

Project Administration Manual

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**Lao People's Democratic Republic:
Trade Facilitation: Improved Sanitary and
Phytosanitary (SPS) Handling in Greater Mekong
Subregion (GMS) Trade Project**

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Agriculture and Forestry (Departments of Planning, Agriculture, and Livestock and Fisheries), Ministry of Health (Departments of Food and Drugs, and Hygiene and Prevention) and Ministry of Education (National University of Laos) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by Ministry of Agriculture and Forestry (Departments of Planning, Agriculture, and Livestock and Fisheries), Ministry of Health (Departments of Food and Drugs and Hygiene and Prevention) and Ministry of Education (National University of Laos) of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan and Grant Negotiations the borrower and ADB shall agree to the PAM and ensure consistency with the financing agreement. Such agreement shall be reflected in the minutes of the Loan and Grant Negotiations. In the event of any discrepancy or contradiction between the PAM and the Financing Agreement, the provisions of the Financing Agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

Abbreviations

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFF	=	agriculture, food, forestry
AFS	=	audited financial statements
AFU	=	Animal Feed Unit
APQAC	=	Animal Products Quality Assurance Control
ARASFF	=	ASEAN Rapid Alert System for Food and Feed
CIU	=	component implementation unit
CLV	=	Cambodia, Lao PDR, Viet Nam
CSF	=	classical swine Fever
CQS	=	consultant qualification selection
DDG	=	deputy director general
DG	=	director general
DMF	=	design and monitoring framework
DOA	=	Department of Agriculture (MAF)
DOLF	=	Department of Livestock and Fisheries (MAF)
EP	=	enquiry point (SPS)
FA-NUOL	=	Faculty of Agriculture (National University of Laos)
FDD	=	Food and Drugs Department (MOH)
FMA	=	financial management assessment
FMD	=	foot and mouth disease
GACAP	=	governance and anticorruption action plan
GAP	=	good agriculture practice
GDP	=	gross domestic product
GHP	=	good hygiene practice
GMP	=	good manufacturing practice
GMS	=	Greater Mekong Subregion
HACCP	=	hazard analysis critical control point
IARS	=	imprest account reconciliation statement
ICB	=	international competitive bidding
INFOSAN	=	International food Safety Authorities Network
IPPC	=	International Plant Protection Convention
ISPM	=	International Standards for Phytosanitary Measures
MAF	=	Ministry of Agriculture and Forestry
MOH	=	Ministry of Health
MOIC	=	Ministry of Industry and Commerce
MPI	=	Ministry of Planning and Investment
NAHC	=	National Animal Health Center
NCAW	=	National Council for the Advancement Of Women
OIE	=	World Organization for Animal Health
O&M	=	operations and maintenance
NCB	=	national competitive bidding
NGPES	=	National Growth and Poverty Eradication Strategy
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
PAI	=	project administration instructions
PAM	=	project administration manual
PBME	=	project benefit monitoring and evaluation

PCR	=	project completion report
PEQ	=	post-entry quarantine
PMU	=	project management unit
PPC	=	Plant Protection Center (MAF)
PSC	=	Project Steering Committee
QBS	=	quality based selection
QCBS	=	quality- and cost based selection
RCSP	=	Regional Cooperation Strategy and Program
RFP	=	request for proposals
RRP	=	report and recommendation of the President to the Board
SBD	=	standard bidding documents
SEACFMD	=	Southeast Asian China Foot and Mouth Disease project
SOE	=	statement of expenditure
SOPs	=	standard operating procedures
SPS	=	Sanitary and phytosanitary
TAD	=	Transboundary animal diseases
TOR	=	terms of reference
UHS	=	University of Health Sciences (MOH)

I. PROJECT DESCRIPTION

A. Project Rationale, Location And Beneficiaries

1. The Project will strengthen institutions and operational and management capacities in the area of sanitary and phytosanitary measures (SPS)¹ in Lao PDR and enhance capacities needed for operating cost-effective SPS systems that facilitate trade and protect health. The Project will focus on Lao PDR's trade in agriculture, food and forest (AFF) products for which SPS measures for plant health, animal health, and food safety apply. The Project will establish, strengthen and implement: (i) surveillance and inspection programs for plant health, animal health and food safety; (ii) enhanced education levels and university training of SPS specialists; and, (iii) promote regional cooperation and harmonization for SPS. It will selectively strengthen food safety handling capacities of private enterprises in the Lao PDR tourist industry.

2. The rationale for the Project derives broadly from the GMS Regional Cooperation Strategy and Program (RCSP), with a focus on connectivity and improved competitiveness in promoting trade among GMS countries, and from the recent GMS SPS Action Plan.² While investments in physical infrastructure have created new opportunities for trade, the Lao PDR Government has increasingly recognized the importance of addressing the institutional and capacity constraints surrounding the handling of AFF products.³ There is continuing growth in GMS AFF trade,⁴ which Lao PDR – land-linked to GMS markets of nearly 300 million consumers – is well-placed to take advantage of because of its underlying comparative advantage in many AFF products (including staple crops, wood products, niche/organic products, and bovine livestock). There is widespread acknowledgement that a better SPS system will lead to reduced (risk of) loss of crops, animal products, and reduction of food-borne diseases and health hazards.⁵

3. In more technical terms, there is a shortage of human resource capacity to: (i) undertake surveys on crop pests and diseases; (ii) manage inspections and interceptions of imported goods; (iii) monitor the agricultural pesticide and veterinary drug trade; (iv) understand the risks of the spread of forest pests associated with wood products trade; and (v) sustain and expand the regional trade in crop products. There is a need to contain transboundary animal diseases, to improve surveillance of veterinary drugs and feed, to maintain the safety of animal food products, and to improve border release procedures. There is little information about (nor monitoring of) the safety of food, food handling by establishments serving the public, and about food poisoning outbreaks. Tourism is a rapidly growing sector without adequate food safety supervision, although incentives exist for private enterprises to improve their food safety performance. More generally, compliance with global SPS requirements needs national specialists in surveillance, risk analysis, testing, diagnostics, pest identification, standards, conformity assessment, good agricultural practice (GAP), good hygiene practice (GHP), good

¹ SPS measures are intended to protect human, animal or plant life or health against risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms; or to protect human or animal health against risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs; or otherwise to prevent or limit damage from the entry, establishment or spread of pests. WTO, SPS Agreement Annex A. (1994).

² *Action Plan 2010-2015 for Improved Handling of Sanitary and Phytosanitary (SPS) Arrangements in the Greater Mekong Subregion (GMS) Cross-Border Trade*. ADB (2011).

³ In recent years there have been problems with exports of corn to PRC due to mould, for example.

⁴ Lao PDR recorded AFF export values are about \$300 million a year; around 80% goes to GMS countries.

⁵ The recent *Sector Assessment, Strategy and Road Map for Trade and Industry (Small And Medium-Sized Enterprises)* 2011-2014 estimated that the cost to the economy from the lost in productivity of persons falling ill from food related diseases and premature mortality could be as high \$149 million annually.

manufacturing practice (GMP) and quality assurance management (such as hazard analysis critical control point - HACCP) – all of which Lao PDR presently lacks and which (in part at least) must come from the graduates of an upgraded national higher education system.

4. The economic case for investment in the Project rests on the pure public goods nature of many SPS services – e.g., the control of communicable diseases, plant pests etc, and the very limited capacity of the private sector to supply impure public goods (e.g., laboratory/testing facilities for inputs and crops, veterinary services). The subregional context also means that Lao PDR SPS performance acts as a (presently weak) link in overall GMS AFF trade development.⁶

5. The main beneficiaries of the Project will be AFF primary producers, processors, traders, employees and consumers. AFF producers are typically small-scale and relatively poor,⁷ wages are low, domestic and transboundary value chains are substantially underdeveloped,⁸ and the country's present openness to formal trade (and trade-related income) is relatively poor.⁹

B. Impact and Outcome

6. The intended impact of the Project is for Lao PDR's AFF products to be: (i) safer; (ii) more efficiently produced; and, (iii) traded in greater quantities. The outcome of the Project is an enhanced SPS management system in Lao PDR.

C. Outputs

7. The outputs of the Project comprise: (i) strengthened surveillance and inspection programs, (for plant health, animal health, and food safety including safer food handling in the tourist industry); (ii) improved regional cooperation and harmonization in SPS management in AFF trade; (iii) enhanced education levels and university training of SPS specialists and (iv) effective Project management.

1. Output 1: Strengthened Surveillance and Inspection Programs

8. Each of Lao PDR's plant, animal and food safety surveillance programs will be strengthened. Closely related to the technical work carried out by specialists, the Project will also review and - where necessary, revise - technical regulations, standard operational procedures (SOPs) and inspection manuals.¹⁰

i. Plant Health

9. Firstly, in order to build surveillance and monitoring capacity for plant pests and diseases, survey-based data gathering and management will be strengthened and diagnostic

⁶ This is why the project is prepared in parallel with proposed SPS investments in Cambodia and Viet Nam.

⁷ More than half (i.e., 600,000-plus) of all Lao PDR households depend directly upon agriculture for their livelihoods; the overwhelming majority of these are still engaged in subsistence and low productivity activities. Average household incomes from agriculture are low, at about \$200 a year, and lower for female-headed households.

⁸ Improving national AFF value chains is a major theme of the recent '*Strategy for Agricultural Sector Development, 2011-2020*' (GOL, 2010. Draft)

⁹ ADTA 4843-Lao: '*Lao PDR Agriculture And Natural Resources Sector Needs Assessment*' (2007)

¹⁰ Project-supported revisions and re-drafting of technical regulations, SOPs and inspection manuals, etc, will: (i) comply with international SPS principles and international good practice; (ii) where relevant, be harmonized with ASEAN and GMS countries; (iii) meet requirements of good governance; and (iv) be justifiable on social and economic grounds.

and analytical services will be improved (through investments in facilities, equipment, supplies and human capacity).¹¹ Necessary interventions will be targeted at raising the capacity of the Plant Protection Center (PPC) to better carry out pest and disease surveillance activities, including: (i) crop pest surveillance; (ii) diagnostics and taxonomic identification; (iii) post-entry quarantine (PEQ) for seed and other propagative plant materials; and, (iv) response to plant pest and disease outbreaks. There is a need to move from an *ad hoc* approach to the implementation of a sustained and planned program of surveillance on priority crops,¹² with scheduled completion dates.¹³ More robust taxonomic identification of survey specimens will be promoted (with regional support, and access to external support for difficult specimens) to expedite the diagnostics component of the survey. PPC staff will be given on-the-job training. There will be upgrading of current laboratory and equipment. Curating of the specimen collection will be improved. The provision of a greenhouse will initiate PEQ activities, and will serve the testing of seed and other planting materials. There will be improvements in data management from field surveys, so that a more comprehensive database can be generated as an essential resource for pest identification, trend analysis, risk management, and policy decision-making. Scholarships to regional universities, training attachments, English proficiency classes and participation in regional meetings will be supported.

10. Fertilizer and pesticide analysis capacity will be upgraded (requiring existing laboratories for agrochemical analysis to undergo refurbishment to accommodate the requirements of the sensitive analytical equipment and allow for more accurate analysis and higher throughput in testing quality and formulation of commercial pesticide products). Participation in proficiency testing will encourage better quality of laboratory practice. Enhanced monitoring of pesticide residues on farm produce will be achieved through annual programs of sampling and testing with rapid test kits (with provision for selected samples to be sent for more quantitative analysis for problem pesticide groups identified from the rapid test monitoring process, as well as pesticides not adequately covered by rapid testing).¹⁴ Upgrading of human capacity through regional scholarships and study tours will also be provided.

11. Forest health and SPS compliance of trade in forest products will receive attention, given their importance for Lao PDR and GMS. This attention will include: (i) conducting a national situational analysis of the forest pest situation and phytosanitary requirements imposed by importing countries; (ii) establishing a program of passive surveillance (involving collaboration between the Agriculture and Forestry Departments of MAF to collect and collate available information to describe and understand the forest pest situation in the country; and (iii) engaging in regional consultation, that will provide a forum to identify common issues, weaknesses and

¹¹ Besides the strengthened reduction of phytosanitary risks that results to Lao PDR from better plant pest and disease information, survey data provides the needed material to describe the pest status in a country. The WTO/SPS Agreements require that pest information be the basis for market access negotiations, and many of Lao PDR's trading partners (e.g., PRC, for corn and cabbage exports) are now routinely asking for such technical information for pest risk analysis.

¹² To be identified by the Government – and likely to include coffee, maize, baby corn, cassava, banana, fresh vegetables, organic rice, tobacco, legumes, Job's Tears and sesame.

¹³ Field activities may focus in the first instance on specific crops that face export challenges, and on individual opportunities - such as corn export to PRC and fruit and vegetable exports to Thailand.

¹⁴ It is important to note that use of the same facilities for testing pesticide residues and formulations present major risks. The risk of cross-contamination is highest in the sample preparation phase. Besides, levels of detection demanded in the analyses of the two groups of products differ significantly, so that the risk of false positives almost makes it mandatory to have separate equipment and facilities. In the case of the PPC, the better option would be to support the use of analytical equipment on formulated commercial products, and retain the use of rapid test kits for residues. Until major surveillance programs are instituted on a regular basis, more detailed pesticide residue analysis can be outsourced to other laboratories, both within the country and to laboratories in neighboring countries.

opportunities for countries to work together to mainstream forest health into their national SPS compliance processes.

12. The need to introduce risk-based import management will require: (i) risk categorization; (ii) development of standard operating procedures (including operations manuals incorporating details of procedures such as inspecting, sampling, etc), and staff training in their application; (iii) acquisition/development of visual guides that assist border inspectors in the identification of suspected pests and diseases;¹⁵ (iv) production of SPS/ International Standards For Phytosanitary Measures (ISPM) awareness materials - explaining the global trading environment under the WTO, the SPS Agreement and its principles, ISPMs etc;¹⁶ (v) improved data management - proper and systematic capture and use of information on plant pests etc in AFF trade provides for the identification of threats and risks, and for the analysis of trends; and (vi) monitoring of pesticide residues at border points.

13. Supply chains of crop products (initially corn, followed by rice) for growing regional markets (especially PRC) will be strengthened by enhancing both public capacity to support better on-farm and post-harvest management practices, the surveillance of inputs, residues and pests etc, and – additionally - private sector capacity to introduce and attain GMP. This will encourage Lao PDR's agriculture trade to become more formal, sustainable and valuable.

ii. Animal Health

14. For animal health, strengthening surveillance programs involves (firstly) enhancing the National Animal Health Center (NAHC)'s TAD surveillance, diagnostic and response capacity. NAHC's ability to survey, test and respond for two priority diseases (FMD, CSF) will be strengthened in target areas with potential for production and exports. The main objective is to improve control of these diseases on a selective geographic basis, while simultaneously strengthening NAHC's generic surveillance and response capacity. Response for FMD and CSF outbreaks will utilize targeted vaccination and movement control measures, and stronger links will be established with SEACFMD (Southeast Asia China Foot and Mouth Disease project) to obtain supply of FMD vaccine as required for outbreak response. Other achievements will be as follows: (i) improved diagnostic capacity and testing (increased testing volumes based on upgraded NAHC equipment, refresher diagnostic training, etc); (ii) a surveillance program in target areas (based development on proper procedures, epidemiology staff training etc); (iii) more frequent and regular surveillance visits and public awareness campaigns; (iv) improved response capacity (and accessing vaccines from regional stockpiles); and (v) improved data management (to record testing and surveillance activities and outcomes).

15. Secondly, as a first step to improve the situation with control of veterinary drugs, the Project will conduct a baseline survey on the quality and use of veterinary drugs in the country to identify the most common problems to be addressed in the future.¹⁷ Furthermore, basic capacity will be established for surveillance of quality of antibiotics, and for testing of some veterinary drug residues using rapid test kits.¹⁸ For animal feed issues and following the Trade

¹⁵ Border inspectors thereby play an important role in "first level detection"; suspect materials may then be sent to the PPC for further investigations. Examples of these guides from neighboring GMS countries could serve as the basis for the development of locally-appropriate materials.

¹⁶ Such materials would also be useful for awareness-raising among other phytosanitary personnel and stakeholders.

¹⁷ Use will be made of capacities at FDQCC for testing several antibiotics.

¹⁸ At the moment a suitable regulatory framework with appropriate sub-regulations and standards (to cover the approval of veterinary drugs, registration, certification for imports, records of importation, formulation testing, and

Development Facility's (TDF)'s work in developing the overall regulatory framework, the Project will support: (i) the formulation of strengthened implementing regulations; (ii) increased testing capacity (utilizing rapid test kits and some upgrade of Animal Feed Unit (AFU) laboratory facilities, and AFU staff training);¹⁹ (iii) surveillance procedures and training of provincial staff to inspect feed mills, storage areas, mixing plants, farms, border points and retail sites²⁰ as visits are undertaken. Improved data management and enhanced regional cooperation (especially with Thailand as the main source of animal feed) will also be included.

16. Regarding animal products food safety,²¹ the Project will support: (i) improved testing of animal products, based on new laboratory equipment²² and laboratory training for Animal Products Quality Assurance Control (APQAC) staff;²³ (ii) technical training²⁴ and development of procedures for food safety surveillance (specifically including the development of a meat inspection manual); (iii) improved and more regular surveillance visits to slaughterhouses, markets and fish processing facilities; (iv) better data collection and management; and (v) improved regional cooperation.

17. Improving the border situation vis-à-vis animal health will include strengthening technical capacity within the Epidemiology Unit to conduct risk assessment activities while establishing a set of procedures for border activities and the specification of a set of import conditions for high-risk products. As elsewhere, drafting of appropriate technical regulations and standards, staff training on surveillance methods, greater resourcing for border visits, better data management and more regional cooperation will be supported. Vehicles will be provided for animal movement control in some provinces – those with international border posts and major animal movements.

18. Finally, general support will be given for: (i) strengthening management during Project implementation; and (ii) furnishing the new laboratories and enhancing quality management.

iii. Food Safety

19. For food safety, firstly, support will be provided for the design and implementation of annual programs of food safety surveillance, monitoring, inspection, and hazard response. Programs will be based on known and perceived risks about food safety hazards in particular products, locations, markets, public events, hotels and restaurants (especially in the tourist areas), and enterprises. A mobile unit will be provided for collecting samples, using rapid test kits on the spot, (e.g., at fairs and other major events), educating the public and disseminating information about preventing food safety hazards. Capacities will be strengthened through

standards for sale, storage and usage etc) is not yet in place. The national lead for such regulatory and institutional reform is with TDF and FAO.

¹⁹ Rapid test kit based testing is would cover hazards such as chloramphenicol, beta agonists (clenbuterol), aflatoxins, fluroquinolones and salmonella.

²⁰ To monitor compliance of feed production and feeding practices, to sample as necessary, and to collect import data

²¹ It is expected that in 2011 a review of the regulatory framework will be carried out by TDF which will be helpful for technical work in this area. This will include the Food Law, the Food Safety Law, the Law on Livestock Production and Veterinary Matters of 2008 and two ministry decrees which specify regulations for meat inspection and for inspection of animal product imports.

²² There is currently no dedicated animal products laboratory facility; with the expected completion (October 2011) of the new World Bank-funded NAHC laboratory building there should be laboratory space to be equipped in 2012.

²³ Laboratory capacity would enable microbiological culture and identification and enable utilization of rapid tests for microbacteria, veterinary drug residues and chemical contaminants. This will need to be supported by training of technical staff on appropriate laboratory testing methods and sampling.

²⁴ Trained APQAC staff can act as trainers for provincial staff on expected standards, surveillance activities and sampling procedures where appropriate. Training can also be provided to meat processing workers in the private sector on good hygiene practices.

scholarships and training of inspectors. The focus will be on both imported²⁵ and domestic products. Support will be provided for food testing and for selective upgrading of testing facilities. For reasons of cost-effectiveness, priority will be given to the use of rapid test kits. Initially the focus will be on a limited number of priority food safety parameters, and - once the system is operational - additional parameters can be added as needed. Although the aim is to eventually cover the whole country, the system will be established first in Vientiane Capital - for reasons of logistics and facilities presently available; in subsequent cycles the system may be extended to Luang Prabang and Pakse (where some basic facilities are available for microbiological tests). The findings of the tests will be stored in a database²⁶ to be used for risk analysis, management support and reporting. Cooperation and exchange of information with neighboring countries will be supported through bilateral working groups, and through participation in: (i) WHO's International Food Safety Authorities Network (INFOSAN); and (ii) the ASEAN rapid alert system for food and feed (ARASFF). Support will be given to produce material for awareness-raising and education, and for improving capacity for rapid intervention in case of outbreaks. Where needed, there will be support for upgrading technical regulations.

20. Secondly, improved food safety handling in the tourist industry and related parts of the food industry²⁷ will be pursued through promoting GHP and GMP on the basis of enterprise grading.²⁸ Through Project-supported study visits, information and experiences on the development and application of scorecard-based systems will be collected from PRC, Singapore and Thailand - where audit systems are routinely used for diagnosing food safety handling procedures. Project support will thus be given for: (i) developing a system of upgrading safe food handling by (sector specific) scorecards and grading systems; (ii) awareness-raising in the tourist industry; (iii) conducting training courses for private sector and government staff and inspectors; (iv) providing diagnostic assessments (i.e., pre-audits) of restaurants and hotels and related selected food enterprises and (based on results of those pre-audits) advice given (by private consultants) to enterprises for their food safety handling upgrading; and, (v) auditing enterprises against the scorecards and assigning grades. In addition, a pilot system for promoting safety to street food stalls will be developed and implemented. Once the grading system has been established, services may be provided by private providers. The Project will select such providers through tenders. Suitably qualified private providers will be allowed to obtain licenses as service providers, allowing the system to continue after the end of the Project. The Project will support the drafting of suitable regulations for implementation of the grading system and regarding definition of qualification of providers.²⁹ The system will be first implemented in Vientiane Capital, and then later expanded to Luang Prabang and Pakse.

21. Thirdly, the Project will commission a study on the possibilities for Lao PDR (in the framework of harmonization and cooperation among GMS countries) to use assessments by other GMS countries for first-time market access requests for processed food products. Similar country-specific studies will be conducted in Cambodia and Viet Nam (and possibly also in PRC

²⁵ Responsibility for inspection of the safety of imported fresh plant and animal origin products will be assumed by plant and animal quarantine inspectors on the border. MOH inspectors have responsibilities for processed food and markets.

²⁶ For example, using MS Excel or Access software

²⁷ Such enterprises may supply drinking water, ice, ice cream, noodles, processed meats (e.g., pork meat balls, sausages) or other inputs to food preparations.

²⁸ Coordination with the "Enhancing sustainable tourism, clean production and export capacity in Lao PDR", of the UNOPS/UN Inter Agency Cluster on Trade and Productive Capacity will be maintained, in terms of approaches in food safety grading of restaurants and sequence of activities.

²⁹ This will be done in the context of the Food Safety Management Systems Certification Body of Lao PDR (based on ISO/IEC 17021:2006).

and Thailand),³⁰ followed by regional consultation aimed at adopting a cooperative system for sharing information about first time access assessments. Support will subsequently be given to the possible implementation of such a system within Lao PDR.

22. Lastly, in addition to efforts to control imported food products through improved food safety surveillance and inspection, support will be given for developing and implementing improved and risk-based methods of controlling imported processed food (in line with international and ASEAN recommendations). This will include: (i) preparing risk-profiles for different products (categorized as high, medium, low) for which different control measures (including different rates of inspection) can be designed and implemented; (ii) the design of improved inspection manuals (where possible harmonized with neighboring countries); and (iii) providing risk-based priorities for inspection. In line with the lead by the Department of Customs for the introduction of the ASEAN Single Window, tasks will be identified which in the future can be performed by Customs. This will include checking of expiry dates and compliance with import approvals.

