

Project Administration Manual

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Lao People's Democratic Republic:
Northern Smallholder Livestock Commercialization
Project

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1. TERMS OF REFERENCE
2. COMPOSITION OF STEERING COMMITTEES

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 (MAF) and the provincial agriculture and forestry offices (PAFO) of Houaphanh, Luang Namtha, Luang Prabang and Xieng Khouang 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 MAF and PAFO of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the Borrower and ADB shall agree to the PAM and ensure consistency with the Loan agreement. Such agreement shall be reflected in the minutes of the Loan Negotiations. In the event of any discrepancy or contradiction between the PAM and the Loan Agreement, the provisions of the Loan 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
CQS	–	consultant qualification selection
DAFO	–	district agriculture and forestry office
DCU	–	district coordination unit
DMF	–	design and monitoring framework
EARF	–	environmental assessment and review framework
EIA	–	environmental impact assessment
EMP	–	environmental management plan
GAP	–	gender action plan
ICB	–	international competitive bidding
IEE	–	initial environmental examination
LARP	–	land acquisition and resettlement plan
LIC	–	loan implementation consultant
LVC	–	livestock value chain
MAF	–	Ministry of Agriculture and Forestry
MOF	–	Ministry of Finance
MONRE	–	Ministry of Natural Resources and Environment
NAFC	–	Northern Agriculture and Forestry College
NCB	–	national competitive bidding
NPMO	–	national project management office
NSC	–	national steering committee
O&M	–	operations and maintenance
OGC	–	Office of the General Counsel (ADB)
PAFO	–	provincial agriculture and forestry office
PAM	–	project administration manual
PCU	–	provincial coordination unit
PPTA	–	project preparation and technical assistance
PPSC	–	provincial project steering committee
PSC	–	project steering committee
QCBS	–	quality- and cost-based selection
RP	–	resettlement plan
SEER	–	Environment, Natural Resources and Agriculture Division of ADB's Southeast Asia Department
SOE	–	statement of expenditure
SLPMG	–	smallholder livestock production group
SPS	–	safeguard Policy statement
SPRSS	–	summary poverty reduction and social strategy
TOR	–	terms of reference
VLF	–	village livelihood fund

I. PROJECT DESCRIPTION

A. Background

1. Agriculture and Livestock

1. Agriculture and natural resources (ANR) is the largest contributing sector to gross domestic product (GDP). It accounted for more than 40% of GDP and over 70% of employment in 2009. Rice is the staple crop of the Lao People's Democratic Republic (Lao PDR), accounting for about 25% of GDP as well as 67% of the caloric intake of the rural population. Livestock and fish make up 10% of GDP, and forestry 8%. Despite the importance of the sector, more than 50% of households in the Lao PDR are subsistence farmers with incomes below \$300 per household per year. While women are active in ANR activities and account for 54% of the work force, gender gaps exist in extension services, market information, and financial services. National food self-sufficiency was achieved in 2000, but recent estimates suggest that only about 30% of the rural population is actually fully food secure, especially in view of the actual and potential impact of drought on mainly rain-fed agriculture production.

2. The livestock subsector is an important source of income and store of wealth for rural smallholders in Lao PDR, with 89% of smallholders owning one or more types of livestock – buffaloes, cattle, pigs, goats, poultry and occasionally other small livestock. Smallholder households in the northern provinces typically comprise a husband and wife team, but in some cases the smallholder may be a single female-headed household. Productivity of the traditional livestock production systems, which are still widespread, is low and livestock are kept as a store of wealth. Targets set in the Master Plan includes an annual 5% increase in the production of meat, fish, eggs and other fresh products.

3. Food safety and public health are a major concern in Lao PDR. Food safety certification systems for livestock are not established. Meat is rarely tested for its quality. Slaughtering of animals for human consumption is essentially unregulated. Slaughtering usually is done on slaps within urban and peri-urban areas. Waste from the slaughtering process is usually released untreated into the environment.

4. Improving production methods to reduce costs and improve off-take is necessary for livestock production to be a more sustainable source of income for farm smallholders. The traditional systems for raising buffaloes, cattle and goats are usually based on free grazing in the fields and forest, while for pigs there may be combination of free grazing and feeding in pens. Constraints to livestock production include the generally poor level of nutrition and widespread disease.

2. Northern Rural Sustainable Livelihoods through Livestock Development Project

5. The Northern Smallholder Livestock Commercialization Project (the Project) builds upon the recently completed Northern Region Sustainable Livelihoods through Livestock Development Project (hereafter abbreviated as LDP). The LDP aimed to reduce poverty by improving the sustainability of livelihoods for upland smallholders in northern Lao PDR. The immediate outcome was to raise livestock productivity and profitability. LDP covered 18 districts in the provinces of Bokeo, Houaphanh, Luang Namtha, Luang Prabang, and Xiengkhouang, where it specifically targeted its interventions to be inclusive of women and disadvantaged upland ethnic groups. Its components included: (i) improved on-farm livestock production

technologies, (ii) developed market efficiency and livestock enterprises, (iii) strengthened participatory extension networks, (iv) effective community-driven development, and (v) strengthened project implementation management.¹

6. LDP's approach to smallholder livestock extension and smallholder development was technically sound and based on a large knowledge base from external support and research on Lao livestock systems. At completion, the project covered 324 villages, and successfully exposed about 13,000 farm smallholders to the potential advantages of more intensive, commercially oriented livestock practices.

7. Many of these smallholders have adopted some or all of these practices, and are now expanding their operations vertically as well as horizontally. The LDP has also been successful in its outreach to the poor, women, and disadvantaged ethnic groups. Hence, the project has set in motion a process for the gradual intensification and commercialization of livestock production. Experience shows that the full development of this process is long-term in nature (10 years or more) and thus beyond the scope of any single project to fully achieve.

8. LDP created about 1,600 livestock production groups (LPGs) including both husband and wife in almost all cases. Reflecting smallholder preferences, more than two-thirds of the LPGs were devoted to cattle and pigs, and only 13% were devoted to poultry. This distribution is strongly correlated with the market value of the livestock. It was found that the poorest smallholders are less able to bear the risk of intensified livestock and often have less time available for group activities. The project attracted women to the extension service, but a general problem was the difficulty of recruiting people from the ethnic groups who had both the required agricultural training and language skills.²

9. Smallholder income from livestock reportedly rose by almost 500% (from \$87 to \$425 per year). Mortality of all livestock has declined, although the target level for poultry was not reached. The percentage of smallholders owning cattle and poultry rose to well above their target levels. Although the targets for pigs and goats were not reached, the growth in numbers was still impressive. The economic internal rate of return (EIRR) for LDP as a whole is estimated at 15.7%, which is comparable to the estimate of 17.2% at appraisal. The overall financial internal rate of return (FIRR) is 13.1%.³ Smallholder investments in livestock are expected to yield FIRRs ranging from 14 to 60% over a 20-year period, with much higher returns for smallholders that adopt the project's recommended practices. Overall, the LDP has created momentum toward a long-run process of modernizing and commercializing smallholder livestock production, and provides a foundation for the Project.

¹ The LDP was approved by ADB in September 2006, became effective in June 2007, and closed in March 2014, following a 15-month extension of the closing date from December 2012. LDP funding was provided by (i) ADB Loan 2259-LAO, for \$9.3 million equivalent from the Asian Development Fund (ADF); (ii) ADB Grant 0055-LAO, for \$0.7 million, also from ADF; (iii) a grant of \$3.5 million from the Swiss Agency for Development and Cooperation (SDC), which financed consultants, contractual services, and training; (iv) a loan of \$3.0 million from the International Fund for Agricultural Development (IFAD), which was targeted initially at the project's marketing, poultry, and revolving fund activities; and, subsequently, (v) a grant of \$0.46 million from the Japan Fund for Poverty Reduction (JFPR) for capacity building technical assistance (TA).

² Based on findings of Project Completion Report for LDP.

³ In the case of the EIRR, the benchmark rate of return is the standard 12% level. The FIRR is compared with the weighted average cost of capital, which is presently estimated at about 4% for Lao PDR. In both cases, the project results exceed the benchmark levels.

B. Rationale, Location and Beneficiaries for the new Northern Smallholder Livestock Commercialization Project (the Project)

10. Due to population growth and changing diets, there is strong market demand for Lao livestock products domestically and potentially from the neighboring countries of the People's Republic of China and Viet Nam. Demand for meat in Lao PDR has been forecast to increase strongly over the next decade⁴ and the Lao Government has set a target to increase livestock production from currently about 210,000 tons per year to 365,000 tons by 2020. Most current livestock trade with PR China and Viet Nam is informal which results in increases in disease spread, while reducing prices and profits to farmers and traders, as well as government revenues. In the People's Republic of China and Viet Nam, per capita meat consumption increased sharply to about 57 kg during the last 20 years, but only to about 20 kg in the Lao PDR⁵. Available information suggests current exports are less than 10% of potential demand, while annual domestic demand is rising at 4.5%.

11. Lao PDR is set to enter the Southeast Asian Nations Economic Community in 2015 (SEANEC), making possible new opportunities for trade in agricultural commodities, and is well positioned to capitalize on growing livestock demand. However, the extent that livestock production can reduce poverty, meet growing domestic demand and lift livestock exports is hampered by the low level and quality of production and weak value chains. Key constraints are: limited producer capacity; poor animal husbandry; fragmented market infrastructure with limited processing facilities; low quality feed; lack of credit and services; lack of product standards and enabling regulations for domestic and export trade; and information failures in supply chains. There is a severe shortage of qualified experts, technicians and meat processors in Lao PDR. In order to develop a cadre of skilled people needed in the sector it is necessary to put in place the fundamentals for knowledge transfer and development.

12. Value chain analyses have shown smallholders engaging in market-oriented livestock production are disadvantaged by poor access to input supplies and services, lack of market linkages and information, long marketing chains, low sale volumes and at some locations depressed prices caused by local government policies. One of the most critical next steps for smallholder livestock development is to link farmers to markets and market information. Farmers, traders and extension workers need to understand market demand and farmers need assistance with improving their production systems to achieve the required quality.

13. There are growing concerns about the safety and quality of meat products in Lao PDR. There are no certification systems or monitoring of livestock and meat through the value chain. Achieving the relevant standards of food safety is essential within framework of SEANEC. To this end the government has recently passed the Law on Food.⁶ It provides a regulatory environment which will have a strong impact on the livestock value chain (LVC). Many improvements will be needed in the LVC to enhance public health through good quality food and good processing practices.

14. Commercially-oriented smallholder livestock production implies a level of intensification and specialization of livestock production, but continues to build on the competitive advantages of smallholder farmers: producing cheap feed on-farm and utilizing available smallholder labor. As feed and livestock production are co-located, effluents from livestock production are recycled

⁴ Stur, W and Phengsavanh, P. 2014. Lessons learnt from the LDP and Assessment of LVCs in northern Lao PDR. Vientiane: International Fund for Agricultural Development.

⁵ FAO Stat, accessed 22 August 2014.

⁶ The Law on Food was promulgated on 20 August 2013.

as fertilizer for feed production, and so have a value rather than being a liability as in peri-urban livestock production systems. More productive, farm-based livestock production increases resource use efficiency and reduces greenhouse gas emissions per unit meat produced when compared to the current low productivity livestock system.

15. An appraisal of the agricultural investment framework revealed that there is investor interest in livestock production and most functions within the livestock sector are carried out by the private sector with private funding e.g. input supply, production, processing and marketing. Therefore, the priority for Government is to create an enabling environment within which the private sector can invest; through mobilizing finance, improving public infrastructure and utilities and creating a legal framework that protects investments. In this regard the ADB Governance and Capacity Development in Public Sector Management Program - Subprogram 1 is assisting the government with the enabling environment for PPPs.

16. To supply the increasing urban demand for meat, intensive pig and poultry farms have emerged in peri-urban areas and there is an increasing reliance on imports. Farmers have no problem selling their livestock, however traders are unable to source enough animals to supply the urban markets, and for example find it easier to source live pigs from Thailand. This poses a risk that rural smallholders will become excluded from supplying the urban meat market, where demand is highest.

17. The Project is consistent with the government's sector development objectives which promote the expansion of market-oriented agricultural production.⁷ The Project is aligned with ADB's: (i) Midterm Review of Strategy 2020 which emphasizes food security, agricultural productivity and inclusive business such as agribusiness development that connects farmers to local and global food markets. Investment in LVC will not only strengthen links with global value chains and food systems but also promote food safety and quality standards; (ii) the agriculture sector strategy and the Operational Plan for Sustainable Food Security, 2009, as improved linkages along the value chains enhance productivity, employment opportunities, exports and regional trade (iii) Lao PDR country partnership strategy has a focus on agriculture for pro-poor transformation from its subsistence orientation into a diversified and commercialized sector;⁸ and (iv) the GMS Regional Cooperation and Integration Strategy (2012-2022) and GMS Regional Cooperation Strategy for the agriculture sector, through ADB support for the Core Agricultural Support Program (Phase 2), which includes support for Lao PDR to engage in cross-border trade.⁹ By focusing on the FNP, from which Lao PDR exports livestock to Vietnam and China, the project complements the ongoing ADB financed, Trade Facilitation: Improved Sanitary and Phytosanitary Handling in GMS Trade Project and the GMS Tourism Infrastructure for Inclusive Growth Project (for approval in 2014).¹⁰

18. The Project will build on lessons from ADB's relevant projects and sector experience including the need to: (i) allow sufficient time for farmers to accept new practices; (ii) adopt a participatory stakeholder approach; (iii) strengthen LPGs technical and business capacities; (iv)

⁷ Seventh National Socio-Economic Development Plan, 2011–2015, Strategy for Agricultural Development 2020, and Agricultural Master Plan, 2011–2015.

⁸ ADB. 2012. *Country Partnership Strategy: Lao People's Democratic Republic, 2012–2016*. Manila. It is included in the ADB. 2014. *Country Operations Business Plan: Lao People's Democratic Republic, 2014–2016*. Manila.

⁹ ADB. 2012. *Technical Assistance for Implementing the Greater Mekong Subregion Core Agriculture Support Program (Phase 2)*. Manila.

¹⁰ ADB. 2012. *Report And Recommendation Of The President To The Board Of Directors: Proposed Grant And Technical Assistance To The Lao People's Democratic Republic For Trade Facilitation: Improved Sanitary And Phytosanitary (SPS) Handling In Greater Mekong Subregion Trade Project*. Manila.

strengthen access to finance and other services; (v) strengthen the link between formal education and practical application; (vi) improve extension capacities of government and private sector; (vii) improve critical value chain infrastructure; (viii) tap into regional trade facilitation and investment through GMS programs; (ix) avoid an over-ambitious setting of targets for technology adoption well beyond the capacity of traditional small livestock producers, most of whom are from relatively isolated, traditional ethnic groups; (x) maintain continuity with the District Agriculture and Forestry Offices (DAFO) and the District Lao Women's Union (LWU) where capacity was created and the core group of high potential villages and LPGs identified; (xi) replicate and expand the relatively simple participatory models that are well understood; (xii) enable or support private sector expansion into areas such as vaccines and other livestock inputs and services (e.g., breeding, feed supplements) and livestock traders; and (xiii) continue to expand the access to rural finance will be crucial since there is a huge unmet demand for credit, for all actors in the LVC.

19. Additional lessons learned in terms of project administration include, but are not limited to: (i) low capacity in procurement, financial management and engineering compared to projects' technical and coordination requirements, particularly where multiple implementing agencies are involved; (ii) poor records management, including for critical contract-related documents; (iii) inadequate maintenance of completed civil works; (iv) payment of "allowances" to government officials in lieu of government salaries which are aligned to market consultancy fees and are much higher than salaries paid to government officials; and (v) unsubstantiated PMU expenses.¹¹

20. The Project will complement other ADB initiatives to improve trade in Greater Mekong Subregion (GMS) including: (i) the Core Agricultural Support Project II, for food safety, linkages to cross-border value chains and livestock management; (ii) the Trade Facilitation: Improved Phytosanitary Handling in GMS Trade Project, for developing cross border trade; (iii) the Governance and Capacity Development in Public Sector Management Program - Subprogram 1; and (iv) the GMS Tourism Infrastructure for Inclusive Growth Project, currently under preparation for approval in 2014.

21. The Project will raise rural incomes by enabling livestock producers and agribusinesses to meet the high demand for Lao livestock products both domestically and increasing international opportunities. Whereas the LDP's main focus was on increasing on farm production, the Project will begin the long journey towards commercialization of the industry.

22. It will be carried out in 12 of LDP's 18 districts in the four provinces of Luang Namtha, Luang Prabang, Houaphanh, and Xiengkhouang. The districts have been selected based on their progress toward market-oriented livestock production. The provinces have strong links to domestic and informally to international markets. The Northern Agriculture and Forestry College (NAFC) in Luang Prabang is a key institution that will support long term sustainable improvement of agricultural practices. The Project will anchor the knowledge base that is being progressively developed into NAFC. The provincial poverty rates in the target provinces range from 28% to 43% with the rural areas being the poorest. More than 80% of the population in the

¹¹ PPRR (2014) LAO: Sustainable Natural Resource Management and Productivity Enhancement Project <http://www.adb.org/projects/documents/sustainable-natural-resource-management-and-productivity-enhancement-project-pprr> and PPRR (2013) LAO: Second Greater Mekong Subregion Regional Communicable Diseases Control Project <http://www.adb.org/projects/documents/second-gms-regional-communicable-diseases-control-project-pprr>

target provinces live in the rural areas, who overwhelmingly rely upon agriculture for their livelihood.

23. In each district, priority animal types were selected for commercialization by the Lao Government based on production and market potential and LDP experience. The Project will focus on of the most promising LVCs in each province that are estimated to provide sufficient production quantities for efficient marketing of livestock products. However, the focus on the most promising value chain will not exclude other types of animal. The project will remain flexible and willing to consider other animal types as demand dictates. The districts and priority animal types are presented in Table 1.

Table 1: Districts and Priority Animal Types

Item	Province	District	Priority animal types
1	Luang Namtha	Singh Viengphoukha Nalae	pigs pigs goats
2	Luang Prabang	Phoukhuon Phonexay Viengkham	cattle and goats cattle and goats cattle
3	Houapanh	Viengxay Xiengkhor Aed	cattle pigs pigs
4	Xiengkhouang	Nonghet Khoun Phaxay	cattle cattle cattle

24. Optimizing the efficiency of smallholder LVCs requires the Project to support a transformation which would feature: channeling support into production clusters to achieve a critical mass of production that attracts the interest of investors and traders; increasing the production capacity of smallholders through the use of smallholder inclusive business models, developing producer organizations to improve market linkages on a commercial basis, and quality improvement along the supply chain to add value.

25. The majority of existing slaughter facilities are owned and operated by the private sector. Standards of practice are very low and they operate with little or no regulation. Almost all the facilities are best described as “slabs” rather than proper slaughterhouses. They are often found within urban and periurban environments. These slabs are the principle source of meat for the wet markets. The lack of proper slaughter and handling of meat potentially poses both an environmental and public health hazard. There is a real need to raise standards in butchery and slaughtering to enable access to higher end outlets, and to provide the opportunity for export in the future.

26. Fundamentally the Project is as much about capacity building as it is investment in both aspects of livestock commercialization and public health through safer food.

1. Impact and Outcome

27. The impact of the Project will be increased average annual incomes of smallholder livestock producers in the project areas from a 2014 baseline of Kip 3.2 million to 8 million in 2026. Its outcome will be increased livestock sales from sustainable smallholder production in

the project areas. On average, SLPMG members will sell heavier live animals: 55kg (from 45kg) for pigs and 225kg (from 200kg) for cattle; and sell more animals with increased annual sales of 18 (from 12) for pigs and 5 (from 3) for cattle. The Project area will include the northern provinces of Houaphanh, Luang Namtha, Luang Prabang, and Xiengkhouang.

2. Outputs

28. The project will have four outputs. (i) strengthened smallholders and other LVC actors; (ii) LVC infrastructure strengthened; (iii) capacity to access credit improved; and (iv) project management enhanced.

