs to be developed.

Finally, donor coordination will be crucial considering the number of donors involved in this undertaking.

2.3 The Detailed Plan

The Annex 1 is the core of this plan and provides the detailed activities within each measure and strategy, their priority level and timeline, their estimated cost, the existing commitment of donors and the potential partners for their implementation.

Under the priority/timeline column:
1 * means that the activity is a priority; it must be done
2 absence of * means that the activity is important but will be carried out if money, human resource & time is available
3 ST: short-term means that the activity will be implemented in the first year of the plan and could be completed either the first or second or will be ongoing thereafter.
4 LT: long-term means that the activity will be implemented between yr 2 to year 5 of the plan.

Conclusion

In developing this plan, Laos has already made a great step forward. The outline of where Laos wants to be and how to get there in a relatively short period of 5 years is now completed. The next steps include securing appropriate funding and detailed implementation of the outlined plan.

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List of tables:

Annexes

Strategy 1: Development of a disease free avian management system

ຮ່າງຍຸດທະສາດທີ 1: ພັດທະນາລະບົບການລ້ຽງສັດປີກ ໃຫ້ປອດຈາກພະຍາດ

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners					
			ST*, ST, LT*, LT								
S1 Measure 1	**Reduce risk of AI infection in backyard poultry production including chicken and duck**			**400,000**			**ST***	**ST**	**LT***	**LT**	
	ຫລຸດຜ່ອນຄວາມສ່ຽງ ການຕິດແປດພະຍາດ ໄຂ້ຫວັດສັດປີກ ໃນການລ້ຽງແບບຄອບຄົວ.										
S1M1A 1	Establish Poultry Producer Groups at the village level through arrangement with local administration	Meetings with local administration, Advocacy	ST*	20,000		MoAF, Local Admin-istra-tion	20,000				
S1M1A 2	In the city areas (Vientiane, Champasak and Savannakhet) introduce biosecurity improvement concepts through 1) Arrangement with local administration 2) Training of trainers (key persons) 3) Training at village level 4) Support preparation of animal facilities with biosecurity at the village level (fencing)	Training materials and modules	ST*	200,000		MoAF, Local admin-istra-tion	200,000				
S1M1A 3	In rural areas, introduce the concepts in reducing risk of AI introduction into village poultry flock and risk to human through public awareness	PA Materials	ST*	180,000		MoAF, Local admin-istra-tion, MoIC	180,000				
					USA 111,000						

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดที 1: พัดทะนาละบิบกานล้ำๆสัดปีก ให้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 2	**Reduce risk of AI introduction in commercial poultry production including broiler, layer, duck and quail**			**400,000**						**LT**	
	ทลุดผ่อนถอามสูงๆกานติดแปดพะยาดไข้หวัดสัดปีกในกานล้ำๆแบบเป็นฟาม (ไก่พันเนื้อ,พันไข่,เป็ด และ นิกกะทา)										
S1M2A 1	Establish/involve existing Poultry Producer Associations for Broiler and Layers through arrangement with private sectors	Meeting with farmers and local administration, Advocacy	ST*	20,000		MoAF, Local Administration, Private sector	20,000				
S1M2A 2	Issue and enforce the regulation on biosecurity improvement of farms and separation of human living areas from poultry raising areas through 1) Legal framework 2) Public awareness 3) Training	1)Training materials and modules 2) PA Materials	ST*	200,000		MoAF, Local Administration, Private sector	150,000				
S1M2A 3	Issue and enforce the regulation on movement restriction of duck flocks through 1) Arrangement with local administration for short-term 2) Legal Framework for long-term 3) Public awareness 4) Training	1)Training materials and modules 2) PA Materials	ST*	180,000		MoAF, Local Administration, Private sector	180,000				
S1M2A 4	Improve safe practices at slaughtering points through1) Arrangement with local administration 2) Public awareness 3) Training of trainers	1)Training materials and modules 2) PA Materials	ST*	50,000		MoAF, Local Administration, Private sector	50,000				

Strategy 1: Development of a disease free avian management system (continue)

ຍຸດທະສາດທີ 1: ພັດທະນາລະບົບການລ້ຽງສັດປີກ ໃຫ້ປອດຈາກພະຍາດ

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 3	**Reduce risk of AI introduction in fighting cock production**			**55,000**							
	ຫລຸດຜ່ອນຄວາມສ່ຽງ ການຕິດແປດພະຍາດໄ ຂ້ຫວັດສັດປີກ ໃນການລ້ຽງໄກ່ຕີ.										
S1M3A 1	Introduce quarantine concepts to fighting cock owners through public awareness	PA Materials	ST*	20,000		MoAF, Local Adminis-tration	20,000				
S1M3A 2	Introduce concepts of reducing risks from traditional practices during cock-fighting through public awareness	PA Materials	ST*	200,000		MoAF, Local Adminis-tration	35,000				

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: พัดทะบาละบิบกาบล้ังสัดปีก ให้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 4	**Enhance capacity for early detection and early warning of AI outbreaks at field levels**			**1,500,000**							
	ทลุดผ่อบถอามสู่ๆ กาบติดแปดพะยาดไฮ้หอัดสัดปีก ล่อๆหน้าอยู่ในท้องถิ่น.										
S1M4A 1	Review national strategic plan for surveillance	Workshop	ST*	30,000		MoAF, related parties	30,000				
S1M4A 2	Establish/involve existing networks for early warning system which includes central, provincial, district and village (Village Veterinary Workers) levels through institutional framework	List of contact persons in the networks	ST*	200,000		MoAF, Local adminis-tration	200,000				
S1M4A 3	Strengthen capacity for disease recognition, reporting and outbreak investigation through 1)Training for trainers 2) Organize training courses for provincial and district staff as well as Village Chief, VVWs on disease recognition, reporting, investigation, sample and data collection 3) Procurement of supplies to be used for field surveillance activities 4) Public awareness	Report format, Information flow, Training materials and modules, Public awareness materials	ST*	600,000		MoAF, Local ad-ministra-tion, MoH, MoIC, MoI	600,000				

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: ພັດທະນາລະບົບການລ້ຽງສັດປີກ ໃຫ້ປອດຈາກພະຍາດ

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners					
			ST*, ST, LT*, LT								
S1M4A4	Strengthen the 10 international border and 15 internal checkpoints through 1) Training course for checkpoints staff, 2) Procurement of necessary supplies to be used for animal movement and disease control 3)Public awareness	Report format, Information flow, basic equipment for check post, Public awareness materials	ST*	170,000			170,000				
S1M4A5	Formulate the guidelines, procedures and legal framework for checkpoints	Training materials and modules	ST*	50,000			50,000				
S1M4A6	Provide facility for investigation, monitor-ing and patrol	PA Materials	LT	450,000						450,000	

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: พัดทะบาละบิบกาบล้ๆสัดปีก ให้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 5	**Strengthen capacity for laboratory dagnsis¦**			4,500,000							
	ส้ๆคอามเฮั้มแฮๆ ในกาบ อิใจ แลฮ บ่ๆมะติพะยาด.										
S1M5A 1	Complete the construction of the building for National Animal Health Center with safe facility for virus isolation through securing financial support	Need for financial support	ST*	1,000,000		MoAF	1,000,000				
S1M5A 2	Improve the diagnostic capacity to the minimal requirements (including sub-typing capacity) according to the FAO Guiding Principles in the short-term through 1) Training 2) Procurement of diagnostic equipment and supplies 3) Increase number of staff	Equipment and supplies for virus isolation, subtyping and antibody detection	ST*	100,000		MoAF	100,000				
S1M5A 3	Improve the diagnostic capacity to the level that can monitor the genetic drift and emergence of new strains in the medium- to long-term through 1) Training 2) Procurement of diagnostic equipment and supplies 3) Increase number of staff	Equipment for molecular methods	ST*	150,000		MoAF	150,000				