2. Output 2: Improved Regional Cooperation and Harmonization

23. In addition to the participation in regional fora already covered under the other outputs (e.g., SEACFMD, INFOSAN, ARASFF) and specific twinning arrangements, regional cooperation and harmonization in SPS will be further deepened through support for bilateral working groups with PRC, Thailand and Viet Nam in the areas of plant protection, animal health and food safety. For animal health, a bilateral working group with Cambodia will also be established and supported. The Project will support some preparation and participation for Lao PDR participants in the working groups only. Partner countries will cover their own expenses.³¹

3. Output 3: Enhanced Education Levels/University Training of SPS Specialists

24. Under output 2, the Project will upgrade SPS academic education upgrading by improving the quality of teaching at FA-NUOL (with some participation by the University of Health Sciences - UHS). This will cover: (i) curricula development, (ii) improved quality of teachers; and (iii) improved laboratory and teaching facilities.

25. The upgrading of the curriculum will be selective and will focus mainly on plant pests and diseases in GMS (i.e., their impact, taxonomy and identification, epidemiology and pathways of their spread, plant pest and disease control, pesticides, inspection, and the international framework for plant protection - WTO, IPPC), animal diseases in Lao PDR and GMS (likewise, their impact, zoonoses and safety of animal products, diagnosis, epidemiology, treatment and containment, safety of feed, veterinary drugs, inspection, and the international framework for animal disease control - WTO, OIE), and food safety in GMS (i.e., food technology, food safety hazards, food borne diseases, food safety testing and assurance, prevention of food hazards, supply-chain control, inspection, and international frameworks for food safety management -

³⁰ This will be funded by those countries themselves or by regional TA.

³¹ Regional TA funds managed by ADB will link to project activities and be used to support implementation and for: (i) regional studies, (ii) regional consultations, (iii) harmonization proposals; and, (iv) twinning arrangements in the areas of plant pests, TAD control, food safety, import handling, control of pesticides quality, control of veterinary drugs and feed quality, information exchange on food safety handling in the tourist industry, harmonization of market access assessments, incidence and control of forest pests, and the application of risk assessment. The regional TA also aims at bringing SPS expertise from outside the region into the GMS. Activities funded will depend on availability of resources.

WTO, Codex Alimentarius). The Plant Science and Livestock and Fishery Departments both have prepared plans for curricula upgrading, with topics identified and estimates of delivery costs included. These will be reviewed and amended as appropriate to address SPS needs. The upgrading of curricula across the three departments in the Faculty of Agriculture will be planned in the first 12 months, and implemented thereafter on an incremental basis.³² Visiting specialists from Asian institutions (operating in the English language) will provide courses and intensive on-the-job training where deficiencies exist in current staffing. These specialists will also be responsible for producing the teaching materials adapted to the revised curricula. In addition to academic curricula development, support will be given to set up vocational (i.e., non-academic) training courses: (i) for staff in Government and the private sector; and (ii) to involve university staff and students in applied research, surveillance, testing and diagnostics. The increased use of specialists from MAF and MOH in relevant parts of university teaching and applied research will be encouraged for both degree and vocational courses.

26. Improving the quality of teaching staff will focus on: (i) filling gaps in specialization presently available to the faculty; (ii) improving the command of English language (to better access competitive scholarships); and (iii) providing some advanced training (within Asia, but using English language curricula) in specialist short courses and at MSc and PhD levels. Staff from these institutions receiving foreign scholarships will be obligated to work in their institutions upon return for a specified number of years before they can move on to other jobs.³³ Twinning will be pursued as a tool in upgrading staff quality. For FA-NUOL this will involve widening the institutional context beyond the University of Khon Kaen in Thailand, to include relationships with other GMS universities and with suitable overseas institutions within Asia.³⁴

27. The upgrading of teaching facilities will also include the construction of a purpose-built shared core teaching facility including a microbiology laboratory. A separate autopsy room will be provided for veterinary training. This facility will be cost-effective in enabling FA-NUOL to maximize the throughput of students on courses with common academic content. A refurbishment of Department-specific laboratories will be complemented by respective subject specific equipment upgrades (including key texts) to support more specialized teaching in the three departments.

4. Output 4: Project Management And Support

28. Under this Output, the Project will provide management support to the Project Management Unit (PMU) through the provision of international and national experts for technical SPS management and for financial management and procurement. The Component Implementation Units (CIU) will be responsible for compiling initial work plans and budgets from respective departments (DOA, DOLF, FDD, DHP and FA-NUOL), and for day-to-day liaison on operational matters. This output will also support the newly established SPS Enquiry Point at DOP.

³² One reason for adopting this approach (i.e., with an extended planning period and an incremental curricula adoption) is because new curricula will be tailored to fit with the anticipated national education reforms in 2012 (and specifically the reduction time for bachelor's degrees from 5 to 4 years).

³³ Relevant government regulations in this regard will be enforced.

³⁴ Since a parallel education component is included in the Cambodia SPS project, possible synergies in curriculum design and twinning with institutions such as the Royal Agricultural University in Phnom Penh may also be pursued.

III. IMPLEMENTATION PLANS

A. Project Readiness Activities

	2011	2012												
Indicative Activities	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Who Responsible
Advance actions		=====												MAF/PMU
Establish project implementation arrangements		=====												MAF/PMU
ADB Board approval (26-06-2012)							*							SEPF
Loan signing									*					OGC/SEPF/MOF
Government legal opinion provided							=====							MAF/MOF
Government budget inclusion							=====							MAF/MOF
Loan effectiveness												*		SEPF/OGC

MAF = Ministry of Agriculture and Forestry of Lao PDR, MOF = Ministry of Finance of Lao PDR, PMU = Project Management Unit, OGC = Office of the General Council (ADB), SERD = Southeast Asia Department (ADB), SEPF = Public Management, Financial Sector and Trade Division, Southeast Asia Department (ADB).

10

		2012				2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
A. DMF																									
1 Surveillance and inspection programs																									
1.1 Plant health program																									
1.1.1	Renovate laboratories, supply equipment, constrct greenhouse					+	+	+	+																
1.1.2	Design, plan and implement time-bound pest surveys					+			+				+				+				+				
1.1.3	Develop pest information database											+	+												
1.1.4	Finalize pest lists at annual workshops													+				+				+			
1.1.5	Regional scholarship on plant pests					+								+											
1.1.6	Annual bio-safety testing program imported seed, propagation materia					+			+				+				+								
1.1.7	Annual pesticides residues sampling (using rapid test kits)							+	+			+	+			+	+			+	+				
1.1.8	Annual analytic proficiency testing program of pesticides					+				+				+				+				+			
1.1.9	Regional work attachments for pesticides					+			+				+				+					+			
1.1.10	Regional study tour pesticides					+				+								+							
1.1.11	National pesticides management workshop						+									+									
1.1.12	Annual on-site English language proficiency course					+				+				+				+				+			
1.1.13	Passive surveillance forest pests, consultation with GMS partners					+				+				+											
1.1.14	Categorize plant import risks, develop risk-based operating procedures							+				+									+				
1.1.15	Monitor pesticides residues at border points							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.1.16	Report plant health situation to GMS countries/IPPC																			+				+	
1.1.17	Implement corn and rice export promotion programs							+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2 Animal health program																									
1.2.1	Supply laboratory equipment and ICT for NAHC					+	+	+																	
1.2.2	Design, plan and implement annual surveillance programs for TAD					+				+				+				+				+			
1.2.3	Manage annual disease response program					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.4	TAD awareness campaign					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.5	Develop TAD information database					+																			
1.2.6	Conduct annual domestic study tours on TAD					+				+				+				+				+			
1.2.7	Formulation testing of veterinary drugs					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.8	Training veterinary drugs					+		+		+		+													
1.2.9	Study tour in region veterinary drugs					+																			
1.2.10	Conduct annual domestic study tour on veterinary drugs						+			+					+				+				+		
1.2.11	Upgrade AFU feed testing equipment					+	+																		
1.2.12	Annual pesticide and heavy metal surveillance of animal feeds						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.13	Train AFU staff in testing					+																			
1.2.14	Develop and manage database for animal feeds information					+				+				+				+				+			
1.2.15	Animal feeds awareness campaign and materials						+		+		+		+												
1.2.16	Conduct regional study tour					+																			
1.2.17	Conduct annual domestic study tour on animal feeds						+			+					+				+				+		
1.2.18	Update technical regulations for control of animal food safety							+																	
1.2.19	Upgrade laboratory and ICT equipment					+	+																		
1.2.20	Produce meat inspection manual and conduct staff training					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.21	Expanded annual surveillance program					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.2.22	Develop and manage database forinformation safety animal food					+	+			+					+				+				+		
1.2.23	Develop animal food safety awareness campaign and materials					+				+				+				+				+			
1.2.24	Train epidemiology and provincial staff to conduct risk assessment					+		+		+		+		+											
1.2.25	Categorize animal product import risks, develop risk-based procedures					+		+		+		+		+		+									
1.2.26	Fully report animal health situation to GMS countries, and OIE																				+				
1.2.27	Supply equipment for NAHC laboratory migration					+	+																		

		2012				2013				2014				2015				2016				2017			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.3 Food safety program																									
1.3.1	Upgrade testing facilities (lab equipment, mobile unit, ICT)			+		+	+																		
1.3.2	Annual surveillance programs for safety of food and food-borne diseases					+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.3.3	Establish and implement food safety database					+				+				+				+				+			
1.3.4	Conduct annual domestic workshops (5)					+				+				+				+				+			
1.3.5	Develop food safety awareness campaign and materials									+				+				+				+			
1.3.6	Scholarships food safety					+								+											
1.3.7	Training food inspectors								+	+			+				+								
1.3.8	Tourist enterprise pilot audit and grading system development					+	+	+	+	+															
1.3.9	Application grading system to tourist and food enterprise establishments								+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
1.3.10	First-time import access study for food products, explore harmonization										+	+	+												
1.3.11	Study tour in region import risk assessment										+														
1.3.12	Categorize imported food risks, develop risk-based inspection methods					+		+			+				+				+						
1.3.13	Consensus and training workshops risk-based import handling							+			+				+				+						
2 Enhanced education levels/training of SPS specialists																									
2.1	Design improved academic curricula and teaching materials					+	+	+		+	+			+	+			+	+			+			
2.2	FA-NUOL participants attend short courses								+				+						+						
2.3	Postgraduate scholarships/PhD awarded to FA-NUOL staff/students						+		+		+	+		+		+		+		+		+			
2.4	Provide on-site (i.e., at FA-NUOL) English language training					+			+			+			+					+					
2.5	Construct shared core laboratory and teaching facility									+	+	+	+												
2.6	Upgrade departmental laboratory and teaching equipment					+	+	+	+																
2.7	Upgrade faculty transport (bus, van, pickup) provisions			+			+																		
3 GMS and ASEAN regional cooperation																									
3.1	Bilateral working groups China, Thailand and Viet Nam - plant health			+			+		+		+	+		+	+		+	+	+	+		+			
3.2	Bilateral working groups Camb, China, Thail, Viet Nam - animal health			+			+		+		+	+		+	+		+	+	+	+		+			
3.3	Bilateral working groups China, Thailand and Viet Nam - food safety			+			+		+		+	+		+	+		+	+	+	+		+			
4 Implementation – project management and monitoring																									
4.1	Set-up project management unit in MAF/DOP		+	+																					
4.2	Set up Component Implementation Units DOA, DOLF, FDD, FA-NUOL		+	+																					
4.3	FM and Procurement Manual, Monitoring and Evaluation framework		+	+	+																				

			2012				2013				2014				2015				2016				2017			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
B. Management Activities																										
	5	Procurement plan key activities to procure contract packages																								
		Preparation packages	+	+																						
		Advertisement	+	+																						
		Contracting				+	+																			
	6	Consultant selection procedures																								
		Preparation packages	+	+																						
		Advertisement	+	+																						
		Contracting				+	+																			
	7	Capacity building																								
		Training ADB/GOL procedures	+	+	+				+																	
		Training procurement	+	+	+				+																	
		Training finance and administration				+			+																	
		Training M&E				+			+							+										
	8	Communication strategy key activities																								
		Inception workshop				+									+				+				+			
		Annual stakeholder workshop					+		+		+		+	+	+			+	+	+	+	+	+			
		Awareness and consultative workshops				+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
	9	Annual/Mid-term review																								
		Annual review					+				+				+				+				+			
		Mid-term review											+													
		Project completion report (31 December 2017)																								+

C. Technical Considerations

1. Project Technical Framework

29. Overall, the Project will enhance institutional capacity to address SPS management issues by strengthening surveillance and inspection systems, improving educational standards, and promoting regional cooperation. The core technical areas of investment cover plant health, animal health and food safety. This, together with regional cooperation and academic education activities (plus project management), provide the rationale for an implementation structure of five components, namely: (i) Plant Health; (ii) Animal Health; (iii) Food Safety; (iv) Academic Education, and (v) Project Management. In terms of the logic of Project design, the first three components contribute to outputs 1 and 2 (i.e., 'Strengthened Surveillance and Inspection Programs' and 'Improved Regional Cooperation and Harmonization'), while the remaining two components relate directly to the respective outputs of 'Enhanced Education Levels/University Training of SPS Specialists' and 'Project Management'.

30. A key feature of the design of the Project is the scope of activities related to SPS with which these individual components engage, and the inclusivity and range of institutions that the Project supports. Although executed by MAF (and involving three Departments therein), the Project also involves both MOH (with two Departments and the University Of Health Sciences) and MOE (via FA-NUOL). In this context, a particular feature of Project technical design has been to center the components (and some sub-components) very firmly on particular individual institutions; thus, plant health is the responsibility of the Department of Agriculture, animal health is the responsibility of the Department of Livestock and Fisheries, and the implementation of the food safety component will be led by the Food and Drugs Department of MOH, and education will be implemented via the Faculty of Agriculture at NUOL. Despite this institutional breadth, across each component, the proposed technical interventions are broadly similar, in that they focus on strengthening surveillance and inspection systems and upgrading human resources, and involve the provision of a range of technical assistance, training and scholarships, and hardware to achieve this purpose.

2. Component Design Features

31. The technical composition of the Project support derived initially from the GMS SPS Action Plan, but it has been developed from wider design considerations including; (i) the need to define quantitative targets for proposed activities (e.g., numbers of surveys to be conducted, numbers of samples to be tested, numbers of scholarships to be awarded etc); (ii) awareness of the recurrent/operational costs implications of enhanced systems' capacity building (i.e., such that the extent of necessary funding – from government and/or other sources – is made quite clear to policy-makers); and, (iii) the subregional context of proposed interventions (such that possibilities for bilateral and subregional engagement and support have been explored – for example regarding possibilities for cost recovery - that appropriate academic and other linkages are fostered).

32. Among the major technical design parameters have therefore been the following:

- (i) a recognition that most plant, animal and food safety surveillance systems in Lao PDR are starting from a very low informational and human capacity base, and that enhancing SPS capacity should take a very pragmatic and practical approach

- (ii) technical design emphases should be on simple and cost-effective approaches – e.g., as applied to the use of rapid test kits, the construction of shared laboratory physical facilities
- (iii) an emphasis on strengthening university teaching (as opposed to research) capacity – in order to increase national human resource capacity in SPS as quickly as possible, and
- (iv) an emphasis on supporting selective regional academic engagement with an English language orientation (to support on-going post-graduate university level access to international standard education through existing scholarship arrangements).

3. Improving Surveillance and Inspection Programs

33. A major part of Project activity concerns the introduction and improvement in surveillance systems for plant health, animal health and food safety. Several points are especially relevant here as regards design considerations. Firstly is the fact that the proposed programs each begin at a pilot level, so that methods (e.g., using rapid tests kits of various sorts) for sampling, inspection can be refined before being up-scaled.

34. Secondly is the fact that improving these systems – which start from such a low base at present - involves a range of activity types being undertaken, i.e., some regulatory review and updating, procedural development, staff training, and the provision of hardware. These activities have to be combined in annual cycles of planning, implementation and review that encompass policy and implementation units.

35. Thirdly are the recurrent cost implications of improving such surveillance systems; unlike in many projects, the annual costs of test kits, of laboratory consumables (e.g., chemicals, glassware etc), sample collection and inspection visits are a relatively high proportion of project costs, and – in the absence of limited possibilities for cost recovery from fees and charges - the sustainability of such systems depends ultimately on government commitment to their maintenance from public revenues.

4. Subregional Characteristics

36. Although not a subregional investment *per se*, the Project is one of three similar interventions in CLV, and its overall intended impact includes increases in GMS AFF trade. A design focus for Lao PDR has thus been to improve what is currently a weak link in regional SPS performance, on the basis that (in regional public good terms) this aggregator technology will be of benefit to the GMS as a whole. The encouragement of crop products' cross-border supply chains to meet emerging subregional SPS standards specifically helps to make trade more formal, predictable, sustainable and valuable. The reduction in domestic TAD incidence will have impacts in neighboring countries because of large-scale informal trade practices.

37. One specific mechanism by which Lao PDR SPS performance can be raised to that of some of its neighbors is via greater bilateral cooperation, regional engagement with SPS fora, technical dialog and support, educational institutions etc – and accordingly the Project technical design extensively supports such interactions and has a component structure and activity scope which is very similar to that of the other countries (i.e., Cambodia and Viet Nam).

II. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Participants – Roles and Responsibilities

Project Participant	Project Management Roles and Responsibilities
Project Steering Committee (PSC)	<ul style="list-style-type: none"> ▪ The PSC is chaired by Vice Minister of MAF. The members include: senior representatives from the Ministries of Finance (MOF), Planning and Investment (MPI), Industry and Commerce (MOIC), GMS Secretariat and the Lao National Chambers of Commerce; and the following ex officio members: Director General DOP (MAF), Director General DOA (MAF), Director General DOLF (MAF), Director General FDD (MOH), and Dean FA-NUOL. ▪ Provides policy guidance to the PMU and the CIUs. ▪ Approves annual plans. ▪ Resolves major policy issues. ▪ Meets twice a year.
Ministry of Finance (MOF)	<ul style="list-style-type: none"> ▪ Signs legal agreement, including its amendments, with ADB. ▪ Reviews, endorses and signs the withdrawal application requests. ▪ Processes and submits to ADB each request for reallocation of proceeds. ▪ Sets up and manages the project pass-through account, which feeds to the project imprest account.
GMS National Secretariat	<ul style="list-style-type: none"> ▪ Reports to GMS bodies as required. ▪ Appoints representative in the PSC.
Ministry of Agriculture and Forestry (MAF)	<ul style="list-style-type: none"> ▪ Assumes overall responsibility for project implementation. ▪ Reviews the project implementation progress. ▪ Reviews and endorses any proposed change in the project scope. ▪ Submits to ADB the withdrawal application signed by MOF.
Ministry of Health (MOH)	<ul style="list-style-type: none"> ▪ Assigns FDD to lead and coordinate the food safety component ▪ Assigns Department of Hygiene and Prevention and the Faculty of Pharmacy (University of Health Sciences), to participate in project implementation.
PMU	<ul style="list-style-type: none"> ▪ Shall be located in DOP of MAF. ▪ Coordinates the implementation of the Project, including the work of the CIUs and acts as focal point for communication with ADB and other agencies. ▪ Organizes timely provision of agreed counterpart funds for project activities. ▪ Provides public disclosure of project information. ▪ Carries out consultant recruitment and procurement activities for the approved expenditure plans. ▪ Sets up and maintains a strong project financial management system. ▪ Makes timely submission to MOF of applications for direct payment, and for advance, replenishment, and liquidation of the imprest account. ▪ Facilitates timely financial audits and takes recommended actions. ▪ Complies with the covenants of the legal agreement. ▪ Takes steps to ensure sustainability of project outputs in the post-implementation phase and ensures ADB is informed of assessed development impacts. ▪ Monitors and evaluates project activities and outputs, with periodic reviews, and identifies and reports issues and required action plans. ▪ Prepares regular quarterly progress reports and project completion report for timely submission to ADB.

Plant Health CIU	<ul style="list-style-type: none"> ▪ Shall be located in DOA of MAF. ▪ Manages the implementation of the plant health activities ▪ Prepares annual, semi-annual and if needed other periodic expenditure plans. ▪ Follows administrative guidelines established for the project. ▪ Contributes to the contents of TORs, bidding documents, and contracts. ▪ Implements the relevant project activities. ▪ Conducts the monitoring of component activities, and provides data to the PMU for periodic monitoring and evaluation reports.
Animal Health CIU	<ul style="list-style-type: none"> ▪ Shall be located in DOLF of MAF. ▪ Manages the implementation of the animal health activities ▪ Other responsibilities similar to Plant Health CIU.
Food Safety CIU	<ul style="list-style-type: none"> ▪ Shall be located in FDD of MOH. ▪ Manages the implementation of the food safety activities ▪ Other responsibilities similar to Plant Health CIU.
Education CIU	<ul style="list-style-type: none"> ▪ Shall be located in FA of NUOL. ▪ Manages the implementation of the education output. ▪ Other responsibilities similar to Plant Health CIU.
Project Technical Advisory Committee (PTAC)	<ul style="list-style-type: none"> ▪ The PTAC is chaired by the Deputy Director General DOP (MAF); the members are: Deputy Director General DOA (MAF); Deputy Director General DOLF (MAF); Deputy Director General FDD (MOH); and, Vice Dean FA-NUOL. ▪ Provides management guidance to the PMU and CIUs. ▪ Reviews draft annual plans for submission to the PSC. ▪ Ensures coordination and alignment of planning and administrative procedures between PMU and CIU.
ADB	<ul style="list-style-type: none"> ▪ Assists DOP and the PMU through timely guidance at each stage of project implementation following agreed implementation arrangements. ▪ Reviews all documents that require ADB approval. ▪ Conducts semi-annual review missions, a mid-term review and a completion mission for the project. ▪ Ensures the compliance of the Government of all legal agreement covenants. ▪ Timely processing of withdrawal applications and release of eligible funds. ▪ Ensures compliance of financial audit recommendations. ▪ With assistance of PMU, regularly updates the project performance review reports. ▪ Regularly updates project information disclosure on the ADB website.

B. Key Persons Involved in Implementation

Executing Agency MAF	Mr. Xaypladeth Choulamany Director General, Department of Planning Telephone: 02055518246 Email address: xaypladeth@yahoo.com Dr. Somphanh Changphengxay Deputy Director General, Department of Planning Tel: 02055685248 Email address: somphana2003@yahoo.com
Implementing Agencies Department of Agriculture (MAF)	Dr. Monthathip Chanphengxay

Department of Livestock and Fisheries (MAF)	Director General Department of Agriculture Telephone: 021412350 Email address: Monthathip_c@yahoo.com
Food & Drugs Department (MOH)	Dr. Bounkhouang Khambounheuang Director General Department of Livestock and Fisheries Telephone: 0202225377 email: lao_dlsmas@yahoo.com
Faculty of Agriculture (National University of Laos, MOE)	Dr Somthavy Changvisommid Director General Food and Drugs Department (MOH) Telephone: 021951096 Email address: drug@laotel.com
Asst. Prof. Dr. Oudom Phone Khampheng Dean Faculty of Agriculture Telephone: 021870048 email address: oudomp@yahoo.com	
ADB Division Director	Staff Name: Shigeko Hattori Position: Director SEPF Telephone No.+632 6326455 Email address: shattori@adb.org
Mission Leader	Staff Name: Lingling Ding Position: Principal trade specialist, SEPF Telephone No. +632 6831792 Email address dingl@adb.org

C. Project Organization Structure

38. MAF, through its Department of Planning (DOP) will be the Executing Agency for the Project. DOP will establish a Project Management Unit (PMU) that will be responsible for Project coordination and management, including financial management of Project accounts, procurement of goods and works, recruitment of consultants, and monitoring and reporting. The PMU will be staffed by a national Project Coordinator, a deputy Project Coordinator, a Finance Officer, an Administrative Officer, a Procurement Officer, an M&E officer and 2 Project Assistants.