29. **Output 1: Strengthened capacities of smallholders and other LVC actors.** The project will: (i) help to organize SLPMGs and provide technical training oriented towards Global Good Agriculture Practice (GAP); (ii) technical training for other actors in the LVC, including private sector input providers, traders and butchers in good practice to improve meat quality, control animal diseases, sanitation and food safety standards;¹² (iii) undertake meat business and investment environment enhancing policy and regulatory assessments; and (iv) cooperate with the Northern Agriculture and Forestry College (NAFC) to improve curricula, practice in butchering and provide opportunities for scholarship and intern experience.

a. Organizing and Developing SLPMGs

30. LDP demonstrated that Livestock Producer Groups could be formed and strengthened to move the group members from raising animals on a subsistence basis to an income earning basis. Based on the experiences of LDP, there are about 300 SLPMGs in the 12 districts identified that have shown good progress in moving along the commercialization trajectory. The Project will build the capacity of these SLPMGs to progress from the basic production improvements achieved during the LDP to being able to (1) access input supplies and services needed for commercial production, (2) produce higher quality livestock products that can be sold at provincial and export markets, (3) market as a producer group, and (4) regularly sell products in local district markets. Smallholder groups in the northern provinces, comprising either husband and wife or single female-headed households, represent the primary beneficiaries. Other household members are considered indirect beneficiaries.¹³

31. The starting point for the Project will be to assess the potential of the 300 SLPMGs and prioritize them for implementation in three phases. In each district, SLPMGs with the strongest potential will be targeted first for Project implementation and so provide an example for other, less strong SLPMGs. This phasing will provide an opportunity for Project implementers to develop the necessary skills and experience to assist slower-developing SLPMGs.

32. Producing higher quality animals (i.e. younger animals with good body condition) will create interest by traders from destination markets to purchase larger quantities of animals which provides opportunities for group marketing and contract arrangements between SLPMGs and traders. Assisting SLPMGs with producing a consistent supply of quality animals will enable them to access provincial and urban markets. In the LDP, working with livestock farmer groups was an efficient way to improve production systems and this experience can be harnessed for expanding the scope to include marketing and other aspects of value chain development.

¹² The training for certification for Office International des Epizooties (OIE) and HACCP.

¹³ Average of 5-6 people per household in the northern provinces.

33. Agricultural fairs will be organized each year in each participating provincial and district center to showcase the livestock of the SLPMGs, and give them the opportunity to interact with potential buyers and explain the higher standards being achieved. The fairs will also be an opportunity for SLPMGs to network, exchange ideas and benchmark performances.

b. Communal land planning

34. Traditionally animals have been left to roam in the forest and communal land. In recent times many natural forests have been given over to commercial forestry such as rubber plantations. In these commercial plantations herbicides and insecticides are often used for the control of weeds and pests. It is necessary for the animals to avoid exposure to recently sprayed areas, and many plantations do not allow grazing of animals. Furthermore increasing animal productivity requires that the animals are confined in pens or enclosures and are fed more nutritious feed than can be obtained by grazing common property resources. Reduced availability of grazing areas has resulted in high competition for feed resources and decreased the already poor animal productivity. Also, grazing animals can cause damage to agricultural crops with resulting conflicts unless grazing lands are clearly delineated from cropping land. Community land zoning plans are needed to address these issues and clarify access rights to common property feed resources.

35. The Project will assist the villages with SLPMGs to prepare land use zoning maps for their communities. In most communities zoning maps already exist. These will be updated to indicate the intended use of areas within the community and presented to village and district governments. The maps will be important for designating resources that need to be protected such as water sources and where the animals will be concentrated, as well as identify suitable land for supporting communal livestock production including planting forage and animal housing. Land use plans will provide a basis for assessing the need for community level productive equipment and material needs.

c. Technical training and demonstration

36. Animal health is critical to livestock productivity and managing risk in commercial production systems. There is a severe shortage of qualified veterinarians in Lao. This makes the prevention of disease and animal injury the most effective strategy to maintain animal health through on-farm and village bio-security measures that reduce the risk of introducing and spreading diseases and vaccination of animals.

37. Vaccines have in the past been provided by the government, sometimes free of charge. There is a dilemma between getting animals vaccinated quickly through free and temporary arrangements and the establishment of sustainable input supply chains provided by the private sector. Bio-security measures include some minor infra-structure but mostly are dependent on producers knowledge and village-level negotiations. The orientation of this Project is to support commercialization and move towards sustainable solutions that include bio-security measures and vaccination.

38. Training services will be provided to educate the farmers about bio-security and vaccination and to facilitate the linkage between vaccine providers and the SLPMGs. The Project will not purchase vaccines directly for the farmers. The Project will facilitate linkages to private sector providers of animal health and vaccine services as well as building on farm capacity for bio-security. The vaccination of animals will be a requirement for membership in the SLPMGs.

39. Moving towards commercial livestock production requires the introduction of improved feeding and management practices that result in high animal productivity and deliver products for which there is high market demand, and business skills for commercial production and marketing of livestock. SLPNG members will be trained to acquire these skills.

40. The increase in fattening of animals as a profitable farm enterprise has resulted in a shortage of young and thin animals for fattening. For example, purchasing thin cattle and fattening these for 2-3 months before selling them for slaughter has been shown to be a very profitable activity in Xiengkhouang and this has resulted in shortages of thin cattle for fattening in some areas. This situation will be exacerbated as fattening is taken up by more farmers in the Project.

41. Support will be provided to members of SLPNGs to become livestock breeders who specialize in producing young animals for onward sale to farmers who specialize in growing and fattening animals for slaughter. This support will include extension activities to promote farmer-to-farmer learning and cross-visits to successful examples, training and provision of credit for breeding enterprises. Opportunities for engaging already established commercial operators in supplying young animals will also be promoted by the Project.

42. SLPNGs will receive animal production and health training in theory and through on farm demonstrations, VLAs and cross-visits including: technologies and practices that will enhance commercial production, production scheduling, improved feeding, breeding, and husbandry.

43. Improved livestock production practices will be scaled up to nearby farmers beyond the project villages through field days showcasing practices of successful SLPNGs. The Project will also develop training material and produce a range of extension material in local languages to support scaling up activities. Scaling up will increase production clusters and provide additional products for sale through market chains developed by SLPNGs.

d. Certification and training

44. Underpinning efforts to improve commercialization of the livestock industry is the need to establish quality standards and a transparent and efficient system of certification throughout the value chain. As Laos enters the ASEAN economic community next year, upgrading standards and quality of agricultural products becomes very important for competitiveness reasons. The GoL/MAF is very aware of this and has highlighted quality certification in their new Upland Development Strategy, not just for livestock but crops as well. Globally, quality certification for Global Good Agricultural Practice (GAP), Hazard Analysis and Critical Control Points (HACCP) etc is provided by internationally accredited private sector companies.¹⁴ These issues are reflected in the new Law on Food. Establishing and implementing this system to the point where at the end of the project it will be expanded beyond the project area is a central objective.

45. Certification indicates compliance with standards and provides credibility regarding product quality. When entering export markets, internationally recognized certification is required, and even standards for the national market are best to be aligned to international

¹⁴ One such company in Thailand that can provide these services www.fairagora.com. FairAgrora is willing at their own cost and no obligation to come to Vientiane and provide a presentation to donors and MoA to explain the benefits and process of certification.

standards. The ADB is supporting the ‘Trade Facilitation: Improved Sanitary and Phyto-Sanitary Handling in GMS Trade Project’, for utilizing instruments to facilitate cross border trade.

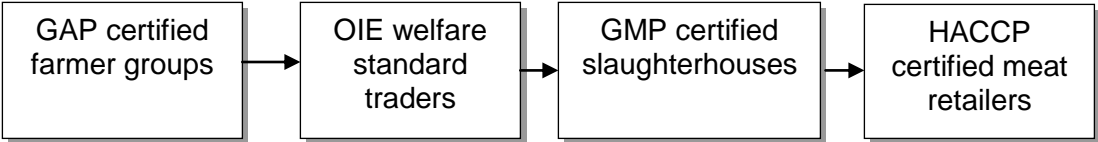
46. GAP is a private voluntary certification scheme for safe and sustainable agricultural production. Certification is based upon standards for housing, use and storage of feeds and veterinary medicines, farm waste, animal welfare, loading facilities etc. Traceability is key to certification and requires the use of tagging and individual animal records. Local GAP is a recent initiative for emerging markets and provides an entry-level for Global GAP. GAP certification is most useful for products where there are concerns for consumer safety, such as intensive pig and poultry production.

47. The Office International des Epizooties (OIE) has developed animal welfare standards for the transport of live animals including: loading, unloading, lairage and vehicle design for transport. Livestock traders can be trained in animal handling to meet these standards.

48. There are several certification schemes for slaughterhouses including Good Manufacturing Practices, ISO 22000 and Hazard Analysis and Critical Control Points (HACCP). All schemes are based on implementing a food safety management system, which can also be used by meat retailers.

49. Quality improvement is key to improving smallholder income as it is a means of differentiating the product to add value. Formal supply chains can be established between chain partners, based upon standards that are dedicated to quality and food safety, as summarized in Figure 1.

Figure 1: Supply Chain Dedicated to Quality and Food Safety



e. Pro-poor inclusivity

50. Focusing on priority value chains for commercialization is likely to favor the involvement of more entrepreneurial and better-off farmers in these villages. Lessons learnt from commercialization will be shared with other farmers in project villages to encourage them to join successful SLPMGs. In addition, the Project will provide extension support to other smallholders in project villages through extension activities and training on livestock production and health of non-priority animal species to increase livestock productivity and farm income from livestock.

51. Commercial smallholder livestock production will create opportunities for providing inputs and services such as producing feed for SLPMG farmers, and create employment opportunities for poor villagers. It is anticipated that the existing Village Livelihood Fund (VLF) credit program managed by the Lao Women’s Union will continue to provide credit to poor smallholders for livestock production of animal types that have not been selected as priority for commercialization. The Project will facilitate credit for priority livestock types to enable poorer farmers to also engage in profitable livestock production and market their animals through SLPMGs.

f. Policy and regulatory support

52. The key impediment to the rapid development of the livestock industry especially to realize the export potential is the policy and regulatory environment. The need for substantial reform is especially urgent in light of the formation of the ASIAN Economic Community (AEC) scheduled for 2015. The Project will support MAF to carry out a number of studies and research projects into specific issues that constrain the commercialization of livestock. Upon completion of the studies, policies and regulations will be prepared for government consideration.

g. Curricula development

53. The Project will assist the NAFC to upgrade its animal production courses to modern standards and oriented towards the Lao cultural and natural environment. There will be two key focuses: (i) market oriented livestock production including development of business plans; and (ii) a course to produce qualified butchers. The trainees will include NAFC staff, NAFC students, government staff and private sector operators.

h. Scholarships

54. The Project will support opportunities for: (i) NAFC's lecturers/teachers to upgrade relevant qualifications to enable them to teach the new course material; (ii) scholarships for disadvantaged students from the project area; (iii) on-farm internship experience for NAFC students; and (iv) in service training courses for traders, butchers, meat processors other industry actors and inspectors to upgrade qualification and for SLPMGs on relevant subjects. Opportunities for NAFC staff will include study tours to observe successful market-oriented livestock production, slaughter and processing facilities. Internship opportunities for NAFC students will be identified along the LVC including village placements working with SLPMGs and meat processing working with butchers.

55. **Output 2: LVC infrastructure strengthened.** This output includes the following activities: SLPMG productive equipment and materials; establishing certified slaughterhouses in Luang Prabang and Xieng Khouang to supply the local urban markets; improving wet market infrastructure and hygiene practices; and support to NAFC to establish a model meat processing facility for the demonstration of and training in value-addition practices.

i. SLPMG productive equipment and materials

56. The Project will provide critical equipment and materials to enhance the ability of the SLPMGs to be GAP certified. The equipment and materials will be provided in-kind to the SLPMGs. The need for the specific equipment and/or materials will be assisted by the developed land use plans and decided through a consultation process with both the SLPMG and the village community. This equipment or materials could for example include, or be used to construct: Improvements to communal grazing land including fences, corrals; loading and weighing facilities to facilitate efficient marketing; village bio-security infrastructure such as fences; quarantine pens; and biogas digesters for waste management, PVC pipes so that the SLMPGs could construct simple water supply infrastructure.

j. Slaughterhouses

57. Considering the size of the urban population and importance to the tourist industry, there is an urgent need to establish a high quality slaughterhouse in Luang Prabang, Currently traders

have to carry out their own slaughter on rudimentary backyard slaughter slabs, posing a serious risk to food safety and public health. A second slaughterhouse will also be built to service Phonsavan town in Xieng Khouang province to provide demonstration of good practice there as well.

58. These facilities will be built and operated to HACCP standards, and will serve as demonstrations of good practice for replication throughout the industry. The slaughterhouses will include training rooms and biogas systems. Animals are penned the day before slaughter and produce manure. The manure is an excellent material to be fed into the bio digesters. The bio-digesters will not only support good waste management but they will also demonstrate the technology. The energy produced from the bio-digesters can be used for electricity for such things as lighting and heating water for operations. The slurry that is produced from the bio-digester can be easily converted into high value fertilizer.

59. Slaughter personnel will be trained in humane slaughter practices and carcass grading to improve meat quality under a special provision in the management contract to permit students from NAFC to learn about practice slaughter and butcher skills during off-peak operational periods. The slaughterhouses will also be used as a venue for training slaughter personnel from other slaughterhouses in the target provinces.

60. The Project midterm review will assess the slaughterhouse operations for possible actions to be privatized. ADB is, assisting the government to establish an enabling environment for Public Private Partnerships (PPP). It is expected that this preparation work will have been completed within the next four years. The privatization of the slaughterhouse would be a test case for the practical application of PPPs. This is a similar process that was successfully used in the coffee industry. The experience of privatizing the facilities will be a pivotal moment for increasing quality investment in the agriculture sector in general and the livestock sector in particular.

61. Increasing the turnover of slaughterhouses, through increasing animal throughput, is key to improving profitability and attracting the interest of private sector investors. This can be achieved by banning slaughter slabs in urban areas and limiting the number of slaughterhouse licenses commensurate with the demand for meat in the market i.e. increasing the throughput of animals for a limited number of slaughterhouses. This is also key for managing the public health issues associated with slaughtering operations. Other opportunities to increase incomes include meat grading and direct supply contracts to institutional buyers, for example mines and restaurants.

k. Wet market infrastructure

62. Food safety standards in traditional wet markets, where the majority of meat is sold, are low. If slaughterhouse standards are raised, retail standards in the supply chain must also be improved; otherwise any food safety gains will be lost. Therefore, the meat sections of one wet market in Luang Prabang and one in Phonsavanh will be upgraded to HACCP standards. The upgraded markets will serve to demonstrate good practice so that other markets may be encouraged to follow the example.

63. District markets are of various conditions with respect to efficiency of food and meat handling and sanitation. In the 12 districts in which the Project will operate, resources will be made available to enable improvements in market conditions to an acceptable standard with due consideration for the needs of women who interact in the market. These improvements will

include the provision of clean water, toilets (men and women), waste disposal, and the tiling of surfaces where meat is handled. Best practice training (food safety and environmental hygiene) will also be provided for butchers/retailers in district wet markets.

I. NAFC meat processing facility

64. The Project will finance the construction of a model cold meat processing facility adjacent to the proposed slaughterhouse in Luang Prabang as a training facility for NAFC to train its students in modern practices. The Project will provide resources for the students to be trained both in an academic setting as well as on-the-job internships at SLPMG in Project villages and the slaughterhouse and meat processing plant. The Project will recruit a master butcher and processing manager under a management contract to manage the meat processing facility and provide Trainer of Trainers training. The Master Butcher will also provide technical advice and training to the Project constructed slaughterhouse operators and other butchers. The training will be oriented towards the slaughterhouses reaching HAACP certification. LIC will prepare curricula for NAFC students and short courses for slaughter personnel, butchers/meat retailers and meat processors.

65. **Output 3: Capacity to access credit improved.** The business capacities of LVC actors will be improved by training in: business management and planning, financial management and cash flow projections, production scheduling, market and price information, contract farming, and quality control. Credit is essential for smallholders and the value chain enterprises to improve and expand their businesses. SLMGs will receive training for the preparation of group as well as individual business plans. The business plans will enhance access to credit from any source.

m. Strengthening linkages to private sector input and service providers, livestock traders and butchers, and contract farming

66. Incremental improvements in livestock productivity require practice changes in the way animals are produced and increasing levels of purchased inputs, which creates demand for inputs and services that were not previously required. Demand by SLPMGs for such input supplies and services needed for market-oriented livestock production will create opportunities for agri-business development for entrepreneurial farmers and local businesses. These include production supplies such as vaccines, veterinary medicine, seed and fertilizer for forage and fodder development, concentrate feeds and livestock equipment, and services such as animal production and health advice. The Project will assess the need for inputs and services with each SLPMG and explore options for supporting the development of sustainable input supply and services through provision of business training. It will also seek to improve supply linkages with traders with the long-term aim of establishing commercial farmer-based agro-enterprises.

67. Contract farming opportunities will be assessed and pursued and SLPMGs will receive training on contract negotiations, risk management and compliance arrangements to safeguard the interests of smallholder livestock producers. A sound and up-to-date understanding of market demand and direct links to traders and butchers at destination markets is essential for profitable commercial livestock production. This participatory market assessment will stimulate SLPMG member to engage in improved, market-oriented livestock production for which there is strong and increasing demand.

n. Accessing credit

68. SLPMGs will receive training for the preparation of group as well as individual business plans. The business plans will enhance access to credit from any source. In addition, an evaluation will be made of the VLF that was established under the under LDP, in order to make recommendations for any actions to improve its performance. The evaluation will also include an assessment of whether it can be upgraded to a more sustainable credit facility operated by a financial intermediary.

69. **Output 4: Project management enhanced.** The fourth output is enhanced project management, with activities that include building counterpart capacity to ensure that financial management and procurement, civil works design and supervision, environmental and social safeguards monitoring, and the preparation of operation and maintenance (O&M) plans for project facilities are compliant with ADB, IFAD and government requirements.

70. **Special Feature.** IFAD will finance a credit component that will directly support the project's third output. By early 2015, the credit component will have been designed jointly by the Government, IFAD and ADB, and will meet ADB's relevant due diligence and safeguard requirements. It will be prepared on a sustainable commercial basis using established and acceptable financial intermediaries. The business plans prepared by the smallholders and their groups will be a prerequisite for accessing the credit.

71. The IFAD credit resources are expected to be available in 2016. The credit will be mainly focused on providing resources to expand and improve smallholder production and quality. It will also be available for other actors in the LVC such as traders and butchers to upgrade their operations. Criteria for eligibility for subloans will include the preparation of business plans and the completion of relevant technical training supported by the project through output 3.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Indicative Activities	2014					2015				Responsibility
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Aide Memoire signed		X								SEER/MAF/IFAD
SRM completed		X								SEER
Establish project implementation arrangements			X							MAF
Loan negotiations			X							SEER/OGC/MAF/MOF
Advance contracting actions			X							NPMO
ADB Board approval				X						SEER
Government budget inclusion					X					MAF
Loan signing						X				ADB/GOL
Government legal opinion provided							X			MOF
Loan effectiveness								X		SEER/OGC

ADB =Asian Development Bank; GOL = Government of Lao PDR, MAF = Ministry of Agriculture and Forestry; MOF = Ministry of Finance; NPMO= National Project Management Office; OGC= Office of the General Counsel; SEER= Southeast Asia Environment, Natural Resources and Agriculture Division

Source: ADB Staff estimates.

Table 2: Detailed Project Readiness Filters

	Key Project Preparation Elements	Stage of Project Preparation					Status as of 2 October 2014
		Fact-finding (15 August – 1 September 2014)	Negotiations 3 October 2014	Signing	Effectiveness (within 3 months after signing)	First Disbursement (within 3 months after effectiveness)	
1.	Project is within Government development priority	Confirmed					Project is confirmed in current ADB country partnership strategy and National Agriculture Strategy.
2.	Project Administration Manual (PAM)	Draft prepared and discussed	Completed and agreed				Agreed with EA.
3.	a. Environment Assessment Review Framework ; b. Resettlement Framework; and d. Ethnic Group Development Framework	Draft prepared and discussed	Confirmed				Government's concurrence on the frameworks received on 17 September 2014.
4.	Procurement Capacity Assessment	Completed	Confirmed	Implementation initiated			Complete.
5.	Financial Management Capacity Assessment	Completed	Confirmed	Start-up actions initiated			Complete.
6.	Procurement Plan for the first 18 months	Drafted	Confirmed				Attached to PAM and agreed with the EA.
7.	Auditing arrangements including TOR	Drafted and discussed	Confirmed				Attached to PAM and agreed with the EA.
8.	Monitoring and evaluation arrangements	Indicators in DMF discussed agreed	Confirmed			Baseline survey initiated	DMF indicators agreed with the EA.
9.	Project Management	Project organization chart, staffing and responsibilities agreed	Project organization chart, staffing and responsibilities confirmed. Key project staff identified (Project Coordinator, Financial and Procurement). Office space availability confirmed	Project management office operational with key staff on board			Project organization chart, staffing and responsibilities agreed with the EA.
10.	Recruitment of:	a. TOR drafted.	a. n/a	a. Draft RFP	a. EOIs issued.	a. EOIs evaluated b. Individual	TORs attached to PAM.