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดที 1: พัดทะนาละบิบกานล้ังๆสัดปีก ใท้ปอดจากกพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners					
S1M5A 4	Improve facility with diagnostic level in Luang Prabang and Champasak.	Meetings with local admin-istration, Advocacy	LT*	50,000		MoAF			50,000		
S1M5A 5	Improve the diagnostic capacity to the minimal requirements (including sub-typing capacity) according to the FAO Guiding Principles at the regional level (Luang Prabang and Champasak) in the long-term through 1. Training 2. Procure-ment of diagnostic equipment and supplies 3. Increase number of staff	Equipment and supplies for virus isolation, subtyping and antibody detection	LT	200,000		MoAF				200,000	
S1M5A 6	Establish new AI laboratory in Namx-ouang with appropriate equipment	PA Materials		3,000,000						3,000,000	

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดที 1: พัดทะนาละบิบกานลี้ยงสัดปีก ให้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners					
			ST*, ST, LT*, LT								
					USA 72,600						
S1 Measure 6	**Research and Development**			**200,000**							
	ຄົ้นค้อา ແละ พัดทะนา.										
S1M6A 1	Conduct research on vaccination in commercial layer and duck	Research: TA, materials	LT*	50,000		MoAF,			50,000		
S1M6A 2	Conduct research on compartmentalisation to facilitate inter-provincial trade through securing external assistance	Research: TA, materials	LT*	100,000		MoAF			100,000		
S1M6A 3	Conduct research on habitat and infection of AI in wildlife through securing external assistance	Research: TA, materials	LT*	50,000		MoAF				50,000	

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดที 1: พัดทะนาละบิบกานล้างสัดปีก ใท้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners					
			ST*, ST, LT*, LT								
S1 Measure 7	**Improve national information system**			**500,000**							
	ปับปุงละบิบข้มูนข่าอสาน.										
S1M7A 1	Review/re-established the current information and data management system	Workshop	ST*	30,000		MoAF	30,000				
S1M7A 2	Establish national information networks including field and laboratory surveillance system	Meetings and workshops, training, materials	ST*	150,000		MoAF	150,000				
S1M7A 3	Improve information management system through 1) Training 2) Procurement of communication equipment and supplies at central and provincial level 3) Installation of appropriate software for information system	Training, equipment and supplies, software for information system	ST*	320,000		MoAF	320,000				

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดที 1: พัดทะนาละบับการลั้งสัดปีก ให้ปอดจากพะยาด

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 8	**Enhance capacity for rapid and effective response to HPAI outbreak**			**1,200,000**							
	ເພີ້ມຄວາມອາດສາມາດທີ່ວ່ອງໄວ ແລະ ມີປະສິດທິຜົນຕໍ່ບ່ອນທີ່ເກີດການລະບາດ ຂອງພະຍາດໄຂ້ວັດສັດປີກ.										
S1M8A 1	Establish emergency preparedness and contingency plan through 1) Creation of National Committee and working groups 2) Contingency plan 3)Financial support 4) Operational and hotline center 5) Equipment and supplies	Workshop	ST*	50,000		MoAF, MoH, MoI, MoIC, MoC, MoCTPC	50,000				
S1M8A 2	Review regulatory control measures: disease notification, movement restriction, culling poultry in defined infected flocks	Workshop, , TA	ST*	250,000		MoAF, MoH, MoI, MoIC, MoC, MoCTPC		250,000			
S1M8A 3	Develop operational plan (SOP) for out-break containment	Meetings	ST*	50,000			50,000				
S1M8A 4	Increase human resource capacity in outbreak containment	Training of animal health staff at provincial, district and village level	ST*	50,000		MoAF	50,000				

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: พัดทะนาละบิบทานล้ังๆสัดปีก ใท้ปอดจากพะยาด

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
S1M8A 5	Stock piling of PPE, equipments and supplies for outbreak containment through (see S5M2)	1) Procurement of PPE and supplies for outbreak containment (100,000 per year for 5 years)	ST*	500,000		MoAF		500,000			
S1M8A 6	Provision for Emergency containment plan in case of outbreak in poultry sector	(readily available fund for purchase of PPE and supplies)	ST*	Contin-gency (500,000)		MoAF, MoF					
S1M8A 7	Review compensation scheme for effective outbreak containment through 1) Institutional and legal framework 2) Schemes may include increasing indemnification to appropriate level, settlement of debt payments, etc.	TA, meetings,	ST*	100,000			100,000				
S1M8A 8	Provision for compensation to farmers in case of outbreak in poultry sector	???	ST*	Contin-gency *see note at the end							
S1M8A 9	Provision of transaporattion facilities	vehicles	LT	200,000						200,000	

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: พัดทะนาละบิบทานล้ังสัดปีก ใท้ปอดจากพะยาด

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 9	**Enhance National, Regional and International Networking**			**250,000**							
	เพิ้มถอามอาดสามาด ในทานปะสานงานละดับชาด,ฮ้งเฮด และ สากิม.										
S1M9A 1	Enhance networking and communication between animal and public health sectors through regular sharing of information and during outbreak/suspected outbreak situation, by immediately notifying the partner and arranging joint field investigation as well as risk communication	Establishment of working groups, meetings, workshops, field visits	ST*	100,000		MoAF, MoH	100,000				
S1M9A 2	Enhance collaboration with countries in the region and regional organizations such as ASEAN through 1) participitation in coordination meeting 2) sharing information to related countries/ organizations 3) collaborating with the countries sharing border with Laos to control AI from poultry movement transboundary	National meetings, international meetings, workshops	LT*	50,000		MoAF		50,000			

Strategy 1: Development of a disease free avian management system (continue)

ຍຸດທະສາດທີ 1: ພັດທະນາລະບົບການລ້ຽງສັດປີກ ໃຫ້ປອດຈາກພະຍາດ

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibil-ity/ Partners					
			ST*, ST, LT*, LT								
S1 Measure 9	**Enhance National, Regional and International Networking**										
	ເພີ້ມຄວາມອາດສາມາດ ໃນການປະສານງານລະດັບຊາດ,ຂົງເຂດ ແລະ ສາກົນ.										
S1M9A 3	IEnhance collaboration with international organizations through 1) Participatating in coordination meeting 2) sharing information to related organizations 3) collaborating with OIE/FAO Reference or Collaborating Centers in monitoring any possible changes of virus	National meetings, international meetings,workshops and field visits	LT*	50,000		MoAF		50,000			
S1M9A 4	Supervision, monitoring and evaluation of strategy 1 implementation		ST*	50,000			50,000				
S1 Measure 10	**Enhance disease control capacity in a long-term**			**1,500,000**							
	ເພີ້ມຄວາມອາດສາມາດ ໃນການຄວບຄຸມ ພະຍາດໄຂ້ຫວັດສັດປີກ ໄລຍະຍາວ.										
S1M10A 1	Increase human resource for disease control through 1) increase number of staff for disease control activities including planning, quarantine, field and laboratory activities 2) training staff to strengthen their capacity in disease control 3) support under-graduate training for DVM to increase number of veterinarian in the country for the long-term (20 DVM will be trained per year and by the end of 2015, there should be 100 new DVM in the country)	Hiring of new staff, training and studying abroad for DMV students	LT*	1,500,000		MoAF, MoE			1,500,000		

Strategy 1: Development of a disease free avian management system (continue)