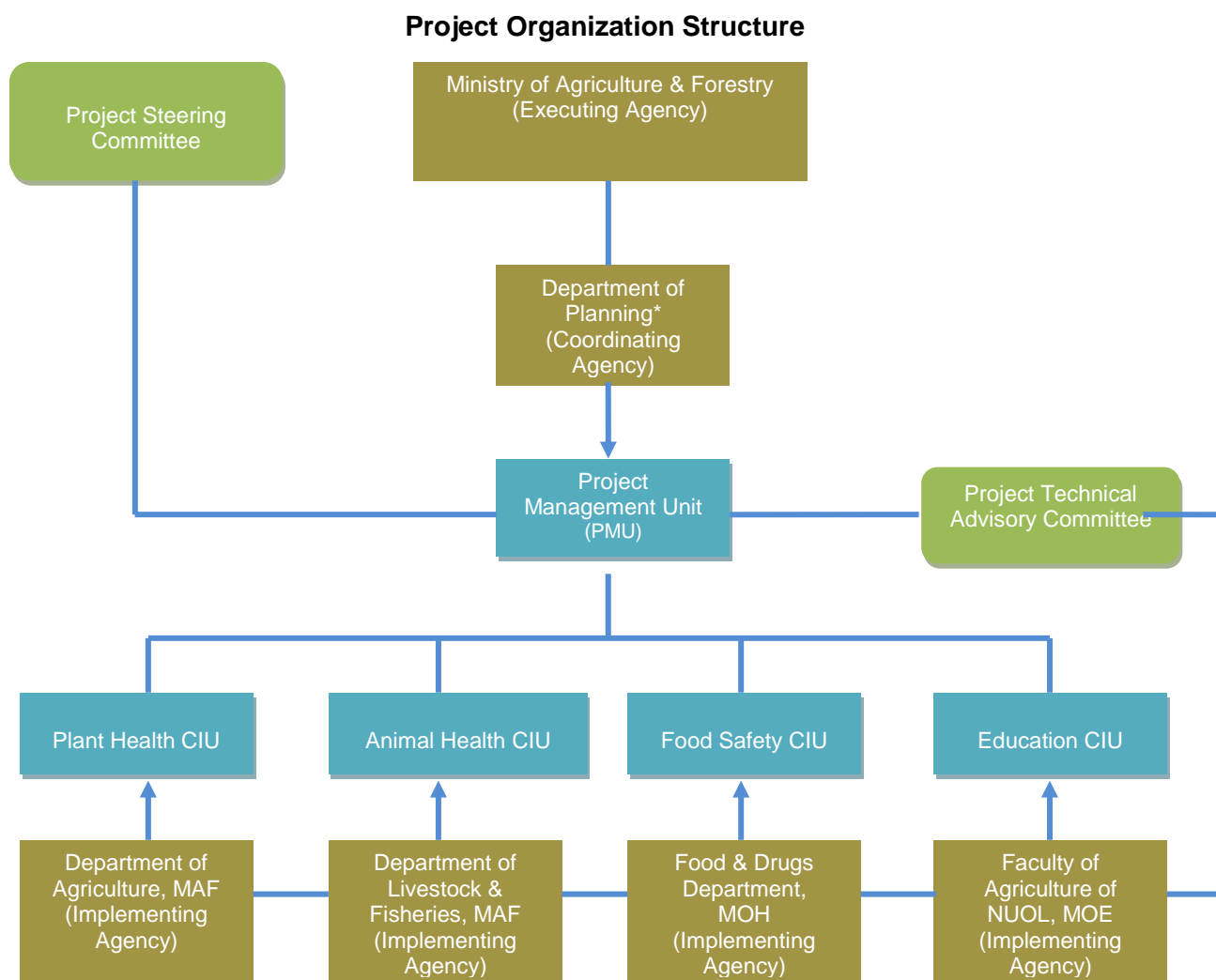
39. Department of Agriculture (DOA), Department of Livestock and Fisheries (DOLF), Food and Drugs Department (FDD) of MOH, and the Faculty of Agriculture at National University of Laos (FA-NUOL) of Ministry of Education (MOE) will be the Implementing Agencies (IAs) for the Project. A Component Implementation Unit (CIU) will be established in each IA. Each CIU will be staffed by a Component Manager (CM) and Component Officer (CO) with guidance and oversight provided by respective Deputy Directors General (i.e., of DOA, DOLF, FDD, and Vice-Dean FA-NUOL). CIUs will be responsible for planning and reporting on day-to-day implementation of components, and for forwarding documentation to PMU for financial planning and procurement. The DDGs and Vice Dean will constitute a Project Technical Advisory Committee (PTAC), which will be chaired by DDG, DOP, to advise the PMU on implementation issues. PTAC will meet 4 times a year, or as required. The table below provides an outline of the roles and responsibilities of the key staff of the PMU and CIU.

40. To ensure inter-agency cooperation and policy guidance, a Project Steering Committee (PSC) will be established. The PSC will be chaired by a Vice Minister of MAF and will include representation from: (i) the Ministry of Finance (MOF); (ii) the Ministry of Planning and Investment (MPI); (iii) the Ministry of Industry and Commerce (MOIC); (iv) Director General DOP; (v) Director General DOA; (vi) Director General DOLF; (vii) Director General FDD; and, Dean FA-NUOL. The PSC will meet twice annually or as required to review overall implementation progress, endorse annual work-plans and budgets. The Vice Minister may delegate the chairmanship to his representative from MAF. The PMU will provide secretariat services to the PSC.

Project PMU and CIU Key Staff

Position	Scope of Work
Project Coordinator (Coordinating Director) (60 pm)	<ul style="list-style-type: none"> Manages the implementation of the Project. Supervises all contracts, including the team of international and domestic consultants. Provides overall guidance and advice on the Project's SPS capacity building activities. Directs and manages the PMU. Oversees bid evaluation and approvals, and contract management and administration. Liaises with agencies involved in Project implementation on high level coordination issues. Reports on all Project activities to the PSC. Communicates with ADB and GOL on Project implementation. Reviews and monitors implementation progress. Oversees training of PMU staff. Acts as Secretary to the PSC.
Deputy Project Coordinator Finance and Administration (Deputy Coordinating Director) (60 pm)	<ul style="list-style-type: none"> Assists the Project Coordinator (Coordinating Director) in the oversight of all finance, accounting, procurement and management activities. Manages PMU and PMU consultants' day-to-day activities. Liaises with implementing agencies on daily coordination issues. Prepares progress, monitoring and evaluation reports. Reports on Project activities to the Project Coordinator (Coordinating Director).
Component manager (60 pm)	<ul style="list-style-type: none"> Manages implementation of the Project component. For Project administration matters reports to Project Coordinator (director) and DG (or DDG as decided). Leads work for annual, six-monthly and other periodic plans (as required) for the CIU, in close cooperation with the PMU. Prepares release of funds from component project account for payments of costs of activities in approved plans. Ensures financial reporting by the parent department accounting staff and that records of payments are kept. Participates together with Departmental specialists in preparation of TORs, tender documents, selection of consultants and evaluation of biddings. Leads work for monitoring and evaluation. Assists staff charged with the implementation of project activities with organization of workshops and logistics. Coordinates the use of Project component vehicles. Manages CIU and oversees consultants' activities.

41. The Project Organization Structure is shown below:



* MAF through its Department of Planning will assume the role of EA

CIU=component implementation unit; MAF=Ministry of Agriculture and Forestry; MOE=Ministry of Education; MOH=Ministry of Health; NUOL=National University of Laos

III. COSTS AND FINANCING

42. The total Project cost is estimated at \$14.456 million. The Government has requested a grant not exceeding \$11m and a loan not exceeding [SDR1.942 million] from ADB's Special Funds resources to help finance the Project. ADB funds will be directed at modest amounts of civil works, equipment, and laboratory systems support, training (capacity building of various government agency staff), awareness-raising, workshops and meetings including travel and per diem for project related training and field work, and consulting and services provision. ADB will finance slightly under 97 percent of the total project cost, and the Government will finance just over 3 percent of the total project cost. No Government staff salaries will be paid. Interest during implementation will be capitalized.

43. The Government will finance the equivalent of \$0.456 million for counterpart staff, office space other in kind contribution, and taxes and duties.

44. ADB will finance taxes and duties of \$0.59 million from loan and grant. Total taxes and duties are under 5% of total Project costs, and are justified because (i) this will not represent an excessive share of the Project investment plan; (ii) taxes and duties apply only with respect to ADB-financed expenditures; and (iii) financing of the taxes and duties is material and relevant to the success of the project. ADB will finance the recurrent costs to ensure smooth Project implementation and promote longer-term capacity development. Transport and insurance cost will be financed by the loan/grant proceeds.

A. Detailed Cost Estimates by Expenditure Category

	(KIP Million)			(US\$ '000)			% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total	
I. Investment Costs							
A. Civil Works							
1. Building/Renovation (Teaching Facility/Office)	1,559.7	3,214.6	4,774.3	194.4	400.6	595.0	4
2. Greenhouse, Laboratory repair/upgrade	84.5	498.4	582.9	10.5	62.1	72.6	1
Subtotal	1,644.2	3,713.1	5,357.2	204.9	462.7	667.6	5
B. Equipment							
1. Vehicle	1,386.7	3,241.0	4,627.7	172.8	403.9	576.7	4
2. Other Equipment							
Office Equipment & Furniture	147.0	353.1	500.1	18.3	44.0	62.3	-
Laboratory/ Greenhouse Equipment	924.6	8,349.2	9,273.8	115.2	1,040.5	1,155.8	9
ICT (Laptop/Projector, etc.)	26.0	233.9	259.9	3.2	29.2	32.4	-
Subtotal	1,097.7	8,936.2	10,033.8	136.8	1,113.7	1,250.5	9
Subtotal	2,484.4	12,177.1	14,661.5	309.6	1,517.6	1,827.2	13
C. Consulting Services							
1. International Consultants	8,401.1	33,417.0	41,818.1	1,047.0	4,164.6	5,211.6	38
2. Local Consultants	4,503.2	-	4,503.2	561.2	-	561.2	4
Subtotal	12,904.3	33,417.0	46,321.3	1,608.2	4,164.6	5,772.8	43
D. Training, Awareness Campaigns, Workshops & Meetings							
1. Training Courses & Scholarships	1,477.7	7,663.3	9,141.0	184.2	955.0	1,139.2	8
2. Study Tours	35.3	562.1	597.4	4.4	70.0	74.4	1
3. Regional/Bilateral Coordination Meetings	431.8	803.1	1,234.9	53.8	100.1	153.9	1
4. Awareness Campaigns, Workshops, Documentation/Materials	1,533.5	1,679.4	3,212.8	191.1	209.3	400.4	3
Subtotal	3,478.2	10,707.8	14,186.1	433.5	1,334.5	1,768.0	13
E. Laboratory Systems' Support							
1. Testing, Surveillance, Other Services	1,133.7	3,647.6	4,781.3	141.3	454.6	595.9	4
2. Small Laboratory Goods	288.9	2,599.8	2,888.6	36.0	324.0	360.0	3
3. Data Management	80.7	275.5	356.2	10.1	34.3	44.4	-
Subtotal	1,503.2	6,522.9	8,026.1	187.3	812.9	1,000.3	7
F. Support Staff	2,906.0	-	2,906.0	362.2	-	362.2	3
Total Investment Costs	24,920.2	66,538.0	91,458.2	3,105.7	8,292.4	11,398.1	84

	(KIP Million)			(US\$ '000)			% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total	
II. Recurrent Costs							
A. Consumable Goods & Services	1,832.3	10,732.6	12,564.9	228.4	1,337.6	1,565.9	12
B. Maintenance and Operating Expenses	2,188.4	2,739.6	4,928.0	272.7	341.4	614.2	5
Total Recurrent Costs	4,020.7	13,472.2	17,493.0	501.1	1,679.0	2,180.1	16
Total Base Costs	28,940.9	80,010.2	108,951.1	3,606.8	9,971.4	13,578.2	100.0
III. Contingencies							
Physical Contingencies	412.2	1,594.2	2,006.4	51.4	198.7	250.1	2
Price Contingencies	6,333.8	-2,065.2	4,268.6	789.4	-257.4	532.0	4
Subtotal	35,687.0	79,539.1	115,226.1	4,447.5	9,912.7	14,360.2	106
IV. Interest During Implementation	-	769.0	769.0	-	95.8	95.8	1
Total Project Costs	35,687.0	80,308.1	115,995.1	4,447.5	10,008.5	14,456.0	106

B. Allocation and Withdrawal of Grant and Loan Proceeds

B1. Allocation and Withdrawal of Grant Proceeds				
CATEGORY			ADB FINANCING BASIS	
a		Amount Allocated for ADB Financing *		Percentage and Basis for Withdrawal from Grant Account
No.	Item	Category	Sub-category	
1	Equipment	1,827,200		
1A	Vehicles		576,700	100% of total expenditures claimed
1B	Laboratory and Other Equipment		1,250,500	100% of total expenditures claimed
2	Consulting Services	5,772,800		100% of total expenditures claimed
3	Laboratory systems support	687,100		
3A	Testing, surveillance and other services		595,900	100% of total expenditures claimed
3B	Small laboratory goods		46,800	13% of total expenditures claimed
3C	Data management		44,400	100% of total expenditures claimed
4	Recurrent costs	2,180,100		100% of total expenditures claimed
5	Unallocated	532,800		
	Total	11,000,000		

B2. Allocation and Withdrawal of Loan Proceeds				
CATEGORY			ADB FINANCING BASIS	
a		Amount Allocated for ADB Financing *		Percentage and Basis for Withdrawal from Loan Account
No.	Item	Category	Sub-category	
1	Civil Works	432,000		100% of total expenditures claimed
2	Training, awareness, workshops and meetings**	1,144,000		100% of total expenditures claimed
3	Small laboratory goods	203,00		87% of total expenditure claimed
4	Interest during implementation	62,000		100% of total amount due
5	Unallocated	101,000		
	Total	1,942,000		

* ADB loan and grant may finance transportation and insurance.

** Cost for study tours will be incurred in ADB member countries

C. Detailed Cost Estimates by Financier (\$000)

	The Government**		ADB GRANT		ADB LOAN		Total
	Amount	%	Amount	%	Amount	%	AMOUNT
I. Investment Costs*							
A. Civil Works							
1. Building/Renovation (Teaching Facility/Office)					595.0	100.0%	595.0
2. Greenhouse, Laboratory repair/upgrade					72.6	100.0%	72.6
Subtotal					667.6	100.0%	667.6
B. Equipment							
1. Vehicle			576.7	100.0%			576.7
2. Other Equipment							
Office Equipment & Furniture			62.3	100.0%			62.3
Laboratory/ Greenhouse Equipment			1,155.8	100.0%			1,155.8
ICT (Laptop/Projector, etc.)			32.4	100.0%			32.4
Subtotal			1,250.5	100.0%			1,250.5
Subtotal			1,827.2	100.0%			1,827.2
C. Consulting Services							
1. International Consultants			5,211.6	100.0%			5,211.6
2. Local Consultants			561.2	100.0%			561.2
Subtotal			5,772.8	100.0%			5,772.8
D. Training, Awareness Campaigns, Workshops & Meetings							
1. Training Courses & Scholarships					1,139.2	100.0%	1,139.2
2. Study Tours					74.4	100.0%	74.4
3. Regional/Bilateral Coordination Meetings					153.9	100.0%	153.9
4. Awareness Campaigns, Workshops, Documentation/Materials					400.4	100.0%	400.4
Subtotal					1,768.0	100.0%	1,768.0
E. Laboratory Systems' Support							
1. Testing, Surveillance, Other Services			595.9	100.0%			595.9
2. Small Laboratory Goods			46.8	13.0%	313.2	87.0%	360.0
3. Data Management			44.4	100.0%			44.4
Subtotal			687.1	68.7%	313.2	31.3%	1,000.3
F. Support Staff	362.2	100.0%					362.2
Total Investment Costs	362.2	3.2%	8,287.1	72.7%	2,748.8	24.1%	11,398.1
II. Recurrent Costs							
A. Consumable Goods & Services			1,565.9	100.0%			1,565.9
B. Maintenance and Operating Expenses			614.2	100.0%			614.2
Total Recurrent Costs			2,180.1	100.0%			2,180.1
Total Base Costs	362.2		10467.2		2748.8		13578.2
III. Contingencies							
Physical Contingencies			188.6	75.4%	61.5	24.6%	250.1
Price Contingencies	93.9	17.7%	344.2	64.7%	93.9	17.6%	532.0
Subtotal	93.9	12.0%	532.8	68.1%	155.4	19.9%	782.0
Interest During Implementation					95.8	100.0%	95.8
TOTAL PROJECT COSTS	456.1	3.2%	11000.0	76.1%	3000.0	20.8%	14,456.0

notes:

* including taxes and duties of \$0.62 million to be financed by Govt and ADB financial resources

** Government contribution is in kind

D. Detailed Cost Estimates by Outputs/Components

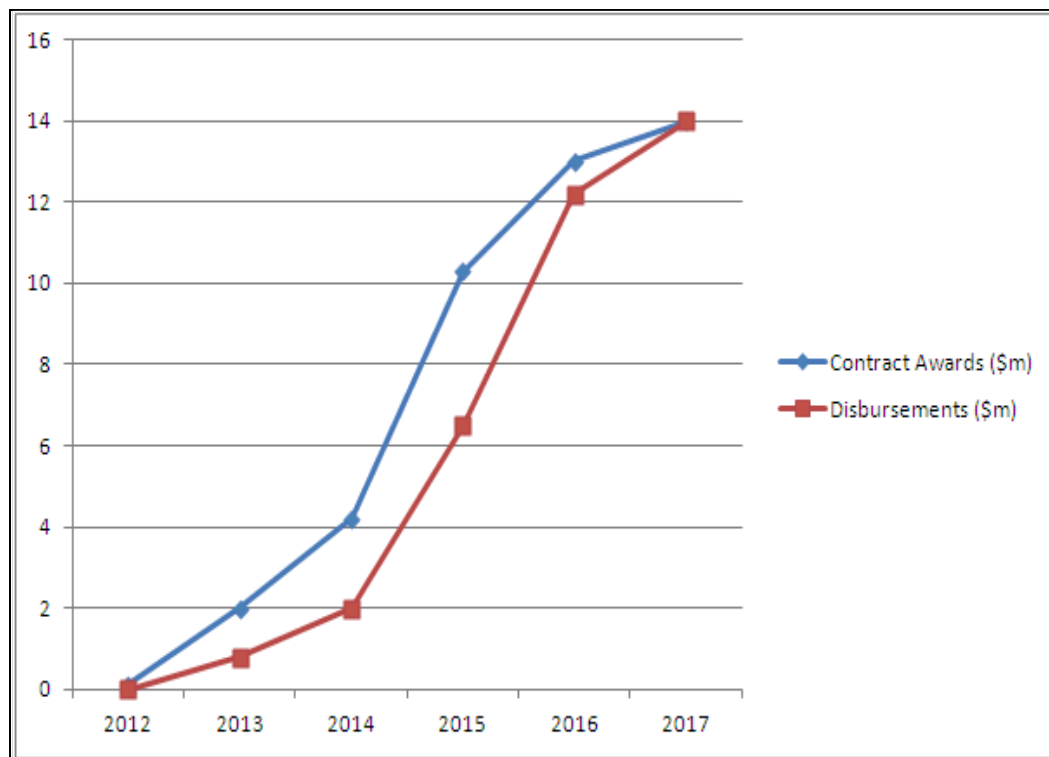
	Total	Plant Health	% of Cost Category	Animal Health	% of Cost Category	Food Safety	% of Cost Category	Academic Education	% of Cost Category	Project Mgt	% of Cost Category
I. Investment Costs											
A. Civil Works											
1. Building/Renovation (Teaching Facility/Office)	595.0	-	0.0%	-	0.0%	-	0.0%	500.0	84.0%	95.0	16.0%
2. Greenhouse, Laboratory repair/upgrade	72.6	72.6	100.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Subtotal	667.6	72.6	10.9%	-	0.0%	-	0.0%	500.0	74.9%	95.0	14.2%
B. Equipment											
1. Vehicle	576.7	94.2	16.3%	219.6	38.1%	95.5	16.6%	136.1	23.6%	31.4	5.4%
2. Other Equipment											
Office Equipment & Furniture	62.3	-	0.0%	-	0.0%	-	0.0%	-	0.0%	62.3	100.0%
Laboratory/ Greenhouse Equipment	1,155.8	338.6	29.3%	332.9	28.8%	66.6	5.8%	417.6	36.1%	-	0.0%
ICT (Laptop/Projector, etc.)	32.4	-	0.0%	8.0	24.7%	16.8	51.9%	-	0.0%	7.6	23.4%
Subtotal	1,250.5	338.6	27.1%	340.9	27.3%	83.4	6.7%	417.6	33.4%	69.9	5.6%
Subtotal	1,827.2	432.9	23.7%	560.4	30.7%	178.9	9.8%	553.7	30.3%	101.3	5.5%
C. Consulting Services											
1. International Consultants	5,211.6	974.4	18.7%	1,077.9	20.7%	1,409.6	27.0%	410.3	7.9%	1,339.5	25.7%
2. Local Consultants	561.2	132.1	23.5%	9.0	1.6%	180.1	32.1%	-	0.0%	240.1	42.8%
Subtotal	5,772.8	1,106.5	19.2%	1,086.9	18.8%	1,589.7	27.5%	410.3	7.1%	1,579.6	27.4%
D. Training, Awareness Campaigns, Workshops & Mtgs											
1. Training Courses & Scholarships	1,139.2	239.5	21.0%	308.0	27.0%	144.4	12.7%	421.1	37.0%	26.2	2.3%
2. Study Tours	74.4	20.9	28.1%	34.0	45.7%	19.5	26.2%	-	0.0%	-	0.0%
3. Regional/Bilateral Coordination Meetings	153.9	-	0.0%	60.1	39.0%	69.0	44.8%	-	0.0%	24.8	16.1%
4. Awareness Campaigns, Workshops, Document'n/Mtgs	400.4	276.5	69.1%	64.2	16.0%	28.5	7.1%	-	0.0%	31.2	7.8%
Subtotal	1,768.0	536.9	30.4%	466.3	26.4%	261.4	14.8%	421.1	23.8%	82.2	4.7%
E. Laboratory Systems' Support											
1. Testing, Surveillance, Other Services	595.9	160.2	26.9%	434.7	72.9%	1.0	0.2%	-	0.0%	-	0.0%
2. Small Laboratory Goods	360.0	234.0	65.0%	-	0.0%	126.0	35.0%	-	0.0%	-	0.0%
3. Data Management	44.4	39.7	89.4%	4.4	9.9%	-	0.0%	-	0.0%	0.3	0.7%
Subtotal	1,000.3	433.9	43.4%	439.1	43.9%	127.0	12.7%	-	0.0%	0.3	0.0%
F. Support Staff	362.2	-	0.0%	-	0.0%	-	0.0%	-	0.0%	362.2	100.0%
Total Investment Costs	11,398.1	2,582.8	22.7%	2,552.7	22.4%	2,156.9	18.9%	1,885.1	16.5%	2,220.6	19.5%
II. Recurrent Costs											
A. Consumable Goods & Services	1,565.9	496.1	31.7%	643.8	41.1%	263.0	16.8%	163.1	10.4%	-	0.0%
B. Maintenance and Operating Expenses	614.2	46.5	7.6%	207.5	33.8%	58.5	9.5%	147.3	24.0%	154.4	25.1%
Total Recurrent Costs	2,180.1	542.6	24.9%	851.3	39.0%	321.5	14.7%	310.4	14.2%	154.4	7.1%
Total Base Costs	13,578.2	3,125.3	23.0%	3,404.0	25.1%	2,478.4	18.3%	2,195.5	16.2%	2,375.0	17.5%
III. Contingencies											
Physical Contingencies	250.1	21.8	8.7%	91.9	36.8%	42.6	17.0%	70.9	28.3%	22.9	9.1%
Price Contingencies	532.0	41.1	7.7%	-20.0	-3.8%	243.4	45.7%	60.1	11.3%	207.3	39.0%
Subtotal contingencies	782.0	62.9	8.0%	72.0	9.2%	285.9	36.6%	131.0	16.7%	230.2	29.4%
IV. Interest During Implementation	95.8	21.1	22.0%	23.0	24.0%	18.2	19.0%	15.3	16.0%	17.2	18.0%
Total PROJECT COSTS	14,456.0	3,209.3	22.2%	3,498.9	24.2%	2,782.6	19.2%	2,341.8	16.2%	2,622.4	18.1%