	Key Project Preparation Elements	Stage of Project Preparation					Status as of 2 October 2014
		Fact-finding (15 August – 1 September 2014)	Negotiations 3 October 2014	Signing	Effectiveness (within 3 months after signing)	First Disbursement (within 3 months after effectiveness)	
	a. LIC (firm) b. Individual start-up and National Project Management Office Support consultants.	b. TOR drafted.	b. EOIs issued	and evaluation criteria confirmed. b. Individual consultants short listed.	b. Individual consultants recruited.	consultant mobilized.	
11.	First year bidding documents for goods and civil works (where design is available).	N/A	N/A	Standard bidding documents for goods and civil works drafted	Bidding documents for vehicles, office equipment drafted		Number of procurement packages identified and included in the Procurement Plan.
12.	Government counterpart funds	Agreed	Confirmed				
14.	Legal opinion			Draft legal opinion submitted to ADB	Legal opinion accepted by ADB		N/A
15	Opening of Imprest / Designated Account (if applicable)	Imprest Account and sub-accounts identified and discussed with the EA.	Confirmed		Opening of imprest account initiated	Imprest account opened	Imprest/Designated Accounts included in PAM and agreed with the EA

ADB = Asian Development Bank; EA = Executing Agency; EOI = Expression of Interest; LIC = Loan Implementation Consultant; N/A = not applicable; PAM = Project Administration Manual; TOR = terms of reference

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Table 3: Management Roles and Responsibilities

Management Entity	Roles and Responsibilities
National Project Steering Committee	<ul style="list-style-type: none"> ➤ Provide policy guidance and advice on project-related issues; ➤ Oversee implementation in conformity with the project's development objectives and scope; ➤ Review overall project progress and achievement towards project impact and outcome; ➤ Assist in coordination among local government agencies involved in project implementation and related activities; ➤ Approve overall project workplan and budget; and ➤ Facilitate the selection of counterpart staff.
Executing agency (MAF)	<ul style="list-style-type: none"> ➤ Approves the project's annual workplan and budget; ➤ Overall responsibility for the execution of the project; ➤ Reviews the project implementation progress; ➤ Reviews and endorses any proposed change in the project scope or implementation arrangements; ➤ Supervises compliance with loan covenants; and ➤ Provides oversight for financial management of the project.
Project Technical Advisory Committee (MAF)	<ul style="list-style-type: none"> ➤ Review the project's annual workplan; ➤ Review all technical matters; ➤ Provide guidance and resolve issues; ➤ Undertake field monitoring; ➤ Review policy documents; and ➤ Supervise project implementation and monitoring and evaluation.
Ministry of Finance (MoF)	<ul style="list-style-type: none"> ➤ Manage the project's imprest account.
National Project Management Office (DOPC, MAF)	<ul style="list-style-type: none"> ➤ Administer a sub-account for the ADB loan; ➤ Project preparation, including the establishment of financial and management systems and procedures, procurement of equipment, management of the project's imprest account; ➤ Consultant recruitment and supervision; ➤ Preparation and submission of rolling annual action plans, consolidating DCU-led activities and workplans received from PIUs for approval by the Deputy Minister, MAF, who is also Chairperson of the National Project Steering Committee; ➤ Ensuring compliance with loan covenants and assurances in respect of all subprojects and the good-governance framework; ➤ Facilitate updating and coordinate with relevant agencies approval of and ensure compliance with IEE, EMPs, IPP and GAP, resettlement plans; ➤ Undertake procurement activities; ➤ Approval of payment of contractors and maintaining disbursement records; ➤ Coordination between the concerned agencies at the national and provincial levels; ➤ Coordination of activities of the PIUs and the inputs of concerned stakeholders; ➤ Coordination of all reporting aspects of the project; ➤ Coordination of institutional strengthening measures; ➤ Administrative and technical support to the PIUs; ➤ Preparation of consolidated project accounts to be forwarded to MOF, ADB, and

Management Entity	Roles and Responsibilities
	IFAD; ➤ Coordination of project audits; ➤ Coordinate all specified monitoring, evaluation and reporting activities; ➤ Communication of project's outcomes, outputs, and activities to all stakeholders; ➤ Timely consolidate, prepare and submit quarterly progress reports to EA, ADB and IFAD; ➤ Preparation of annual financial statements; ➤ Coordination of annual audit of statements; and ➤ Submission to ADB.
Department Coordination Unit (DLF, DAEC, NAFRI and NAFC)	➤ Guide PAFO and DAFO in implementation of project activities; ➤ Provide technical oversight to and ensure proper technical standards; ➤ Preparation of the project work plan and annual plans jointly with NPMO and PIUs; ➤ Take lead in implementing project activities under department's respective mandate; ➤ Consolidate and report project progress on quarterly basis to the NPMO; and ➤ Contribute data/information to project M&E system.
Provincial Project Steering Committee	➤ Ensuring that concerns of all stakeholders are adequately addressed by the project; ➤ Coordination between concerned provincial agencies; ➤ Confirming compliance with local regulations and provincial policies; ➤ Overseeing budgeting and disbursement of counterpart funds; and ➤ Overseeing implementation of resettlement plans, compensation schemes and all other project safeguard procedures.
Provincial Implementation Units (embedded within the PAFO of 4 project provinces)	➤ Preparation of provincial-level rolling annual workplans for approval by the Vice-Governor who is also the Chairperson of the Provincial Steering Committee and onward submission to NPMO for incorporation into project's overall annual plan; ➤ Reporting on project progress and inputting required information into the PPME; ➤ Coordinating with other provincial government departments; ➤ Coordinating with DCUs in implementing technical activities; ➤ Coordinating LPMGs development and agricultural extension training; ➤ Coordinating with private sector suppliers and service providers; ➤ Coordinating with market managers and vendors; ➤ Administer project sub-accounts; ➤ Establish/enhance mechanisms to sustainably finance operation and maintenance of project supported infrastructure; ➤ Promote identified public-private partnership (PPP) initiatives; ➤ Coordination with all concerned stakeholders; ➤ Monitoring and quarterly reporting on progress and issues to the NPMO; and ➤ Compiling M&E data from DIUs and feeding those data into project M&E system.
District Implementation Units (embedded within the DAFO of 12 project districts)	➤ Assist in all community development activities, ➤ Facilitate LPMG strengthening; ➤ Assist with various surveys; ➤ Coordinate safeguard and gender activities; ➤ Carry out extension activities; ➤ Report to PIUs on progress, and issues of implementation; and ➤ Regularly collect and feed M&E data into project M&E system.
ADB	➤ Assists NPMO through timely guidance at each stage of project implementation following agreed implementation arrangements; ➤ Timely review all documents that require ADB approval; ➤ Provide oversight for procurement and consultant recruitment; ➤ Periodic project review missions, a mid-term review and a completion mission;

Management Entity	Roles and Responsibilities	
		<ul style="list-style-type: none"> ➤ Monitoring compliance of all loan covenants; ➤ Timely processing of withdrawal applications and release of eligible funds; ➤ Monitoring compliance of financial audit recommendations; and ➤ Regularly updates project information disclosure on the ADB website.
IFAD	(i)	Provide financing for \$10.0 million of the project cost through a mix of \$5.0 million concessional loan and \$5.0 million grant;
	(ii)	Monitor project implementation arrangements, disbursements, procurement, consultant selection, and reporting;
	(iii)	Monitor schedules of activities, including funds flow;
	(iv)	Review compliance with agreed procurement procedures;
	(v)	Review compliance with Loan Covenants;
	(vi)	Monitor effectiveness of safeguard procedures;
	(vii)	Undertake periodic review missions in conjunction with ADB; and
	(viii)	Undertake midterm project review jointly with the Government and ADB.

ADB = Asian Development Bank; MAF = Ministry of Agriculture and Forestry; NPMO= national project management office; PMD= project management division; DCU= department coordination unit; PIU=provincial implementation unit; DIU=district implementation unit; DAEC= Department of Agriculture Extension and Corporate; NAFRI= National Agriculture and Forestry Research Institute; DLF=Department of Livestock and Fisheries; NAFC=Northern Agriculture and Forestry College; PAFO=provincial agriculture and forestry office; DAFO=district agriculture and forestry office; LPB=Luang Prabang; LNT=Luang Namtha; XKH=Xieng khouang; HPH=Houaphanh.

72. An overview of job descriptions for the NPMO, DCU and PIU-based national project staff are provided in Table 4.

Table 4: Key NPMO, DCU and PIU Staff Job Descriptions

Position	Job Description	Requirements
NPMO – Admin/Finance Staff		
National Project Coordinator	The NPMO-based National Project Coordinator (NPC) reports to the National Project Steering Committee (NPSC) on the overall supervision and implementation of the project and ensures that the NPSC and ADB are kept informed of project developments, issues and progress. The NPC oversees and coordinates the work of NPMO staff, and the recruitment and performance of international and national consultants, ensuring budgets and work plans are approved and executed on time and on target. The NPC supervises and approves all project activities and expenditures.	A senior government official with at least 10 years project management experience. Master's degree or equivalent and competence in spoken and written English.
Senior Administration Officer (SAO)	The Senior Administration Officer reports to the NPC, ensuring effective coordination among project stakeholders on administrative and finance aspects. The main duties involve assisting the NPMO prepare and implement detailed annual work plans and budgets, coordinating all admin/finance/procurement, managing project account to ensure timely disbursement for project activities, managing consultant recruitment and procurement, managing project fixed assets, and oversee implementation of the Project Performance Management System (PPMS). S/he reviews and endorses budget requests of DCUs and PIUs for onward submission for approval of the NPC.	A senior government official with at least 8 years project management experience. Master's degree or equivalent and competence in spoken and written English.

Position	Job Description	Requirements
Chief Accountant	The NPMO-based Chief Accountant (CA) will report to the Admin Officer, overseeing the day-to-day financial management of the project. The CA, supported by the financial management and procurement officers and consultants, will (i) facilitate the establishment of the necessary accounts at the NPMO/PIU level as required by ADB, (ii) establishes the required accounting, withdrawal approval and audit systems and procedures, (iii) set up accounting software in line with project requirements, (iv) establish a system for safekeeping of tender documents, minutes of committee meetings, contracts and financial and audit reports; (v) prepare financial projections against the work plans, (vi) carry out a financial management training program for PIU staff; (vii) provide ongoing training and coaching to PIU's as needed, and (viii) supervises the preparation of regular financial reports for transmission to the EA and the ADB.	A senior government official with formal accounting qualifications and at least 8 years previous experience in financial management of internationally financed projects, preferably projects financed by ADB or World Bank. Bachelor's degree or equivalent. Competence in spoken and written English.
Assistant Accountant	The NPMO-based Assistant Accountant (AA) will report to the CA and will (i) assist with the establishment of the required accounting, withdrawal approval and audit systems and procedures; (ii) undertake day-to-day project financial accounting activities; (iii) monitor the flow of funds to the PCU and PIUs; (iv) provide training and coaching to PIU's as needed; (v) monitor cash flow; (vi) ensure that accurate, up-to-date information regarding the project's finances is available to the CA, AO and NPC upon demand; (vii) prepare regular financial reports for transmission to the EA and the ADB; and (viii) assist external auditors carry out the annual audit.	Formal accounting qualifications and at least 5 years previous experience as accountant on ADB or internationally financed projects. Ability to use accounting and word processing software. Bachelor's degree or equivalent and good command of spoken and written English.
Procurement Officer	The NPMO-based Procurement Officer reports to SAO, ensuring all project procurement activities are undertaken in accordance with ADB's Procurement Guidelines.	At least 5 years previous experience as procurement officer on ADB or internationally financed projects and good command of spoken and written English.
Administrative Assistance	The Office Assistant provides logistical support to the senior staff as needed. Frequently interacting with senior government officials, DCU/PIU staff and the consultants.	At least 3 years previous experience working on ADB or internationally financed projects. Ability to use word processing software and some English ability.
M&E Officer	The NPMO-based M&E Officer reports to SAO ensuring the project M&E system is established, updated, monitored, and reported.	At least 3 years previous experience working as M&E officer on ADB or internationally financed projects. Ability to use word processing software and good English ability.

Position	Job Description	Requirements
NPMO – Technical Staff		
Technical Coordinator	The Technical Coordinator (PTC) report to NPC, ensuring effective coordination among project stakeholders on all technical aspects. The main duties of the PTC involve coordinating and leading the preparation of the project work plan, coordinating with DCUs and PIUs on technical activities, managing technical consultants, overseeing implementation and monitoring of environmental, involuntary resettlement and indigenous peoples safeguards, the poverty reduction and social strategy, and gender action plans. The PTC supervises and endorses all technical activities for onward submission for approval of the NPC.	A senior government official with at least 10 years project management experience. Strong technical qualification in livestock sector and competence in spoken and written English. The PTC will make frequent trips to the provinces to monitor project implementation.
Implementation Coordinator	The Implementation Coordinator (IC) reports to the PTC. Main duties of the IC include assisting PTC in coordinating with DCUs and PIUs in implementation, supervision and monitoring.	At least 5 years previous experience working on ADB or internationally financed projects. Ability to use word processing software. Good command of spoken and written English.
Safeguards Officers	The NPMO-based Environment, Safeguards, and Gender Officers reports to the PTC, ensuring implementation and monitoring of gender, social and environmental safeguards in accordance with ADB's SPS 2009. The Safeguards Officers work closely with the international and national Safeguard consultants on institutional strengthening and capacity building, updating IEEs/EMPs, RPs, IPP, and GAP preparing quarterly reports on safeguards compliance.	A degree in environment / social science and at least 3 years work experience in related field, preferably on internationally supported projects. Good command of spoken and written English.
DCU Staff		
Department Coordinator	The Department Coordinator (DC) reports to PTC, ensuring effective implementation of project activities under her/his department. Main duties of DC include (i) contributing to the development of the project work plan and budget, (ii) making specific work plan and budget for activities her/his department, (iii) coordinating technical inputs to support PIUs/DIUs, and (iv) consolidating and supporting M&E data of their respective activities. Supervises and approves all project activities and DCU expenditures.	A senior government official with at least 5 years project management experience. Strong technical qualification in relevant field, has ability to use word processing software, and competence in spoken and written English.
Admin/Finance Assistant	The DCU-based Admin/Finance Assistant provides logistical and financial management support to the DCU as needed. Frequently interacting with senior government officials, NPMO/PIU staff and the consultants.	At least 3 years previous experience working on ADB or internationally financed projects. Ability to use word processing software and some English ability.
PIU Staff		
Provincial Implementation Unit (PIU) Coordinator	The PIU Coordinator oversees implementation of project activities at provincial level. Main duties include leading preparation of the provincial project work plan and budget, coordinating with related government agencies and	A senior government official with at least 8 years project management experience. Strong

Position	Job Description	Requirements
	development partners in the implementation of civil works subprojects and capacity building activities, ensuring compliance with provincial policies and regulations, supervising and approving all project activities and PIU expenditures.	technical qualification in relevant field.
PIU Deputy Coordinator	The PIU Deputy Coordinator reports to PIU Coordinator, ensuring effective implementation of project activities at provincial level. Main duties include assisting Provincial Coordinator in coordinating development of provincial work plan and budget, coordinating with related government agencies and development partners in the implementation of civil works subprojects and capacity building activities, supervising and reviewing DIU's work plan and budget, following up and monitoring field implementation, and consolidating and reporting project benefit monitoring and evaluation.	A senior government official with at 5 years of experience managing internationally financed projects and has relevant technical background. Ability to use word processing software. Good command of spoken and written English.
Admin/Finance Officer	The PIU-based Admin/Finance Officer reports to the PIU Director, overseeing the establishment and monitoring the PIUs accounting systems and procedures, tracks the use of project funds, and ensures accurate, up-to-date financial accounting information is available to the PIU Director/Deputy, consolidate PIU and DIU expenses and process request for replenishment/liquidation of the PIU's sub-accounts, provide hands on training to DIU staff.	At least 3 years of experience as accountant on ADB or internationally financed projects. Ability to use accounting and word processing software. Good command of spoken and written English.
Technical Staff	The PIU-based technical staff reports to the PIU Director, implementing PIU activities, working hand in hand with DCUs and DIUs, guiding DAFO staff on field implementation.	At least 3 years previous experience as technical staff in related field and Bachelor's degree or equivalent.
M&E Officer	The PIU-based M&E Officer reports to PUI Coordinator, ensuring the project M&E system is updated, monitored, and reported.	At least 2 years previous experience working as M&E officer on ADB or internationally financed projects. Ability to use word processing software and some English ability.
Safeguards Specialist	The PIU-based Safeguards Officers reports to the PIU Coordinator/Deputy, ensuring implementation and monitoring of social, environmental safeguards in their respected province. Support NPMO's based safeguard officers in updating provincial IEEs/EMPs, RPs and the IPP, GAP and providing information to preparing quarterly reports on safeguards compliance.	A degree in environment / social science and at least 2 years work experience in related field.

ADB = Asian Development Bank; MAF = Ministry of Agriculture and Forestry; NPMO= national project management office; PMD= project management division; DCU= department coordination unit; PIU=provincial implementation unit; DIU=district implementation unit; DAEC= Department of Agriculture Extension and Corporative; NAFRI= National Agriculture and Forestry Research Institute; DLF=Department of Livestock and Fisheries; NAFRC=Northern Agriculture and Forestry College; PAFO=provincial agriculture and forestry office; DAFO=district agriculture and forestry office; LPB=Luang Prabang; LNT=Luang Namtha; XKH=Xieng khouang; HPH=Houaphanh.

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Agriculture and Forestry

H.E. Dr. Phouang Parisak Pravongvienkham
Vice Minister
Ministry of Agriculture and Forestry

NPMO

Dr. Somphan Chanphengxay
Deputy Director
Department of Planning and Cooperation
Ministry of Agriculture and Forestry

ADB

Environment, Natural Resources, and Agriculture Division

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C. Project Management Structure

1. At Central Level

73. MoF will manage the project imprest account.

74. MAF is the Executing Agency (EA) and it will be responsible for overall project management and coordination of project implementation. It will manage Government and ADB project funds and will be responsible for loan covenant compliance and adherence to safeguard

policies. Since the Project requires a high level of inter-ministerial cooperation, MAF will engage with other ministries and establish instruments for cooperation such as Memoranda of Understanding (MoU) as appropriate. It shall ensure that personnel are assigned to key management positions and are empowered to manage the Project. Chart 1 provides an organization chart of how MAF interacts with the overall project management structure.

75. MAF will establish a National Project Management Office (NPMO) within the Department of Planning and Cooperation (DOPC). The NPMO in DOPC will consist of three (3) units: (i) administration unit; (ii) technical unit; and (iii) safeguards unit. The administration unit will be headed by a full-time Senior Administrator who has experience in the management and implementation of similar types of ADB projects. The technical unit will be headed by a full-time Technical Coordinator who has experience in the management and implementation of similar types of ADB projects. The safeguards unit will be headed by a full-time Safeguards Officer (Community Development) who has experience in the management and implementation of similar types of ADB projects. NPMO will be responsible for overall coordination and project delivery. This will include (i) consolidation of the project workplan, (ii) reporting on project progress to the EA and to ADB; (iii) establishment and management of PPMES; (iv) recruitment of consultants and procurement of civil works and goods; (v) establishment and management of a sub-account and supervision and consolidation of four sub-imprest accounts in each Provincial Implementation Unit (PIU); and (vi) monitoring of safeguard compliances. Chart 2 sets out the staffing requirements of these three units.