ยุดทะสาดทิ 1: พัดทะบาละบับทาบล้ังสัดปีก ใท้ปอดจากพะยาด

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners					
			ST*, ST, LT*, LT								
Total		**Strategy1 Total**									
				10,505,000.0			3,905,000	900,000	1,800,000	3,900,000	10,505,000
	Note: During the first outbreak from January to March 2004, less than 1% of the total poultry population was culled. The cost of the compensation was around 400,000$. The total poultry population is estimated around 20 millions.										
							3 yr *	3 yr no *	4-5*	4-5 no *	
							4,805,000.0	2,850,000.0	900,000.0	1,950,000.0	10,505,000
Note:		**List of abbreviations:**									
ST*: short-term priority		AI= avian influenza					4,805.0	2,850.0	900.0	1,950.0	10,505.0
ST: short-term but not a priority		ASEAN=association of South -East Asian nations									
LT*: long-term priority		DVM= doctorate in veterinary medicine									
LT: long-term but not a priority		OIE= International Office of Epizoonotics									
		PPE= personal protective equipment									
		TA= technical assistance									
		VVW= Village Veterinary Workers									

Strategy 2: Disease surveillance and response in humans during outbreaks

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 1	**General capacity building in surveillance and response**					
	ການສ້າງຄວາມອາດສາມາດທົ່ວໄປສຳລັບວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບຕໍ່ການລະບາດຂອງພະຍາດ					
S2M1A1	Overseas training for staff from NCLE and selected provinces/districts (per year)	FETP training short (1month) for 2 people/ long term (2yrs) for 1 person	ST*	150,000	USA 100,000 (TBC)	NCLE-MoH/FETP Thailand and others
S2 Measure 2	**Inclusion of ILI/ARI and strengthening of routine (weekly) surveillance system**					
	ສ້າງຕັ້ງລະບົບເຝົ້າລະວັງ ໄຂ້ຫວັດສັດປີກ ແລະ ລະບົບເຕືອນໄພຂັ້ນຕົ້ນ.					
S2M2A1	Develop case definition of ILI / ARI	NCLE meetings	ST*	3000	WHO 3,000	NCLE-MoH
S2M2A2	Add ILI / ARI in the existing weekly epidemiological surveillance report (to be 17 diseases)					
S2M2A3	Develop a guideline on weekly epidemiological surveillance report form and 001 form at provincial level					
S2M2A4	Print, distribute revised weekly (epi surv.) report		ST*	35,000		NCLE-MoH
S2M2A5	Train surveillance officers in each level for weekly surveillance (including ILI - see above) and rapid communication	1. Training of trainers (ToT) at prov. Level 2. Training by prov. to district level		90,000	WHO 70,000 TBC	NCLE-MoH

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ຍຸດທະສາດທີ2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2M2A6	Provide communication tools for district offices and health centres by expansion of existing systems	Provide communication tools for district offices and health centres by expansion of existing systems	ST*	150,000	USA 100,000 (TBC)	NCLE-MoH/FETP Thailand and others
		Op costs / year- Phone cards, communication fee, batteries	ST*	210,000		NCLE-MoH
S2M2A7	Update regularly the list of all surv. officers at all levels with phone number, etc)	Op costs / year-	ST*	25,000		NCLE-MoH
S2M2A8	Monitor and supervision on weekly surveillance	Op costs / year-	ST*	50,000		NCLE-MoH
S2M2A9	Feedback report to each level, to MOH, to concerned partners	form, printing, distribution	ST*	25,000		NCLE-MOH
S2M2A10	Strengthen regional and international networking/communication 1. Fully participate in Asian Disease Surveillance Net 2. Comply with IHR requirment on information sharing	Computer	ST*	1,000		
		Op.cost:5000, HR:5000	ST*	10,000		NCLE-MoH

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 3	**Expand / strengthen Early Warning Outbreak Recognition Systems**					
	ຂະຫຍາຍ ແລະ ປັບປຸງ ລະບົບເຕືອນໄພເບື້ອງຕົ້ນໃຫ້ເຂັ້ມແຂງ					
S2 M3 Activity	Expand Early warning outbreak recognition system (EWORS) to all prov. hospitals in 2 phases (first:all prov. Where internet connection currently available 5 provinces, 2nd: where it is not, 8 provinces)	Per new site:Equipment: computers, fax, telephone, mobile phone= 1,500 phone and internet connection:1500/ yr, incentives to satff: (7200/yr)	ST/LT	First wave: 225,000 Second wave:186,000	Discuss with NAMRU	NCLE-MoH
S2 Measure 4	**Integration / linking of routine surveillance systems and data**					
	ຂະຫຍາຍ ແລະ ປັບປຸງ ລະບົບເຕືອນໄພເບື້ອງຕົ້ນໃຫ້ເຂັ້ມແຂງ					
S2M4A1	Plan for integration of surveillance systems	Meetings with NCLE and all interested parties (MAF, NAMRU, etc)	ST*	1,000		NCLE-MoH
	Establishment of mechanism for integrated surveillance -1.weekly Surveillance System and EWORS 2. Human and animal data		ST*	2,000		NCLE-MoH
S2M4A2	Development of database (GIS) to link clinical / epi / lab data on human cases and animal data	informatics TA	ST*	15, 000		NCLE-MoH
	Development of data entry reference manual	informatics TA	ST*			
	Training of data entry clerks	Training	ST*			
S2M4A3	Data entry, analysis and management	Hiring new staff and incentives	ST*	42,500		NCLE-MoH
S2M4A4	IT support (on request only)	small contingency fund	ST*	2,500		NCLE-MoH

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ฮูมงานเฝ้าละวัง ແລະ โต้ตอบการณละบาดในคน ในไลยะมีการณละบาด.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 5	**Strengthening the capacity to investigate and respond to EID (incl. AI) at central level**					
	เฝ้าละวัง ແລະ ถอบคุมพะยาดในคน เอลามิไฮ้วัดสัดปีกละบาด โดยการมะกูมละบับเฝ้าละวัง แบบลึงถ้นหาย่างต่เมื่อๆ.					
S2M5A1	Update a case definition of AI before outbreak		ST*	1,800	WHO	NCLE-MoH-MAF
S2M5A2	Revise case report form		ST*			
S2M5A3	Revise investigation form		ST*			
S2M5A4	Built the RRT: identify key staff involved in the Rapid Response, 3 epidemiologists, 3 lab, 2 drivers, 2 from live stock dep, 2 from prevention dep., 2 from curative dep.	consultation meeting	ST*			
S2M5A5	Develop guidelines on Rapid Response on EID including ILI- / -ARI	TA	ST*	10,000		NCLE-MoH
S2M5A6	Develop check lists for RRT and laboratory materials		ST*	500		NCLE-MoH
S2M5A7	Train the RRT at central level (1 day training)		ST*	500	WHO	NCLE-MoH
S2M5A8	Train the RRT, overseas		ST*	10,000	USA/HSS 133,000 (together with S2M6A3)	NCLE-MoH
S2M5A9	Provision of PPE, lab kits and antivirals if available		ST*	42,500	USA/HSS 100,000 (together with S2M6A5)	NCLE-MoH
S2M5A10	Provide transportation for RRT	3 Vehicles	ST*	60,000		