Notes:

1. ADB will finance taxes and duties. Total costs include taxes and duties of \$616,600 (ADB \$593,800 and GOL \$22,800).
2. For ADB, tax is \$345,000 and duty is \$248,400
3. VAT and duty are both estimated at 10%
4. Physical contingencies are computed for laboratory and survey consumables
5. Price contingencies are computed based on ADB published Southeast Asia and international (MUV) cost escalation factors, including provision for exchange rate fluctuations

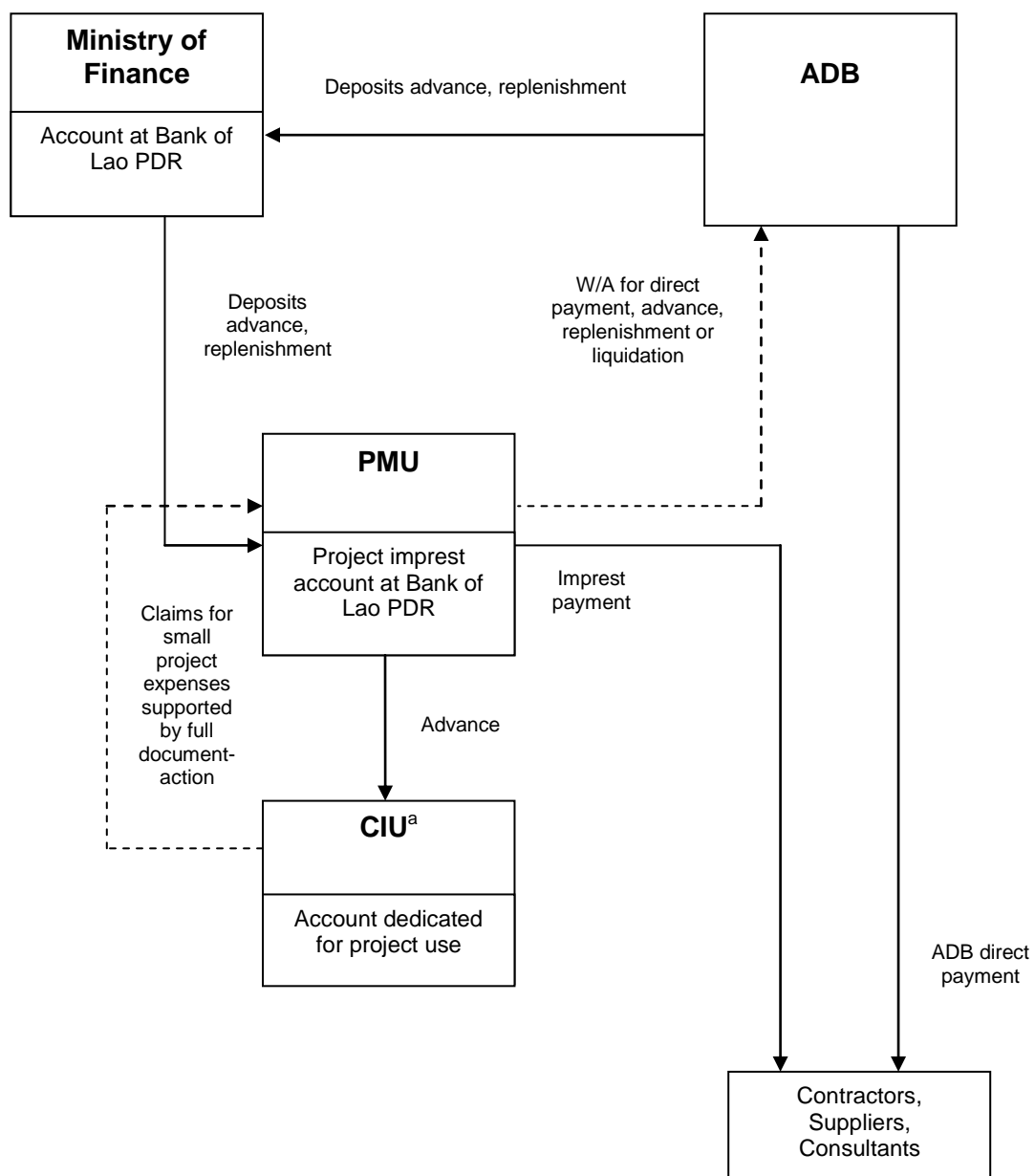
E. Detailed Cost Estimates by Year

	Base Cost						
	Total	2012	2013	2014	2015	2016	2017
I. Investment Costs							
A. Civil Works							
1. Building/Renovation (Teaching Facility/Office)	595.0	14.0	518.0	18.0	18.0	18.0	9.0
2. Greenhouse, Laboratory repair/upgrade	72.6	-	72.6	-	-	-	-
Subtotal	667.6	14.0	590.6	18.0	18.0	18.0	9.0
B. Equipment							
1. Vehicle	576.7	324.5	252.2	-	-	-	-
2. Other Equipment							
Office Equipment & Furniture	62.3	46.3	2.7	5.4	4.0	4.0	-
Laboratory/ Greenhouse Equipment	1,155.8	4.2	1,138.6	-	13.0	-	-
ICT (Laptop/Projector, etc.)	32.4	20.6	8.1	3.7	-	-	-
Subtotal	1,250.5	71.1	1,149.4	9.1	16.9	4.0	-
Subtotal	1,827.2	395.6	1,401.6	9.1	16.9	4.0	-
C. Consulting Services							
1. International Consultants	5,211.6	353.1	1,396.3	1,875.8	776.9	533.8	275.7
2. Local Consultants	561.2	40.0	148.1	126.5	105.0	96.5	45.0
Subtotal	5,772.8	393.1	1,544.4	2,002.3	881.9	630.4	320.7
D. Training, Awareness Campaigns, Workshops & Meetings							
1. Training Courses & Scholarships	1,139.2	71.1	396.6	274.1	242.7	140.2	14.5
2. Study Tours	74.4	7.0	40.0	14.5	8.5	3.0	1.5
3. Regional/Bilateral Coordination Meetings	153.9	13.0	35.0	28.0	33.0	26.0	19.0
4. Awareness Campaigns, Workshops, Documentation/Materials	400.4	9.1	118.2	63.5	129.0	45.5	35.1
Subtotal	1,768.0	100.2	589.8	380.1	413.2	214.7	70.1
E. Laboratory Systems' Support							
1. Testing, Surveillance, Other Services	595.9	-	170.5	143.3	126.3	98.5	57.3
2. Small Laboratory Goods	360.0	-	81.3	84.3	84.3	84.3	26.0
3. Data Management	44.4	0.9	11.9	13.6	13.6	3.6	0.7
Subtotal	1,000.3	0.9	263.7	241.1	224.1	186.4	84.0
F. Support Staff	362.2	36.2	72.4	72.4	72.4	72.4	36.2
Total Investment Costs	11,398.1	940.0	4,462.5	2,723.1	1,626.6	1,125.9	520.0
II. Recurrent Costs							
A. Consumable Goods & Services	1,565.9	-	446.4	380.5	332.1	281.5	125.5
B. Maintenance and Operating Expenses	614.2	18.7	137.3	140.6	143.8	145.5	28.2
Total Recurrent Costs	2,180.1	18.7	583.7	521.1	475.9	427.0	153.7
Total Base Costs	13,578.2	958.7	5,046.2	3,244.1	2,102.6	1,552.8	673.7
III. Contingencies							
Physical Contingencies	250.1	4.5	133.0	39.4	32.7	29.2	11.3
Price Contingencies	532.0	-3.2	-32.8	214.8	113.7	132.8	106.7
Subtotal Contingecies	782.0	1.3	100.2	254.2	146.4	161.9	118.0
IV. Interest During Implementation	95.8	0.3	4.4	15.6	20.8	25.9	28.9
Total PROJECT COSTS	14,456.0	960.3	5,150.8	3,514.0	2,269.7	1,740.7	820.6
% of total Project costs		6.64%	35.63%	24.31%	15.70%	12.04%	5.68%

F. Contract and Disbursement S-Curve

Source: Asian Development Bank estimates

G. Fund Flow Diagram



IV. FINANCIAL MANAGEMENT

A. Financial Management Assessment

45. With appropriate capacity building action, fiduciary risk is deemed to be wholly manageable. An in depth financial management assessment (FMA) and fiduciary risk assessment has been carried out on the proposed project arrangements. As a result of the review, a detailed risk mitigation strategy and FM Action Plan has been developed. Controls to be implemented through the Action Plan are expected to effectively mitigate risks identified at both the general environment, the EA and the project levels. There will be particular focus on staff development, project financial reporting and procurement.

46. MAF has acted as EA for previous ADB-financed projects. Department of Planning (DOP) of MAF is responsible for the financial functions of MAF. MAF accounting and finances staff, are familiar with the country financial management framework, but will receive specific training on ADB financial reporting requirements. Training in project accounting and financial reporting system is regarded as important and will be provided for the staff in the Project Management Unit (PMU) and Component Implementing Units (CIU). The appointment of a Deputy Project Director for project finance and administration, and the provision of financial and procurement experts, to help EA set up the financial reporting and auditing and internal control system, additional assurance will be obtained regarding the effective and appropriate use of project funds. As the Project will entail a number of procurement packages, including procurement of laboratory equipment and supplies, and ICT equipment, sound inventory control will be further strengthened.

47. To ensure effective fiduciary risk management, the following risk mitigation measures will be implemented by the project.

Table 1: Financial Management Risk Assessment and Mitigation Measures

Risk	Risk Level Before	Mitigation	Risk Level After
Financial Management Arrangements			
Financial reporting and auditing -Internal controls	S	<ol style="list-style-type: none"> 1. Deputy project director level responsibility created for Project finance and administration. 2. Minimum three to four finance and accounting staff assigned to the project management unit for PMU Project accounting and to support CIU level accounting. Each CIU will have an assigned finance/accounting staff member from its parent agency on a time-sharing basis. 3. MAF and DOP have acted as EA and IA for previous ADB-financed projects but accounting and finance staff will not easily make the switch from the government system to the international system required for an ADB-financed project. Training in the project accounting and financial reporting system will be provided for the staff in 2. 4. One international procurement and financial management consultant, with experience and qualifications satisfactory to ADB, to be available full time for at least the first 6 months of Project implementation to set up internal controls and be responsible for day to day Project finance and 	M

Risk	Risk Level Before	Mitigation	Risk Level After
		accounting activities. 5. One national project financial management consultant, with experience and qualifications satisfactory to ADB, to be available full time until Project completion, first to assist the international consultant and later to advise and assist the deputy director for finance and administration. 6. Training of PMU staff on inventory management. 7. Project flow of funds arrangements to be set up as in the Project Administration Manual under G Fund Flow Diagram. 8. Periodic internal audit carried out jointly by PMU and auditor to specific TOR both satisfactory to ADB 9. External audit of Project annual accounts by an auditor and to specific TOR, both satisfactory to ADB.	
Project Specific Risk			
Coordination of subproject implementation and management	S	Project organization will include the Project Steering Committee and Project Technical Advisory Committee as described in the PAM section on the Project Management Arrangements.	M
Project funds flow complexity High volume of out-of-pocket expenses for government staff field work throughout project implementation	M	PMU, procurement and FM specialists to monitor out-of-pocket expenditure throughout project implementation. Training required for procedures of OPE claims. To minimize cash handling at CIU level, a separate project account will be established at each CIU (4) to receive small advances on a transaction basis, supported by documentation and/or invoices for claims of small project expenses. Each CIU account will not exceed \$5000 at one time.	L
Safeguard of high technology laboratory equipment	H	FM system in place to control expenditure and control of the inventory. Sound inventory management is required through training.	M
Country Issues			
Fiduciary risk	S	Public disclosure of project financial and procurement information is conducted following the method as set out in the PAM Strengthened Project financial management capacity Public availability of audited reports	M

ADB = Asian Development Bank, CIU = component implementation unit, FMA=financial management assessment, OPE = out-of-pocket expenses, PAM = project administration manual, TOR = terms of reference, Risk rating: H = high, S = substantial, M = moderate, L = low.

48. The following action plan for project financial management will guide implementation of the above risk mitigation measures.

Table 2: Project Financial Management Action Plan

Planned Action	Output	Responsible Party	Due Date
PMU financial management function established and operational	PMU deputy director, project finance and administration appointed and accounting and finance staff chosen	EA selection with ADB concurrence for deputy director	Loan negotiations.
	PMU consulting team of project financial and procurement consultants mobilized, set up project accounting and financial reporting procedures and control and conduct PMU project accounting and financial staff on the job training/refresher course	EA recruitment with ADB assistance	Training conducted, and procedures elaborated upon engagement of PMI consultants.
	Project disbursement arrangements and procedures established and staff trained in their operation	PMU, assisted by PMI consultants	As above.
	TOR for annual independent and internal project auditors drafted & auditors appointed	PMU, assisted by PMI consultant for TOR; auditors selection by EA with ADB assistance	As above.
Project Steering Committee established and operational	As in Project management arrangements section of PAM	EA	Loan effectiveness.
Project funds flow arrangements adopted & operational	Concerned MOF, EA, PMU and CIU staff all briefed	PMU assisted by PMI consultants	Training conducted, and procedures elaborated upon engagement of PMI consultants
Project OPE claims procedures established and operational	User units staff briefed on procedures	PMU, assisted by PMI consultants with ADB input	Training conducted, and procedures elaborated upon engagement of PMI consultants.
Public disclosure of project audited financial and procurement information operational	Project website for information disclosure established and operational	PMU, assisted by PMI consultants	Throughout the Project.

ADB = Asian Development Bank, CIU = component implementation unit, EA = Executing Agency, PMI = project management and implementation, PMU = project management unit, OPE = out-of-pocket expenses, TOR = terms of reference.

49. Financial management risks should be considered and updated throughout the life of the project. Risk mitigation measures should also be updated accordingly.

B. Disbursement

50. The Loan/Grant proceeds will be disbursed in accordance with ADB's *Loan Disbursement*

Handbook (2007, as amended from time to time),³⁵ and detailed arrangements agreed upon between the Government and ADB.

51. Pursuant to ADB's *Safeguard Policy Statement* (2009)(SPS),³⁶ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list (Appendix 5) to subprojects financed by ADB.

52. ADB direct payment procedures will generally be used for suppliers, contractors and consultants. With oversight of MAF, the PMU will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and in coordination with MOF iv) preparing and sending withdrawal applications to ADB.

53. To ensure the timely release of loan/grant proceeds and to expedite project implementation, the Government will, immediately upon project effectiveness, open and maintain two Project imprest accounts (for loan and grant) administered by the PMU at the Bank of Lao for disbursement of eligible expenditures. The Ministry of Finance (MOF) will be responsible for establishing, managing, replenishing, and liquidating the account through an account managed by MOF. To facilitate effective Project implementation in view of the cash flow requirement and the need to make a great number of small payments, PMU will be in charge of necessary planning and documentation for a project imprest account and seeking the review and approval from MOF. To minimize cash handling for small Project expenditures at CIU level, two separate accounts may be established for the loan and the grant at each CIU(4) to receive small advances on a transaction basis, supported by documentation and/or invoices for claims of small project expenses. Each CIU account will not exceed \$5000 at one time.

54. The maximum ceiling of the imprest accounts in aggregate, will not at any time exceed the estimated ADB financed expenditures to be paid from the imprest accounts for the next 6 months or 10% of the respective loan and grant amount, whichever will be lower.³⁷

55. The request for initial advance to the Project imprest accounts should be accompanied by an Estimate of Expenditure Sheet³⁸ setting out the estimated expenditures for the first six (6) months of project implementation, and submission of evidence satisfactory to ADB that the imprest account has been duly opened. For every liquidation and replenishment request of the imprest account, the borrower will furnish to ADB (a) Statement of Account (Bank Statement) where the imprest account is maintained, and (b) the Imprest Account Reconciliation Statement (IARS) reconciling the above mentioned bank statement against the EA's records.³⁹

56. ADB's statement of expenditure (SOE) procedures may be used for reimbursing eligible expenditures and liquidating of advances to the project imprest accounts due to impracticality of full documentation. The maximum payment for any individual item using these procedures is \$20,000 equivalent per individual payment. Individual payments in excess of the SOE ceiling should be accompanied by full supporting documents with submitting the WA to ADB. SOE records should be maintained and made readily available for review by ADB's disbursement and

³⁵ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

³⁶ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

³⁷ Bank charges may be financed from the ADB loan.

³⁸ Available in Appendix 29 of the *Loan Disbursement Handbook*.

³⁹ Follow the format provided in Appendix 30 of the *Loan Disbursement Handbook*.

review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.⁴⁰

57. Before the submission of the first withdrawal application, the borrower shall submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is US\$100,000, unless otherwise approved by ADB. The borrower is to consolidate claims to meet this limit for reimbursement and imprest account claims. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.

C. Accounting

58. The Ministry of Agriculture will ensure that separate Project accounts and records are maintained by the PMU and CIUs for the loan and grant for all expenditures incurred on the Project. Project accounts will follow international accounting principles and practices.

D. Auditing

59. Project and component accounts and financial statements will be audited and the EA will also cause the detailed consolidated Project accounts to be audited in accordance with International Standards on Auditing by an auditor acceptable to ADB. The PMU will prepare the information required for auditing. The audited accounts will be submitted in the English language to ADB within 6 months of the end of the fiscal year through the PMU. The annual audit report will include a separate audit opinion on the use of the Project imprest account, and the SOE procedures if used. The Government and the EA have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

⁴⁰ Checklist for SOE procedures and formats are available at:
http://www.adb.org/documents/handbooks/loan_disbursement/chap-09.pdf
http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-100-Below.xls
http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-Over-100.xls
http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Operating-Costs.xls
http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Free-Format.xls

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Action

60. At the request of the EA, before Project effectiveness, ADB has supported advance action for starting the process of recruitment of consultants and procurement of goods. All advance action, will be undertaken in conformity with ADB's *Procurement Guidelines* (2010, as amended from time to time)⁴¹ and ADB's *Guidelines on the Use of Consultants* (2010, as amended from time to time).⁴² The issuance of invitations to bid under advance contracting will be subject to ADB approval. The borrower, the executing, and implementing agencies have been advised that approval of advance action does not commit ADB to finance the Project. Procurement capacity assessment of the EA has been conducted to underpin the proposed project implementation and procurement plan.

61. The following steps for the recruitment of the Project management consultant (entity) can, however, be concluded in advance: (i) advertisement; (ii) short listing of consulting firms; (iii) issuance of the Request for Proposals (RFP); (iv) evaluation of technical proposals; and (v) evaluation of financial proposals and final ranking. The contract is to be signed after ADB Board approval and the loan is declared effective. It is expected that office equipment for the PMU may be required early to establish the PMU and the following steps for the procurement of goods may also be undertaken in advance: (i) advertisement; (ii) issuance of bid documents; (iii) bid opening; and (iv) evaluation of bids. The contract is to be signed after the loan is declared effective.

62. The EA will make expertise available from ongoing projects and ADB will make efforts to assist (i) in the preparation of documents for contracting consultants (including TORs and advertisement texts) and procurement of goods; (ii) drafting procedures and guidelines for the PMU to organize contracting and procurement; (iii) training of staff (to be) appointed to the PMU with responsibilities for recruitment of consultants and procurement of goods. Packages planned to be procured immediately after loan effectiveness are the (i) consultants for the project management and implementation support; (ii) technical specialists; (iii) laboratory materials and equipment; and (iv) office equipment.

B. Procurement of Goods, Works and Consulting Services

63. All procurement will be undertaken in accordance with ADB's *Procurement Guidelines*. International competitive bidding (ICB) procedures will be used for goods contracts valued at \$500,000 or more. Procurement of civil works valued at less than \$1.0 million equivalent will be undertaken through national competitive bidding (NCB); NCB will also be used for goods contracts valued at less than \$500,000. ADB shopping procedures will be used for works and goods contracts valued less than \$100,000 equivalent.

64. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages, national competitive bidding guidelines, etc appears in Section C. Procurement of laboratory equipment and supplies is complex because it includes a broad range of goods which come from segmented markets. Some goods are of high technical sophistication, with only one (or at most a few) global premier brands being sold through dealers or a limited number of specialized traders; other market segments have more producers and traders, and consequently more competition. Part of the goods (test kits and consumables) need

⁴¹ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

⁴² Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

to be procured through supply contracts. There are virtually no local producers in the country and the retail market is underdeveloped, which means that virtually all goods need to be imported. In order to attract more bidders and to promote competition, laboratory equipment and supplies with similar characteristics (market segments and sophistication) are grouped into lots which will be combined in one ICB package to the extent possible. Laboratory supplies have to be replenished annually or more frequently. Some laboratory chemicals, rapid test kits and vaccines have short active lifetime and need to be replenished regularly as well. The use of delivery contracts for periodic replenishment is common for laboratories and veterinary supplies. It is expected that procurement of laboratory consumables will be staggered and will follow the shopping procedure.

65. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants*.⁴³ Consultants will be selected using selection method as indicated in the Procurement Plan. The terms of reference for all consulting services are detailed in Section D.

66. An estimated 646.5 person-months (353 international⁴⁴ and 293.5 national) of consulting services are required to (i) facilitate project management and implementation, and (ii) strengthen the institutional and operational capacity of the executing agency and implementing agencies. Academic course for scholarship in the estimated amount of \$396,000 for a total of 20 scholarships will be offered under the project based on panel selection and the following criteria: (i) identified gaps in capacities of the client; and (ii) qualification of the candidates.

C. Procurement Plan

1. Basic Data

Project Name: Lao People's Democratic Republic: Trade Facilitation: Improved Sanitary and Phytosanitary (SPS) Handling in Greater Mekong Subregion (GMS) Trade.	
Country: Lao PDR	Executing Agency: Ministry of Agriculture and Forestry
Loan/Grant Amount: SDR1,942,000 loan; \$11,000,000 grant	Loan/Grant Number: TBD
Date of First Procurement Plan: 30 March 2012	Date of this Procurement Plan: 30 March 2012

2. Process Thresholds, Review and 18-Month Procurement Plan

(i) Project Procurement Thresholds

67. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works	
Method	Threshold
International Competitive Bidding (ICB) for Goods	\$500,000 or above
National Competitive Bidding (NCB) for Works	\$100,000 or above but below \$1,000,000

⁴³ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

⁴⁴ 210 pm will require consultants with expertise from the Southeast Asia region, to ensure regional presence and experience.