76. To ensure inter-agency cooperation and policy guidance, a National Project Steering Committee (PSC) will be established. The PSC will be chaired by a Vice Minister of MAF and will include: (i) Provincial Vice Governors of project provinces; representative from 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 DAEC; (vi) Director General DLF; (vii) Director General NAFRI; (viii) Director General NAFC, and representatives from BOL, DOT, DFD, and DESIA. The PSC will meet once 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 NPMO will provide secretariat services to the PSC.

77. To ensure technical soundness, a Project Technical Advisory Committee (PTAC) will be established and chaired by DG/DDG, DLF, with representatives of DOPC; DAEC; NAFRI; NAFC; Department of Trade (DOT) and Department of Import and Export (DIE)/Ministry of Industry and Commerce, Department of Food and Drug (DFD) /Ministry of Public Health, Bank of Laos (BOL), and Department of Environment and Social Impact Assessment (DESIA)/Ministry of Environment and Natural Resource. The PTAC will meet semi-annually or as required to discuss any technical issues, review work plans, and supervise implementation and monitoring and evaluation. The technical unit under DLF will provide secretarial services to the PTAC.

78. The technical unit will coordinate inputs from the Department Coordination Unit (DCU) of each MAF department: Department of Agriculture Extension and Cooperative (DAEC); National Agriculture and Forestry Research Institute (NAFRI); Department of Livestock and Fisheries (DLF) and the Northern Agriculture and Forestry College (NAFC). These departments will provide technical oversight to and ensure proper technical standards are attained. Each DCU will be staffed as shown in Chart 3.

2. At Provincial Level

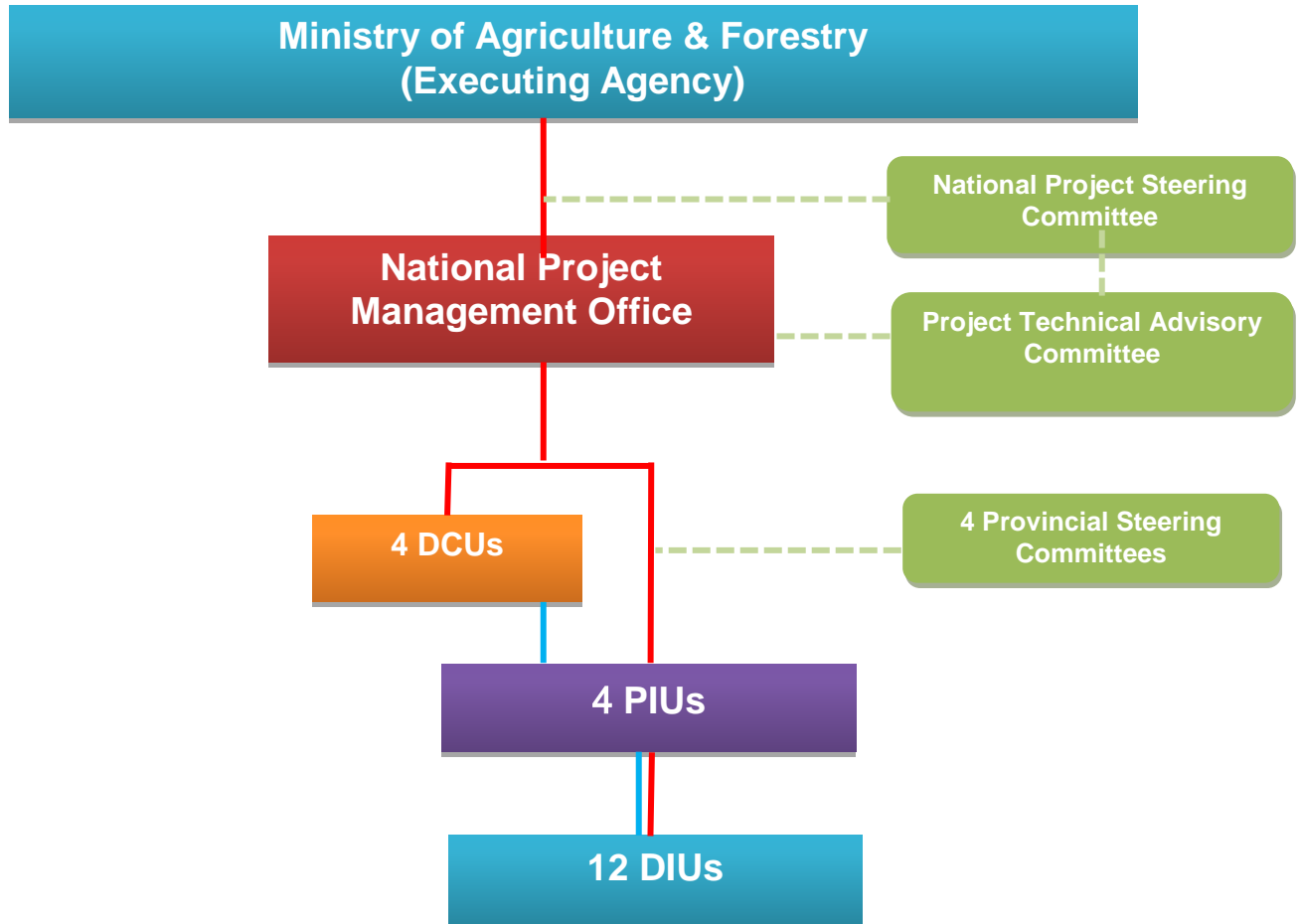
79. The implementing agencies are the Provincial Governments, whose function and role will be effected through their provincial agriculture and forestry offices (PAFO) of Houaphanh, Luang Namtha, Luang Prabang, and Xieng Khouang. Provincial Implementation Units (PIUs), established within the PAFOs under the previous Livestock Development Project (LDP), will be re-activated and strengthened to coordinate implementation in each project province. Each PIU will be staffed in accordance with organization structure shown in Chart 4. PIU will coordinate with provincial line agencies including the governor's office, industry and commerce, health, environment and natural resources, etc.

80. Provincial Project Steering Committees (PPSC), already established under LDP, will consist of representatives from PAFO, other provincial line agencies including planning and investment, finance, industry and commerce, health, and environment, PIU and district vice governors and chaired by provincial vice governor. The representatives from S-CAW will also be members of the PPSCs. The PIUs will also serve as secretariats to the PPSCs. The PPSCs shall meet annually or as needed to review the physical and financial progress of the project and provide overall guidance and direction for project implementation and helping to resolve any outstanding issues including policy constraints in the provinces.

3. At District Level

81. Field project implementation at the district level will be the responsibility of the respective district governments in the project areas. District Implementation Units (DIUs) established within the DAFOs under LDP will be strengthened to assume the responsibility of day-to-day coordination of project activities in their respective districts. A district project coordinator will be assigned from DAFO to head the DIU. The DIU will be staffed in accordance with the organization structure shown in Chart 5. The representative from district S-CAW will be appointed to DIU to help monitor the implementation of the gender action plan (GAP). Field activities will be supervised by PIU and the respective DCUs in MAF's technical departments. DIU will provide daily technical support to the SLPMGs and organize farmer activities. The DIU will also carry out the market facilitation in their respective districts and will work closely with the Lao Women's Union on village livelihood funds and community mobilization. The DIU will have a quarterly and annual work plan in line with the PIU work plan. They will provide monthly reports to the PIU.

**Chart 1
PROJECT ORGANIZATION**



- Command line
- - - Advisory line
- Assistance line

Chart 2

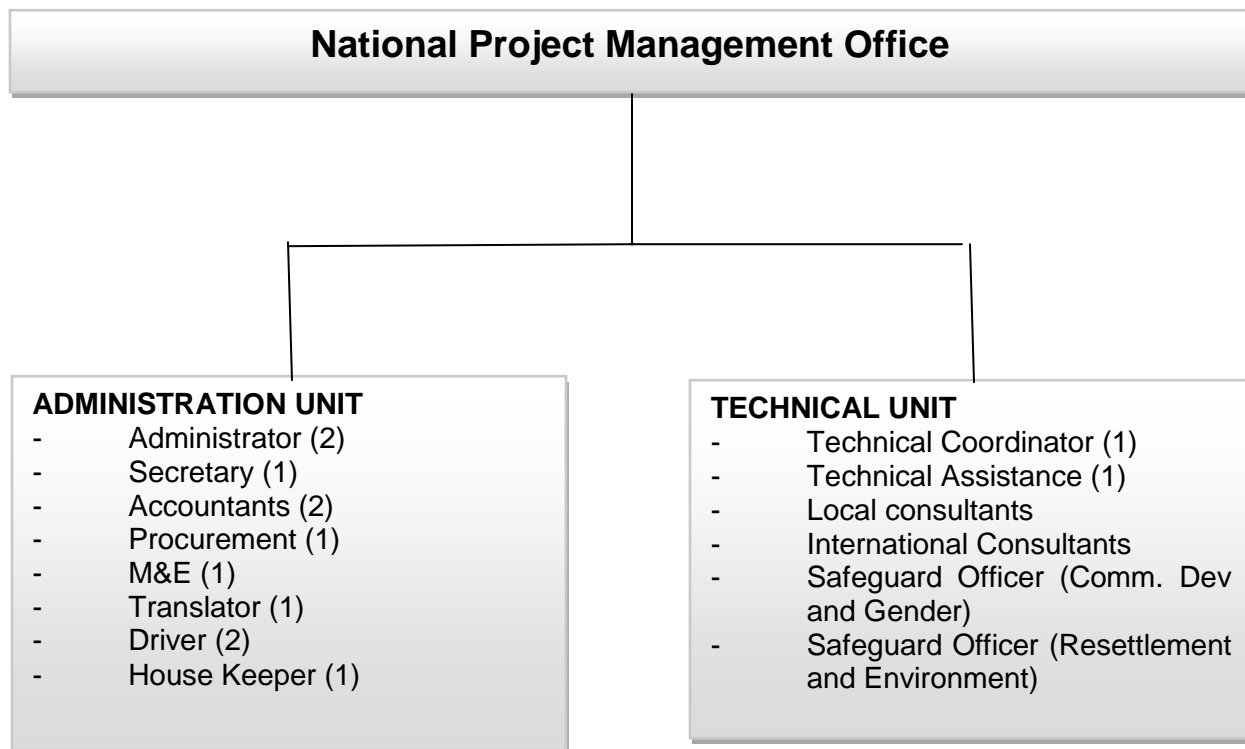


Chart 3
Department Coordination Structure

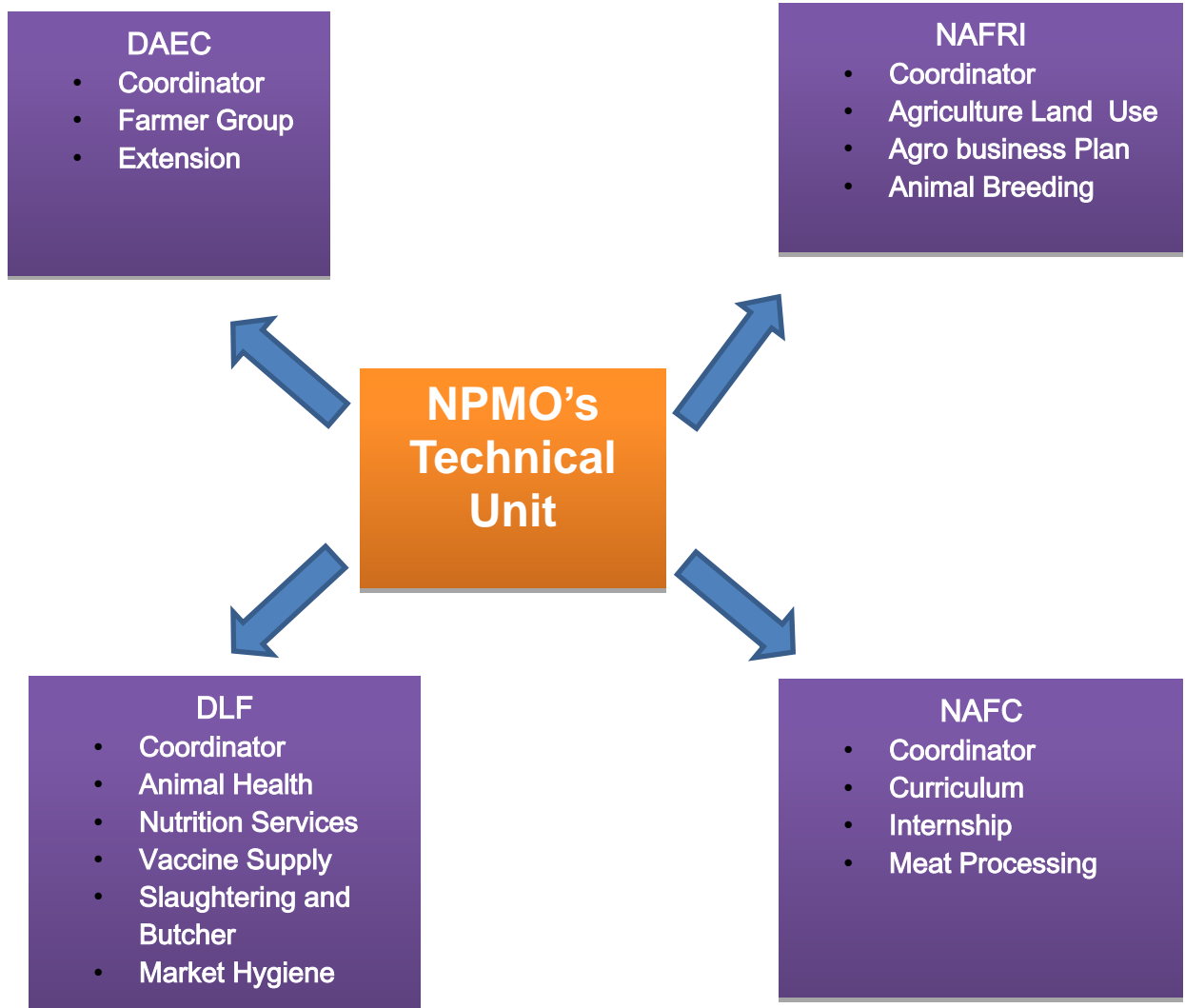
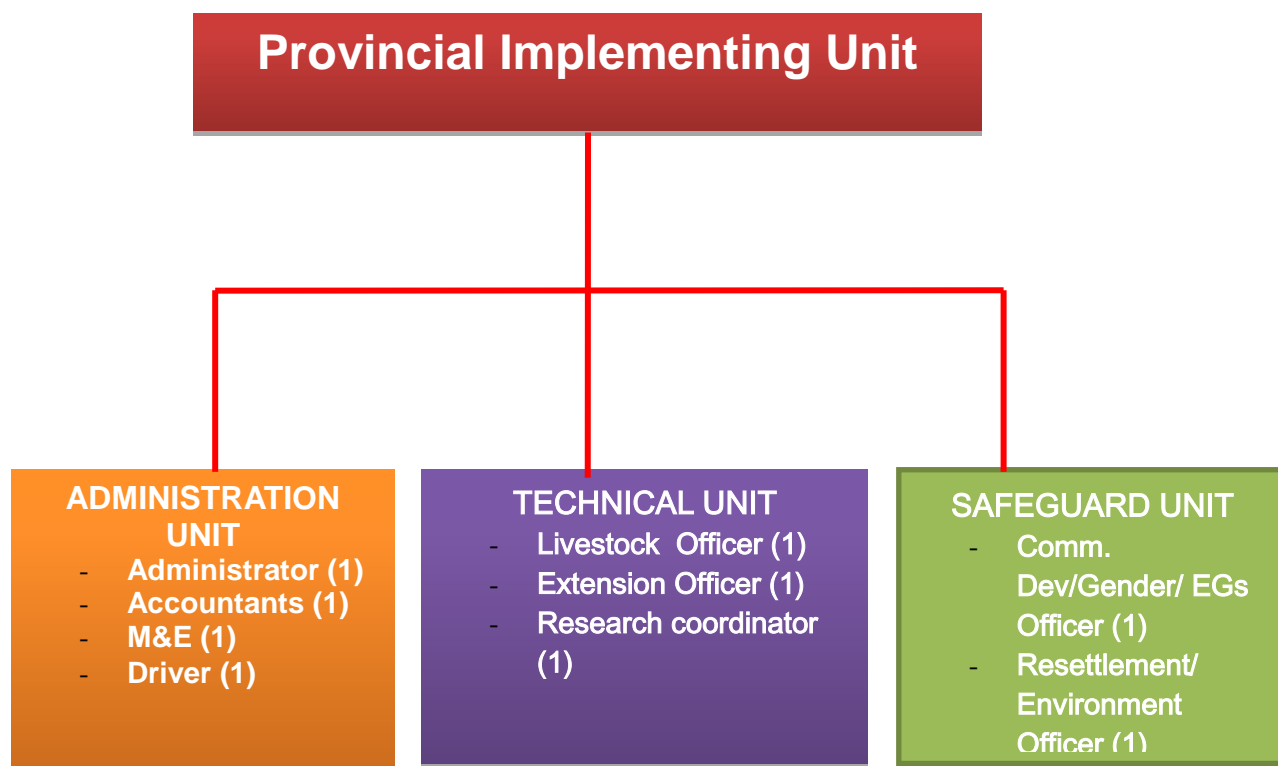


Chart 4



D. Implementation Arrangements

1. ADB and IFAD Co-financing

82. The ADB is providing \$21 million in the form of an ADF loan to the Project. The ADB loan proceeds are expected to become available in the first quarter of 2015. IFAD is providing approximately an additional \$10 million of which \$5 million will be in the form of a grant and \$5 million in the form of a concessional loan. The IFAD resources are expected to be available in mid-2016.

83. The ADB-IFAD arrangement is parallel collaborative co-financing. This type of financing requires that each party finances distinct components and maintains separate accounts. Therefore implementation arrangements will be organized accordingly.

2. Organizational assignment of task responsibilities

84. The bulk of the project activities will be carried out at the provincial and district levels. However, lessons learned from past projects include the need to involve MAF's specialized technical departments and organizations. The specialized departments and organizations will assist the NPMO to design the implementation program and prepare their own workplans and contribute to the overall workplan. The NPMO will be responsible for all major procurement activities.

85. The NPMO will work with the provinces and districts to provide training, capacity development and backstopping to implementation activities. The departments and organizations will submit costed workplans to carry out the activities. The PAFOs will be responsible for minor procurement through shopping. The following table outlines the division of Project responsibilities among the departments and organizations.

Table 5: Lead Agency Responsibilities

Executing Agency	MAF				Financial Institution
	DAEC	NAFRI	DLF	NAFC	
Task Group	Strengthened smallholder LPMGs organizational capacity	Strengthened commercialization capacity	Improved critical value chain infrastructure	Improved knowledge base for market oriented livestock production.	credit component
Task	Organizing and Developing LPMGs	Communal land planning	Training on animal health	Curricula development	Provide target beneficiaries with access to credit.
	Training on agro-business and marketing linkage	Training on animal production and breeding	Certification and training	Scholarship	
	SLPMG productive	Livestock market assessment	Pro-poor inclusivity	Meat processing	

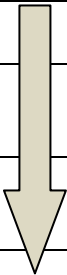
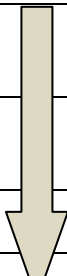
Executing Agency	MAF				
Lead Organization	DAEC	NAFRI	DLF	NAFC	Financial Institution
	equipment and material service				
	Strengthening linkages to private sector and contract farming		Policy and regulatory		
	Assistance for linkage to the micro credit		Slaughterhouses		
			Wet market infrastructure		

DAEC = Department of Agriculture Extension and Corporate; DLF = Department of Livestock and Fisheries; MAF = Ministry of Agriculture and Forestry; NAFCI = Northern Agriculture and Forestry College; NAFRI = National Agriculture and Forestry Research Institute

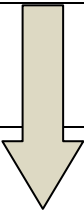
a. Training

86. Training and capacity building along the LVC is a core Project activity. The following table provides an outline of the training needs that the Project will address at the various levels in the LVC.