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 6	**Decentralization of AI outbreak investigation (epi + lab) - linkage with animal health**					
	ມອບຄວາມຮັບຜິດຊອບໃຫ້ແກ່ແຂວງ ໃນວຽກງານສອບສວນການລະບາດ.					
S2M6A1	Lauch of the new Outbreak investigation and Response Program at provincail level	Meeting	ST*	5,000		NCLE-MoH
S2M6A2	Develop and adapt training manual on outbreak investigation	TA	ST*	20,000		NCLE-MoH
S2M6A3	Train provincial health staff (n=90)	5-day workshop ToT	ST*	100,000	USA/HSS (S2M5A8)	NCLE-MoH
S2M6A4	Simplified manual, checklist, flowchart of sample collection, shipment for the provincial labs	Forms, Record, Manual, Training	ST*	5,000		NCLE-MoH
S2M6A5	Provision of PPE, lab kits and antivirals if available	TA	ST*	90,000	USA/HSS (S2M5A9)	NCLE-MoH
S2M6A6	Train district staff	1-day workshop by prov. staff	ST*	42,000		NCLE-MoH, Provincial Health
S2M6A7	Verification of reports and rumours of events (and investigation, if required) detected through Early warning response system	10 investigations	ST*	75,000	WHO 2000/year	NCLE-MoH

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: อุมภาบเฝ้าละอัง และ โต้ตอบภาบละบาดในถิ่น ในไลยะมิภาบละบาด.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 7	**Operationalization of outbreak investigation**					
	ວິທີການດຳເນີນງານ ຂອງການສືບສວນການລະບາດ.					
S2M7A1	Deployment of RRT		As required	Contingency fund ($1000/ suspected case)		NCLE-MoH
	*Verify suspected case with the case definition by communication	same comment				
	*Plan for case and field investigation using check lists					
	*Trace contact in affected areas					
	*Identify a source of outbreak					
	*Identify risk factors by investigation team					
	*Feedback meeting	Mtg				
S2M7A2	On the job training by central staff during outbreak	Training				

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 8	**Develop public health emergency measures for rapid intervention during outbreak**					
	ພັດທະນາມາດຕະການຕອບໂຕ້ສຸກເສີນການລະບາດ.					
S2M8A1	Develop plan and guidelines for public health measures(social distancing, anti-viral dstribution, vaccine?) during rapid intervention-	TA / workshop	ST*	19,000		NCLE-MoH
S2M8A2	Undertake outbreak simulation exercise	TA / workshop	ST*	19,000		NCLE-MoH
S2M8A3	Establish contingency fund for operational costs for activities related to surveillance and response during rapid intervention		ST*	100,000		Muti-sectoral

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 9	**Develop public health emergency measures for the pandemic -**					
	*** This is a part of Sectoral pandemic preparedness planning (Strat.5)**					
	ພັດທະນາ ມາດຕະການຕອບໂຕ້ສຸກເສີນທາງດ້ານສາທາລະນະສຸກຢ່າງທັນການ ສຳລັບການລະບາດຂະໜາດໃຫຍ່.					
S2M9A1	Develop plan and guidelines for surveillance-/-public health interventions (social distancing) during pandemic	TA / workshop	ST*	See S2M8A1		Muti-sectoral
S2M9A2	Establish contingency fund for operational costs for activities related to surveillance and response during a pandemic		ST*			Muti-sectoral
S2 Measure 10	**Operational public health activities for rapid intervention during outbreak**					
	ກິດຈະກຳການດຳເນີນງານທາງດ້ານສາທາລະນະສຸກ ສຳລັບການເຂົ້າແຊກດ່ວນ ໃນເວລາມີການລະບາດ.					
S2M10A1	Implement public health measures as required (including use of antivirals)		As required	Contingency fund		NCLE-MoH
S2M10A2	Involvement of mass media		As required	0		Muti-sectoral
S2M10A3	Implement travel measures as required (incl. screening, educational materials, restrictions, etc)		As required	Contingency fund		Muti-sectoral

Strategy 2: Disease surveillance and response in humans during outbreaks (continue)

ยุดทะสาดที2: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S2 Measure 11	**Operational public health activities during pandemic**					
	*** This is a part of Sectoral pandemic preparedness planning (Strat.5)**					
	ກິດຈະກຳການດຳເນີນງານ ທາງດ້ານສາທາລະນະສຸກ ໃນເວລາມີການລະບາດ.					
S2M11A1	Implement surveillance and public health measures (as required) according to Plan	TA / workshop	As required	Contingency fund		Muti-sectoral
S2M11A2	Involvement of mass media		As required	Contingency fund		Muti-sectoral
S2M11A2	Implement travel measures as required (incl. screening, educational materials, restrictions, etc)		As required	Contingency fund		Muti-sectoral
Total		**Strategy2 Total**		**1,740,800**		

Note:	**List of Abbreviations:**
ST*: short-term priority	ARI= acute respiratory infection
ST: short-term but not a priority	EID: emerging infectious diseases
LT*: long-term priority	FETP=field epidemiology training program
LT: long-term but not a priority	GIS= geographic information system
	HSS= department of health and human services of the US govt
	ILI= influenza like illness
	NAMRU=naval american research unity
	NCLE= national center for laboratory and epidemiology
	PPE= personal protective equipment
	RRT= rapid response team
	TA= technical assistance

Strategy 3: Laboratory and Curative Care

ยุดทะสาดทิ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3 Measure 1	**Strengthen Curative Resources**											
	ປັບປຸງຊັບພະຍາກອນດ້ານການປິ່ນປົວໃຫ້ເຂັ້ມແຂງ.											
	Strengthen health care HR and infrastructure											
	ປັບປຸງວຽກງານການປິ່ນປົວ.											
S3M1A1	Establish a national clinical care committee -NCCC	Meetings	ST*	5,000		Hosp. staff, Curative and preventive dpts	5,000					10,532,200
S3M1A2	Develop clinical guidelines on case detection and management	WHO guidelne, Op cost, NCCC meetings	ST*	5,000		Dep Curative	5,000					
S3M1A3	Print clinical guidelines on case detection and management	Printing cost (5000 x $3)	ST*	15,000			15,000					
S3M1A4	Provision of antivirals (Tamiflu) for patients	10 patients per hosp. (central and prov. 250 doses)	ST*	5,000		Dep Curative	5,000					
S3M1A5	Develop infection control guidelines for central, provincial and district hosp.	TA, translation cost	ST*	19,000	19,000 WHO	Dep Curative	19,000					
S3M1A6	Print infection control guidelines for central, provincial and district hosp.	Printing cost for central, prov., district hosp. and HCs (rounded 200x 5copiesx$5)	ST*	5,000		Dep Curative	5,000					

Strategy 3: Laboratory and Curative Care

ຍຸດທະສາດທີ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibil-ity/ Partners						
			ST*, ST, LT*, LT									
S3M1A7	Simplify infection control guidelines for Health Centers level	NCCC meetings	ST*	5,000		Dep Curative	5,000					
S3M1A8	Print simplified infection control guidelines for Health Centers level	Priniting cost (700 health centersx2 copiesx$3)	ST*	4,200		Dep Curative	4,200					
S3M1A9	Provision of Tamiflu for health staff, minimum stock	825 doses central, prov., district Hp (15 staff at central/prov. Hosp., 3 staff at district hosp.)	ST*	16,500		Dep Curative	16,500					
S3M1A10	Provision of PPE for health staff, minimum stock	3150 std PPE kits and 1400 special kits	ST*	750,000	150,000 USA	Dep Curative	750,000					
S3M1A11	Define the roles on AI management in heath fac Define the roles on AI management in heath facilities at each level, province, district, HC ilities at each level, province, district, HC	Op cost- Meeting, NCC	ST*	5,000		Dep Curative	5,000					
S3M1A12	Train health care workers at each level of the guidelines on infection control and case detection/ management	Training/ Op cost	ST*			As below						

Strategy 3: Laboratory and Curative Care (Continue)