National Competitive Bidding for Goods	\$100,000 or above but below \$500,000
Shopping for Works	Below \$100,000
Shopping for Goods	Below \$ 100,000
Direct Contracting	Up to \$10,000

(ii) ADB Prior or Post Review

68. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement Method	Prior or Post	Comments
Procurement of Goods and Works		
ICB Goods	Prior	
NCB Works	Prior/Post	First contract under prior review*
NCB Goods	Prior/Post	First contract under prior review*
Shopping for Works	Prior/Post	First contract under prior review*
Shopping for Goods	Prior/Post	First contract under prior review*
Recruitment of Consulting Firms		
Quality- and Cost-Based Selection (QCBS)	Prior	Ratio 80:20
Other selection methods:		
Consultants Qualifications (CQS)	Prior	
Fixed Budget (FBS)	Prior	
Single Source Selection (SSS)	Prior	
Recruitment of Individual Consultants		
Individual Consultants (ICS)	Prior	

* Prior review for the first contract and subject to satisfactory execution, 'post review' for the subsequent contracts being awarded by the same PIU (Project Implementation Unit)

(iii) Goods and Works Contracts Estimated to Cost More than \$1 Million

69. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months. A package divided into several lots which allows a bidder to bid for one or more lots becomes a collection of distinct contracts when an award is made to several winning bidders. A package not divided into lots yields one single contract.

General Description	Contract Value (US\$ million)	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
Laboratory equipment and supplies divided in lots: (1) pesticides formulation analysis (2) microbiology equipment (3) general laboratory	\$1.099	ICB	No	Q4/2012	The tender will consist of lots of goods with similar technical characteristics. A bidder may bid for one or more lots.

General Description	Contract Value (US\$ million)	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
equipment (4) plant and animal diagnostics (5) miscellaneous laboratory equipment (6) miscellaneous equipment and tools (7) test kit analysis					

(iv) Consulting Services Contract Packages Estimates to Cost More than \$100,000

70. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value (US\$ million)	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
Plant, Animal Health & Food Safety technical improvement (T1)	\$2.370	QCBS (80:20)	Q1/2012	International,	International (126.5 pm); national (169.5-pm)
Project management & implementation support (T6)	\$1.545	QCBS (80:20)	Q1/2012	International	International (60pm); national (94 pm)
Service contract for (i) training enterprises and restaurants for upgrading food safety handling and GMP (800 enterprises), and (ii) training enterprises for good practice post-harvest handling and GMP (120 enterprises) (S1)	\$0.932	FBS	Q1/2013	International	International (90pm) (The BD will not specify the number of consultants; the TOR for the assignment should however be clearly defined). The bidder will have the flexibility within the fixed budget.
Service contract for audit of (i) enterprises for good practice post-harvest	\$0.182	CQS	Q1/2013	International	International/ National (15.5pm) As auditors, they will have

General Description	Contract Value (US\$ million)	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
handling and GMP (360 enterprises), and (ii) enterprises for good practice post-harvest handling and GMP (70 enterprises) (S2)					the flexibility to propose a team within the budget to execute the work. Two professional auditors have to be part of the team
Enhancing restaurant and food enterprises food safety handling capacity (T3)	\$0.274	CQS	Q1/2013	International	International (16pm); national (30pm)
SPS teaching curriculum upgrading (T4)	\$0.131	CQS/ ICS	Q3/2012	International	International (6pm)
SPS course teachers (T5)	\$0.280	CQS/ICS		International	Expertise and TORs are to be recommended/ developed under the SPS teaching curriculum upgrading assignment; international (34.5pm)

QCBS = Quality and Cost Based Selection, CQS = Consultant Qualification Selection; FBS = Fixed Budget Selection, ICS = Individual Consultant Selection; FTP = Full Technical Proposal, STP = Simplified Technical Proposal.

(v) Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000

71. The following table groups smaller-value goods, works and consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Value of Contracts (cumulative) (US\$ million)	Number of Contracts	Procurement / Recruitment Method	Advertisement date (Qtr/year)	Comments
Goods:					
Laboratory equipment and supplies	\$0.353	Multiple	Shopping		Equipment to be procured for the new laboratory to be constructed in 2014 including a PCR (polymerase chain

General Description	Value of Contracts (cumulative) (US\$ million)	Number of Contracts	Procurement / Recruitment Method	Advertisement date (Qtr/year)	Comments
					reaction testing equipment) and Veterinary border field equipment.
Works:					
Faculty of Agriculture teaching facility building	\$0.498	1	NCB		
Greenhouse construction, laboratory and office renovations	\$0.077	Multiple	Shopping		
Goods:					
Supply & delivery of 13 pickup vehicles 1 van 1 bus (25-seater) 1 large van with modification	\$0.576	Multiple	NCB/Shopping		Multiple lots in one tender, as appropriate. User units: (i) Pickups: PMU (1), Plant Health CIU(3), Animal Health CIU(7), Food Safety CIU(1), Education CIU(1) (ii) Van: Education CIU(1), (iii) 25-seater bus: Education CIU (lots i-iii in one NCB package (iv) Large van modified as mobile laboratory: Food Safety CIU (item iv as a separate package under Shopping.)
Supply & delivery of ICT equipment and systems, incl. software & protection	\$0.033	Multiple	Shopping		
Supply & delivery of office furniture & equipment and furniture for animal health laboratory	\$0.069	Multiple	Shopping		For PMU and SPS Enquiry Point

General Description	Value of Contracts (cumulative) (US\$ million)	Number of Contracts	Procurement / Recruitment Method	Advertisement date (Qtr/year)	Comments
Consulting Services:					
Consultancy for supply chain studies for corn and rice (T2)	\$0.060	2	ICS		International/ national (4.5pm); specialists/firm with experience in region One lump sum contract may be more appropriate.

3. Indicative List of all Packages Required Under the Project

72. The following table provides an indicative list of all procurement (goods, works and consulting services) over the life of the project.

General Description	Estimated Value (cumulative) (US\$ million)	Estimated Number of Contracts	Recruitment/ Procurement Method	Domestic Preference Applicable	Comments
Goods:					
Laboratory equipment and supplies	\$1.099	Multiple	ICB	N/A	Several lots in one package; bidder may bid for one or more lots.
Laboratory equipment and supplies	\$0.353	Multiple	Shopping	N/A	Equipment to be procured for the new laboratory to be constructed in 2014 including a PCR (polymerase chain reaction testing equipment) and Veterinary border field equipment.
Laboratory Consumables	\$1.571	Multiple	Shopping	N/A	Perishable and consumable items (staggered procurement over the life of the project)

General Description	Estimated Value (cumulative) (US\$ million)	Estimated Number of Contracts	Recruitment/ Procurement Method	Domestic Preference Applicable	Comments
Vehicles	\$0.576	Multiple	NCB/ Shopping	N/A	User units: Pickups: Plant Health CIU(3), Animal Health CIU(7), Food Safety CIU(1), Education CIU(1), PMU (1) (ii) Van: Education CIU(1), (iii) 25-seater bus: Education CIU (lots i-iii in one NCB package (iv) Large van modified as mobile laboratory: Food Safety CIU (item iv as a separate package under Shopping)
Supply & delivery of office furniture & equipment and furniture for animal health laboratory	\$0.069	Multiple	Shopping	N/A	For PMU and SPS Enquiry Point
ICT equipment, data handling systems, office equipment and furniture	\$0.090	Multiple	Shopping	N/A	
Printed material, manuals etc for workshop and awareness events	\$0.094	Multiple	Shopping	N/A	Small off the shelf items costing less than US\$10,000 may be procured following the direct purchase mode.
Works:					
Faculty of Agriculture teaching facility building	\$0.498	1	NCB	N/A	
Greenhouse construction, laboratory and office renovations	\$0.077	Multiple	Shopping	N/A	

General Description	Estimated Value (cumulative) (US\$ million)	Estimated Number of Contracts	Recruitment/ Procurement Method	Type of Proposal	Comments
Consulting Services					
Project management & implementation support (T6)	\$1.545	1	QCBS(80:20]	FTP	international (60pm) and national (94pm)
Plant, Animal Health & Food Safety technical improvement (T1)	\$2.370	1	QCBS(80:20]	FTP	international (133pm); national (160.5 pm)
Service contract for (i) training enterprises and restaurants for upgrading food safety handling and GMP (800 enterprises), and (ii) training enterprises for good practice post-harvest handling and GMP (120 enterprises) (S1)	\$0.932	1	FBS	STP	international (90pm)
Service contract for audit of (i) enterprises for good practice post-harvest handling and GMP (360 enterprises), and (ii) enterprises for good practice post-harvest handling and GMP (70 enterprises) (S2)	\$0.182	1	CQS	BTP	international (14.5pm)
Enhancing restaurant and food enterprises food safety handling capacity (T3)	\$0.274 million	1	CQS	BTP	international (16pm); national (30pm)
SPS teaching curriculum upgrading (T4)	\$0.131 million	1	CQS/ICS international	BTP	international (6pm).
SPS course teachers (T5)	\$0.280 million		CQS/ICS	BTP	Details of positions including duration and TORs are to be recommended under the SPS teaching curriculum upgrading assignment; international (34.5pm)

General Description	Estimated Value (cumulative) (US\$ million)	Estimated Number of Contracts	Recruitment/ Procurement Method	Type of Proposal	Comments
Consultancy for supply chain studies for corn and rice (T2)	\$0.060	2	ICS	BTP	international (4.5pm); specialists/firm with experience in region Lump sum contract may be more appropriate.

4. National Competitive Bidding

a. General

73. The procedures to be followed for National Competitive Bidding shall be those set forth for “Public Bidding” in Prime Minister’s Decree No. 03/PM of the Lao People’s Democratic Republic, effective 09 January 2004, and Implementing Rules and Regulations effective 12 March 2004, with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the Procurement Guidelines.

b. Application

74. Contract packages subject to NCB procedures will be those identified as such in the project Procurement Plan. Any changes to the mode of procurement from those provided in the Procurement Plan shall be made through updating of the Procurement Plan, and only with prior approval of ADB.

c. Eligibility

75. Bidders shall not be declared ineligible or prohibited from bidding on the basis of barring procedures or sanction lists, except individuals and firms sanctioned by ADB, without prior approval of ADB.

d. Advertising

76. Bidding of NCB contracts estimated at \$500,000 or more for goods and related services or \$1,000,000 or more for civil works shall be advertised on ADB’s website via the posting of the Procurement Plan.

e. Procurement Documents

77. The standard procurement documents provided with Ministry of Finance, Procurement Monitoring Office shall be used to the extent possible. The first draft English language version of the procurement documents shall be submitted for ADB review and approval, regardless of the estimated contract amount, in accordance with agreed review procedures (post and prior review). The ADB-approved procurement documents will then be used as a model for all procurement financed by ADB for the project, and need not be subjected to further review unless specified in the procurement plan.

f. Preferences

- (i) No preference of any kind shall be given to domestic bidders or for domestically manufactured goods.
- (ii) Suppliers and contractors shall not be required to purchase local goods or supplies or materials.

g. Rejection of all Bids and Rebidding

78. Bids shall not be rejected and new bids solicited without ADB's prior concurrence.

h. National Sanctions List

79. National sanctions lists may be applied only with prior approval of ADB.

i. Corruption Policy

80. A bidder declared ineligible by ADB, based on a determination by ADB that the bidder has engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing an ADB-financed contract shall be ineligible to be awarded ADB-financed contract during the period of time determined by ADB

j. Disclosure of Decisions on Contract Awards

81. At the same time that notification on award of contract is given to the successful bidder, the results of the bid evaluation shall be published in a local newspaper or well-known freely accessible website identifying the bid and lot numbers and providing information on (i) name of each Bidder who submitted a Bid, (ii) bid prices as read out at bid opening, (iii) name of bidders whose bids were rejected and the reasons for their rejection, (iv) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. The executing agency/implementing agency shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

k. Member Country Restrictions

82. Bidders must be nationals of member countries of ADB, and offered goods, works and services must be produced in and supplied from member countries of ADB.

D. Consultant's Terms of Reference

83. Human resource capacities in Lao PDR's public and private sectors, both in numbers and educational levels, constitute a critical constraint to strengthening SPS management capacities; specialists are therefore needed to undertake a broad range of tasks. Consultants to be financed consist of three types: (i) management consultants – they are employed to strengthen the operational quality and management capacity of PMU and CIUs, in key areas of planning, implementation, monitoring and reporting; (ii) technical specialists in areas of trade in agriculture, food and forestry products, plant and animal diseases, food safety, and laboratories – their role is to bring in specialized knowledge for the many areas in SPS which is not available in the country, and partly also to fill gaps in available staff; and, (iii) visiting scholars for upgrading university

curricula – they are highly qualified university teachers from advanced universities in highly developed countries and in the South East Asia region.

84. All recruited consultants have dual tasks: (i) to contribute to the management and technical work to be done; and, (ii) to perform training – both on-the job and through workshops. In addition, there are business service providers for GHP and GMP upgrading and auditing – they provide specialized services to the private sector in areas that are typically served by private providers. All consultants will ensure transfer of knowledge to Government counterparts.

85. An overview of the consultancies is provided in Table 3, and service providers in Table 4. Seven contract packages are proposed for consultants, and service providers, as follows:

1. T1: Technical consultants

86. These are technical consultants in the areas of agriculture, trade and risk analysis (mainly plant health, animal health and food safety). They may be sourced from major international consulting entities. These consultants work individually or in small groups with counterparts on a subcomponent-by-subcomponent basis. Their work needs oversight from management consultants, the Project Coordinator, the Component Manager and Government staff responsible for respective subcomponents. They need offices in implementing agencies, at or close to persons in charge of respective subcomponents. Consultants with experience in GMP and good practice in post-harvest handling will be needed. They will need office space - partly in DOA Vientiane and partly in the Northern provinces (where much of the field work will be done).

2. T2: Supply chain specialists

87. These consultants work in small teams and will only do supply chain studies (field surveys) for corn and rice. A few small companies with international and local staff, mostly located in the region, have experience in supply chain studies in GMS countries. In recruiting the consultants, emphasis must be on adequate regional experience in the required field. These specialists do not need office space. They should be contracted with priority because they will do ground work for T1 consultants (especially the individuals P10 and P11).

3. T3: Food safety and GHP/GMP specialists

88. GHP/GMP specialists for restaurants and food processing industries are different from GMP postharvest specialists (T1) but they may be recruited under a separate contract. They need office space in MOH and occasionally in Luang Prabang and Pakse.

4. T4: University scholars from leading international universities

89. It is expected that overseas universities will be bidders for these contracts, and thus it is not appropriate to combine these specialists with those recruited under T1. They will need office space at FA-NUOL.

5. T5: University scholars from leading universities in the ASEAN region

90. The need for these scholars will be specified by teachers who are recruited under T4; there is therefore a sequence in contracting. Successful contracting of these specialists through international competitive bidding will depend on whether universities in the region have the

interest to organize such a multidisciplinary team from various universities and bid for such contracts. Transaction costs may be high and the number of candidates for most specialist posts too limited; individual contracting may be the more practical alternative. Individuals will need office space at FA-NUOL.

6. T6: Project management

91. These management consultants support the Project Coordinator (Coordinating director) and will be located in the PMU. Since they will help with preparation and supervision of other contracts they should be contracted with priority. Under a separate individual consultant contract, an international procurement specialist will be contracted immediately after effectiveness to help expedite recruitment of consultants and procurement of goods. Priority will be given to contracting the management consultants for the PMU.

7. Service contracts: S1 and S2

92. In addition to consultants, other specialists⁴⁵ will provide standardized services: (i) in providing group training and advice to individual enterprises for upgrading to meet well-defined GHP and GMP requirements (S1); and, (ii) in conducting audits (S2). Since there is conflict of interest between trainers and auditors, S1 and S2 contracts cannot be combined.

93. There are several qualified potential providers in the region, especially from Thailand and Viet Nam; this makes it attractive to look for competitive bidding. Many potential providers will, given their specializations, only be interested in one area (i.e., either post-harvest GMG, or restaurants). This may put constraints on combining S1 and S2 respectively. Consultants P10/P11 and F3/F4 will help to prepare the contracting.

Table 3: Consultancy Contracts⁴⁶

Code	Job Title	Contract		
PMU		Int.	Nat.	
M1	International project management specialist/team leader	46		T6
M2	International procurement and financial management specialist	13		T6
M3	National financial management specialist		44	T6
M4	Local implementation consultant provision, on need basis		50	T6
M5	International laboratory equipment specialist	1		T6
	Total	60	94	
Enquiry Point (DOP)				
EP1	International consultant - Enquiry Point start up-SPS Specialist	1.0		T1
EP2	International consultant - Enquiry Point website design- ICT Specialist	1.5		T1
EP3	National Consultant - Enquiry Point data base- ICT Consultant		4.0	T1
	Total	2.5	4	
Plant health		Int'l	Nat'l	
P1	International consultant - pest list development consultant	2		T1
P2	International consultants for pest diagnosis and taxonomic identification specialist	7		T1
P3	International consultant - pesticides management specialist	7		T1
P4	International consultant - wood and forest pests management specialist	1		T1
P5	National consultant - wood and forest pests consultant		2	T1

⁴⁵ Procured in accordance with ADB's *Procurement Guidelines* (2010)

⁴⁶ In several cases, consultancies could be combined for reasons of efficiency, provided that qualifications are met; examples include P10 and P13; P14 and F7; A1 and A2; A7, A10, A14; and A14 and F2.

P6	International consultant - risk categorization import plant products specialist	6		T1
P7	National consultant - risk categorization import of plant products consultant		10	T1
P8	International consultant - develop program for upgrading post-harvest handling -grains and grain products specialist	7		T1
P9	International consultant – implement program for GMP and post-harvest handling grains and grain products specialist with extensive experience in Mekong	29		T1
P10	National consultant - export promotion to PRC - grains and grain products exports specialist		54	T1
P11	International consultant for supply chain studies for corn and rice	4.5		T2
P12	Service provider - training enterprises for good practice post-harvest handling and GMP (120 enterprises)	10		S1
P13	Service provider - auditing enterprises for good practice post-harvest handling and GMP (70 enterprises)	3.5		S2
	Total	77	66	
Animal health				
A1	International consultant- Trans-boundary Animal Disease (TAD) specialist	25		T1
A2	International consultant - TAD laboratory specialist	4		T1
A3	National consultant - TAD control consultant		24.5	T1
A4	International consultant – development of control system for veterinary – veterinary drugs specialist	5		T1
A5	National consultant - veterinary drugs consultant		5	T1
A6	International consultant –safety of animal feed specialist	2		T1
A7	International consultant - animal feed laboratory specialist	2		T1
A8	National consultant – safety of animal feed consultant		2	T1
A9	International consultant – Meat hygiene and animal products safety control specialist	4		T1
A10	International consultant - safety animal products laboratory specialist	3		T1
A11	National consultant - safety animal products consultant		4	T1
A12	International consultant – animal products risk categorization specialist	6		T1
A13	National consultant – import animal products-risk categorization consultant		4	T1
	Total	51	39.5	
Food Safety				
F1	International consultant - food safety surveillance- food safety specialist	6		T1
F2	National consultant - food safety surveillance –food safety consultant		60	T1
F3	International consultant- Assessment for granting first-time market access permit-food safety specialist	3		T1
F4	International consultant- risk-based import handling specialist	5		T1
F5	International consultant – food safety tourist industry and food processing enterprises [QCBS, 80:20]	4		T3
F6	International consultant – food safety tourist industry and food processing [QCBS, 80:20]	12		T3
F7	National consultant - food safety tourist industry and related food processing enterprises [QCBS, 80:20]		30	T3
F8	Service provider - training enterprises and restaurants for upgrading food safety handling and GMP (800 enterprises)	80		S1
F9	Service provider – audits enterprises for good practice post-harvest handling and GMP (360 enterprises)	12		S2
	Total	122	90	
Education				

E1	International scholars for curricula upgrading [QCBS, 80:20]	6		T4
E2	International scholars for teaching SPS courses [QCBS, 80:20]	34.5		T5
	Total	40.5	0	
	Grand total consultants	353	293.5	
	Of which:			
	Management	60	94	
	Technical	147	199.5	
	Academic	40.5	0	
	Service contracts	105.5	0	

Breakdown broad category of consulting services									
	Int.	Nat.	Total	Total Amount	% int'l	% nat'l	% Cost	% grant and loan	
Grand total	353.0	293.5	646.5	5,773.2	100.0	100.0	100.0	41.2	
of which									
Management	60.0	94.0	154.0	1,544.6	16.7	33.0	26.8	11.0	
Technical	147.0	199.5	346.5	2,704.4	42.7	67.0	46.8	19.3	
Academic	40.5	0.0	40.5	410.3	11.3	0.0	7.1	2.9	
Service contracts	105.5	0.0	105.5	1,113.9					
					29.3	0.0	19.3	8.0	

94. Outline TORs for consultants are provided in Table 4.

Table 4: Outline TORs Consultants and Service Providers

Code And Job Title	Outline Terms Of Reference
	PMU
M1 International project management specialist/team leader (46pm)	<p>The project management consultant will assist and provide support to the Project Director and the Project Manager in planning and implementing the Project with a view to achieving the objectives of the Project. The specific tasks of the consultant will be, but not limited to the following responsibilities:</p> <ul style="list-style-type: none"> • lead the team of international and national consultants advising and assisting the PMU; • assist the PMU and CIUs in preparing annual and quarterly plans, procurement and contracting of consultants, monitoring and reporting; • assist the PMU and CIUs in arrangement of bilateral and multilateral cooperation and twinning; • liaise with other SPS projects in Lao PDR and other GMS countries; • help CIUs with identification of suitable institutions for training, secondment and trainings; • enhance harmonization of Lao PDR SPS measures with other countries in GMS and ASEAN; • assist the Project Coordinator with the supervision of consultant contracts; • enhance the effectiveness of the technical consultants (Package T1) by pursuing adequate preparation and follow-up of their field work;

Code And Job Title	Outline Terms Of Reference
	<p>Qualifications: The specialist should have broad experience in managing agricultural development projects in developing countries. Knowledge of agricultural institutions and food safety would be an added advantage. The candidate should have a minimum qualification of a master's degree in agriculture and at least 10 years experience in a related field; of which the candidate should preferably have at least two years experience in the Mekong region. Demonstrated experience working on projects in the region financed by multilateral lending institutions (ADB and/or World Bank) is also considered necessary.</p> <p>The consultant will work full time in the first three years of the project and on an intermittent basis in the 4th and 5th year.</p>
M2 International procurement and financial management specialist (13pm)	<p>The key responsibilities of the consultant will be to work closely with the PMU procurement staff to ensure that the procurement packages as agreed upon during project preparation and provided in the procurement plan are procured on schedule and in line with the Standard Government Operating Procedures (SOP) for NCB and Shopping packages and strictly following ADB Guidelines for the procurements under ICB and the recruitment of consulting services.</p> <p>The International Specialist will also work very closely with the National Financial Management Specialist on the following:</p> <p>a. Finance and accounting</p> <ul style="list-style-type: none"> • Planning for project implementation and subsequent operation and maintenance (O&M). Develop long, medium term and annual operating plans and schedules as agreed between ADB and the EA for project implementation and subsequent O&M activities. • Accounting oversight. Develop and establish a manual and standard procedures for project accounting to standards agreed between ADB and the EA. • Internal control, funds flow management, financial reporting. Develop and make operational a manual and procedures as agreed between ADB and the EA for project financial management, for use by the PMU in project implementation and the implementing and executing agencies in subsequent O&M activities <p>b. Audit</p> <ul style="list-style-type: none"> • Audit planning. Comply with the terms and standards agreed between ADB and the EA, (i) prepare the TOR for independent external auditors to conduct audits of the project accounts, use of imprest accounts and related disbursement procedural matters, and, (ii) advise and assists the EA in the recruitment of specialists to conduct internal audits of the project accounts and imprest account activities. • Audit management. Advise and assist the PMU in facilitating such external and internal audits <p>c. Capacity building of financial and accounting staff</p> <ul style="list-style-type: none"> • By following the terms agreed between ADB and the EA, plan and organize training in accounting and financial management (including planning) for PMU and implementing agencies staff assigned to the project implementation