Table 6: Value Chain Training Matrix

Value chain segment	Type of training	Training provider	Trainees
1) Input supplies and services			
	Business skills for input and service providers	DAEC with support from the agribusiness trainer	Input and service providers
	ToT contract farming arrangements for livestock producers	DAEC with support from the agribusiness specialist	PAFO and DAFO staff
	Contract farming arrangements for livestock producers	PAFO and DAFO with support from DAEC	250 LPMGs
	Facilitation for providing an inputs and services linkage between service providers and LPMGs	DLF	Service providers
2) Livestock production			
	Land planning for livestock production	NAFRI with support from the land use planning consultant	PAFO and DAFO staff
	ToT in commercial animal production and health	NAFRI and DLF	PAFO and DAFO staff
	Animal production and health for LPMGs	PAFO and DAFO	150 LPMGs
	ToT business skills for LPMGs and	DAEC with support from Agribusiness consultant	PAFO and DAFO staff

Value chain segment	Type of training	Training provider	Trainees
	agribusinesses		
	Business skills for LPMGs	PAFO / DAFO with support from the agribusiness trainer	150 LPMGs staff
	ToT in participatory extension methodology (e.g. VLAs and cross visits)	DAEC	PAFO and DAFO staff
	GAP compliance	Service contract with accredited agency	50 LPMGs
3) Livestock trading			
	ToT livestock market assessments and LPMG-Market linkages	NAFRI with DAEC with support from the agribusiness specialist	PAFO and DAFO staff
	Livestock market assessment	PAFO and DAFO with support from the agribusiness trainer	250 LPMGs
	Business skills for small livestock traders	DAEC with support from the agribusiness trainer	Livestock traders
	OIE standard animal welfare (handling)	DLF with NAFC short course (master butcher to ToT NAFC lecturers)	55 traders from 12 districts
4) Livestock slaughter			
	OIE standard animal welfare (handling & slaughter)	DLF with NAFC short course (master butcher to ToT NAFC lecturers)	50 staff and management from 2 upgraded and other existing slaughterhouses in 4 provinces.
	HACCP compliance (food safety)	DLF and Service contract with accredited agency.	2 upgraded slaughterhouses
	Meat grading & carcass dressing	DLF and NAFC short course (master butcher to ToT NAFC lecturers)	50 staff and management from 2 upgraded and other existing slaughterhouses in 4 provinces.
	Best practice slaughterhouse management	Cross visits to good examples of slaughterhouses in region.	Management from 2 upgraded and other existing slaughter houses in 4 provinces.
5) Meat processing			
	HACCP compliance (food safety)	DLF and Service contract with accredited agency.	NAFC meat processing facility
	Preparation of processed meat products	NAFC short course (master butcher to ToT NAFC lecturers)	65 meat processors/retailers/butchers from 12 districts.
6) Meat retailing			
	HACCP compliance	DLF and Service	2 upgraded provincial wet

Value chain segment	Type of training	Training provider	Trainees
	(food safety)	contract with accredited agency.	markets.
	Best practice food safety & environmental hygiene for 11 district wet markets.	DLF and NAFC short course (master butcher to ToT NAFC lecturers)	30 wet market managers from 12 district and 2 provincial wet markets.
	Meat grading and butchery.	NAFC short course (master butcher to ToT NAFC lecturers)	65 meat retailers/ butchers from 12 districts.

DAFO = district agriculture and forestry office; DAEC = Department of Agriculture Extension and Corporate; DLF = Department of Livestock and Fisheries; HACCP = Hazard Analysis and Critical Control Point ; MAF = Ministry of Agriculture and Forestry; NAFCI = Northern Agriculture and Forestry College; NAFRI = National Agriculture and Forestry Research Institute; PAFO = provincial agriculture and forestry offices; SLPMG = smallholder livestock production group; ToT = training of trainers

87. The following discussion describes the implementation arrangements for delivering the outputs.

b. Output 1: Strengthened capacities of smallholders and other LVC actors

i. Organizing and Developing SLPMGs

88. During the start-up phase of the project, the Project will prepare guidelines and an implementation program to assess the potential of the LPGs established in the LDP in each of the target districts to move toward a more commercialized orientation. Support will be provided by the start-up component. The LPGs will be consolidated into a more manageable target of 300 SLPMGs in four provinces with a total of 12 districts. The criteria for selecting the SLPMGs will include:

- (i) Located in areas with high potential for commercialization: close to markets or good road connections to markets to facilitate access to input supplies and service; producers are able to produce ample feed for animals; and financial institutions.
- (ii) SLPMGs with at least five members that express strong interest to become market oriented SLPMGs and potential to expand to at least 20 farmers, and where there are other eligible SLPMGs nearby to ensure sufficient production volume for marketing.
- (iii) Good track record of debt/interest repayment.
- (iv) History of LDP or other development project performance to date.

89. The Project will carry out a training of trainers for the PAFO and DAFO extension staff with support from the SCC and LIC. The DAFO extension staff will carry out the training program with immediate technical backstopping from the PAFO. Overall supervision and quality control will be provided by the Project through regular monitoring activities.

90. The SLPMGs will be assessed and ranked in three categories, strongest, middle and weak. The training will be provided starting with the strongest group, followed by the middle and finally the weakest group. The idea is to use the strong groups to be an example for the other groups. The pattern will be followed throughout the Project in the capacity building activities.

ii. Communal land planning

91. The Project will prepare guidelines for preparing communal land use maps during the start-up phase. The Project will train the PAFOs and DAFOs to assist the villages and SLPMGs to prepare the maps. Most villages already have land use maps, and these will be the basis for adapting them to increased animal production.

92. The PAFOs and DAFOs will assist the villages with SLPMGs to prepare land use zoning maps for their communities during the main implementation phase. The maps will designate areas of importance for livestock production. This will include: water sources; grazing and pasture lands; forage production; and animal housing. These maps will be useful for the selection of productive community infrastructure and equipment.

iii. Technical training and demonstration

93. The Project will update the technical training used in the LDP. They will then conduct Training of Trainers courses whereby the PAFO and DAFO staff will be prepared to pass on the knowledge to the SLPMGs. Training will be a key activity over the entire project. The training will consist of theory, on farm demonstrations, and village learning activities including: technologies that will enhance commercial production, production scheduling, improved feeding, breeding, husbandry, as well as help the groups to identify and link to production input suppliers. Farmer to farmer learning will be a key method of skill and knowledge transfer.

94. SLPMGs will be trained by DAFO extension workers to acquire these skills by conducting practical training courses and Village Learning Activities (VLAs), which were identified as having been an effective way of demonstrating and assessing new technologies and practices in villages. The Project will also arrange farmer cross-visits to successful examples to facilitate farmer-to-farmer learning and stimulate interest in commercial livestock production. Cross visits have been shown to be a very effective extension approach in the LDP. Building capacity of farmers to conduct VLAs will ensure that they acquire the skills needed for assessing new technologies and change their production systems in line with changing market demand.

95. Support will be provided to SLPMGs to become livestock breeders who specialize in producing young animals for onward sale to farmers who specialize in growing and fattening animals for slaughter. This support will include extension activities to promote farmer-to-farmer learning and cross-visits to successful examples, training and provision of credit for breeding enterprises. Opportunities for engaging already established commercial operators in supplying young animals will also be promoted by the Project.

96. SLPMGs will receive animal production and health training in theory and through on farm demonstrations, VLAs and cross-visits including: technologies and practices that will enhance commercial production, production scheduling, improved feeding, breeding, and husbandry.

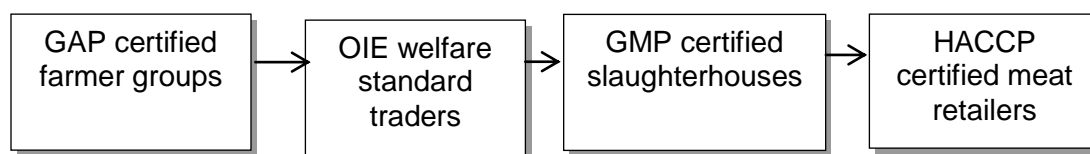
97. The Project will also develop training material and produce a range of extension material in local languages to support scaling up activities. Scaling up will increase production clusters and provide additional products for sale through market chains developed by SLPMGs.

iv. Certification and Training

98. The Project will design the training program to upgrade standards and establish value chain partnerships dedicated to quality and food safety in coordination with the National Tourism Authority (NTA) the Ministry of Health (MoH) and the ADB supported 'Trade Facilitation: Improved Sanitary and Phyto-Sanitary Handling in Greater Mekong Sub-region Trade Project', for utilizing instruments to facilitate cross border trade. The Project will disseminate the system to the actors in the value chain. The Project will prepare a training program and carry out a ToT with the PAFOs and DAFOs to meet the specific standards.

99. The Project will engage on a service contract an accredited certification agency to assess and provide guidance to SLPNGs to reach GAP standards. Traders will also be trained in loading/transport/lairage procedures to reduce animal stress, according to Office International des Epizooties (OIE) animal welfare standards. Two slaughterhouses, and two wet markets in Luang Prabang and Phonsavan as well as a separate meat processing facility in Luang Prabang will be established to Hazard Analysis and Critical Control Point (HACCP) standard. Formal supply chains can be established between chain partners, based upon standards that are dedicated to quality and food safety, as summarized in Figure 12.

Figure 2: Supply Chain Dedicated to Quality and Food Safety



v. Pro-poor inclusivity

100. The Project's activities will be extended to those who are marginalized and poor in the selected villages. The Project will prepare a strategy for preparing non-group villagers to join the SLPNGs. The strategy will be integrated into the regular extension work of the DAFOs. The strategy will consist of both skills and knowledge transfer as well as access to credit. In addition there will be employment and income opportunities generated by the increased need for labor to care for the additional livestock. The Lao Women's Union will be mobilized to implement these activities.

101. The Project will facilitate credit for priority livestock types to enable poorer farmers to also engage in profitable livestock production and market their animals through SLPNGs. In addition, the Project will provide extension support to other smallholders in project villages through extension activities and training on livestock production and health of non-priority animal species to increase livestock productivity and farm income from livestock. It is anticipated that the existing VLF credit program managed by the Lao Women's Union will continue to provide credit to poor smallholders for livestock production of animal types that have not been selected as priority for commercialization.

vi. Policy and regulatory support

102. The Project will prepare the ToR for the studies and research projects with the support of LIC. NPMO will recruit individual consultants to carry out the studies through service contracts.

Upon completion of the studies and research projects, policy and regulations will be prepared for government consideration. The following are some of the key areas that will be considered for study and research: (i) livestock production land allocation; (ii) PPP and contract farming arrangements in agriculture; (iii) animal nutrition; (iv) vaccination policy; (v) establish emergency trust fund for disease control; (vi) production insurance; (vii) rural credit; (viii) SME-cooperatives & commercialization; (ix) pricing controls; (x) taxes; (xi) energy; and (xii) mechanization.

vii. Curricula development

103. The Project will upgrade its animal production courses to modern standards and oriented towards the Lao cultural and natural environment. There will be two key focuses: (i) market oriented livestock production including development of business plans; and (ii) a course to produce qualified butchers. The LIC will include consultants to prepare and conduct ToT for the NAFC staff who will carry out the training of NAFC students, government staff and private sector operators.

viii. Scholarship

104. The NPMO, the Project Technical Committee and MAF will agree upon key knowledge gaps and deficiencies that need to be addressed. Based upon this assessment specific training needs will be identified. For the NAFC teaching staff opportunities for training in these specified areas will be investigated. Thailand has an advanced livestock industry and supporting academic system underpinning the industry.

105. The Project will support opportunities for: (i) NAFC's lecturers/teachers to upgrade relevant qualifications to enable them to teach the new course material; (ii) scholarships for disadvantaged students from rural communities in the project area; (iii) on farm internship experience for NAFC students; and (iv) in service training courses for traders, butchers, meat processors other industry actors and inspectors to upgrade qualification and for SLPMGs on relevant subjects. Opportunities for NAFC staff will include study tours to observe successful market-oriented livestock production, slaughter and processing facilities. Internship opportunities for NAFC students will be identified along the LVC including village placements working with SLPMGs and meat processing working with butchers.

c. Output 2: LVC infrastructure strengthened

i. SLPMG productive equipment and materials

106. The Project will finalize the criteria for eligible investments. The criteria will include clear guidelines for the operation and maintenance responsibilities of the assets. The criteria will be disseminated to the PAFOs and DAFOs.

107. The DAFOs will engage with the villages and the SLPMGs to select and prioritize the most appropriate productive equipment and material needs. The village development committees and the SLPMGs will agree upon priority assets needed to boost production with the support of the DAFO extension staff. The selected assets will be reviewed by the PAFOs and finally by MAF.

108. Proposals for SLPMG productive equipment and materials will be included in the provincial-wide feasibility studies and associated appraisal reports to ensure to ensure the technical and financial viability of the proposed assets, as well as demonstrate due diligence with respect to safeguards. Following approval of MAF's appraisal reports by ADB, equipment

and materials will be procured by shopping procedures by PIUs/DIUs and supplied to SLPMGs, which will provide any labor necessary in commissioning the assets.

109. The Project through the PAFO/DAFO will monitor the condition of the assets. Any undue deterioration of the assets will be reported to the District and Provincial authorities. Appropriate action will be taken by the authorities to rectify any such problems.

ii. Slaughterhouses

110. The Project will build two slaughterhouses, one in Luang Prabang and one in Xieng Khouang. The GoL will provide land for the construction of the slaughterhouses. These facilities will be built and operated to HACCP standards, and will serve as demonstrations of good practice for replication throughout the industry. The slaughterhouses will include training rooms and biogas systems.

111. The management and operation of the slaughterhouses will be carried out by the private sector under a management contract. Best practice training will be provided to slaughterhouse management, including exposure visits to good examples of slaughterhouses in the region. Slaughter personnel will be trained in humane slaughter practices and carcass grading to improve meat quality. The slaughterhouses will also be used as a venue for training slaughter personnel from other slaughterhouses in the target provinces and students from NAFC. The facility in Luang Prabang will be an abattoir, i.e. it will have an adjacent meat processing unit for cold meat preparation and supply.

112. Identification and selection slaughterhouse locations will be screened against the following criteria:

113. Technical Criteria

- (i) The site is located close to the wet market and is accessible to meat retailers from the wet market, as the slaughterhouse will supply fresh 'hot' meat. Out-of-town centralized slaughterhouses are not appropriate.
- (ii) The site is owned by the State and there are no on-going disputes regarding ownership.
- (iii) The site does not have any relocation or environmental issues.
- (iv) The area is large enough to have lairage on site, or additional site is allocated for lairage close-by.
- (v) The site is large enough to allow for future expansion.
- (vi) The site will not cause disturbance to local residents (e.g. noise and pollution, environmental health). There is community consultation to confirm agreement with site selection.
- (vii) The site has year-round access to the main road and there is adequate space for large trucks to enter, unload, turn and exit the site.
- (viii) The site has access to main utilities – electricity and water.
- (ix) The site does not pose any problems for waste disposal and environmental hygiene measures to be taken.
- (x) All requirements under the EARF, RF, IPF in accordance with ADB's Safeguard Policy Statement (SPS) to be met.

114. **Economic and Financial Criteria.** For economic and financial aspects the slaughterhouses will be screened against the following criteria:

- (i) Thorough supply/demand analysis must be undertaken
- (ii) All investment costs – including all ancillary infrastructure not just the buildings and equipment must be detailed.
- (iii) Details on commissioning, staff training, etc - cost and who will deliver (project consultants, staff seconded from existing facilities)
- (iv) Ownership and management structure. Ensure that there is no potential conflict of interest issue if government (local authority) is going to be responsible for licensing and monitoring standards. Analyse interest of private sector.
- (v) If the only alternative is to begin with government operation, then a clear exit strategy will be needed. That will need to demonstrate sufficient profitability at the point of exit to get private sector operators interested.
- (vi) Clear description of the implementation arrangements and operating modality (fee for slaughter service, buying animals/selling carcasses, etc).
- (vii) Estimate of operating costs – not only direct costs but also licensing, monitoring, environmental, tax, etc.
- (viii) Financial analysis.
 - a. Source of funds clearly identified – government equity, private sector equity, project loan direct from government or through local bank.
 - b. Based on the WACC against which the rate of return can be assessed.
 - c. Cash flow – 15 years with realistic phasing of throughput and, therefore, income. Not forgetting asset replacement costs, as necessary.
 - d. Based on the cash flow FIRR (before and after financing and tax) and sensitivity analysis and clear statement of quantifiable risks.
 - e. Projected financial statements (income statement, balance sheet) and financial indicators (gross and net profit margins, return on assets, return on equity, etc).
 - f. If it is to be government owned and operated – a statement of the impact on the government budget, a firm commitment that operating costs will be forthcoming, statement of how income will be utilized (retained by the entity or transferred to budget, etc).
 - g. Statement of indirect unquantifiable benefits and risks (for example: environment, public health)

115. A financial sustainability assessment has been carried out on a representative slaughterhouse model and, based on very conservative assumptions; it demonstrates that the proposed investment will be sustainable from the first year of operation, subject to the application of the criteria listed above. The assessment indicates a working ratio of 0.85 from the first year of operation with an increasing cash-to-total assets ratio over the period to 2031.

116. LIC includes engineers and construction supervisors who will survey, design and prepare tender documents for the slaughterhouses. The NPMO will tender the abattoir and slaughterhouses within the package for the market improvements within each province. LIC will backstop the construction supervision.

117. The Project midterm review will assess the slaughterhouse operations for possible future private sector participation. By that time, the Government will have in place some clear guidelines on PPP. Private sector participation in slaughterhouse operations would be a test case for the practical application of PPPs. During the life of the Project, MAF will work closely with the existing informal operators of slaughter slabs to move them out of urban areas and upgrade their standards, or look at closing them down. In parallel, MAF will also be looking to

limit the number of slaughterhouse licenses commensurate with the demand for meat in the market i.e. increasing the throughput of animals for a limited number of slaughterhouses as a condition of the Project.

iii. Wet market infrastructure

118. Food safety standards in traditional wet markets, where the majority of meat is sold, are low. If slaughterhouse standards are raised, retail standards in the supply chain must also be improved; otherwise any food safety gains will be lost. Therefore, the meat sections of one wet market in Luang Prabang and one in Phonesavanh will be upgraded to HACCP standards. The upgraded markets will serve to demonstrate good practice so that other markets may be encouraged to follow the example.

119. District markets are of various conditions with respect to efficiency of food and meat handling and sanitation. In the 12 districts in which the Project will operate, resources will be made available to enable improvements in market conditions to an acceptable standard with due consideration for the needs of women who interact in the market. These improvements will include the provision of clean water, toilets (men and women), waste disposal, and the tiling of surfaces where meat is handled. MAF will lead on identifying needed improvements and will coordinate with the Ministry of Industry and Commerce for the implementation of the improvements. Best practice training (food safety and environmental hygiene) will also be provided for butchers/retailers in district wet markets.

120. As part of the selection process for a wet market to participate in the Project, the market operator will be required to enter into an agreement with the district government requiring that the operator shall cover all recurrent costs through stall fees. The initial fee will be set during the conduct of the feasibility study, and will be reviewed annually by both parties to ensure all O&M costs are covered. A financial sustainability assessment has been carried out on a representative wet market model using conservative assumptions. The model demonstrates that the proposed investment will be sustainable from the first year of operation. The assessment indicates a very healthy working ratio of 0.67 from the first year of operation, and a maximum periodic maintenance to cash deposit ratio of less than 0.5 in the year 2026 reducing to 0.19 in 2031.

121. LIC will survey, design and prepare documentation for the improvements to the two wet markets located in the provincial capitals and the 12 district markets (meat sections only). The works will be aggregated into one procurement package per province to be let by the NPMO. LIC will backstop the supervision of the works.

iv. NAFC meat processing facility

122. LIC will survey, design, and supervise the cold meat processing facility under NAFC. NPMO will procure the works in a single NCB package.

123. The Project will recruit a master butcher under a management contract to manage the NAFC meat processing facility and provide Trainer of Trainers training. The Master Butcher will provide technical advice and training to the slaughterhouse operators and other butchers. The training will be oriented towards the slaughterhouses reaching HACCP certification. LIC includes a specialist to prepare curricula for NAFC students and short courses for slaughter personnel, butchers/meat retailers and meat processors, as described above.