ຍຸດທະສາດທີ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners						
			ST*, ST, LT*, LT									
	* 6 central hosp. in Vientiane		ST*	3,000		Dep Curative +hosp. directors	3,000					
	* 4 regional hosp.		ST*	3,000			3,000					
	* 13 provincial hosp.		ST*	12,000			12,000					
	* 141 districts		ST*	70,000			70,000					
	* 4 regional hosp.		ST*	3,000			3,000					
	* 13 provincial hosp.		ST*	12,000			12,000					
	* 1200 Health Center staff		ST*	50,000		Provincial /District Dep +hosp. directors	50,000					
S3M1A13	Strengthen committees for infection control in each hospital	Regular meetings	ST*	5,000		Hosp. directors	5,000					
S3M1A14	Provide secure transportation for transfer the case by a special ambulance to the nearest isolation room (1)		ST*	200,000		Dep planning, hosp. directors, MSC	200,000					
S3M1A15	Provide secure transportation for transfer the case by a special ambulance to the nearest isolation room (2)	20 ambulances for central and provincial hosp.	LT	800,000		Dep planning, hosp. directors, MSC	800,000					

Strategy 3: Laboratory and Curative Care (Continue)

ຍຸດທະສາດທີ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ time-line	Budget $US	Do-nors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M1A16	Access to adequate Isolation facilities , *4 Central hosp.s, *11 Provincial hosp. (excludes Friendship hosp and 4 regional hosp.)	Construction, Renovation, (5 isolation rooms per hosp.)	LT	750,000		Dep planing, Dep curative, MSC				750,000		
S3M1A17	Provide full equipment to hosp. with existing isolation rooms (n=5 see above)	Medical Equipment for isolation room as a set-(at 135,000 per hosp.)	LT	675,000		Dep planning, hosp. directors, MSC		675,000				
S3M1A18	Provide full equipment to all other hosp. (n=19 see above)	Medical Equipment per hosp (at 135,000 per hosp.)	LT	2,565,000		Dep planning, hosp. directors, MSC				2,565,000		
S3M1A19	Provide equipment to hosp. with mobile X-ray	Medical Equipment per hosp (1 mobile X-ray, n=25)	LT	1,500,000						1,500,000		

Strategy 3: Laboratory and Curative Care (Continue)

ຍຸດທະສາດທີ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M1A20	Provide equipment to hosp. with auto-clave	Medical Equipment per hosp (1 autoclave per hosp., n=25)	LT	1,625,000		Dep plaing, Dep curative, MSC				1,625,000		
S3M1A21	Access to safe disposal of dangerous biological specimens (1)	Incinerators to 7 hosp. (3central, 4 regional)- 7 incinerators	LT	490,000		Dep planning, MSC			490,000			
S3M1A22	Access to safe disposal of dangerous biological specimens (2)	Provide incinerators to 11provincial hosp.- 11 incinerators	LT	770,000		Dep planning, MSC				770,000		
S3M1A23	Access to safe disposal of dangerous biological specimens (3)	Provide materials for safe dis-posable at central, prov. hosp.	LT	50,000		Dep Curative	50,000					

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ time-line	Budget $US	Do-nors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M1A24	Capacity building of key staff for infection control and case management	Master degree graduate, study tours, conferences	LT	150,000		Dep human resources, Dep Curative/ Prevention				150,000		
	Strenghten border control for travellers											
	ปับปุงการบอบคุมการท่องท่ยว ยู่ชายแดบย่างเข้ัมแข็ง.											
S3M1A25	Access to adequate Quarantine rooms at the borders, international airport- 3 airports, 11 check-points	Construction/ Renovation supply	ST*	28,000		Airport authority, Mo Trasport, Mo Security	28,000					377,000
S3M1A26	Develop plan, guidelines and reporting forms for border control	TA / workshop	ST*	10,0000		Dep Curative, NCLE	10,0000					

Strategy 3: Laboratory and Curative Care (Continue)

ຍຸດທະສາດທີ3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M1A27	Train quarantine officers, costum and desinfection staff	Op. cost- training	ST*	7,000		Dep Curative, NCLE	7,000					
S3M1A28	Staffing border crossings to implement plan	Op.. Cost- 2 nurses per check point (accommodation and food for 22 staff in 11 points)	ST*	330,000		Dep human resources, Dep Curative/ Prevention	330,000					
S3M1A29	Access to Function auto-thermometer at Vientiane airport	repair	ST	2,000		Dept prev medicine	2,000					

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
	Development and Monitoring of Pandemic Preparedness activites											
	ພັດທະນາ ແລະ ຕິດຕາມບັນດາກິດຈະກຳ ການກະກຽມຕ້ານລະບາດ.											
S3M1A30	Develop inventory of HCW(no. & types), no. beds, relevant equipments in each health facilities	NCCC	ST*	5,000		Dep curative	5,000					33,000
S3M1A31	Develop priority list of essential services to be maintained during a pandemic	NCCC	ST*	1,000		Dep curative	1,000					
S3M1A32	Develop a list of essential lab services to be maintained during a pandemic	NCC/NCLE	ST*	1,000		Dep curative	1,000					
S3M1A33	Plan for alternative health facilities	NCCC	LT*	1,000		Dep curative			1,000			
S3M1A34	Monitor preparedness activities:	Op cost	LT	25,000		Dep curative				25,000		

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
	Establish and improve information systems in hospitals (central, provincial)											
	ຈັດຕັ້ງ ແລະ ປັບປຸງ ລະບົບຂໍ້ມູນຂ່າວສານຢູ່ໂຮງໝໍ (ສູນກາງ ແລະ ແຂວງ).											
S3M1A35	Establish information systems in 16 hospitals (excludes 7 EWORS hosp.- 4 central and 3 regional)	Computers + other equipment	LT*	65,000		Dep Curative, hosp. directors			65,000			150,000
S3M1A36	Maintain information systems in 16 hospitals (excludes 7 EWORS hosp.- 4 central and 3 regional)	2 Internet connection Data base $50/month/ Hp x 16hosp. x12 months	LT*	50,000		Dep Curative, hosp. directors			50,000			
S3M1A37	Train hosp. staff for IT	Training	LT*	35,000		Dep Curative, hosp. directors			35,000			

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Re-spon-sibility/ Part-ners						
			ST*, ST, LT*, LT									
S3 Measure 2	**Strengthen Laboratory Resources**											
	ປັບປຸງຊັບພະຍາກອນ ຫ້ອງວິເຄາະໃຫ້ເຂັ້ມແຂງ.											
	Strengthen lab HR and infrastructure											
S3M2A1	Construction of virology laboratory (1rst option)	Construction	LT*	1,000,000		NCLE			1,000,000			14,324,500
S3M2A2	Upgrading laboratory facility NCLE to BSL2 (2nd option)	Renovation	LT*	500,000		NCLE			500,000			
S3M2A3	Provide laboratory equipment	BSL2 equipment (PCR, safety cabinet, freezer, dry ice maker, etc)	ST*	400,000	400,000 USA through WHO	NCLE	400,000					
S3M2A4	Provide laboratory materilas	Materials, reagents	ST*	125,000		NCLE	125,000					
S3M2A5	Shipment of specimens to WHO collabiration center	Op cost	ST*		WHO	NCLE						

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M2A6	Training for BSL2 lab staff	Training	ST*	225,000	225,000 USA	NCLE	225,000					
S3M2A7	Develop manuals and SOPs of AI suspected specimen (collection, handling, transport of specimens)	translation, printing-	ST*	1,000		NCLE, hosp. lab	1,000					
S3M2A8	Establish and pilot Influenza Surveillance System	Transport, Op cost	ST*	3,500	3500 WHO	NCLE	3,500					
S3M2A9	Expand and maintain Influenza Surveillance System	Transport, Op cost	LT*	50,000	WHO (TBC)	NCLE			50,000			
S3M2A10	Training on basic virology lab skills and laboratory based influenza surveillance (1)	Training for NCLE staff	ST*	100,000	100,000 USA	NCLE	100,000					
S3M2A11	Training on basic virology lab skills and laboratory based influenza surveillance (2)	Training for central and provincial hosp. laboratory	ST* /LT*			NCLE						