Code And Job Title	Outline Terms Of Reference
	<p>and subsequent O&M.</p> <p>The international specialist will lead the combined effort for at least six months continuously at the start of project followed by intermittent inputs based on need in the ensuing years. Capacity building is a key element of the assignment and the specialist is expected to prepare the national financial specialist to take over the work at the end of the international specialist assignment in the project. Knowledge transfer from the international procurement and financial management specialist on procurement to the EA is an important aspect of his/her scope of work.</p> <p>Qualifications: The International Procurement and Financial Management specialist should have broad experience in implementing projects in developing countries funded by International Financial Institutions, preferably including experience with ADB projects. The candidate should have a minimum equivalent of a BSc degree and at least 10 years of experience as a procurement specialist and financial management related to project implementation.</p> <p>The work will be on an intermittent basis and includes an initial input of 6+ months at the start of the project. Subsequent visits will support procurements and the work of the national financial specialist. The candidate has to be flexible based on project needs.</p>
M3 National financial management specialist (44pm)	<p>The National Financial Management Specialist will work very closely with the PMU finance staff and under the guidance of the International Procurement and Financial Management Specialist to support the PMU on the following:</p> <p>a. Finance and accounting</p> <ul style="list-style-type: none"> • Planning for project implementation and subsequent operation and maintenance (O&M). Develop long, medium term and annual operating plans and schedules as agreed between ADB and the EA for project implementation and subsequent O&M activities. • Accounting oversight. Develop and establish a manual and standard procedures for project accounting to standards agreed between ADB and the EA. • Internal control, funds flow management, financial reporting. Develop and make operational a manual and procedures as agreed between ADB and the EA for project financial management, for use by the PMU in project implementation and the implementing and executing agencies in subsequent O&M activities <p>b. Audit</p> <ul style="list-style-type: none"> • Audit planning. Comply with the terms and standards agreed between ADB and the EA, (i) prepare the TOR for independent external auditors to conduct audits of the project accounts, use of imprest accounts and related disbursement procedural matters, and, (ii) advise and assists the EA in the recruitment of specialists to conduct internal audits of the project accounts and imprest account activities. • Audit management. Advise and assist the PMU in facilitating such external

Code And Job Title	Outline Terms Of Reference
	<p>and internal audits</p> <p>c. Capacity building of financial and accounting staff</p> <ul style="list-style-type: none"> By following the terms agreed between ADB and the EA, plan and organize training in accounting and financial management (including planning) for PMU and implementing agencies staff assigned to the project implementation and subsequent O&M. <p>It is expected that the National Financial Management Specialist will work independently in supporting the EA on all financial matters after the international procurement and financial management specialist has completed his assignment.</p> <p>Qualifications: The national Financial Management specialist should have a degree in finance and accounting or an equivalent qualification with experience in implementing projects funded by international financial institutions, preferably including experience with ADB projects. A minimum related work experience of at least 5 years is required.</p>
M4 Local implementation consultant provision (national), on need basis (50pm)	<p>In view of the complex nature of the project, the PMU will need added support from time to time. Since it is not possible at this early stage to envisage the nature of such requirements, a provision of 50pm of national consultants have been budgeted (\$100,000) and the cost to be included as a 'Provisional Sum' in the RFP (Data Sheet). Under the team leadership and advise of the International Project Management Consultant, the PMU will identify such needs from time to time and hire such consultants with the prior approval of the ADB using the funds under the 'Provisional Sum'. Such recruitment will be on a competitive basis for the selection and engagement of individual consultants.</p>
M5 International laboratory equipment specialist (1pm)	<p>Under the guidance of the Project Manager and the international procurement specialist, the international laboratory equipment specialist will assist in procurement, planning and processing of laboratory equipment and supplies. Special tasks will be to:</p> <ul style="list-style-type: none"> Provide advice on types and capacities of equipment to be procured (where relevant); Provide technical descriptions/specifications of equipment and supplies; Advise on contents of different packages or lots; Draft and/or review (in case potential suppliers have their own conditions) purchase and delivery conditions, warrantee, maintenance contracts, spare parts, required support by the provider for installation and training in the use of the equipment; Provide lists of traders and manufacturers who are potential bidders for different lots; Provide advice to recipients about infrastructural and climatic requirements for installation and use of new equipment (where relevant); Provide support and advice to technical and evaluation committees in evaluating the bids.

Code And Job Title	Outline Terms Of Reference
	<p>Qualifications: The specialist should have a university degree or an equivalent education in a related field with broad experience in procuring laboratory equipment preferably including experience with ADB projects or other institutions with similar procurement methods.</p>
<p>EP1 International consultant – Enquiry Point start up –SPS Specialist (1pm)</p>	<p>Support the Department of Planning in the start-up of a well-functioning SPS Enquiry Point (EP). The consultant will:</p> <ul style="list-style-type: none"> • train staff assigned to operate the EP and their contact points in DOA, DOLF and DFD about roles and responsibilities of EPs • provide standard operating procedures for EP operations in English language • familiarize staff with websites and relevant networks • guide staff in selection of an appropriate website and data base to support the work of the EP • provide guidance to the international consultant for web site design and the national consultant for setting up the database • assist in finding secondment for one staff at the EP in Thailand or Viet Nam <p>Qualifications: Good knowledge about roles and responsibilities of SPS EPs, the WTO SPS network, and skills in training. Experience in operating an EP is expected. The candidate should have a university degree or an equivalent education in a related field with extensive demonstrated experience in the Mekong region. Proficiency in Lao language would be an advantage.</p>
<p>EP2 International consultant – Enquiry Point website design- ICT specialist (1.5pm)</p>	<p>Support the Department of Planning in the design of a website and database for the SPS Enquiry Point (EP). The consultant will:</p> <ul style="list-style-type: none"> • provide technical guidance to the staff of the EP and the international consultant for the start-up of the EP about choice for a website and database • design the website and database to be used • guide the local consultant in entering information in the website • provide training to staff about maintenance of website and database. <p>Qualifications: Good skills and experience in designing websites, databases and necessary (Information and Communication Technology (ICT). The candidate should have a relevant qualification in the ICT field and extensive demonstrated experience in the Mekong region.</p>
<p>EP3 National Consultant – Enquiry Point data base – ICT consultant (4pm)</p>	<p>Support the Department of Planning in setting-up a database for the SPS Enquiry Point (EP). The consultant will under the guidance of EP staff, contact persons in DOA, DOLF and DFD, and the international consultants:</p> <ul style="list-style-type: none"> • collect information and store it in the database • train staff about storage of information in the database. <p>Qualifications: The candidate should have a relevant qualification and at least three years experience in ICT and maintaining databases.</p>
Plant health	
<p>P1 International consultant - pest list development consultant</p>	<p>Support Department of Agriculture and its Plant Protection Center in pest list development. The consultant will:</p> <ul style="list-style-type: none"> • identify priorities for pest list development in Lao PDR, based on analysis of available data on crop commodities traded and their associated pest lists in the GMS region, • provide guidance on the consolidation of passive and active surveillance into draft national pest lists

Code And Job Title	Outline Terms Of Reference
(2pm)	<ul style="list-style-type: none"> • facilitate presentation of findings in a national workshop and their finalization • provide advice about improving quality and relevance • provide advice on the establishment of post-entry quarantine system and infrastructure • provide training on managing post entry-quarantine enhance harmonization of LAO PDR SPS measures with other countries in GMS and ASEAN • advise on the work program of the international consultant for pest diagnosis and taxonomic identification and the national consultant <p>Qualifications: At least ten years of experience in plant quarantine, pest surveillance, pest identification and pest list development, preferably in Southeast Asia. The work on pest list development and post entry quarantine handling may be conducted by different specialists. The candidate should have a masters degree in a related field with extensive demonstrated experience in developed and developing countries.</p>
P2 International consultant-pest diagnosis and taxonomic identification specialist (7pm)	<p>Support Department of Agriculture and its Plant Protection Center in pest list development. The consultants will:</p> <ul style="list-style-type: none"> • provide training on pest diagnosis and taxonomic identification in pest surveillance and in post-entry quarantine • provide advice in the development of specimen-based pest lists, including the curation of collected pest specimens • help in the conduct of annual pest list finalization workshops enhance harmonization of LAO PDR SPS measures with other countries in GMS and ASEAN • enhance harmonization of LAO PDR SPS measures with those of other countries in GMS and ASEAN <p>Qualifications: At least ten years of experience in plant pest surveillance and pest identification in Southeast Asia. The consultant should have at least ten years of experience in pest identification and pest quarantine in at least one of the GMS or ASEAN countries. (The work can be conducted by specialists in different areas, such as in entomology, plant pathology, virology, nematology etc). The candidate should have a university degree in a related field.</p>
P3 International consultant - pesticides management specialist (7pm)	<p>Support Department of Agriculture and its Plant Protection Center in the management of pesticides. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of an annual program of pesticides quality testing • provide on the job training in sample collection and testing of quality of pesticides • assist in the establishment of an annual program of sample collection and testing of pesticides residues by using a combination of rapid test kits and quantitative analysis (the quantitative analysis will be conducted at FDQCC or in a neighboring country) • pursue regional harmonization in methods adopted • establish a system of data storage for retrieval, analysis and interpretation, and for sharing with other Government agencies involved in food safety management, especially the Food and Drugs Department of MOH • establish a laboratory quality management system for the Pesticides Laboratory <p>Qualifications: At least eight years of experience in pesticides management in at least one of the GMS or ASEAN countries. The candidate should have a university degree in a related field.</p>
P4 International consultant - wood and forest pests management	<p>Support the Forestry Department and the National Plant Protection Organization (Plant Quarantine Division (DOA)) in</p> <ul style="list-style-type: none"> • collection of data on wood and forest pests in the country • collect information on SPS requirements of importing countries on wood and forest products • conduct passive surveillance on wood and forest pests from exporters and

Code And Job Title	Outline Terms Of Reference
specialist(1pm)	<p>government agencies</p> <ul style="list-style-type: none"> • liaise with studies on wood and forest pests in other GMS countries • advise on a work program of the national consultant and provide support for its implementation • enhance harmonization of LAO PDR SPS measures with other countries in GMS and ASEAN • assist in the organization of a start-up consultative workshop with public and private stakeholders <p>Qualifications: A university degree in a related field and at least six years of experience in pest quarantine and pest surveys in at least one of the GMS or ASEAN countries and special knowledge about wood and forest pests.</p>
P5 National consultant - wood and forest pests consultant (2pm)	<p>Support the Forestry Department and the National Plant Protection Organization (Plant Quarantine Division (DOA)) in collecting information on wood pests and wood pest SPS requirements. The consultant will:</p> <ul style="list-style-type: none"> • collect data on wood and forest pests in the country • collect information on SPS requirements of importing countries on wood and forest products • conduct passive surveillance on wood and forest pests from exporters and government agencies • liaise with studies on wood and forest pests in other GMS countries; collate and synthesize available information • assist in the organization of two consultative workshops with public and private stakeholders <p>Qualifications: A relevant qualification in the field and adequate knowledge of wood and forest pests</p>
P6 International consultant – methodology for risk categorization import plant products specialist (6pm)	<p>Support the Department of Agriculture (DOA) in development and introduction of risk-based border handling of plants and primary processed plant products. The consultant will:</p> <ul style="list-style-type: none"> • develop a methodology for preparation of list of products based on import risk categorization(e.g. low, medium and high risk products, possibly with further differentiation) • develop differentiated import handling methods and procedures for products of different risk categories • develop, document and recommend standard operating procedures to streamline inspection procedures at the border • review current phytosanitary procedures at the border and the skills base of staff that • implement these procedures • assist in the testing and implementation of draft standard operating procedures • assist in the preparation of an operations manual for implementation by local staff • train local staff to practice SOPs in their daily duties, in accordance with procedures in the operations • develop an inspection manual for the implementation of risk-based import handling • pursue harmonization with practices in other GMS countries • train trainers for training of border inspectors • advise on the work program of the national consultant for risk categorization

Code And Job Title	Outline Terms Of Reference
	<p>Qualifications: A master's degree in agriculture or a related field and at least ten years of experience in risk analysis for imported plants and plant-based products. The candidate should have excellent English language writing skills to support the development of the operations manual with demonstrated related work experience in the region.</p>
<p>P7 National consultant – implementation of risk categorization import plant products consultant (10pm)</p>	<p>Support Department of Agriculture (DOA) in development and introduction of risk-based border handling of plants and primary processed plant products. The consultant will:</p> <ul style="list-style-type: none"> • apply methodology for preparation of list of products with different import risk categorization developed by the international consultant and assign imported products to different risk categories • developing a data base of lists of imported products (following HS classification) with differentiated import handling methods and procedures • developing procedures for continuous evaluation of the system, including the use of interception records • test and further develop the inspection manual for the implementation of risk-based import handling • provide training to inspectors <p>Qualifications: A university degree in agriculture and least ten years of experience in risk analysis for imported plants and plant-based products.</p>
<p>P8 International consultant - develop program for upgrading post-harvest handling - grains and grain products specialist (7pm)</p>	<p>Support Department of Agriculture (DOA) in development of a program for upgrading postharvest handling and adoption of GMP for promoting exports of corn and rice to PRC. Prepare and advise on the technical work plan that includes the following:</p> <ul style="list-style-type: none"> • awareness raising among public and private stakeholders (especially government agencies, private sector entities, extension workers and farmers leaders) • guiding and interpreting supply chain studies of corn and rice destined for export, especially to PRC • identification of critical points in primary production to be described by the extension service for corn and rice with respect to the use of certified seed, pest and pesticides management, and on-farm harvesting, drying, shelling and storage • identification of required public sector surveillance activities in plant pest, pesticides quality, pesticides residues, aflatoxin and food safety parameters • describing good practice and design GMP-based score cards for all steps in the post-harvest supply chain of corn and rice, including collecting, shelling, milling, storage, packing, pest management and transport of product. • providing guidance for training workshops among all stakeholders • preparation of inspection manuals and training of GMP trainers, inspectors, and auditors • guiding the application of score cards and training for a group of pilot enterprises for each crop • lead the technical specification of tenders and contract arrangements for service providers for (i) applying score cards and providing individual advice, and (ii) auditors • provide guidance to the design of work programs for the implementing international and national consultants <p>Qualifications: A degree in agriculture and at least ten years of experience in post-harvest management and GMP for grain and grain products. Experience in Southeast Asia will be an added advantage.</p>

Code And Job Title	Outline Terms Of Reference
<p>P9 International consultant to implement program for GMP and post-harvest handling grains and grain products specialist with extensive experience in Mekong (29pm)</p>	<p>Support Department of Agriculture (DOA) in implementation of good post-harvest handling and GMP for promoting exports of corn and rice to PRC. Under the guidance of the international consultant for development of the program participate in the preparation and implementation of the technical work plan that includes the following:</p> <ul style="list-style-type: none"> • awareness raising among public and private stakeholders (especially government agencies, private sector entities, extension workers and farmers leaders) • assist in the description of good practice and design GMP-based score cards for all steps in the post-harvest supply chain of corn and rice, including collecting, shelling, milling, storage, packing, pest management and transport of product by field testing the method and fine-tuning the approach and scorecards. • lead and participate in implementation of training workshops among all stakeholders • assist in the preparation of inspection manuals and training of GMP trainers, inspectors, and auditors • lead and participate in the application of score cards and training for a group of pilot enterprises for each crop • assisting in the technical specification of tenders and contract arrangements for service providers for (i) applying score cards and providing individual advice, and (ii) auditors • technically supervising service providers • providing guidance to the design of work programs for the local consultant <p>Qualifications: A degree in agriculture and at least eight years of experience in post-harvest management and GMP for grain and grain products in the Mekong region. Experience in Southeast Asia is essential. Ability to communicate in Lao language would be an advantage.</p>
<p>P10 National consultant - export promotion to PRC- grains and grain products exports specialist (54pm)</p>	<p>Support Department of Agriculture (DOA) in development and implementation of methods of good post-harvest handling and GMP for promoting exports of corn and rice to PRC. Under the guidance of the international consultants assist in all activities for the preparation and implementation of the technical work plan. Specific tasks include the following:</p> <ul style="list-style-type: none"> • collection of information for project implementation • preparation of awareness raising, consultative and training workshops • assisting in the logistics • liaising with and providing information to all stakeholders • participate in the preparation of inspection manuals and training of GMP trainers, inspectors, and auditors • assisting in the supervision of service providers <p>Qualifications: A degree in agriculture and at least eight years of experience in project management and implementation for agriculture in Lao PDR</p>
<p>P11 International consultant for supply chain studies for corn and rice (4.5pm)</p>	<p>Under the guidance of the Department of Agriculture (DOA) conduct successively two value chain studies, one for corn and one for rice, actually or potentially destined for export, particularly to PRC. The study will be conducted in five provinces in the North with a focus on the following:</p> <ul style="list-style-type: none"> • collecting information on production, producers, production methods, marketing and supply chain organization, product quality and safety management; value added creation • obstacles to compliance with export market requirements, especially in PRC • identification of main options for compliance and capturing value added through capacity building, including investments, public support programs, surveillance, testing, and regulatory improvements • facilitating discussion of these options with stakeholders in government services,

Code And Job Title	Outline Terms Of Reference
	<p>private sector and farming communities</p> <p>Qualifications: It is expected that it will be an entity in SEA with experience in conducting value chain studies in GMS countries, and preferably in Lao PDR</p>
<p>P12 Service provider - training enterprises for good practice post-harvest handling and GMP (120 enterprises) (Entity-10pm)</p>	<p>Provide special services to the Department of Agriculture (DOA) in implementation of methods of good practice post-harvest handling and GMP for promoting exports of corn and rice to PRC, as identified by the project. The purpose of the work is preparation for certification. The service provider will:</p> <ul style="list-style-type: none"> • conduct awareness raising workshops among interested private sector stakeholders in the post-harvest supply chains for corn and rice actually and potentially destined to PRC • provide targeted training for all interested private sector entities in the post-harvest supply chains of corn and rice, including collecting, shelling, milling, storage, packing, pest management and transport of product • follow-up with individual advice to enterprises through application of GMP-based score cards and individual advice for preparation of certification through independent audit (methods, scorecards and quantitative targets to be specified by project) <p>Qualifications: The service provider is most likely an entity in Southeast Asia with international GMP qualification and has at least eight years of experience in training for post-harvest management and GMP for grain and grain products with experience in at least one GMS or ASEAN country. Ability to communicate in Lao language is necessary.</p>
<p>P13 Service provider - auditing enterprises for good practice post-harvest handling and GMP (70 enterprises) (Entity-3.5 pm)</p>	<p>Provide special services to the Department of Agriculture (DOA) in independent certification of methods of good practice post-harvest handling and GMP for promoting exports of corn and rice to PRC, as identified by the project. The service provider will:</p> <ul style="list-style-type: none"> • conduct audits of private sector entities that have applies with Government for certification of good practice in post-harvest handling and application of GMP in the supply chains of corn and rice, including collecting, shelling, milling, storage, packing, pest management and transport of product (methods, scorecards and quantitative targets to be specified by project) <p>Qualifications: The service provider is most likely an entity in Southeast Asia with international GMP qualification and has at least five years of experience in auditing GMP for in post-harvest handling, including grain and grain products with experience in at least one GMS or ASEAN country. Ability to communicate in Lao language is necessary.</p>
Animal health	
<p>A1 International consultant - trans-boundary animal diseases (TAD) specialist (25pm)</p>	<p>Support Department of Livestock and Fisheries (DOLF) and the CIU coordinator, in close coordination with the international project management consultant in the PMU. The consultant will:</p> <ul style="list-style-type: none"> • assist the CIU in preparing annual and quarterly plans, procurement of materials and equipment, and the contracting of consultants, monitoring and reporting • assist the CIU in arrangement of bilateral and multilateral cooperation and twinning • liaise with other animal health, trade and animal production projects in Lao PDR and other GMS countries • liaise with regional animal health organizations and other technical agencies to enhance coordination of resourcing to Lao PDR for animal health support (such as utilization of regional vaccination banks) and veterinary education • help the CIU with identification of suitable institutions for training, secondment

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	<p>and</p> <ul style="list-style-type: none"> • scholarships • enhance harmonization of LAO PDR SPS measures with other countries in GMS and ASEAN • enhance the effectiveness of consultants by pursuing adequate preparation and follow-up of their field work • development of a set of national TAD surveillance procedures (covering surveillance, outbreak response and disease reporting) • oversight of data system development for all animal subcomponents • participate as necessary in project field work, training and awareness activities • design of work programs for the international and local consultants <p>In addition the consultant will support the DOLF and its National Animal Health Center (NAHC) in tasks related to TAD control. The consultant will:</p> <ul style="list-style-type: none"> • assist in the development of an annual TAD surveillance program for the project target provinces (including sampling plans, visit schedules, definition of surveillance, outbreak response and reporting activities) • assist CIU in development of annual budgets for implementation of the surveillance program • train DOLF staff on standards and techniques for implementing required surveillance and response activities. • advise on formulation and implementation of subsequent annual surveillance plans depending upon surveillance findings and outbreak occurrence. • establish parameters for a system of data storage and sharing for animal health reporting and surveillance activities • advise on policy decisions regarding the effective control of TAD's (including vaccination, culling and management) • assist in development of national TAD surveillance documented procedures (covering • surveillance, outbreak response and disease reporting) <p>Qualifications: A degree in Veterinary Science, broad experience in management and implementation of animal health projects in developing countries. The consultant should have at least 10 years of related experience and preferably in the GMS region.</p>
A2 International consultant - TAD laboratory specialist (4pm)	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in tasks relating to TAD control. The consultant will:</p> <ul style="list-style-type: none"> • review of existing laboratory testing protocols for TAD and amend as appropriate to improve compliance with international standards • provide training of laboratory staff in testing methodology and conduct follow up proficiency testing • advise on procurement of laboratory equipment and consumables • assist in establishing parameters for a system of data storage for animal health reporting and surveillance activities • assist CIU in development of annual budgets for testing support for the surveillance program • assist in migration of NAHC laboratory to new building <p>Qualifications: Veterinary or graduate in other relevant field with at least eight years of experience in the management of animal health laboratory services. Experience in a GMS/ASEAN country is a must</p>
A3	Support Department of Livestock and Fisheries (DOLF) and its National Animal Health