124. The Project will finance the construction of a model cold meat processing facility adjacent to the proposed slaughterhouse in Luang Prabang as a training facility for NAFC to train its students in modern practices. The Project will provide resources for the students to be trained both in an academic setting as well as on-the-job internships at SLPMG in Project villages and the slaughterhouse and meat processing plant. The Master Butcher will provide technical advice and training to the Project constructed slaughterhouse operators and other butchers. The training will be oriented towards the slaughterhouses reaching HAACP certification. Consultants will also be recruited to prepare curricula for NAFC students and short courses for slaughter personnel, butchers/meat retailers and meat processors.

125. Net revenue from processed meat sales (prepared during training) is expected to cover all or part of the recurrent costs of the facility. However, in the event of any deficit, MAF has undertaken to back-stop the necessary recurrent costs through the annual budget allocation to NAFC.

d. Output 3: Capacity to access credit improved

126. Training will include: business management and planning, financial management and cash flow projections, production scheduling, market and price information, contract farming, and quality control.

i. Strengthening linkages to private sector input and service providers, livestock traders and butchers, and contract farming

127. The Project will assess the need for inputs and services with each SLPMG and explore options for supporting the development of sustainable input supply and services through provision of business training. It will also seek to improve supply linkages with traders with the long-term aim of establishing commercial farmer-based agro-enterprises. Contract farming opportunities will be assessed and pursued and SLPMGs will receive training on contract negotiations, risk management and compliance arrangements to safeguard the interests of smallholder livestock producers.

128. The Project will engage with local traders and facilitate visits of key SLPMG members, DAFO extension staff and local traders to destination markets with the objective of creating links with traders and butchers at these markets and to gain a better understanding of market demand and opportunities.

129. The Project will develop a strategy for compressively linking the actors in the value chain from producer through to consumer. The Project will disseminate the strategy to the PAFO and DAFOs. In turn the PAFOs and DAFOs will carry out the strategy. The following activities will be included: (i) annual livestock fairs; (ii) study tours for SLPMGs to trace the value chain; (iii) study tours within Lao and to Thailand to see examples of contract farming; and (iv) dissemination of contacts of actors in the value chain.

130. The Project will prepare model contracts to be used within the value chain. For example, contracts between traders and producers, or between traders and slaughterhouses. Contracts are already in use in the Project area and these will be the starting point for development of the models. The model contracts will be tested within the project under controlled conditions. Training will be provided to the contractual partners to ensure that obligations and

responsibilities are well understood. The contracts will be disseminated to actors in the value chain. The chambers of commerce will be informed of the contracts.

ii. Accessing credit

131. MAF with the assistance of consultants will prepare training courses for SLMGs to prepare group as well as individual business plans. The business plans will enhance access to credit from any source. The project will initiate meetings among credit providers and the SLPMGs. The SLPMGs business training and their business plans will be highlighted during these meetings and should enhance the attractiveness of the SLPMGs as targets for credit provision.

132. In addition, an evaluation will be made of the VLF that was established under the under LDP, in order to make recommendations for any actions to improve its performance. The evaluation will also include an assessment of whether it can be upgraded to a more sustainable credit facility operated by a financial intermediary.

e. Output 4: Project management enhanced

133. MAF as the EA will chair a Project inter-ministerial steering committee consisting of national level stakeholders and representatives from the participating provinces. The committee will advise the Project on overall objectives and activities and coordinate on matters where more than one agency has responsibility. The Committee will meet twice a year or as needed.

134. MAF's Department of Planning and Co-operation (DoPC) will establish a NPMO. The NPMO will be responsible for overall coordination between various implementing agencies of the Project. It will provide secretarial support to the inter-Ministerial Steering Committee and ensure coordination within the MAF departments. The DoPC has recently established a Project Management Division (PMD). The NPMO will be located within the PMD.

135. The NPMO will be responsible for overall project planning, monitoring and reporting. It will ensure that the M&E system is established from the earliest stage of project implementation and kept current throughout the Project. The NPMO will be responsible for major project procurement. The NPMO will ensure that all loan covenant obligations are complied with including gender and safeguard considerations.

136. MAF's technical departments and organizations, DAEC, DLF, NAFRI, NAFC will be responsible for the design and quality control of those activities within their respective mandates. They will prepare overall project workplans and detailed annual workplans for the areas of their responsibilities. A technical advisory committee chaired by the DLF will coordinate on technical matters. The DAEC, DLF and NAFRI will backstop the implementation activities of the PAFOs and DAFOs.

137. The bulk of the project activities will take place in the provinces and districts. In each province a Vice Governor will chair a Provincial Steering Committee that will ensure good coordination among the provincial stakeholders. A similar arraignment will be made in the districts.

138. The PAFOs will be the implementing agencies and DAFOs will have coordination within the provinces and districts among the stakeholders. Four provincial implementation units (PIUs), established under LDP under PAFO will be strengthened to coordinate implementation in each

province. The PIU will comprise one provincial coordinator (Deputy Director of PAFO) and one full-time officer responsible for provincial implementation, and the necessary administrative support staff. Field activities will be implemented by district staff and guided by PAFO and relevant MAF's. Training and capacity building will be provided by the MAF departments to the PAFO and DAFO staff to enable them to carry out their responsibilities.

139. The project implementation will be supported by LIC. Advance action consultants will assist the NPMO to prepare for loan effectiveness. At loan effectiveness the start-up component will begin during which individual consultants will be engaged to kick start activities in advance of the recruitment of the Loan Implementation Consultant.

140. The NPMO and the technical organizations will work through the relevant personal in the PAFOs and DAFOs. The PAFOs and DAFOs will have coordination within the provinces and districts among the stakeholders.

141. A top priority task of the NPMO will be to establish the projects M&E system. The M&E system will be designed to not only meet the needs of project management and evaluation but will also align and contribute to the government's statistics and sector information systems. The NPMO will be assisted by the Start-up consultants, which will include an M&E specialist, to prepare the M&E system and to train the provinces in its use. M&E specialists will be included in the Start-Up consultants (SC) and the Loan Implementation Consultants (LIC).

142. The Project will provide consulting support throughout the project duration through the AAC, SCC, NPMO Support and LIC. To minimize the number of consulting services packages during the main implementation period the LIC package will contain most of the specialist support that the project will require.

143. **Special Feature.** IFAD will finance a credit component that will directly support the project's third output. By early 2015, the credit component will have been designed jointly by IFAD and ADB, and will meet ADB's relevant due diligence and safeguard requirements. It will be prepared on a sustainable commercial basis using established and acceptable financial intermediaries. The business plans prepared by the smallholders and their groups will be a prerequisite for accessing the credit.

IV. COSTS AND FINANCING

144. The total project cost is estimated at \$31.5 million. The Government has requested a loan of [\$21.0 million equivalent] in various currencies from ADB's Special Funds Resources (ADF) to help finance the Project. The loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the draft loan agreement.

145. The ADB loan represents 66.7% of total project costs. It will be utilized for civil works (value chain infrastructure and equipment), vehicles (except the vehicles for PAFO and DAFO for carrying out extension work), all consulting services, stakeholder consultations in preparation for designing and building slaughterhouses, costs associated with farmer training (MAF related implementation costs), incremental project management staff, external audit fees, and all project operation costs. The government will also borrow for financing charges during implementation. ADB will finance taxes and duties on ADB financed expenditures.

146. The Government has requested IFAD to co-finance the Project. IFAD has committed to provide \$10.0 million through a \$5.0 million grant and a \$5.0 million concessional loan. The IFAD loan and grant represent 15.9% respectively of total project costs. The IFAD contribution is expected to finance the credit component, vehicles for PAFO and DAFO for carrying out extension work, service contracts for value chain capacity and policy support, costs associated with farmer training (except MAF related implementation costs) and value chain training. IFAD will not finance taxes and duties on IFAD related expenditures. IFAD's contribution will be considered by the IFAD Executive Board in April 2016.

147. The IFAD loan will have a 40-year term, including a grace period of 10 years, with a service charge of three fourths of one per cent (0.75 per cent) per annum, and such other terms and conditions which will be discussed between IFAD and the Government.

148. IFAD's contribution to the Project will be in the form of parallel collaborative co-financing. IFAD's cofinancing will not be administered by ADB. The project is divided into specific, identifiable subcomponents and contract packages, each of which is separately financed by ADB and IFAD. ADB and IFAD will finance separate project subcomponents according to the assumptions in the following table.

149. The Government will finance the equivalent of \$0.5 million (1.5% of total project costs), from the central government budget allocations. The Government counterpart funds will be for (i) salaries of government staff working for the Project, (ii) land, mine clearing, and (iii) taxes and duties on vehicles and farmer training which are financed by IFAD. Detailed cost tables prepared during design are presented in Supplementary Document 16.

150. Until IFAD's executive board (EB) finally approves their contribution in Q1 2016, contingency must be considered for the very remote chance that IFAD's EB may not approve the IFAD contribution. In this extremely unlikely event, the project will undertake a major change of scope and will be reconfigured to fit the ADB \$21.0 million contribution along the following lines: (i) the IFAD decision will be known during the start-up phase, i.e. at an early stage of project implementation, so there is sufficient time to make any necessary adjustments; (ii) the number of small holder groups and the geographic project scope will be adjusted to an optimal level given available resources; (iii) increasing smallholder production and quality will be the main project focus; (iv) investment in NAFC, policy support and LVC infrastructure will be cancelled. The project economic viability is based upon the income gains made possible by

improved smallholder production. These gains are sufficient to cover other investments in the LVC.

A. Detailed Cost Estimates by Expenditure Category

	(Kip Ten Thousand)					(US\$ '000)				
	Local	Foreign	Total	%	% Total	Local	Foreign	Total	%	% Total
				Foreign Exchange	Base Costs				Foreign Exchange	Base Costs
I. Investment Costs										
A. Civil Works	1,182,275	295,569	1,477,843	20	7	1,477.8	369.5	1,847.3	20	7
B. SLPMG equipment and materials	2,249,280	-	2,249,280	-	10	2,811.6	-	2,811.6	-	10
C. Vehicles and Equipment										
1. Vehicles	173,880	405,720	579,600	70	3	217.4	507.2	724.5	70	3
2. Motorcycles	23,040	53,760	76,800	70	-	28.8	67.2	96.0	70	-
3. Equipment	51,503	95,649	147,152	65	1	64.4	119.6	183.9	65	1
Subtotal	248,423	555,129	803,552	69	4	310.5	693.9	1,004.4	69	4
D. Consulting Services										
1. International Consultants	435,496	1,741,984	2,177,480	80	10	544.4	2,177.5	2,721.9	80	10
2. National Consultants	1,345,150	-	1,345,150	-	6	1,681.4	-	1,681.4	-	6
3. Consultancy Support	32,000	-	32,000	-	-	40.0	-	40.0	-	-
Subtotal	1,812,646	1,741,984	3,554,630	49	16	2,265.8	2,177.5	4,443.3	49	16
E. Service Contracts	894,000	298,000	1,192,000	25	5	1,117.5	372.5	1,490.0	25	5
F. Credit line	3,600,000	-	3,600,000	-	16	4,500.0	-	4,500.0	-	16
G. Land	240,000	-	240,000	-	1	300.0	-	300.0	-	1
H. Surveys and Studies	349,724	87,431	437,155	20	2	437.2	109.3	546.4	20	2
I. Audit services	112,000	28,000	140,000	20	1	140.0	35.0	175.0	20	1
J. Farmer Training	3,970,243	-	3,970,243	-	18	4,962.8	-	4,962.8	-	18
L. Value Chain Training	1,054,200	-	1,054,200	-	5	1,317.8	-	1,317.8	-	5
M. Supervision and Implementation										
1. Incremental Staff	1,378,656	-	1,378,656	-	6	1,723.3	-	1,723.3	-	6
2. Operations	997,760	249,440	1,247,200	20	6	1,247.2	311.8	1,559.0	20	6
Subtotal	2,376,416	249,440	2,625,856	9	12	2,970.5	311.8	3,282.3	9	12
N. Vehicle and Equipment O&M	547,792	234,768	782,560	30	4	684.7	293.5	978.2	30	4
Total Investment Costs	18,636,999	3,490,320	22,127,319	16	100	23,296.2	4,362.9	27,659.1	16	100
II. Recurrent Costs										
Total BASELINE COSTS	18,636,999	3,490,320	22,127,319	16	100	23,296.2	4,362.9	27,659.1	16	100
Physical Contingencies	1,231,264	343,155	1,574,420	22	7	1,539.1	428.9	1,968.0	22	7
Price Contingencies	2,481,713	560,923	3,042,636	18	14	817.7	186.3	1,004.0	19	4
Total PROJECT COSTS	22,349,976	4,394,399	26,744,375	16	121	25,653.0	4,978.2	30,631.2	16	111
Interest During Implementation	-	706,456	706,456	100	3	-	830.3	830.3	100	3
Total Costs to be Financed	22,349,976	5,100,855	27,450,831	19	124	25,653.0	5,808.5	31,461.5	18	114

Source: ADB staff estimates

B. Allocation and Withdrawal of Loan Proceeds

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS –ADF				
CATEGORY				ADB FINANCING
Number	Item	Amount Allocated (\$)		Percentage and Basis for Withdrawal from the Loan Account
		Category	Subcategory	
1	Works	[1,847,304]		100 percent of total expenditures claimed.
2	Vehicles and Equipment	[713,191]		
2A	Vehicles		[433,251]	100 percent of total expenditures claimed.
2B	Motorcycles		[76,000]	100 percent of total expenditures claimed.
2C	Equipment		[183,940]	100 percent of total expenditures claimed.
3	Consulting Services	[4,443,288]		100 percent of total expenditures claimed.
4	Implementation and Supervision	[3,212,165]		100 percent of total expenditures claimed.
5	Vehicle and Equipment Operations and Maintenance	[761,040]		100 percent of total expenditures claimed.
6	SLPMG equipment and materials	[2,811,600]		100 percent of total expenditures claimed.
7	Farmer and value chain training and regulations	[3,104,698]		100 percent of total expenditures claimed.
8	Service contracts	[794,170]		100 percent of total expenditures claimed.
9	Surveys and Studies	[199,452]		100 percent of total expenditures claimed.
10	Audit Services	[175,000]		100 percent of total expenditures claimed.
11	Interest During Construction	[710,400]		100 percent of amount due.
12	Unallocated	[2,227,692]		
	Total	[21,000,000]		

C. Detailed Cost Estimates by Financier

(US\$ '000)	ADB Loan		IFAD Grant		IFAD Loan		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs										
A. Civil Works	1,847.3	100.0	-	-	-	-	-	-	1,847.3	5.9
B. SLPNG equipment and materials	2,811.6	100.0	-	-	-	-	-	-	2,811.6	8.9
C. Vehicles and Equipment										
1. Vehicles	433.3	59.8	107.2	14.8	96.4	13.3	87.7	12.1	724.5	2.3
2. Motorcycles	96.0	100.0	-	-	-	-	-	-	96.0	0.3
3. Equipment	183.9	100.0	-	-	-	-	-	-	183.9	0.6
Subtotal	713.2	71.0	107.2	10.7	96.4	9.6	87.7	8.7	1,004.4	3.2
D. Consulting Services										
1. International Consultants	2,721.9	100.0	-	-	-	-	-	-	2,721.9	8.7
2. National Consultants	1,681.4	100.0	-	-	-	-	-	-	1,681.4	5.3
3. Consultancy Support	40.0	100.0	-	-	-	-	-	-	40.0	0.1
Subtotal	4,443.3	100.0	-	-	-	-	-	-	4,443.3	14.1
E. Service Contracts	794.2	53.3	695.8	46.7	-	-	-	-	1,490.0	4.7
F. Credit line	-	-	-	-	4,500.0	100.0	-	-	4,500.0	14.3
G. Land	-	-	-	-	-	-	300.0	100.0	300.0	1.0
H. Surveys and Studies	199.5	36.5	190.2	34.8	156.8	28.7	-	-	546.4	1.7
I. Audit services	175.0	100.0	-	-	-	-	-	-	175.0	0.6
J. Farmer Training	2,481.4	50.0	2,481.4	50.0	-	-	-	-	4,962.8	15.8
L. Value Chain Training	623.3	47.3	614.1	46.6	80.4	6.1	-	-	1,317.8	4.2
M. Supervision and Implementation										
1. Incremental Staff	1,723.3	100.0	-	-	-	-	-	-	1,723.3	5.5
2. Operations	1,488.8	95.5	45.2	2.9	-	-	24.9	1.6	1,559.0	5.0
Subtotal	3,212.2	97.9	45.2	1.4	-	-	24.9	0.8	3,282.3	10.4
N. Vehicle and Equipment O&M	761.0	77.8	195.6	20.0	-	-	21.5	2.2	978.2	3.1
Total Investment Costs	18,061.9	65.3	4,329.5	15.7	4,833.6	17.5	434.1	1.6	27,659.1	87.9
II. Recurrent Costs										
Total BASELINE COSTS	18,061.9	65.3	4,329.5	15.7	4,833.6	17.5	434.1	1.6	27,659.1	87.9
Contingencies	2,227.7	75.0	670.5	22.6	46.2	1.6	27.6	0.9	2,972.0	9.4
Total PROJECT COSTS	20,289.6	66.2	5,000.0	16.3	4,879.8	15.9	461.8	1.5	30,631.2	97.4
Interest During Implementation	710.4	85.6	-	-	120.2	14.5	-	-	830.3	2.6
Total Costs to be Financed	21,000.0	66.7	5,000.0	15.9	5,000.0	15.9	461.8	1.5	31,461.5	100.0

Notes:

IFAD loan and grant is parallel collaborative financing

Interns and scholars, amounting to \$0.389 million, will be supported by the IFAD Grant. These are part of activities under the Value Chain Training category.

Government share on vehicles, supervision & implementation, and vehicle & equipment O&M are for taxes and duties for vehicles to be financed by IFAD, salaries of government staff, and maintenance of vehicles to be financed by IFAD respectively. Source: ADB staff estimates.