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
S3M2A12	Training on basic virology lab skills and laboratory based influenza surveillance (3)	Refresher training for lab staff of NCLE, central and provincial hosp	LT	25,000		NCLE, hosp. directors				25,000		
S3M2A13	Training on basic virology lab skills and laboratory based influenza surveillance (4)	On the job training for lab staff of central and provincial hosp.	LT	25000		NCLE, hosp. directors				25000		
S3M2A14	Access to adequate disposal of dangerous biological specimens	Provide 1 incinerator to NCLE	ST*	70,000		NCLE	70,000			9,200,000		
S3M2A15	Build a new NCLE, (detailed plan attached)	Construction	LT	9,200,000		NCLE						
S3M2A16	Provide equipment with a NEW NCLE, (detailed plan attached	Supplies equipment & reagents)	LT	2,600,000		NCLE				2,600,000		
S3M2A17	Maintain laboratory quality control and quality assurance, * Australia QA scheme	Workshop, QA	LT	5,000		NCLE				50,000		297,000

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Components	Priori-tize/ timeline	Budget $US	Donors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
Upgrading/maintenace of central/regional labs and lab capacity to ensure proper management of critically ill patients												
ປັບປຸງ/ບຳລຸງຮັກສາຫ້ອງວິເຄາະຂັ້ນພາກ/ສູນກາງ ແລະ ຮັບປະກັນຄວາມສາມາດຂອງຫ້ອງວິເຄາະໃນການຄຸ້ມຄອງຄົນເຈັບໜັກ ຢ່າງ ເໝາະສົມ.												
S3M2A18	Develop Lab QA for provincial laboratories	Op. cost	LT	5,000		NCLE				5,000		
S3M2A19	Simplify training manual and guidelines on emerging infectious diseases including influenza for provincial Labs	translation / printing	ST	5,000		NCLE		5,000				
S3M2A20	Need assesment of current lab infrastructure at central/ regional hosp.	TA, op.cost	LT	22,000		Planning Dep, Hosp directors				22,000		
S3M2A21	Renovate 5 central hosp. labs (at 25,000 / hosp)	Renovation lab rooms, equipment	LT	125,000						125,000		
S3M2A22	Maintain 5 central hosp. labs	Op. cost	LT	50,000						50,000		
S3M2A23	Renovate 4 regional hosp. labs (at 15,000 / hosp.)	Renovation lab rooms, equipments	LT	60,000						60,000		
S3M2A24	Maintain 4 regional hosp. labs	Op. cost	LT	25,000						25,000		

Strategy 3: Laboratory and Curative Care (Continue)

ยุดทะสาดที3: ວຽກງານເຝົ້າລະວັງ ແລະ ໂຕ້ຕອບການລະບາດໃນຄົນ ໃນໄລຍະມີການລະບາດ.

		Com-po-nents	Priori-tize/ timeline	Budget $US	Do-nors Comitt	Respon-sibility/ Partners						
			ST*, ST, LT*, LT									
Total		**Strategy3 Total**		**25,713,700**			2,513,700	682,000	2,191,000	20,327,000	25,713,700	25,713,700
Note:		**List of abbreviations:**										
ST*: short-term priority		BSL=bio-safety level					3 yr *	3 yr no *	4-5*	4-5 no *		
ST: short-term but not a priority		EWORS= early warning outbreak response system					3,609,200	10,845,500	1,095,500	10,163,500	25,713,700	
LT*: long-term priority		IT= information technology										
LT: long-term but not a priority		NCCC= national clinical care committee					3,609.2	10,845.5	1,095.5	10,163.5	25,713.7	
		NCLE= national center for laboratory and epidemiology										
		PPE= personal protective equipment										
		QA=quality assurance										
		TA= technical assistance										

Strategy 4: Health Education and Community Action

ยุดทะสาดที4: ໂຄສะนาสุขะสึกสา ແລะ ภาบเถื่อบไทอภิดจะทำขอๆชุมชิบ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S4 Measure 1	**Formulation of National Campaign on avian and human influenza**					
	ส้างขะบอบโถสะนาสุขะสึกสา ภ่งอกับไข้หวัดสัดปีก ແລะ ไข้หวัดใบคิบใบที่อปะเทด.					
S4 M1A1	Establishment of IEC taskforce	Workshop/Mtgs	ST*	5,000		CDC Secretariat, MoH, MAF, MoIC, MoE and UN partners + mass organizations (LWU, LYU,…)
S4 M1A2	Formulation of overall comunication strategy on AI and PI (to be reviewed with other 4 strategies)	Workshop & publication & dissemination and TA	ST*	215,000	AED\USAID (15,000)	IEC Task Force, CDC Secretariat, MoH, MAF, MoIC, MoE and UN partners
S4 M1A3	Development of a communication plan for the national campaign (all levels)(Review with other groups)					
S4 M1A4	Rapid participatory community survey on basic KAP about AI and Emerging Infectious Disease	Baseline, midline and endline	ST*	90,000	AED\USAID (40,000 for 2 surveys for 2006)	IEC Task Force, NSC,WHO/ AED, MoH, MoAF, MoIC, MoE
S4 M1A5	1. Development and production of the IEC materials for campaign and training guidelines (posters, leaflets, flipcharts, Radio, TV, films on AI, other media etc) and development pandemic risk communication materials/tools 2. Re-production of materials and distribution	Development, translation into minority languages, pre-testing and production =250,000 and reprod. and distribution=100,000	ST*	350,000	AED\USAID (80,000 committed for 2006), USA 100,000	IEC Task Force, provincial gvts, UN partners

Strategy 4: Health Education and Community Action (Continue)

ยุดทะสาดที4: ໂຄສะนาสุขะสึกสา ແละ ภานเคื่อนไหอกิดจะกำขอๆชุมชิม.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S4 Measure 1	**Formulation of National Campaign on avian and human influenza**					
	ส้างขะบอบโຄสะนาสุขะสึกสา ก่งอกับไข้หอัดสัดปีก ແละ ไข้หอัดในคินในที่อปะเทด.					
S4 M1A6	Provincial Production and Broadcasting of media (TV, radio, etc) materials produced.	broadcasting (for one year in 18 provinces @ 3000 per prov).	ST*	55,000	UNDP	IEC taskforce, MoIC, provincial mass media (print, radio, TV)
S4 M1A7	1. Training of trainers (ToT)-3 geograp. regions (north, central, south) 2. Training of district/local facilitators using materials.	Training workshop + TA (15,000 for ToT + 15,000 for TA) PLUS training at prov. level (90,000 = 5,000 per province).	ST*	120,000	AED\USAID (40,000 for 2006)	A. Village Volunteers* (health and veterinarian) B. LFU, LWU, LYU, teachers, Bouddhist Association, community authorities
S4 M1A8	Training of mass media in Vientiane and provinces.	2-day training,workshop (for 60 pers).	ST*	40,000	AED\USAID (5,000)	IEC Task Force,MoH, MAF, MoIC, LJA
S4 M1A9	Community mobilization/ National campaign implementation in the whole country (17 provinces and one special zone).	Interpersonal communication; retribution and community events (700 events-5 per district at $200 each).	ST*	250,000	AED\USAID (100,000)	IEC Task Force,MoH, MAF, MoIC,LFU, LWU, LYU, volunteers, monk, community authorities, traders.
S4 M1A10	Rapid participatory community survey on basic KAP about AI and Emerging Infectious Disease.	AV equipment (TV, VCD, amplifier, projector, generator) for each province at $2500 and 4 vehicules for prov. and 2 for central at $25,000 each.	LT	345,000		MoH, provincial MoH, mass media