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National consultant - TAD control consultant (24.5pm)	<p>Center (NAHC) in tasks relating to TAD control. The consultant will:</p> <ul style="list-style-type: none"> • assist in the implementation of the annual TAD surveillance program including participation as necessary in project field work, outbreak response and awareness activities • assist in the training of provincial/district staff and VVWs in disease surveillance, sample collection, submission, response and reporting procedures • assist in the formulation of annual surveillance plans depending upon surveillance findings and outbreak occurrence • assist in collection and entry of data from animal health reporting and surveillance • assist in migration of NAHC laboratory to new building • assist CIU in development of annual budgets for implementation of the surveillance program <p>Qualifications: Veterinary degree with at least 5 years of experience in the implementation of animal health programs.</p>
A4 International consultant – development of control system for veterinary drugs specialist (5pm)	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in the development of a control system for veterinary drugs. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of a regulatory framework and its standardization by collecting data from neighboring countries and international organizations • assist in the establishment of an annual program of testing quality of veterinary drugs (the analysis will be conducted at FDQCC or in a neighboring country) • pursue regional harmonization in regulation, standardization and control methods • establish parameters for a system of data storage for retrieval and for sharing with other Government agencies involved in food safety management, especially the Food and Drugs Department of MOH • provide guidance to the design of work programs for the national consultant <p>In addition the consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of import control procedures and training of border inspectors • provide on the job training in sample collection • provide guidance on annual testing program operation and follow up on compliance activities • assist in implementation of the data storage system <p>Qualifications: Veterinary or pharmacology graduate or equivalent with at least ten years of experience in control of veterinary drugs in at least one GMS or ASEAN country.</p>
A5 National consultant - veterinary drugs consultant (5pm)	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in building capacity for veterinary drug control. The consultant will:</p> <ul style="list-style-type: none"> • assist in the implementation of the annual veterinary drug testing program • assist in sample collection and other control activities • assist in follow up on compliance activities • assist in data entry for the data storage system <p>Qualifications: A veterinary or pharmacology graduate or equivalent with at least 3 years of work experience.</p>
A6 International	Support Department of Livestock and Fisheries (DOLF) and the Animal Feed Unit (AFU) under its National Animal Health Center (NAHC) in building capacity for control of safety

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consultant – development of a control system for safety of animal feed specialist (2pm)	<p>of feed. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of a regulatory framework and its standardization by collecting data from neighboring countries and international organizations • assist in the establishment of an annual program testing the safety of animal feed (including definition of surveillance visits, sampling plans, and testing schedule) • assist CIU in development of annual budgets for operation of the testing program • pursue regional harmonization in regulation, standardization and control methods • establish parameters for a system of data storage for retrieval and sharing of information on animal feed imports and testing • advise CIU on procurement of laboratory equipment and consumables • provide guidance to the design of work programs for the international laboratory and local consultants <p>Qualifications: A veterinary or agricultural graduate with at least ten years of experience in control of safety of animal feed and related safety of animal product, preferably with experience in Southeast Asia</p>
A7 International consultant – safety of animal feed laboratory specialist (2pm)	<p>Support Department of Livestock and Fisheries (DOLF) and the Animal Feed Unit (AFU) under its National Animal Health Center (NAHC) in building capacity for control of animal feed. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of the Animal Feed Unit laboratory • develop protocols for sampling and testing of animal feed • provide training of laboratory staff in testing methodologies and conduct follow up proficiency testing • pursue regional harmonization in testing • provide advice on procurement of consumables • assist in establishing parameters for a system of data storage for animal health reporting and surveillance activities <p>Qualifications: A veterinary or agricultural graduate or equivalent with at least eight years of experience in control of safety of feed in at least one GMS or ASEAN country. Substantial experience in the region is a must.</p>
A8 National consultant - safety of animal feed consultant (2pm)	<p>Support Department of Livestock and Fisheries (DOLF) and the Animal Feed Unit (AFU) under its National Animal Health Center (NAHC) in building capacity for control of animal feed. The consultant will:</p> <ul style="list-style-type: none"> • assist in implementation of the annual testing program • provide training of provincial/border staff in sample collection and submission • assist in sample collection and other control activities • assist in follow up on compliance activities • assist in data entry for the data storage system <p>Qualifications: A veterinary or agricultural graduate with at least 5 years work experience.</p>
A9 International consultant - meat hygiene and animal products safety control specialist (4 pm)	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in building capacity for control of safety of animal products. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of a regulatory framework and its standardization by collecting data from neighboring countries and international organizations • assist in the establishment of an annual program of testing the safety of animal products (and conducting of meat inspection related activities) • pursue regional harmonization in regulation, standardization and control methods • assist in establishing a system of data storage for retrieval and for sharing with

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	<p>other Government agencies involved in food safety management including selection of priority parameters</p> <ul style="list-style-type: none"> • assist CIU in development of annual budgets for operation of the testing program • advise CIU on procurement of laboratory equipment and consumables • develop a meat inspection and hygiene manual defining disease standards and quality control procedures based on regional materials and standards • assist in development of a training program for meat inspection staff and meat workers • provide on the job training on meat inspection standards, meat hygiene and quality control • provide guidance to the design of work programs for the international laboratory and local consultants <p>Qualifications: A University degree in a related field and at least eight years of experience in control of food safety, including safety of animal products; preferably experience in Southeast Asia. Also, experience in meat hygiene and inspection systems in at least one of the GMS or ASEAN countries is a requirement.</p>
<p>A10 International consultant - safety animal products; (laboratory specialist) (3pm)</p>	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in building capacity for control of safety of animal products. The consultant will:</p> <ul style="list-style-type: none"> • assist in the establishment of the Animal Products Quality Assurance Control Unit laboratory • develop a set of sampling and testing protocols for animal product safety testing • provide training on laboratory techniques • provide follow up proficiency testing • assist in establishing a system of data storage for retrieval and for sharing with other Government agencies involved in food safety management • advise CIU on procurement of consumables • pursue regional harmonization in testing methods <p>Qualifications: A University degree in a related field and at least eight years of experience in laboratory testing for the control of food safety, including safety of animal products in at least one of the GMS or ASEAN countries.</p>
<p>A11 National consultant - safety of animal products consultant (4pm)</p>	<p>Support Department of Livestock and Fisheries (DOLF) and its National Animal Health Center (NAHC) in building capacity for control of safety of animal products. The consultant will:</p> <ul style="list-style-type: none"> • assist in implementation of the annual testing program • provide training of provincial/border staff in sample collection and submission • assist in on the job training on meat inspection standards, meat hygiene and quality control • assist in sample collection and other control activities • assist in follow up on compliance activities • assist in data entry for the data storage system <p>Qualifications: A veterinary graduate with 5 years of work experience.</p>
<p>A12 International consultant – animal products risk categorization</p>	<p>Support the Department of Livestock and Fisheries (DOLF) in development and introduction of risk-based border handling of animals and primary processed animal products. The consultant will:</p> <ul style="list-style-type: none"> • develop a methodology for preparation of a list of products with different import risk categorization • develop a procedural manual for the implementation of risk-based import

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specialist (6pm)	<p>handling</p> <ul style="list-style-type: none"> • provide on job training on risk assessment methods to staff • pursue harmonization with risk-based import practices in other GMS countries • assist in the establishing of data storage for retrieval and sharing of information on imports of animals and animal products including selection of priority parameters • assist in development and implementation of import conditions and procedures • train trainers for training of border inspectors • advise on the work program of the national consultant <p>Qualifications: Veterinary degree with at least ten years of experience in risk analysis for imported animals and primary processed animal products in at least one ASEAN or GMS country.</p>
A13 National consultant - import animal products - risk categorization consultant (4pm)	<p>Support the Department of Livestock and Fisheries (DOLF) in development and introduction of risk-based border handling of animals and primary processed animal products. The consultant will:</p> <ul style="list-style-type: none"> • assist in implementation of the import procedural manual • assist in training of provincial/border staff • assist in follow up on compliance activities • assist in data entry for the data storage system <p>Qualifications: veterinary graduate with 5 years of work experience.</p>
Food safety	
F1 International consultant - food safety surveillance – food safety specialist (6pm)	<p>Support the Food and Drugs Department (MOH) in the development and implementation of an annual cycle of food safety surveillance, including active and passive surveillance, domestic and imported products, outbreak investigation and response to identified hazards. The consultant will:</p> <ul style="list-style-type: none"> • Develop the methodology for national food safety surveillance, which includes MAF agencies which share responsibilities in food safety management. • Assist in the design of an annual surveillance cycle which targets actual risks and perceived risks through active surveillance and inspection programs; this includes the annual work program of the mobile unit • Participate in annual design workshops in which actual and perceived risks are discussed. • Participate in annual workshops in which results of the surveillance cycle are assessed. • Assists in the design of a food safety information data base to be used for risk analysis, and annual reporting • Participate in training of trainers for inspectors, sample collection, and risk-based inspections • Advise on design of an annual report on food safety in the country which includes information from MAF and MOH units • Advise on active participation in INFOSAN and ARASFF • Advise on the work program of the national consultant. <p>Qualifications: A degree in a related field and at least ten years of broad experience in food safety management and risk analysis, including surveillance and inspection. Preferably some experience in Southeast Asia</p>
F2 National consultant - food safety	<p>Support the Food and Drugs Department (MOH) in the development and implementation of an annual cycle of food safety surveillance, with guidance from the international consultant. The work includes the following tasks:</p> <ul style="list-style-type: none"> • Collect information for design of the surveillance system and the annual cycles

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surveillance – food safety consultant (60pm)	<ul style="list-style-type: none"> • Assist in the planning and logistics of surveillance activities • Participate in annual design workshops in which actual and perceived risks are discussed. • Participate in annual workshops in which results of the surveillance cycle are assessed. • Assists in the design a food safety information data base and storage of data • Participate in preparation of the annual food safety report • Contribute to active participation in INFOSAN and ARASFF <p>Qualifications: A degree or equivalent qualification in a related field and at least five years of experience in project implementation, including experience with data processing. Familiarity with food safety management, agriculture, trade, and national institutions.</p>
F3 International consultant-assessment for granting first-time market access permit-food safety specialist (3pm)	<p>Support the Ministry of Health (MOH) in the development of capacities to assess requests for first-time market access for processed food products. The consultant will:</p> <ul style="list-style-type: none"> • describe national practice and assess national capacities • cooperate with international consultant in identifying practices in other GMS countries, which will be available from study in other GMS countries • participate in study tour to study practices and capacities in PRC, Thailand and Viet Nam, and to explore options to make use of risk assessment work in these countries • organize concluding workshop • jointly with regional consultant recommend follow up • provide training on regional cooperation and harmonization • set-up data-base containing products for which market-access has been granted <p>Qualifications: A degree or equivalent in a related field and at least eight years of experience in food safety management and risk analysis, in particular processed food, in at least one GMS or ASEAN country.</p>
F4 International risk-based import handling specialist (5pm)	<p>Support the Ministry of Health (MOH) in the development and implementation of risk-based import handling for processed food products. The consultant will:</p> <ul style="list-style-type: none"> • developing a methodology for preparation of list of products with different import risk categorization (e.g. low, medium and high risk products, possibly with further differentiation) • prepare and participate in a study tour to Thailand to study risk-based border management approach in these countries • developing differentiated import handling methods and procedures for products with different risk • developing inspection manual for the implementation of risk-based import handling • design training of trainers for training inspectors • pursue harmonization with practices in other GMS countries • participate in the development and implementation of the annual cycle of food safety • surveillance, including inspection <p>Qualifications: A degree in a related field and at least ten years of experience in food safety management and risk analysis, in particular processed food, in at least one GMS or ASEAN country.</p>
F5	Support the Ministry of Health (MOH) in the development and implementation of

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International consultant – food safety tourist industry and food processing enterprises (QCBS, 80:20) (4pm)	<p>programs of improved food safety handling in the tourist industry and related food processing industry through the use of GHP/GMP based scorecards and certification by trainers and independent auditors. The consultant will:</p> <ul style="list-style-type: none"> • conduct awareness raising activities among public and private stakeholders • review existing scorecards, collect information about scorecards and ratings applied in other GMS or ASEAN countries and design GMP-based score cards for restaurants and food processing enterprises suitable for the country • adopt separate pilot programs for application of scorecards among restaurants and food processing industries • design a scorecard-based rating system for restaurants • participate in awareness raising and training workshops among all stakeholders about the adopted programs • preparation of inspection manuals and training of GMP trainers, inspectors, and auditors • guide the application of score cards and training for groups of pilot restaurants and enterprises • evaluate the pilot programs, adjust methods and scorecards where relevant and design large scale implementation programs for restaurants and groups of processing industries • assist in the specification of tenders and contract arrangements for service providers for (i) applying score cards and providing individual advice, and (ii) auditors • guide the technical supervision of service providers • provide guidance to the design of work programs for the international consultant for food safety for restaurants and food processing enterprises and local consultant <p>Qualifications: A degree or equivalent qualification in a related field and at least eight years of experience in training and auditing of GMP among small and medium sized food processing enterprises and restaurants. Preferably experience in Southeast Asia. (Two consultants may be involved to cover expertise in restaurants and food enterprises).</p>
F6 International (regional) consultant – food safety tourist industry and food processing enterprises (QCBS, 80:20) (12pm)	<p>Support the Ministry of Health (MOH) in the development and implementation of programs of improved food safety handling in the tourist industry and related food processing industry through the use of GHP/GMP based score cards and certification by trainers and independent auditors. The work will be carried out under the general guidance of the international consultant. The consultant will:</p> <ul style="list-style-type: none"> • participate in awareness raising among public and private stakeholders • review existing scorecards, collect information about scorecards and ratings applied in other GMS or ASEAN countries and contribute to the design of GMP-based score cards for restaurants and food processing enterprises suitable for the country • assist in the adoption of separate pilot programs for application of scorecards among restaurants and food processing industries • assist in the design of a scorecard-based rating system for restaurants. • participate in awareness raising and training workshops among all stakeholders about the adopted programs • assist in the preparation of inspection manuals and training of GMP trainers, inspectors, and auditors • conduct the application of score cards and training for groups of pilot restaurants and enterprises • participate in the evaluation of the pilot programs, and advise on the adjustment of methods and scorecards where relevant and contribute to the design of large scale implementation programs for restaurants and groups of processing industries • assist in the specification of tenders and contract arrangements for service providers for (i) applying score cards and providing individual advice, and (ii) auditors

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	<ul style="list-style-type: none"> • provide technical supervision of service providers • provide guidance to the design of work programs for the local consultant <p>Qualifications: At least eight years of experience in training and auditing of GMP among small and medium sized food processing enterprises and restaurants in at least one GMS or ASEAN country. (Two consultants may be involved to cover expertise in restaurants and food enterprises). Adequate regional experience is essential. Ability to communicate in Lao language is necessary.</p>
F7 National consultant - food safety tourist industry and food processing enterprises (30pm)	<p>Support the Ministry of Health (MOH) in the development and implementation of programs of improved food safety handling in the tourist industry and related food processing industry through the use of GHP/GMP based scorecards and certification by trainers and independent auditors. The work will be carried out under the general guidance of the international consultants. The consultant will:</p> <ul style="list-style-type: none"> • participate in the organization of workshops and meetings for awareness raising and training • collect information about enterprises and restaurants • participate in the planning and logistics of all field work • keep records of all activities, store the data in a database, and participate in monitoring and evaluation activities • assist in the technical supervision of service providers <p>Qualifications: A degree or equivalent with experience with data processing. Familiarity with food safety management, and national institutions.</p>
F8 Service provider - training enterprises and restaurants for upgrading food safety handling and GMP (800 enterprises) (Entity-80pm)	<p>Provide special services to the MOH in implementation of upgrading safety of food handling in restaurant and food enterprises through the use of scorecards and training. The purpose of the work is preparation for certification. The consultant will:</p> <ul style="list-style-type: none"> • conduct awareness raising workshops among interested private sector stakeholders in restaurants and groups of processing industries • provide targeted training for all interested private enterprises in areas and segments of the industry specified by the project • follow-up with individual advice to enterprises through application of GMP-based score cards and individual advice for preparation of certification through independent audit • conduct pre-GMP audits of food processing enterprises and pre-audits of restaurants • consult on follow up GHP/GMP audits related to corrective actions and preventive actions of noncompliant (methods, scorecards and quantitative targets to be specified by project) <p>Qualifications: At least eight years of experience in training and auditing for application of GHP/GMP application in restaurants or food processing enterprises. The service provider should have international recognition as GMP provider and experience in at least one GMS or ASEAN country. ([This tender may be split in two parts with the purpose to develop a competitive market). Ability to communicate in Lao language is necessary.</p>
F9 Service provider - audits enterprises for good practice post-harvest handling and GMP (360	<p>Provide special services to the MOH in implementation of upgrading safety of food handling in restaurant and food enterprises. The purpose of the work is to conduct audits for certification. The consultant will:</p> <ul style="list-style-type: none"> • conduct GMP audits of food processing enterprises, using scorecards provided by the project • conduct audits of restaurants using scorecards provided by the project (methods, scorecards and quantitative targets to be specified by project) <p>Qualifications: At least eight years of experience in auditing for application of GHP/GMP</p>

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enterprises) (Entity-12pm)	application in restaurants or food processing enterprises. The service provider should have international recognition as GMP auditor and experience in at least one GMS or ASEAN country. Ability to communicate in Lao language is necessary.
Education	
E1 International scholars for curricula upgrading (6pm)	<p>Three international scholars in plant health, animal health and food safety respectively, will be recruited to assist Faculty of Agriculture, National University of Laos to upgrade the curriculum for teaching, mainly at bachelors level, in plant health, animal health and food safety in courses that cover main topics relevant to (i) the WTO SPS Agreement, (i) the standards and guidelines provided by the international standard setting bodies – International Plant Protection Convention (IPPC), the International Organization of Animal Health (OIE) and the Codes Alimentarius, and (iii) relevant standards of the International Standards Organization (ISO).</p> <p>The consultants will:</p> <ul style="list-style-type: none"> • review present and planned new curricula and teaching material • consult with staff about ways to improve curricula highlight important teaching topics; (i) pests and diseases (i.e., their spread and impact in GMS, taxonomy and identification, epidemiology and pathways of their spread, plant pest and disease control, pesticides, inspection, and the international framework for plant protection and trade in plant products - WTO, IPPC), (ii) animal diseases (their incidence and impact in Lao PDR and GMS, zoonoses and safety of animal products, diagnosis, epidemiology, treatment and containment, safety of feed, veterinary drugs, inspection, and the international framework for animal disease control and trade in animals and animal products - WTO, OIE), and (iii) food safety (status and hazards in GMS, food technology food safety hazards food borne diseases, food safety testing and assurance, prevention of food hazards, supply-chain control, inspection, and international frameworks for food safety management and trade in food products - WTO, Codex Alimentarius). The food safety specialist will also meet with University of Health Sciences (UHS) staff teaching food safety, review their curricula and course material and provide advice for upgrading; provide lectures and presentations on selected topics; • help to identify adequate teaching material and literature; • provide advice on a program of guest lecturers for areas where the Faculty lacks capacities or where staff is abroad for advanced studies and training. <p>Qualifications: The curricula specialists must have broad experience in teaching plant health, animal health and food safety in advanced universities and good understanding of university education in developing countries, preferably in Southeast Asia. It is expected that the scholars will have as a minimum a masters degree and preferably a PhD in the related specialization.</p>
E2 International scholars for teaching SPS courses (34.5pm)	<p>A program will be established for guest lecturers in areas with gaps in expertise. (Guest lecturers will be recruited from universities in the region, based upon recommendations by curricula specialists, preference from the faculty and availability). The guest lecturers will:</p> <ul style="list-style-type: none"> • provide short courses and lectures; • assist in improving teaching material (syllabi etc.) and teaching methods • participate in research <p>Qualifications: highly qualified teachers from universities in Southeast Asia. It is expected that the scholars will have as a minimum a masters degree and preferably a PhD in the related specialization.</p>

VII. SAFEGUARDS

95. The Project investments are in a range of hardware (e.g., laboratory equipment and consumables, small civil works, vehicles, survey equipment etc) and software (e.g., technical assistance, training, surveillance, planning, computer database and other programs, etc) within the context of overall national capacity building for improvement in SPS services.

A. Resettlement

96. The Project civil works are all small-scale and are on existing university sites, without implications for resettlement of any persons. There are no construction activities at (for example) border sites, and all systems' upgrading takes place within existing facilities.

B. Environmental Impact

97. The Project has no negative environmental impact through the construction or rehabilitation of the various laboratories, nor does it from the expanded scope of pest and animal disease surveys etc.

98. The Project can be expected to have positive environmental impacts in the forms of: (i) improved food handling practices (less human health impacts in terms of illness-associated medical costs and work and leisure time lost, less wastage etc); (ii) improved animal health (through stronger outbreak response); and (iii) better control of plant and wood products' pests. Other positive impacts would arise because of appropriate (i.e., safer) use of agrochemicals, less use of land through improved animal and agriculture productivity, and better protection of biodiversity against invasive pests.

C. Indigenous Peoples

99. The Project investments are made within existing institutions, academic sites, laboratory facilities etc, and as such do not impact upon indigenous peoples at all.

100. To the extent that indigenous peoples are suppliers, producers of AFF products and employees of enterprises engaged in AFF activities they will benefit from the Project in terms of employment and income opportunities. Indigenous peoples may reap particular benefits if they are employees of tourism-related enterprises in ethnic minority areas (e.g., border areas, uplands, national parks, areas targeted by 'eco-tourism').

VIII. GENDER AND SOCIAL DIMENSIONS

A. Gender Issues

101. Gender development in Lao PDR has accelerated throughout the past ten to fifteen years. Whereas once unheard of, it is now possible (for example) to find women heads of village, and women filling senior government positions - including that of governor at either provincial or

district levels. At the highest policy level, recognition of the importance of gender issues in development by the Lao PDR Government is reflected in various national policies and strategies. For example, the “*National Growth and Poverty Eradication Strategy*” (NGPES) includes a gender strategy and identifies the need to: (i) promote gender equality in Government-wide, and (ii) address needs and priorities of poor women, especially in the rural areas and among ethnic minority groups. In 2003, the government established the National Council for the Advancement of Women (NCAW) under the Prime Minister’s office to act as the main impetus to mainstreaming gender across all sectors and provinces.

102. In relation to AFF trade and production, and specifically within the agriculture sector, the NGPES seeks to: (i) improve poor women’s productivity, food security, and income; (ii) reduce time burdens in agriculture, livestock raising, and fishing; and (iii) promote suitable use of non-timber forest products and make progress towards target GDP growth and poverty reduction. However, although women account for over 50% of the agriculture workforce and are responsible for many decisions and activities surrounding AFF production, they still receive a disproportionately small share of the services and resources directed at AFF development, and they remain somewhat unaccounted for in public policies and programs. Gender gaps have been found⁴⁷ to exist (for example) in: (i) agriculture extension services; (ii) cultivation, commercialization, and other productivity enhancement interventions; (iii) market information services; and (iv) financial and other (including trade-related) services. To promote AFF production and trade, including through the improvement of SPS capacity, gender inequalities in service delivery by government institutions will have to be addressed under the Project. Tourism is increasingly widely recognized to be a vehicle for gender empowerment and women’s equality,⁴⁸ so as Lao PDR’s tourism expands this will particularly benefit women.

103. The Project is categorized as having some gender benefits with reference to the ADB *Gender Guidelines*.⁴⁹ At present the share of female among Government staff in most SPS agencies varies, but is generally between 30-50%. In restaurants and food enterprises staffing is more gender balanced. The Government will ensure that all Project activities are designed and implemented in accordance with ADB’s *Policy on Gender and Development* (1998). In particular, the Government will ensure that (on average) female participation for all kinds of training will at least be proportional to the share of female employed. The Government will further ensure that all monitoring and evaluation data will be disaggregated by sex.

B. Social and Poverty Issues

104. Rapid economic growth has contributed to substantial progress in poverty reduction, with the national poverty incidence falling from 33.3% in 2003 to 28% in 2008. Poverty in Lao PDR is directly linked to food availability, and recent estimates⁵⁰ by World Food Programme suggest that only about one-third of the rural population are truly ‘food secure’ in the strict sense of the term, and that one household in seven has either poor or borderline food consumption. Perhaps most tellingly of all, despite over a decade of sustained economic growth for the economy as a whole, chronic malnutrition remains ‘alarmingly high’; every second child in rural areas is chronically malnourished (based on standardized anthropometric measures of stunting). Thus, while steady progress has been made to achieve the first MDG’s—i.e. a reduction in income poverty, the performance in reducing non-income poverty has been mixed. While important progress is being

⁴⁷ *Capacity Strengthening for Gender Mainstreaming in the Agriculture Sector* ADB CDTA (2010).