D. Detailed Cost Estimates by Outputs/Components

D. Detailed Cost Estimates by Outputs / Component

(US\$ '000)	Output 1				Output 2			Output 3			Output 4			Total				
	Strengthened smallholder and other LVC actors				Strengthened LVC infrastructure			Improved access to sustainable LVC			Effective project management							
	Extension & training - DAFO & PAFO	Extension & training - MAF	VC capacity and policy support	Technical support	Total Amount (Output 1)	% of Cost Category	VC infrastructure	Community infrastructure	Technical support	Total Amount (Output 2)	% of Cost Category	Credit line	Technical support		Total Amount (Output 3)	% of Cost Category	Effective project management	% of Cost Category (Output 4)
I. Investment Costs																		
A. Civil Works	-	-	-	-	-	0.0%	1,747.3	-	-	1,747.3	94.6%	-	-	-	0.0%	100.0	5.4%	1,847.3
B. SLPMG equipment and materials	-	-	-	-	-	0.0%	-	2,811.6	-	2,811.6	100.0%	-	-	-	0.0%	-	0.0%	2,811.6
C. Vehicles and Equipment																		
1. Vehicles	290.0	-	-	-	290.0	40.0%	90.0	-	-	90.0	12.4%	-	-	-	0.0%	344.5	47.6%	724.5
2. Motorcycles	-	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	0.0%	96.0	100.0%	96.0
3. Equipment	-	-	-	-	-	0.0%	60.0	-	-	60.0	32.6%	-	-	-	0.0%	123.9	67.4%	183.9
Subtotal	290.0	-	-	-	290.0	28.9%	150.0	-	-	150.0	14.9%	-	-	-	0.0%	564.4	56.2%	1,004.4
D. Consulting Services																		
1. International Consultants	-	-	-	1,715.3	1,715.3	63.0%	-	-	195.8	195.8	7.2%	-	90.6	90.6	3.3%	720.2	26.5%	2,721.9
2. National Consultants	-	-	-	630.7	630.7	37.5%	-	-	119.3	119.3	7.1%	-	146.8	146.8	8.7%	784.7	46.7%	1,681.4
3. Consultancy Support	-	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	0.0%	40.0	100.0%	40.0
Subtotal	-	-	-	2,345.9	2,345.9	52.8%	-	-	315.1	315.1	7.1%	-	237.4	237.4	5.3%	1,544.9	34.8%	4,443.3
E. Service Contracts	-	-	1,490.0	-	1,490.0	100.0%	-	-	-	-	0.0%	-	-	-	0.0%	-	0.0%	1,490.0
F. Credit line	-	-	-	-	-	0.0%	-	-	-	-	0.0%	4,500.0	-	4,500.0	100.0%	-	0.0%	4,500.0
G. Land	-	-	-	-	-	0.0%	300.0	-	-	300.0	100.0%	-	-	-	0.0%	-	0.0%	300.0
H. Surveys and Studies	187.5	-	157.9	-	345.4	63.2%	10.0	-	-	10.0	1.8%	-	-	-	0.0%	191.0	35.0%	546.4
I. Audit services	-	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	0.0%	175.0	100.0%	175.0
J. Farmer Training	3,742.3	620.5	-	-	4,362.8	87.9%	-	-	-	-	0.0%	-	600.0	600.0	12.1%	-	0.0%	4,962.8
L. Value Chain Training	-	-	1,317.8	-	1,317.8	100.0%	-	-	-	-	0.0%	-	-	-	0.0%	-	0.0%	1,317.8
M. Supervision and Implementation																		
1. Incremental Staff	-	-	-	-	-	0.0%	-	-	-	-	0.0%	-	-	-	0.0%	1,723.3	100.0%	1,723.3
2. Operations	-	-	50.0	-	50.0	3.2%	-	-	-	-	0.0%	-	-	-	0.0%	1,509.0	96.8%	1,559.0
Subtotal	-	-	50.0	-	50.0	1.5%	-	-	-	-	0.0%	-	-	-	0.0%	3,232.3	98.5%	3,282.3
N. Vehicle and Equipment O&M	165.0	-	50.0	-	215.0	22.0%	-	-	-	-	0.0%	-	-	-	0.0%	763.2	78.0%	978.2
Total Investment Costs	4,384.8	620.5	3,065.7	2,345.9	10,416.9	37.7%	2,207.3	2,811.6	315.1	5,334.0	19.3%	4,500.0	837.4	5,337.4	19.3%	6,570.9	23.8%	27,659.1
II. Recurrent Costs																		
Total BASELINE COSTS	4,384.8	620.5	3,065.7	2,345.9	10,416.9	37.7%	2,207.3	2,811.6	315.1	5,334.0	19.3%	4,500.0	837.4	5,337.4	19.3%	6,570.9	23.8%	27,659.1
Physical Contingencies	438.5	62.1	306.6	234.6	1,041.7	52.9%	154.0	-	31.5	185.5	9.4%	-	83.7	83.7	4.3%	657.1	33.4%	1,968.0
Price Contingencies	264.4	40.2	171.2	124.3	600.1	59.8%	79.7	-	17.9	97.5	9.7%	-	-	-	0.0%	306.3	30.5%	1,004.0
Total PROJECT COSTS	5,087.7	722.8	3,543.5	2,704.8	12,058.8	39.4%	2,441.0	2,811.6	364.4	5,617.0	18.3%	4,500.0	921.1	5,421.1	17.7%	7,534.3	24.6%	30,631.2

Notes: Costs in mid 2014 prices.

Physical contingencies computed at 10% for all expenditure categories except for rural credit and for community equipment and material. Price contingencies computed at 1.4% on foreign exchange costs and 5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. ADB will finance taxes and duties for the expenditure items it covers, land acquisition and resettlement costs, interest during implementation, operational costs (i.e., incremental project management costs but not include any salaries or remunerations other than travel costs and daily subsistence allowance for government officials who work for the project), transportation costs, and interest and bank charges related to the imprest account, civil works and equipment, vehicles for the NPMO, consulting services, stakeholder consultations, NPMO implementation costs, incremental project management staff and all project operation costs. IFAD will finance provincial and district level costs for the credit component, vehicles for PAFO and DAFO, service contracts for LVC capacity and policy, farmer and LVC training. The government counterpart contribution will finance full-time permanent counterpart staff, land, mine clearing, and duties and taxes on vehicles and farmer training which are financed by IFAD.

Source: ADB staff estimates

E. Detailed Cost Estimates by Year

	2015	2016	2017	Base Cost 2018	2019	2020	2021	Total
I. Investment Costs								
A. Civil Works	100.0	-	800.0	580.0	367.3	-	-	1,847.3
B. SLPMG equipment and materials	-	-	-	2,811.6	-	-	-	2,811.6
C. Vehicles and Equipment								
1. Vehicles	274.5	360.0	90.0	-	-	-	-	724.5
2. Motorcycles	96.0	-	-	-	-	-	-	96.0
3. Equipment	123.9	-	60.0	-	-	-	-	183.9
Subtotal	494.4	360.0	150.0	-	-	-	-	1,004.4
D. Consulting Services								
1. International Consultants	166.0	611.0	814.7	457.6	292.4	127.5	252.8	2,721.9
2. National Consultants	75.5	293.7	332.9	297.3	271.4	264.6	146.2	1,681.4
3. Consultancy Support	5.0	7.0	7.0	7.0	7.0	7.0	-	40.0
Subtotal	246.5	911.6	1,154.5	761.9	570.8	399.0	399.0	4,443.3
E. Service Contracts	-	200.0	350.5	394.5	394.5	150.5	-	1,490.0
F. Credit line	-	-	1,350.0	1,350.0	1,800.0	-	-	4,500.0
G. Land	-	-	300.0	-	-	-	-	300.0
H. Surveys and Studies	46.0	215.0	144.3	50.4	40.4	40.4	10.0	546.4
I. Audit services	25.0	25.0	25.0	25.0	25.0	25.0	25.0	175.0
J. Farmer Training	-	681.6	877.8	933.1	918.1	803.5	748.7	4,962.8
L. Value Chain Training	-	137.0	278.8	330.8	290.8	238.8	41.8	1,317.8
M. Supervision and Implementation								
1. Incremental Staff	162.0	325.1	323.1	281.1	238.1	238.1	155.9	1,723.3
2. Operations	98.0	349.0	319.0	319.0	183.0	183.0	108.0	1,559.0
Subtotal	260.0	674.1	642.1	600.1	421.1	421.1	263.9	3,282.3
N. Vehicle and Equipment O&M	60.1	143.6	168.6	168.6	168.6	168.6	100.1	978.2
Total Investment Costs	1,232.0	3,347.9	6,241.6	8,005.9	4,996.4	2,246.8	1,588.5	27,659.1
II. Recurrent Costs								
	1,232.0	3,347.9	6,241.6	8,005.9	4,996.4	2,246.8	1,588.5	27,659.1
Physical Contingencies	123.2	334.8	459.2	384.4	282.9	224.7	158.8	1,968.0
Price Contingencies	9.5	72.6	183.2	202.2	193.9	187.7	154.9	1,004.0
	1,364.7	3,755.3	6,883.9	8,592.6	5,473.3	2,659.2	1,902.2	30,631.2

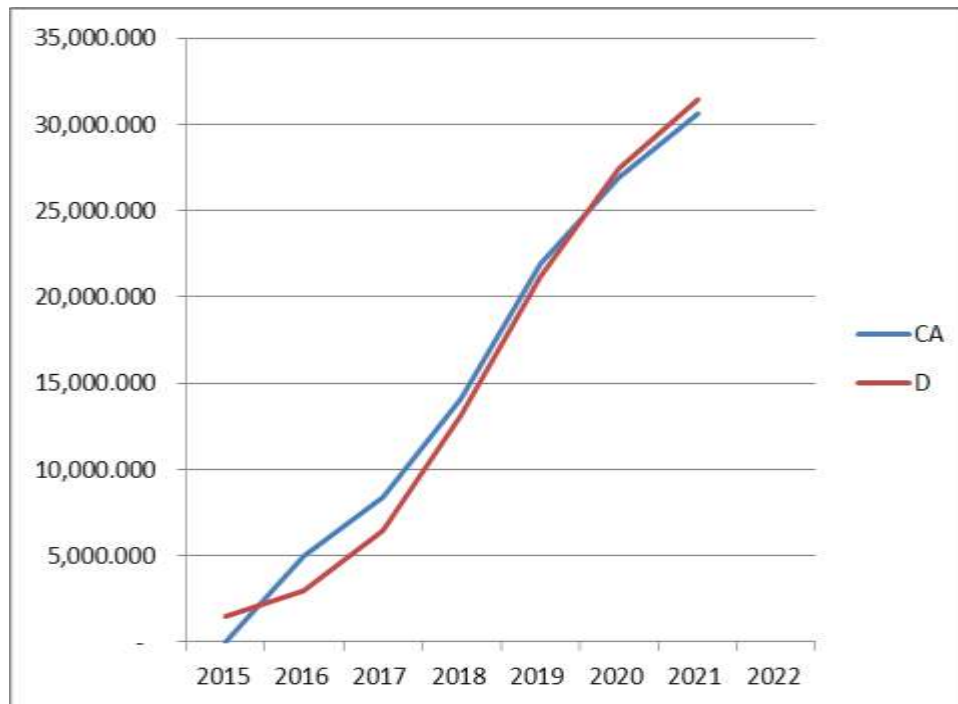
Source: ADB staff estimates.

F. Components by Financiers

(US\$ '000)

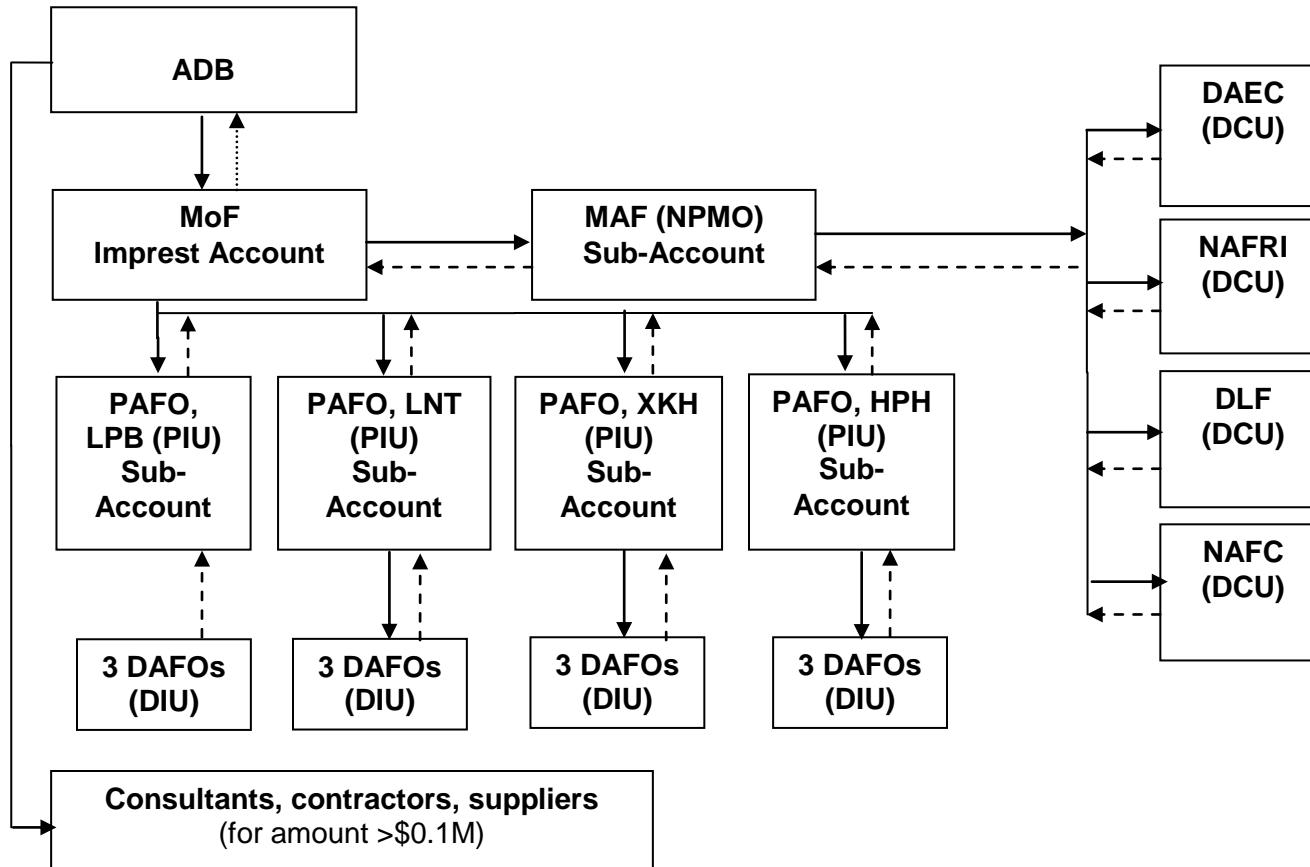
	ADB Loan		IFAD Grant		IFAD Loan		Government		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Strengthened smallholder and other LVC actors										
1. Extension & training - DAFO & PAFO	1,483.2	100.0	3,379.5	93.8	108.1	3.0	117.0	3.2	5,087.7	16.2
2. Extension & training - MAF	722.8	100.0	-	-	-	-	-	-	722.8	2.3
3. VC capacity and policy support	1,639.6	46.3	1,620.5	45.7	271.7	7.7	11.7	0.3	3,543.5	11.3
4. Technical support	2,704.8	100.0	-	-	-	-	-	-	2,704.8	8.6
Subtotal	6,550.3	54.3	5,000.0	41.5	379.8	3.1	128.7	1.1	12,058.8	38.3
B. Strengthened LVC infrastructure										
1. VC infrastructure	2,130.4	87.3	-	-	-	-	310.6	12.7	2,441.0	7.8
2. Community infrastructure	2,811.6	100.0	-	-	-	-	-	-	2,811.6	8.9
3. Technical support	364.4	100.0	-	-	-	-	-	-	364.4	1.2
Subtotal	5,306.4	94.5	-	-	-	-	310.6	5.5	5,617.0	17.9
C. Improved access to sustainable LVC credit										
1. Credit line	-	-	-	-	4,500.0	100.0	-	-	4,500.0	14.3
2. Technical support	921.1	100.0	-	-	-	-	-	-	921.1	2.9
Subtotal	921.1	17.0	-	-	4,500.0	83.0	-	-	5,421.1	17.2
D. Effective project management	7,511.8	99.7	-	-	-	-	22.5	0.3	7,534.3	23.9
Total PROJECT COSTS	20,289.6	66.2	5,000.0	16.3	4,879.8	15.9	461.8	1.5	30,631.2	97.4
Interest During Implementation	710.4	85.5	-	-	120.2	14.5	-	-	830.3	2.6
Total Disbursement	21,000.0	66.7	5,000.0	15.9	5,000.0	15.9	461.8	1.5	31,461.5	100.0

Source: ADB staff estimates

G. Contract and Disbursement S-curve

Source: Asian Development Bank estimates.

H. Fund Flow Diagram



Fund flow → Submission of WA ----> -> Submission of invoices^a Payments less than \$100,000 should generally be paid by the EA/IA, and subsequently claimed to ADB through reimbursement, or made from the imprest or sub-accounts.

Source: ADB staff

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

151. A risk assessment was carried out for the Project and a risk management plan was prepared (linked document 13). A Financial Management Assessment (FMA) is presented in Supplementary Appendix 14. The main findings of the risk assessment regarding financial management indicate that MAF is capable of undertaking financial management of the project. The capacity of NPMO/PIUs staff is also sufficient in administering the Project since their accountants, who are the same staff from the previous LDP project, have adequate experience with ADB Loan disbursements including SOE procedures. A consultant will be engaged to strengthen the capacities of the NPMO and PIU staff on the operation of the imprest/sub-accounts.

152. There is a medium risk associated with lack of accountability with respect to utilization of public and donor funds. To reduce this risk, financial management training will be provided to accounting, disbursement, and financial management specialist and supporting personnel appointed to the NPMO, as well as to PIUs immediately upon project effectiveness. In addition financial management at provincial and district level will be monitored closely, and corrective actions such as incremental training and/or commendation will be implemented if needed. Cash payments will also be minimized through the use of project bank accounts to ensure that loan funds are used properly and in accordance with the requirements of the Project. The counterpart funds will be for salaries of government staff working for the Project, land, mine clearing, and taxes and duties on vehicles and farmer training which are financed by IFAD. Potential overlapping budget in financing investment activities will be closely monitored.

153. The potential of leakage of project funds is considered low. Nevertheless, to further reduce the risk associated with this a number of measures have been built into the project design, including:

- (i) the use of complete legal documents and project procedures on investment management and proper procurement/bidding;
- (ii) the introduction of investment monitoring from subproject preparation to implementation through a project website and other public monitoring mechanisms;
- (iii) strengthening inspection and control through the appointment of internationally qualified auditors through a private sector firm to conduct independent audits which would identify opportunities for potential leakage; and
- (iv) adopting international accounting software for the NPMO using double entry accounting procedures that allow a trace of transactions to be followed during audit and other reviews.

154. The project will prepare terms of reference (TORs) that define duties, responsibilities, lines of supervision, and limits of authority for all officers, managers, and staff. The following responsibilities will be performed by different units or persons:

- (i) authorization to execute a transaction;
- (ii) recording of the transaction; and
- (iii) custody of assets involved in the transaction

155. The bank reconciliation will be prepared by someone other than those who approve payments. Accounting software will be capable of generating reports identifying expenditures in accordance with project components, expenditure accounts, disbursement categories, and sources of funds.

156. Controls will be in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained. The chart of accounts will be able to account for and report on project activities and disbursement categories. The cost allocations to the various funding sources will be made accurately and in accordance with established agreements. The general ledger and subsidiary ledgers will be reconciled and in balance.

157. All accounting and supporting documents will be retained on a permanent basis in a defined system that allows authorized users easy access. Regular monitoring and internal audit functions will be built up to monitor transactions along the line from central government to provincial, and subproject levels. Such control procedures will also be documented in the Government's Project Implementation Manual.

B. Disbursement

158. The Loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2012, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.

1. Imprest Account and Statement of Expenditures

159. Immediately after ADB Loan effectiveness, MOF will establish an Imprest Account in US dollar in the Bank of Lao PDR to receive ADF loan funds for the Project. MOF regulations do not allow the EAs to operate the imprest account to pay directly for project expenditures. NPMO will therefore establish one sub-account and will be responsible to consolidate and submit withdrawal applications through MoF to ADB for the imprest account. In addition, four sub-accounts, in US dollar currency, will be opened by the PIUs to receive funds from the imprest account at MOF. The imprest account and sub-accounts will be replenished in accordance with standard procedures outlined in the ADB's Loan Disbursement Handbook.¹⁵ All accounts will be audited annually by an independent auditor. The imprest account/sub-accounts are to be used exclusively for ADB's share of eligible expenditures. The entity which established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account, including advances to the sub-accounts.

160. The total outstanding advance to the imprest account will not at any time exceed the estimated ADB financed expenditures to be paid through the imprest fund procedure for the forthcoming 6 months. The imprest account will be used to establish advances in the respective sub-accounts. The sub-accounts will be used to provide cash resources to meet operations of the PIUs, training, and other relatively small activities. The Borrower may request for initial and additional advances to the imprest account based on an Estimate of Expenditure Sheet¹⁶ setting out the estimated expenditures to be financed through the account for the forthcoming six (6) months. Supporting documents should be submitted to ADB or retained by the Borrower in

¹⁵ ADB may finance bank charges.

accordance with ADB's Loan Disbursement Handbook when liquidating or replenishing the imprest account.

161. NPMO's sub-account will make payments for MAF's line departments (DCUs) to enable them to carry out their operational responsibilities, and the PIU sub-accounts will similarly make payments for the DIUs so that they can fulfill their role.

162. The statement of expenditures (SOE)¹⁷ procedure may be used to reimburse eligible expenditures and to liquidate advances provided in accordance with the ADB's Loan Disbursement Handbook (2012, as amended from time to time) and detailed arrangements agreed upon between the Borrower and ADB. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. NPMO will be responsible for ensuring that SOEs are operated in accordance with ADB's requirement.

2. Direct payment

163. Loan proceeds may be disbursed directly to contractors for goods, works and consulting services by ADB in accordance with the approved contracts between the executing agency and the contractors, using direct payment procedures.

164. 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 equivalent, unless otherwise approved by ADB. Individual payments below this amount should generally be paid from the imprest/sub-account, or by the EA/IA and subsequently claimed to ADB through reimbursement. ADB reserves the right not to accept WAs below the minimum amount. Sample forms for withdrawal of loan proceeds, replenishment of imprest account and SOE can be downloaded from the ADB website.¹⁸

3. Disbursement and liquidation procedures for counterpart funds

165. Government counterpart funds will be used to finance salaries of staff seconded to the Project through the regular payroll mechanism for Government employees, land, mine clearing, and taxes and duties on vehicles and farmer training which are financed by IFAD.