Strategy 4: Health Education and Community Action (Continue)

ยุดทะสาดที4: โดสะนาสุขะสึกสา และ กานเถื่อนไหวกิดจะกำของๆชุมชิน.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S4 M1A11	1Improve health education and health emergency communications for 200 villages with no radio access (public address system).	Pilot project- public address sytem at 1000/each.	LT	200,000		Local authority, MoH, MoIC, MAF
S4 M1A12	School outreach through existing systems (eg. Blue Box prog. in 8 provinces in primary schools, supervision unit).	Through the teachers-6,000 per province with Blue Box prog. and 10,000 per prov. Without Blue Box prog).	LT*	150,000		IEC Task Force, MoE, MoH, Un partners
S4 M1A13	Monitoring and evaluation of communication strategy.	Meetings, supervision workshops, research and short-term consultant.	LT*	100,000	WHO (50,000)	IEC Task Force, UN partners, FMS
S4 Measure 2	**Prepare for a pandemic**					
	กานกะกุมเพื่อกานละบาด.					
S4 M2A1	Educational radio programs and materials to be used during a pandemic-outbreaks.	Adaptation of resources produced by UNICEF - TA, translation and local production.	LT	80,000		MoE, UNICEF
S4 M2A2	Dvelopment post-pandemic community-based need assessment.	TA	LT	20,000		MoH, MoIC, MoE, UNICEF

Strategy 4: Health Education and Community Action (Continue)

ยุดทะสาดที4: ໂຄສะນาสุขะสึกสา ແລะ ภาบเถื่อบไหอภิดจะกำขอๆชุมชิบ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
	Total	**Strategy4 Total**		**2,020,000**		
Acronyms:		**List of abbreviations:**			**Notes:**	
MoH : Ministry of Health,		AI=avian influenza			ST*: short-term priority	
MoAF: Ministry of Agriculture and Forestry		IEC=information\education\ communication			ST: short-term but not a priority	
MoIC: Ministry of Information and Culture		KAP= knowledge, attitudes and practices			LT*: long-term priority	
GED: General Education Department,		PI= pandemic influenza			LT: long-term but not a priority	
NSC: National Statastistic Center		ToT=training of trainers				
FMS: Faculty of Medical Science,						
UN partners						
LFU: Lao Front Union,						
LWU: Lao Women Union,						
LYU: Lao Youth Union,						
AED: Academy for Educational Development						
LJA: Lao Journalist Association						
Suggested membership of the IEC taskforce: rep. from MoH, MAF, MoIC, MoE, UN partners						

Under S4 M1 Activity 7: Village volunteers will receive a more comprehensive training including surveillance and reporting of suspected AI cases. Where possible health and animal village volunteers should be trained together so they communicate a uniform message, they develop collaborative work and training is done in a cost-effective manner.

Strategy 5: Strengthening of institutional and legal frameworks

ຍຸດທະສາດທີ5: ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານຂອບເຂດວຽກງານກ່ຽວກັບສະຖາບັນ ແລະ ລະບຽບການ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 1	**Strengthening the function of the National CDC Committee**			**872,000**		
	ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານສິດແລະ ໜ້າທີ່ຂອງຄະນະກຳມະການແຫ່ງຊາດ ຕ້ານພະຍາດຕິດຕໍ່.					
S5M1A1	Upgrade authority of CDC Committee to reflect its multisectoral responsibilities and advocate for emergency preparedness and response at central, provincial and district levels.					
S5M1A1.1	Mtgs, Supervision in province, 3 region mtgs with senior officials.		ST*	36,000		CDC Committee, CDC Sec
S5M1A1.2	Study tours - pandemic preparedness - regional - committee/secretariat - Ag control and Curativfe lessons learned (3 groups).	CDC committee, Ag sector, and Health sector (3 separate groups).	ST*	24000		CDC Sec, MAF, MOH
S5M1A2	Establish a single information unit in the Secretariat of the CDC to communicate the national status on AI/PI to the media and the general public during outbreaks.					
S5M1A2.1	Equip. office(s).	PM office is the lead, sub-offices needed for MOH and MAF and MOFA.	ST*	20,000		
S5M1A2.2	Training of information officers.	To be done by core spokespersons trained in BKK (provinces included).	ST*	5000 (low?7500)		

Strategy 5: Strengthening of institutional and legal frameworks (Continue)						
ຍຸດທະສາດທີ5: ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານຂອບເຂດວຽກງານກ່ຽວກັບສະຖາບັນ ແລະ ລະບຽບການ.						
		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 1	**Strengthening the function of the National CDC Committee**					
	ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານສິດແລະ ໜ້າທີ່ຂອງຄະນະກຳມະການແຫ່ງຊາດ ຕ້ານພະຍາດຕິດຕໍ່.					
S5M1A2.2(a)	Equip provincial info offices	Core equipment -	LT	36,000		
S5M1A2.3	Determination of communication roles of different ministries and international organizations during a pandemic		ST*			
S5M1A2.4	Determination of clear lines of communication within and between Ministries		ST*			CDC Sec
S5M1A2.5	Develop emergency contacts list- with regular updating of names, phone numbers, emails, etc	One database manager - 2 yrs - equipment paid for above	ST*	12,000		CDC Sec, UN ORC
S5M1A2.6	Designation and training of spokespersons		ST*		CDC\HSS Feb 2006	CDC Sec
S5M1A2.7	Development Radio and TV Risk communication materials - for release if pandemic occurs and training of journalists	Development and Production of prototypes - train journalists on pandemic preparedness	ST*	35,000		CDC Sec, IEC task force, MoIC
S5M1A2.8	Media involvement in production and implementation (all levels)	Dissemination in the event of a pandemic - contingency	LT		Contingency (100,000)	CDC Sec, IEC task force, MoIC
S5M1A2.9	Planning for hot line(s) during pre-pandemic and pandemic phases	Mtgs, training (maybe belongs in IEC or rumour surveillance of Ag and Hlth)	ST*	20,000		CDC Sec, IEC task force, MAF,MOH

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ยุดทะสาดทิ5: ส้างถอามเฮั้มแฮงทางด้านฮอบเขดองกางานก่งอกับสะถาบัน ແລะ ละบงบกาน.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 1	**Strengthening the function of the National CDC Committe**					
	ส้างถอามเฮั้มแฮงทางด้านสิด ແລะ หน้าที่ฮองถะนะกำมะกานแห่งชาด ต้านพะยาดติดต่.					
S5M1A3	Strengthen the CDC Secretariat in multisectoral functions - expand membership, ToR review	done - new decree				
S5M1A3.1	Expand membership of Secretariat from 2 to 5 ministries	done - in new decree	ST*			
S5M1A3.2	Review and disseminate ToR of CDC	done	ST*	1,000		CDC Sec
S5M1A3.3	High level awareness raising - advocacy mtgs, study tours	see activity 1.1	ST*			
S5M1A3.4	CDC operations cost - 2 Offices	coms (00/mo.), transportation (2 vehicle), office equipment (10000) and supplies (400/mo)	ST*	75,000		CDC Sec
S5M1A3.4(a)	CDC operations cost - additional two offices	coms (00/mo.), transportation (2 vehicle), office equipment (10000) and supplies (400/mo)	LT	75,000		
S5M1A3.5	Plan for and test an operations command center/ procedures including harmonising with current Disaster Office in MoLSW	(sat phones 1200 x 15 = 18000, running costs (12000/year)	ST	30,000		CDC Sec