⁴⁸ According to the World Tourism Organization ‘*Global Report on Women in Tourism*’ (2011)

⁴⁹ ADB (2010).

⁵⁰ World Food Programme; ‘*Comprehensive Food Security And Vulnerability Assessment*’ (2007).

made, more attention is needed to fill the gaps for social service provision, environmental enforcement capacity, child malnutrition and maternal mortality. Poverty is increasingly concentrated amongst certain regions and ethnic groups, and major improvements in government services are required to address non-income poverty and to improve the level of human resource development.

105. The Project's Classification is a 'General Intervention', and does not target poverty directly, but by improving the SPS handling of AFF products in trade it will contribute to increasing agriculture sector production and productivity. It will help to make AFF trade more predictable, transparent, and with fewer transaction costs. It will thus contribute to strengthening AFF value chains (within and between countries), extending back to the on-farm production environment, thereby creating demand for on-farm and off-farm labor, primary AFF produce (agriculture and livestock products) and supporting incomes and gainful employment of poor rural households. In all countries, poverty is now largely a rural phenomenon.

106. The improved surveillance and outbreak response to livestock diseases will benefit rural households in specific provinces as animal morbidity/mortality is reduced. Improved national food surveillance reduces exposure to illness and time off work for all, including the poor for whom it is relatively more important in terms of illness costs and lost work time.

107. In the tourist industry, the grading of establishments for food handling will help to stabilize and formalize hotels and restaurants, thus indirectly sustaining employment among people with relatively low wages in food preparation, handling, and serving. Undertaking grading visits and audits, as part of national food safety surveillance systems, will create formal jobs.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Design Summary	Performance Targets / Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
Impact Lao PDR AFF products become safer, more efficiently produced, and traded in greater quantities.	By 2020: (i) increased formal trade in AFF products to GMS (annual value up 10-15%; from \$166 million in 2009) (ii) reduced incidence of food-borne diseases and related morbidity and mortality, and loss of productive time for consumers by 10%(1442 DALY in 2004) (iii) tourism arrivals increase (5-10% annually from 2010; 2 million arrivals in 2009) (iv) lower SPS-related border transaction costs for traders (at least 20% from 2010)	National trade statistics; WITS, UN COMTRADE Reports of food-borne disease outbreaks (from FDD) and DALYs (WHO) National Tourism Authority records and surveys Stakeholder (traders and forwarders) consultation (2014) and survey (2017)	Assumption: Trade facilitation measures covering AFF products continue to be effectively implemented in GMS, ASEAN and other countries Risk: Lack of GOL commitment to recurrent costs funding of enhanced SPS system over medium-term

Design Summary	Performance Targets / Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
Outcome Enhanced SPS management system in Lao PDR	By 2017: (i) Crop- or product-specific market access agreements based on new pest/disease information (3 - corn, rice, one other) (ii) improved animal disease outbreak response using variety of controls (vaccination, movement restrictions, quarantine etc) in 2 provinces; 200 visits and 4 responses per year on average (iii) improved food hazard response capacity (product, violation, dispossession, compliance, enforcement knowledge gained through attendance at 16 courses, 5 study tours) (iv) improved food safety (on GHP and GMP-based grading) in 360 tourist and food processing enterprises in 3 major centers (v) GMS trading partners regard Lao PDR plant, animal and food SPS data and practices as more reliable (timeliness and quality of reporting to partners and international organizations)	Supervision and review missions Consultations with stakeholders and development partners active in SPS (WB, AFD, etc) Annual reports by MAF, MOH, MOE, and DOA, DOLF, FDD, FA-NUOL; animal health and food safety annual situation reports GMS working group Reports (CBTA); attitudinal survey of Lao PDR regional trading partners Project Completion Report (2018)	Assumptions: Trading partners' continuing demand for Lao PDR AFF products Provincial authorities cooperate with NAHC in implementing controls Regional and national tourism demand continues to grow and provide private incentives Risk: No major new health hazards (e.g., SARS, avian or swine flu) emerges, resulting in re-allocation of human and financial resources for SPS activities
Outputs 1. Strengthened surveillance and inspection programs designed and implemented (for plant health, animal health and food safety)	(i) programmed annual surveys provide robust and timely pest and disease information covering priority crops available; (ii) <i>ad hoc</i> PEQ testing of imported seed and planting materials; (iii) routine pesticide formulation and residue analysis results available annually; (iv) forest product pest issues understood (by 2016); (v) corn and another cross border supply chains strengthened (by 2016); (vi) established risk-based surveillance and awareness of TAD in target areas (2 provinces); (vii) formulation testing of veterinary drugs begun (2012 onwards), monitoring of animal feeds established (by 2015); (viii) annual testing of animal food products (by 2015); (xi) active participation in SEACFMD, INFOSAN and ARASAFF etc (data shared; annual reporting); (x) risk-based, programmed annual food safety surveys and inspection capacity established (in Vientiane Capital, then	Project M&E reporting ADB review missions Annual reports by DOA, DOLF, FDD Regional animal health and food safety institutions' reports Tourist industry surveys and reviews (National Tourism Authority and international)	Assumptions: Government commitment to ongoing economic reform (national and sectoral) processes, WTO accession, etc continues Government commitment to GMS and regional processes continues National education policy reforms continue to support undergraduate education Risk

Design Summary	Performance Targets / Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	rolled out), with annual reports); (xi) staff training, diagnostic assessments, in 800 tourist and food processing enterprises, and audits in 360 tourist and food processing enterprises in Vientiane Capital, L. Prabang and Pakse (30% of trainees are female); and, (xi) risk-based management of plant, animal and food products imports at 2 international border posts		Technical and administrative capacity to implement the project proves insufficient Operational cost for monitoring, surveillance, testing and diagnostics is insufficient.
2. Improved regional cooperation and harmonization	(i) bilateral working groups on plant protection and food safety (each with PRC, Thailand and Viet Nam) and animal health - with same three countries, plus Cambodia (numbers of meetings and participants, topics discussed and agreements reached)	Bilateral working groups' minutes and reports	
3. Enhanced education levels/university training of SPS specialists	(i) plant pest and disease, animal pest and disease, food safety curricula (i.e., 3 areas) upgraded, with associated teaching materials produced by 2016; (ii) post-graduate (3 – at least 30% female) and short-course trainees (6 - 30% are female); (iii) English language proficiency of 50% of staff and students increased (30% are female); (iv) upgraded teaching and laboratory facilities (3 departments and 1 core facility equipment - support the quality of teaching increase) by 2014; (v) institutional twinning arrangements implemented (number, country, year); collaboration between NUOL and MAF and MOH strengthened (participation in surveillance, testing and diagnostics, teaching)	Annual reports of FA-NUOL (3 departments), UHS	
4. Effective project management and monitoring	PMU, 4 CIUs established and staffed (by end-2012; 30% of recruited staff are female); FM, Procurement and M&E systems operational (by 2013; 30% of recruited staff are female)	Quarterly and annual monitoring and evaluation reporting	
Activities with Milestones: Lao PDR			Inputs
1. Surveillance and inspection programs			ADB
1.1 Plant health program			
1.1.1 renovate laboratories, supply equipment (for pest lists and pesticides management) and greenhouse (for PEQ etc) by 2013			\$3 million equivalent loan and \$11 million grant
1.1.2 design, plan and implement time-bound pest surveys (4 per year) on priority crops (corn, cabbage, others to be determined)			
1.1.3 develop pest information database (by 2015)			
1.1.4 finalize pest lists at annual workshops (one per year after 2013)			
1.1.5 send 3 staff for regional scholarship on plant pests (1 per year)			
1.1.6 design, plan and implement annual bio-safety testing program for imported seed and propagation material			
1.1.7 design, plan and implement annual pesticides residues sampling (using rapid test kits)			
1.1.8 undertake annual analytic proficiency testing program of pesticides			Government Counterpart support, office, and other in kind contribution \$0.456 million

Design Summary	Performance Targets / Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
	<p>1.1.9 send staff for regional work attachments (4 over 5 years)</p> <p>1.1.10 organize and run regional study tour (3 over 5 years)</p> <p>1.1.11 conduct national pesticides management workshop (2 over 5 years)</p> <p>1.1.12 organize annual on-site English language proficiency course (5)</p> <p>1.1.13 conduct situational analysis of forest pests, establish passive surveillance system, and consult with GMS partners regarding mainstreaming into SPS systems (2 workshops before end-2016)</p> <p>1.1.14 categorize plant import risks, develop risk-based standard operating procedure materials, visual aids and guides, SPS awareness material etc; train staff in usage and develop process to capture and store data (8 workshops before end-2016).</p> <p>1.1.15 Monitor pesticides residues at border points (from 2013)</p> <p>1.1.16 fully report plant health situation to GMS countries/IPPC (by 2017)</p> <p>1.1.17 value chain analysis of corn (2013 onwards) and rice (2014 onwards), training of GOL staff, private sector and farmers (27 workshops per crop; by end-2016)</p> <p>1.2. Animal health program</p> <p>1.2.1 supply laboratory equipment and ICT for NAHC (2012 onwards)</p> <p>1.2.2 design, plan and implement annual surveillance programs for animal health (TADs – FMD and CSF in Savannakhet and Xiengkhouang; 2012 onwards)</p> <p>1.2.3 manage annual disease response program (movement control, vaccines etc) –2012 onwards</p> <p>1.2.4 develop TAD awareness campaign and materials (2 over 5 years)</p> <p>1.2.5 develop TAD information database (2012 onwards)</p> <p>1.2.6 conduct annual domestic study tours on TAD (5 years)</p> <p>1.2.7 update technical regulations for control of animal feeds (in 2013)</p> <p>1.2.8 upgrade AFU feed testing equipment (2012 onwards)</p> <p>1.2.9 annual pesticide and heavy metal surveillance of animal feeds (500 samples in total over 5 years)</p> <p>1.2.10 train AFU staff in testing (1 course)</p> <p>1.2.11 develop database for storage and management of animal feeds information (2012 onwards)</p> <p>1.2.12 develop animal feeds awareness campaign and materials (2 in first 2 years)</p> <p>1.2.13 conduct regional study tour (2012 onwards)</p> <p>1.2.14 conduct annual domestic study tour on animal feeds (5)</p> <p>1.2.15 update technical regulations for control of animal food safety (in 2013)</p> <p>1.2.16 upgrade laboratory and ICT equipment (2012 onwards)</p> <p>1.2.17 produce meat inspection manual and conduct staff training (laboratory, hygiene, inspection, etc; 2012 onwards)</p> <p>1.2.18 expanded annual surveillance program (slaughterhouses, markets, fish processing etc) – 134 visits over 5 years</p> <p>1.2.19 develop database for storage and management of food safety information (2012 onwards)</p> <p>1.2.20 develop animal feeds food safety awareness campaign and materials (tentatively 2013 and 2014)</p> <p>1.2.21 train epidemiology and provincial staff to conduct risk assessment (2012 onwards each year thereafter for provinces)</p> <p>1.2.22 categorize animal product import risks, develop risk-based standard operating procedure materials, visual aids and guides, SPS awareness material etc; train staff in usage and develop process to capture and store data</p> <p>1.2.23 fully report animal health situation to GMS countries, and OIE (by 2017)</p> <p>1.2.24 Supply equipment for NAHC laboratory migration (2012 onwards)</p> <p>1.3. Food safety program</p> <p>1.3.1 upgrade testing facilities (lab equipment, mobile unit, ICT; 2012 onwards)</p> <p>1.3.2 design, and plan annual surveillance programs for safety of food and food-borne diseases based on perceived risks (up to 5000/year samples across markets, importers, hotels, restaurants, street vendors, food establishments; underway on pilot basis 2013 onwards)</p> <p>1.3.3 conduct annual domestic workshops (5)</p> <p>1.3.4 develop food safety awareness campaign and materials (2012 onwards, pilot first, expanded thereafter)</p> <p>1.3.5 tourist enterprise pilot audit and grading system development – including development</p>		

Design Summary	Performance Targets / Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
of score cards, awareness raising campaign, training of government and private sector staff in GHP and GMP applications, advice to enterprises etc (2012 onwards) 1.3.6 award of tenders for application of grading system to tourism and food enterprise establishments (2013 onwards) 1.3.7 conduct first-time market access study for food products (2014) and explore harmonization possibilities 1.3.8 categorize imported food risks, develop risk-based assessment profiles (for products requiring different inspection levels), develop procedural materials, visual aids and guides, etc, and identify tasks that can be performed by Customs (includes 2 regional tours, 4 training workshops; 2013 onwards). 1.3.9 Produce SPS awareness material (2013 onwards); train staff in usage and develop process to capture and store data (2013 onwards) 2. GMS and ASEAN regional cooperation 2.1 bilateral working groups with PRC, Thailand and Viet Nam on plant health, animal health and food safety established or strengthened, and initial meetings held by 2013 2.2 bilateral working group with Cambodia on animal health established, and initial meeting held by 2013 3. Enhanced education levels/training of SPS specialists 3.1 Design and agree improved academic curricula by 2014, and provide associated teaching materials by 2016 3.2 FA-NUOL participants attend short courses (2 each in 2013, 2014 and 2015; 30% of trainees are female); 3.3 postgraduate scholarships awarded to FA-NUOL staff/students (1 per year 2013-2015, at least 30% are female); 3.4 Provide on-site (i.e., at FA-NUOL) English language training (5-10 courses per year; 30% of students and staff attending are female) 3.5 construct shared core laboratory and teaching facility by 2015 (600 students/year using – 30% are female) 3.6 Upgrade departmental laboratory and teaching equipment (by 2014; 30% of students using are female) 3.7 Upgrade faculty transport (bus, van, pickup) provisions (by 2013) 4. Implementation – project management and monitoring 4.1 Set-up project management unit in MAF/DOP by mid-2012 4.2 Set up Component Implementation Units in DOA, DOLF, FDD and FA-NUOL by mid-2012 4.3 Financial Management Manual, Procurement Manual and Monitoring and Evaluation framework prepared by end-2012			

ADB = Asian Development Bank, ADF = Asian Development Fund, AFF = agriculture, food, and forestry, AFU = Animal Feed Unit, ARASFF = ASEAN Rapid Alert System for Food and Feed, CBTA = Cross border Transport Agreement, CIU = Component Implementation Unit, DALYs = disability adjusted life years, CSF = classic swine fever, DOA = Department of Agriculture (MAF), DOLF = Department of Livestock and Fisheries (MAF), DOP = Department Of Planning (MAF), FA-NUOL = Faculty of Agriculture, National University Of Laos, FMD = foot and mouth disease, FDD = Food and Drugs Department (MOH), GMS = Greater Mekong Subregion, INFOSAN = International Food Safety Authorities Network, IPPC = International Plant Protection Convention, NAHC = National Animal Health Center, OIE = International Organization for Animal Health, PEQ = Post-entry quarantine, PMU = Project Management Unit, SPS = Sanitary and Phytosanitary, TAD = transboundary animal disease, WHO = World Health Organization, WITS = The World Integrated Trade Solution.

B. Monitoring

108. **Project performance monitoring.** A Project benefit Monitoring and Evaluation (PBME) system will be developed and implemented by the PMU. The M&E Officer (and Project Assistants) within PMU will receive training and will work with CIU staff to develop the PBME. The PBME will collect information to identify the current conditions in Lao PDR AFF trade, SPS surveillance and inspection systems, academic education and regional cooperation and assess the impacts of project investments.

109. CIUs will collate and compile inputs and outputs data (e.g., on workshops conducted, courses attended, equipment delivered, civil works constructed, numbers of TAD visits, food

safety inspections, samples collected, laboratory tests performed etc). The disaggregated baseline data for output and outcome indicators gathered during project processing will be updated and reported quarterly through MAF's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.

110. Overall, the PBME will follow the logic and content of the DMF and be based on measurable inputs, outputs and outcomes. As well as accessing national data sources (i.e., the various agency quarterly and annual reports), the PBME system will access reports of the bilateral and subregional working groups of which Lao PDR is a member.

111. The Project does not target poverty directly, but the growth in trade and tourism and the improvements in food safety will have pro-poor impacts. Where possible from agency reports, the PBME will disaggregate collected data on the basis of location, ethnicity etc. Where original data is collected – e.g., from surveys of AFF trade-related enterprises – the backgrounds of new employees will be monitored for poverty characteristics.

112. All collected data, in accordance with Prime Minister's Decree No.140/PM dated 20 August 2002 and guideline paper No. 018/PMO of 10 January 2005, will be disaggregated by sex and age, urban and rural women, and women of ethnic groups. Some gender indicators and time bound targets have been defined, and the institutional responsibility for their achievement has been defined. These indicators will be an integral part of the PBME system.

C. Evaluation

113. ADB will conduct regular (i.e., at least twice per year) reviews throughout Project implementation to assess implementation performance and achievement of project outcomes and objectives, examine financial progress, and identify issues and constraints affecting the Project and work out time-bound action plans for their resolution.

114. A Midterm Review will also be undertaken within 30 months of Project effectiveness. This review will include a comprehensive evaluation of project implementation arrangements, detailed evaluation of the scope and implementation process and progress of subprojects, feedback from the PBME, performance of consultants, capacity building progress, and possible reallocation of grant proceeds. During this more significant review, the impact from the pro-poor initiatives linked to infrastructure development will be assessed as will the allocation by local administrations for the maintenance of the infrastructure developed under the Project. Remedial action will be instituted as required.

115. Within 6 months of physical completion of the Project, ADB will conduct a Project Completion Mission to carry out a preliminary assessment of the success of the Project to achieve its physical and socio-economic developmental objectives, as well as to review compliance with ADB requirements and financing agreement covenants.

D. Reporting

116. The PMU will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions; (c) updated procurement plan and (d) updated implementation plan for next 12 months; and (iii) a Project Completion Report (PCR) within 6

months of physical completion of the Project.

E. Stakeholder Communication Strategy

1. Consultation

117. Project preparation has been conducted with stakeholder agencies in the Government of Lao PDR - including various departments within MAF (i.e., DOA, DOLF, DOP), MOH (FDD, HPD, and HHS), MOE (including the National University of Laos) and the National Tourism Authority. A workshop was conducted with private sector participants to provide information about the project and to get feedback. A workshop is still planned to present the findings of a survey on food safety handling in the tourist industry. The composition of Project activities also closely follows that which was agreed through the extensive national and subregional consultation process – including public and private agencies of all types and at all levels over an extended period - embedded in the GMS SPS Action Plan. Significant numbers of awareness raising, consultation and training workshops are planned throughout Project implementation.

2. Participation

118. Widespread participation in Project activities will most obviously involve: (i) communities with various types of livestock who will be affected by the TAD component (through vaccinations and in outbreak responses); (ii) large numbers of primary producers, traders, processors in export supply chains of corn and maize will participate in upgrading activities; and (iii) owners and workers in the hundreds of food establishments who will participate in sampling, testing, upgrading etc.

119. Obviously significant numbers of students at FA-NUOL and UHS will be involved in academic education activities.

120. More generally, as trade-related AFF and tourism activity expands, there will be created employment opportunities in crops' products exports involving production, processing and trade. An interesting feature of the Project is that many consumers will *de facto* participate in the Project even by doing nothing. These will be persons who would have otherwise suffered the consequence of poor food safety but who are now spared such effects.

3. Awareness

121. Awareness raising at all levels is fundamental to increasing national SPS capacity. The Project includes awareness raising for GOL agency staff on *inter alia* import handling for plant and animal products, on animal drugs and feeds, on the safety of animal food products, and good farm practice and off-farm GMP. In relation to food safety in the tourist industry, awareness raising covers significant numbers of private sector operators of all sizes and scales at several locations. In the work to enhance cross-border supply chains of corn, rice, etc the awareness raising activities incorporate small and commercial crop growers, processors and traders in five Northern provinces.

F. Sustainability

122. Sustainable use of increased SPS capacities (human, institutional, equipment) after the

termination of the Project will require increased Government budget and staff. The PMU will assist in assessing short-term, medium-term and long-term levels of staff and budgetary resources required for operation and maintenance of the SPS system. The Project will also assist the IAs in developing appropriate budget templates and procedures for O&M in the annual planning and budget cycle. The operational costs for SPS under the present project are summarized below.

Recurring expenditures can be broadly grouped into two categories:

I. costs that support institutions' laboratory systems

- (i) out-sourcing of testing and diagnostics to other laboratories (e.g., regional/neighboring countries),
- (ii) laboratory equipment servicing and calibration, training, documentation, proficiency testing, and accreditation; purchase of standards, columns, chemicals/reagents and glassware - which may last for a few years; and,
- (iii) the management and storage of survey data, laboratory records etc

II. costs directly related plant, animal and food safety surveys

- (i) the purchase and collection cost of samples (i.e., plant, animal, food);
- (ii) rapid test kits (e.g., for aflatoxin, pest residues, formalin in seafood etc);
- (iii) staff travel and per diems for survey field work; and,
- (iv) other non-staff survey and inspection costs (e.g., small equipment items, stationary, communications etc).

The first category of costs need not be incurred in any particular year, and are thus not 'recurrent' in a traditional accounting sense; nevertheless, these expenditures must be incurred routinely/periodically in order to support national technical capacity. If these items of the first category are not regularly replaced and renewed and if the laboratory has no steady stream of samples to be tested (this is where category 2 costs are incurred), national capacities and proficiencies erode rapidly, and rebuilding them is expensive. Notably also, inadequate operational costs funding for university faculties implies that classroom education cannot be complemented by the necessary practical training in laboratories and in the field.

In the current Project, the first category of costs to support laboratory systems in addition to the investment costs are estimated to around \$1.0 million over the five years across all components. The costs associated directly with the surveys programs are estimated to about \$2 million. These figures are summarized by sector and by year in Table 5 below.

**Table 5: Supporting National SPS System Capacity:
Summary Of Likely Non-Capital Costs Per Year**

	Plant Health (DOA)	Animal Health (DOLF)	Food Safety (MOH)	Academic Education (FA-NUOL)	TOTAL (\$m per year)
National laboratory capacity	> \$85,000	>\$85,000	< \$25,000	\$0	\$0.20
Operations and survey costs	<\$110,000	\$170,000	\$65,000	\$60,000	\$0.40
Total	< \$200,000	\$255,000	\$90,000	\$60,000	>\$0.60m

Note: The potential for recovery of these costs through the charging of fees for services (e.g., testing of feeds, pesticides, food etc) is extremely limited.

X. ANTICORRUPTION POLICY

123. ADB's *Anticorruption Policy* (1998, as amended to date)⁵¹ was explained to and discussed with MAF and DOP. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.⁵²

124. To support these efforts, relevant provisions are included in the financing agreement and the bidding documents for the Project. In particular, all contracts financed by ADB in connection with the Project shall include provisions specifying the right of ADB to audit and examine the accounts of MAF, PIU, as well as all contractors, suppliers, consultants and other service providers as they relate to the Project. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.

125. Risks associated with project management, including procurement and disbursement, will be mitigated by the engagement of project implementation consultants to advise and assist in the procurement of goods and services, and the engagement of other consultants. The Project will also establish a website in which it will disclose implementation progress; bid notifications and their results; and provide grievance mechanism against any corrupt practice. References on ADB's Anticorruption Policy can be accessed through the following link: <http://www.adb.org/Integrity/>.

⁵¹ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

⁵² ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

126. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.⁵³

⁵³ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF PAM CHANGES