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ຍຸດທະສາດທີ5: ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານຂອບເຂດວຽກງານກ່ຽວກັບສະຖາບັນ ແລະ ລະບຽບການ.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 1	**Strengthening the function of the National CDC Committee**					
	ສ້າງຄວາມເຂັ້ມແຂງທາງດ້ານສິດ ແລະ ໜ້າທີ່ຂອງຄະນະກຳມະການແຫ່ງຊາດ ຕ້ານພະຍາດຕິດຕໍ່.					
S5M1A4	Develop Pandemic planning, evaluation and review process		ST*			
S5M1A4.1	Develop Master Pand. Preparedness Plan with Standard Operation Procedures/ Protocols -(set of actions to be taken at each successive WHO pandemic phase)	mtgs to dev, print, distribute, Technical assistance	ST*	15000 + 1-2 months TA	USA 100,000	CDC Sec
S5M1A4.2	Prepare sectoral pandemic plans - including detailed contingency planning for ministries and selected private business, eg garment industry, markets	15 ministries x 2500	ST*	37500 + 1-2 months TA	S5M1A4	AI focal points in ministries
S5M1A4.3	Training of specialised core mobile group of PPP ToT in provinces (20 pers. X 2wks	Form 4-5 teams of 4-5 people to facilitate provincial planning	ST*	10,000	S5M1A4	CDC Sec
S5M1A4.4	Support Provincial pandemic preparedness process to include gvt, NGO and private stakeholders (e.g. Lao Red Cross)	18 prov x 3000	ST*	54,000	S5M1A4	Prov. Governor
S5M1A4.5	Desktop pandemic simulation exercises	TA	LT*	10000 + 1 mo. TA		CDC Sec, UN team

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ยุดทะสาดทิ5: ส้างถอามเฮั้มแฮงทางด้านฮอบเฮดอูมงานก่งอกับสะถาบัน ແລะ ละบูบกาม.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 1	**Strengthening the function of the National CDC Committee**					
	ใส้างถอามเฮั้มแฮงทางด้านสิด ແລะ ໜ้าที่ฮองถะนะกำมะกามแห่งฮาด ต้านพะยาดติดต่.					
S5M1A4.6	Actual pandemic simulation exercises	Technical assistance/consultancy - decide if needed after desktop exercise	LT	30000?		
S5M1A4.7	Annual review of planning process, lessons learned and post-pandemic assessment (S4 M2 Activity 6		LT*	40,000		CDC Sec, UN team
S5M1A4.8	Technical assistance/consultancy for planning review annually	TA x 1 month yearly	LT*	60,000		CDC Sec, UN team
S5M1A4.9	Funding for 5 masters degrees in Pandemic related fields , e.g. disaster mgmt, planning, complex emerg. Or secondments or short courses in disaster management	Masters x 5 - 100000; Secondments - in region - 2-3 months - 4000 x 5; Short courses in disaster mgmt - 4000 x 5	LT*	140,000		CDC Sec, UN Team
S5M1A5	Develop unit jointly between donor community (UN system) and CDC Sec.		ST*			
S5M1A5.1	Operational support for donor meetings		ST*	4,000		
S5M1A5.2	Establish a donor coordination unit with one TA and Two Lao staff to work closely with the CDC Secretariat	Staff, coordination meetings (Staff: 25,000 and 25,000 for meetings)	ST*	200,000	UN* (TBC)	

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ยุดทะสาดทิ5: ส้างดอามเฮ้มแฮงทางด้ามฮอบเฮดองกางามก่งอกับสะถาบัม และ ละบงบกาม.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5M1A5.3	Regional and international networking	These funds are likely to be held by regional donor agencies and organizations	ST*		UN*(TBC)	
S5M1A5.4	Develop a tracking system- computer database	Two years	ST*	15,000		CDC Sec, MOFA DCI, UNRC
S5 Measure 2	**Develop national stockpile of essential supplies**					
	พัดทะบากามสะสิมเพื่อสะหงองอุปะกอม ที่จำแป้นใมละดับชาด.					
S5M2A1	Management of supplies, warehousing, security, administration, transport	10-15% of purchase price	ST*	25,000		
S5M2A2	Stockpile of PPE kits at central and provincial level, multiple kits for frontline workers	PPE	ST*	2,000,000		
S5M2A3	Plan and implement a seasonal flu vaccine program targeting at risks groups	CDC taskforce, vaccine costs, vaccine administration and transport ($7 x 15000 people per year)	ST*	525,000		
S5M2A4	Stockpile of pandemic vaccine if becomes available and plan for how to administer	Cannot anticipate costs or availability- no budget	LT*			
S5M2A5	Stockpile of antiviral drugs for high risk people- cullers, front line health care workers and a plan on how to prioritize and distribute	20$ x 15,000 pers.	ST*	300,000		

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ยุดทะสาดทิ5: ส้ๅงถอามเฮ้มแฮงทาๅงด้ามฮอบเฮดอๅงกาๅมก่ๅงกับสะถาขับ ແລะ ละบๅบกาม.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5M2A6	Stockpile of antiviral drugs 600,000 treatments based on 10% pop.	Antivirals (n=600K X $20)	ST	12,000,000		
S5M2A7	Reserve budget and/or stocks to provide humanitarian support to individuals and communities with early outbreaks - perhaps a plan for diverting stocks from existing sources that have been pre-positioned.	Will need further planning with other partners, e.g. local disaster committees of MOLSW, Lao Red Cross, WFP, OCHA and other UN agencies. Needs to be part of detailed pandemic plan. Budget includes seed money for planning.	ST	1,000,000		MOLSW, UN Agencies, LRC, Local government

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

ยุดทะสาดที5: ส้างดอามเข้มแฃงทางด้านฃอบเขดอวุกงานก่วอกับสะถาบัน และ ละบวบกาน.

		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
S5 Measure 3	**Development of financial and legal frameworks**			**126,000**		
	พัดทะนาฃอบเขดอวุกงานทางด้านกานเงิน และ ละบวบกาน.					
S5M3A1.(a)	Develop mechanisms to ensure rapid disbursement of funds.	Op cost	ST*	3,000		CDC Sec
S5M3A1.(b)	Transparent and harmonised accounting and reporting procedures.	Op cost	ST*	3,000		CDC Sec
S5M3A2	Develop hazard pay incentive scheme for essential service staff, eg., investigation teams, provincial and village level health staff.	Will require negotiations with donors. Budget figure not possible now.	LT			
S5M3A3	Ensure compliance with International Health Regulations (IHR).					
S5M3A3.1	Advocacy, training of focal points and capacity assessment related to IHR.	TA	ST*	30,000	WHO	MOH
S5M3A3.2	Review existing decrees, regulations, laws related to pandemic/disease prevention and control against current IHR requirements	Legal TA - int 3 months, 2 nat TA 3 months, local costs, translate,	ST*	90,000		MOH
S5M3A3.3	Propose revisions to current legal framework if needed.		LT*	30,000		MOH, MOJ, National Assembly

Strategy 5: Strengthening of institutional and legal frameworks (Continue)

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		Components	Prioritize/ timeline	Budget $US	Donors Comitt	Responsibility/ Partners
			ST*, ST, LT*, LT			
Total		**Strategy5 Total**		**17,090,500**		
Note:		**List of abbreviations:**				
ST*: short-term priority		BKK= Bangkok				
ST: short-term but not a priority		CDC =communicable disease control				
LT*: long-term priority		IHR= international health regulations				
LT: long-term but not a priority		Mtgs= meetings				
		PPE=personal protective equipment				
		PPP=pandemic preparedness plan				
		TA= technical assistance				
		ToR=terms of references				
		ToT=training of trainers				