C. Accounting

166. MAF the EA, through the NPMO will maintain separate project accounts and records by funding source for all expenditures incurred on the Project. The NPMO will prepare consolidated project financial statements in accordance with the Government's accounting laws and regulations which are consistent with international accounting principles and practices. The NPMO will be responsible for (i) preparing disbursement projections; (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents; (iv) collecting and verifying replenishment requests from the PCUs, and (vi) preparing and sending withdrawal applications to ADB.

¹⁷ SOE form available in Appendix 9B of the *Loan Disbursement Handbook*.

¹⁸ Available at <http://lfis.adb.org/gfis/download.isp>

D. Auditing and Public Disclosure

167. The NPMO will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements will be submitted in the English language to ADB within six months after the end of the fiscal year of the executing agency.

168. The annual audit report will include an audit management letter and audit opinions on (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv) compliance with the imprest fund procedure; and (v) compliance with use of the SOE procedure certifying (a) to the eligibility of those expenditures claimed under SOE procedures, and (b) proper use of the procedure in accordance with ADB's Loan Disbursement Handbook and the project documents.

169. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

170. The Government and the NPMO have been informed of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements. ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the Borrower, or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. 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.

171. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011).¹⁹ After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter and the Audited Financial Statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

172. Since this Project will continue the work done from the recently completed LDP, it intends to utilize as much as possible the institutional arrangements already established under LDP including key central, provincial, and district staff. To bridge the gap from LDP completion to effectiveness of this Project, ADB has approved, on the request of the Borrower, for advance contracting actions for the procurement of goods and consulting services.

¹⁹ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

173. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (March 2013, as amended from time to time)²⁰ and ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time).²¹ The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The Borrower, MAF and implementing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Project.

174. **Advance contracting.** With the assistance of consultants funded by the PPTA, the NPMO will conduct advance action for the recruitment of start-up consultants, and the loan implementation consultant (LIC). The prompt appointment of these consultants is critical to ensure efficient implementation. NPMO will initiate recruitment of LIC, and start up consultants, including issuing invitation for Expressions of Interests, short-listing of potential firms, invitation to submit proposals and evaluation of proposal. ADB support of advance contracting does not commit ADB to approve the loan project or to finance the recruitment cost.

175. **Retroactive financing.** Withdrawals from the Loan Account may be made for reimbursement of eligible expenditures incurred under the Project before the Effective Date, but not earlier than 12 months before the date of this Loan Agreement in connection with works, equipment and implementation supervision, subject to a maximum amount equivalent to 20% of the Loan amount.

B. Procurement of Goods, Works and Consulting Services

176. All procurement under the ADB loan will be undertaken in accordance with ADB's Procurement Guidelines (March 2013, as amended from time to time).

177. Procurement of civil works packages and goods will be carried out by NPMO. There are no civil works packages valued at \$3.0 million, so international competitive bidding procedures do not apply. Civil works packages valued at less than \$3.0 million equivalent but more than \$100,000 equivalent will be procured following national competitive bidding (NCB) procedures. The national contracting industry is more than capable of undertaking contracts of this size. There are no packages for goods valued at more than \$1.0 million equivalent. Packages for goods therefore valued at less than \$1.0 million equivalent but more than \$100,000 equivalent, will be procured following NCB procedures. For works and goods packages valued below \$100,000 equivalent, shopping procedures acceptable to ADB will be followed.

178. Before the start of any procurement, ADB and the Government will review the public procurement laws of the central and state governments to ensure consistency with ADB's Procurement Guidelines.

179. The proposed Project will require a number of consulting services to assist the NPMO, PIUs and DIUs, including Advance Action Consultants (AAC), Start-up Component Consultants (SCC), NPMO support consultants, Loan Implementation Consultant (LIC) and Financial Audit. LIC will have a total input of 403 person-months, comprising 90 person-months of international expertise and 313 person-months of national expertise. There will also be a number of service

²⁰ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

²¹ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

contracts to be used as determined for policy development and project research. The procurement plan sets out the procurement methods for each of these packages.

180. All consultants and entities will be selected and recruited by NPMO in accordance with the ADB's Guidelines on the Use of Consultants. The outputs and deliverables from all consulting services shall be in accordance with the Government policies, and in support of the development strategies of the target provinces, and the needs of the beneficiaries.

181. The Procurement Capacity Assessment (PCA) concludes that there is an average-high risk rating associated with procurement to be carried out by the NPMO/Project Management Division. Accordingly, and in line with the recommendations of PCA, the Project includes the following arrangements:

- (i) ADB's standard bidding documents will be adopted for the Project;
- (ii) Job descriptions will be developed under the Start-up Component for staff of NPMO;
- (iii) NPMO will appoint a full-time Procurement Officer, who will be supported and trained (on-the-job) by an individual procurement specialist (training of trainer). The Procurement Officer will in turn train the other staff in NPMO/PMD;
- (iv) a systematic filing and storage system for all procurement will be established during Start-up, together with a payment tracking system, and maintained in accordance with an approved regulation for the duration of the Project;
- (v) The regulation developed under (iv) will also set out procedures to be followed for all procurement approvals so as to permit a clear auditable trail of procurement decisions, as well procedures for dealing with procurement complaints;
- (vi) Provision is made in the cost estimates to engage an external auditor in the case where SAO does not have adequate resources to undertake audits on schedule;
- (vii) approval of all contracts for procurement goods and works under NCB, and recruitment of consulting services will be subject to ADB prior review; and
- (viii) approval of the first three contracts procured under shopping for goods and works will be subject to ADB prior review.

182. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages is in Section C.

C. Procurement Plan

1. Basic Data

Project Name: Northern Smallholder Livestock Commercialization Project	
Project Number: P47300	Approval Number: XXXX
Country: LAO PEOPLE'S DEMOCRATIC REPUBLIC	Executing Agency: Ministry of Agriculture and Forestry
Project Financing Amount: \$31,46 million ADB Financing: \$21,000,000 Non-ADB Financing: \$460,000 (Government) \$5,000,000 (IFAD Loan) \$5,000,000 (IFAD Grant)	Implementing Agency: Provincial Agriculture and Forestry Offices of Houaphanh, Luang Namtha, Luang Prabang, and Xieng Khouang provinces
Date of First Procurement Plan {loan approval date}:	Date of this Procurement Plan: {dd / mm / year}

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

a. Procurement and Consulting Methods and Thresholds

183. 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	Comments
International Competitive Bidding (ICB) for Works	≥ \$3,000,000	Prior review
International Competitive Bidding for Goods	≥ \$ 1,000,000	Prior review
National Competitive Bidding (NCB) for Works ¹	Below \$3,000,000 but ≥ \$100,000	Prior review In view of the average-high risk highlighted in the PCA, all contracts will be subject to ADB's prior review and approval. EA must commit to using the format of the documents reviewed and approved by ADB.
National Competitive Bidding for Goods ¹	Below \$1,000,000 but ≥ \$100,000	Prior review. Same as NCB Works above
Shopping for Works	Below \$100,000	Prior/Post review. The first 3 contracts will be subject to ADB's prior review and approval. Subsequent contracts for similar work will be subject to post-review. EA must commit to using the format of the documents reviewed and approved by ADB.
Shopping for Goods	Below \$100,000	Prior/Post review Same as Shopping for Works.

² NCB procedures are described in Section D of this Procurement Plan.

Note: For the procurement of items below \$10,000, the executing and implementing agencies may purchase the items directly from suppliers, and in such cases, ADB should be satisfied that the price paid is reasonable.

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	EA will recruit Loan Implementation Consultant using full technical proposals.
Least Cost Selection ¹	EA will recruit a firm for Financial Audit using LCS.
Individual Consultants Selection	EA will recruit individual consultants for start-up, NPMO support and other consultants.

¹ Refer to Para. 26 of PAI 2.02 for Least Cost Selection

b. Goods and Works Contracts Estimated to Cost \$3 Million or More

184. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number ⁵	General Description	Estimated Value	Procurement Method	Review (Prior / Post)	Bidding Procedure ⁶	Advertisement Date (quarter/year)	Comments ⁷
	none						

c. Consulting Services Contracts Estimated to Cost \$100,000 or More

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

Package Number	General Description	Estimated Value (\$)	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal ⁸	Comments ⁹
Start-up Component Consultants							
	Start-up Specialist: Project Management	180,000	ICS	Prior	Q1 2015		International
NPMO Support Consultants							
	Project Management Specialist	130,000	ICS	Prior	Q1 2015		National
	Project Accountant	180,000	ICS	Prior	Q1 2015		National
	Procurement Specialist	110,000	ICS	Prior	Q1 2015		National
Loan Implementation Consultant							
	Loan Implementation Consultant	4,200,000	QCBS (90:10)	Prior	Q2 2015	FTP	International/national

d. Goods and Works Contracts Estimated to Cost Less than \$3 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

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

Goods and Works								
Package Number ⁵	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior / Post)	Bidding Procedure ⁶	Advertisement Date (quarter/year)	Comments ⁷
	Pick-ups (9 units)	362,000	1	NCB	Prior	1S 1E	Q2 2015	
	Motorcycles (48 units)	76,000	1	Shopping	Prior/Post		Q2 2015	

Goods and Works								
Package Number⁵	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior / Post)	Bidding Procedure⁶	Advertisement Date (quarter/year)	Comments⁷
	Minibus (1 unit)	71,000	1	Shopping	Prior/Post		Q1 2016	
	NAFC equipment (1 unit)	71,000	1	Shopping	Prior/Post		Q1 2016	
	Office Refurbishment for NPMO, PAFOs/DAFOs	197,000	5	Shopping	Prior/Post		Q3 2015	
	Office Equipment and Furniture for NPMO, DCUs/ PAFOs/DAFOs	113,000	5	Shopping	Prior/Post		Q3 2015	

Consulting Services								
Package Number	General Description	Estimated Value (\$)	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal⁸	Comments⁹
	Start-up: Rural Credit Specialist	60,000	1	ICS	Prior	Q1 2015		International
	Start-up Rural Credit Specialist	15,000	1	ICS	Prior	Q1 2015		National
	Start-up M&E specialist	70,000	1	ICS	Prior	Q1 2015		International
	Start-up: Project M&E Specialist	18,000	1	ICS	Prior	Q1 2015		National

3. Indicative List of Packages Required Under the Project

187. The following tables provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods							
Package Number⁵	General Description	Estimated Value (cumulative) (\$)	Estimated Number of Contracts	Procurement Method	Review (Prior / Post)	Bidding Procedure⁶	Comments⁷
	SLPMG Productive Equipment and Materials	2,811,000	Multiple	Shopping	Prior/Post		PIU/DIU to procure

Works							
Package Number⁵	General Description	Estimated Value (cumulative) (\$)	Estimated Number of Contracts	Procurement Method	Review (Prior / Post)	Bidding Procedure⁶	Comments⁷
	District Market Infrastructure	600,000	4	NCB	Prior	1S 1E	NPMO to procure
	Slaughterhouse: Xieng Khouang	350,000	1	NCB	Prior	1S 1E	NPMO to procure
	Slaughterhouse and Meat Processing Plant: Luang Prabang	550,000	1	NCB	Prior	1S 1E	NPMO to procure
	Provincial Market Upgrading	150,000	2	Shopping	Prior/Post		NPMO to procure

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal⁸	Comments⁹
	Financial Audit	175,000	1	LCS	Prior	BTP	National
	Service contracts for policy support, project research and regulatory support.	794,000	Several	ICS	Prior		International/national

4. List of Awarded and On-going, and Completed Contracts

188. The following tables list the awarded and ongoing contracts, and completed contracts.

a. Awarded and Ongoing Contracts

Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments¹⁰
	none						

¹⁰ Indicate the Contractor's name and the contract signing date.

Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments ¹¹
	none						

¹¹ Indicate the Consulting Firm's name and the contract signing date.

b. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments
	none							

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments
	none							

5. Non-ADB Financing

189. The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
Pick-ups (4 units)	133,900	1	[1]	Funded by IFAD
Motorcycles (55 units)	120,700	1	[1]	Funded by IFAD

Consulting Services				
General Description	Estimated Value \$ (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments
Management Contract for Meat Processing Facility	573,000	1	[1]	Funded by IFAD
Small Service Contracts for Policy Support	227,000	5	[1]	Funded by IFAD
Certification	325,900	1	[1]	Funded by IFAD

Note:

[1] IFAD will follow its procedures.

D. National Competitive Bidding

1. General

190. The procedures to be followed for National Competitive Bidding (NCB) 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.

2. Application

191. 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.

3. Eligibility

192. 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.

4. Advertising

193. Bidding of NCB contracts estimated at \$1,000,000 or more for goods and related services or \$3,000,000 or more for civil works shall be advertised on ADB’s website via the posting of the Procurement Plan.

5. Procurement Documents

194. 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.

6. Preferences

195. No preference of any kind shall be given to domestic bidders or for domestically manufactured goods.

196. Suppliers and contractors shall not be required to purchase local goods or supplies or materials.

7. Rejection of all Bids and Rebidding

197. Bids shall not be rejected and new bids solicited without ADB’s prior concurrence.

8. National Sanctions List

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

9. Corruption Policy

199. 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

10. Disclosure of Decisions on Contract Awards

200. 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.

11. Member Country Restrictions

201. 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.

E. Consultant's Terms of Reference

202. A complete terms of reference for all consulting services and the certification service contract is in Appendix 1.

VII. SAFEGUARDS

203. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS), 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. ADB and the Government 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 all subprojects

204. The project is Category B for environment, Indigenous Peoples, and involuntary resettlement. Safeguard frameworks have been prepared for all three safeguard areas to avoid, or if avoidance is not possible, to minimize and mitigate adverse environmental and social impacts. Since a substantial portion of the project will be coursed through financial intermediaries (credit component) and environmental and social impacts may ensue in the activities they will support, an environmental and social management system will be prepared by IFAD following its loan effectiveness to ensure that safeguards cover all the project's interventions.

A. Resettlement

205. The project is Category B for involuntary resettlement as infrastructure components of the project may result in insignificant involuntary resettlement impacts. Slaughterhouses require the largest land area at a maximum of 3 ha each. As much as possible, infrastructure components will be constructed on unused government or communally-owned land to avoid or at least minimize involuntary resettlement impacts.

206. A Resettlement Framework has been prepared to guide screening for involuntary resettlement impacts, ensure that impacts will be minimized and mitigated, and help affected persons improve if not restore their living standards to pre-project levels. No resettlement plan has been prepared as the quantity and location of infrastructure components have yet to be determined. However, during project implementation, all infrastructure components will be screened for involuntary resettlement impacts. If screening reveals that involuntary resettlement impacts will ensue for an infrastructure component in a given province, then a Resettlement Plan for that province will be prepared in accordance with the Resettlement Framework. If screening reveals that affected persons involve ethnic groups, the Resettlement Plan will incorporate Indigenous Peoples safeguards as outlined in the SPS and this project's Ethnic Groups Development Framework. If screening shows that an infrastructure component in a given province has no involuntary resettlement impacts, a Resettlement Plan is not required.

207. NPMO will submit the Resettlement Plans to ADB for approval and disclosure to the ADB website. ADB's approval of the Resettlement Plans is required before any project-related physical activities start.

B. Environmental Impact

208. The realization of the strengthened smallholder livestock production and marketing will have a strong impact on the livestock improvement in the four target provinces. Similarly, support for livestock value chains will improve food quality through construction and operation of two hygienic slaughterhouses in Luang Prabang and Phonsavan, and improved wet markets in twelve (12) districts and two (2) provincial capitals. Screening of investments indicates that only minor to moderate adverse environmental impacts can be expected, yielding a classification of

Category B for environment in accordance with ADB's regulations. The identified adverse environmental impacts will mainly occur by increasing generated livestock waste from livestock husbandry and waste from slaughterhouses operation. These adverse environment impacts can be mitigated through implementation of improved livestock waste management and proper site selection and design of waste treatment systems, and correctly undertaking operating procedures for slaughterhouses.

209. Positive impact could be expected in the improvement of livestock husbandry in accordance with GAP practices. The operation of hygienic standard slaughterhouses with waste treatment systems which will replace the small unhygienic slaughter slabs, and improved wet markets will have a positive effect on environmental quality and sanitation. Consequently, the Environmental Assessment and Review Framework (EARF) which is based on the laws and regulations of the Lao PDR Government and ADB's SPS (accessible from the list of linked documents in Appendix 2), will guide the screening of investments and environmental management procedures, and ensure all potential adverse impacts will be adequately mitigated and monitored.

C. Ethnic Groups

210. The project is Category B in Indigenous People (Ethnic Group (EG) in Lao context) because the project will improve the livestock system of EGs so that it will not change the EG's livelihood system or their cultural practice and ancestral domains. Some land managed by Government will be acquired to improve infrastructure of project villages. The project may affect some trees/crops of EGs which are planted on the acquired Government land, however, EGs will be informed early about the project so that they would not cultivate new crops or they could harvest their crops on time before land acquisition.

211. The Ethnic Group's Development Framework has been developed for the overall project and sets out the requirements for screening of subprojects to ensure that EGs (i) will receive culturally appropriate social and economic benefits of the project, (ii) do not suffer adverse impacts as a result of the project, and (iii) can participate actively in the project that affect them. The project villages and locations of infrastructures to be improved have not been identified yet. However, it is anticipated that Lao, Khmou and H'mong Ethnic minorities will be present in the project area. During project implementation, if any negative impacts of project components on EGs are identified, an Ethnic Group Development Plan for project province as outlined in the SPS 2009 will be prepared based on social impact assessment and meaningful consultation with the EGs. If no negative impact is determined, the project will be classified as Category C in IP, and the revised IP Categorization Form should be submitted to ADB (RSES) for concurrence.

VIII. GENDER AND SOCIAL DIMENSIONS

212. The Project will continue to utilize the livestock production groups formed during the LDP whose main thrust was poverty reduction. It will be implemented in 12 of Lao PDR's 50 poorest districts. As the project moves its focus to commercialization, larger livestock production and related activities are expected to induce demand for labor which poorer segments of the community can provide. The project will continue to offer poor farmers with access to credit through the existing Village Livelihood Fund which the poor found to be the most attractive among all of the LDP's interventions.

213. The gender action plan (GAP) will (i) ensure equality of project benefits and opportunity sharing between men and women;(ii) reduce gender inequalities in the project areas; (iii) set targeted approach for both men and women (iv) collect sex disaggregated data including benefit monitoring and evaluation; and (v) increase representation of women in decision-making levels. The gender inclusive design elements are in response to constraints faced by women in the project targeted areas. The gender targets will complement and support the MAF Strategy for Livestock Development 2011- 2020. A gender analysis will be conducted as an inception activity under LIC, the results of which will feed into the GAP.

214. The GAP has a special focus on supporting women empowerment in the livestock commercialization including targeted women involvement in the LPGs committee, women participation and consultation with men and women will be separated and documented for identified of different needs. All project data is required to be sex-disaggregated. GAP monitoring will focus on assessment of the progress in compliance with gender indicators in GAP. The results of the assessment will be included in the quarterly project progress reports. Central level in collaboration with provincial and district levels will implement GAP and monitor progress, assisted by an experienced national gender specialist.

Table 7: Gender Action Plan

Project outputs	Actions	Responsibilities
Output 1: Strengthened capacities of smallholders and other LVC actors	<p>Gender analysis of the LVCs in the project area conducted at the beginning of the project. This study will assess the constraints faced by women involved in various segments of the value chain, including non-Lao-Tai women (including access to credit, market information, etc.). The results of the study will further inform the GAP in terms of adequate measures to be adopted to achieve the key targets set.</p> <p>50% of the participants in consultation are women farmers. Separate consultations are held with men and women to identify their concerns, needs and preferences; ensure women's voice will be taken into consideration and addressed. Gender awareness-raising will be conducted at village level.</p> <p>SLPMGs will accept membership registrations from husband and wife. At least 20% of committee members of SLPMGs are women and 50% of group members are women.</p> <p>All committee members (women and men) will be trained on Group formation and capacity strengthening training in participatory decision-making and facilitation techniques, leadership skills, public speaking, confidence building.</p>	<p>Implementing agency in the provincial and district levels by supporting from project consultants.</p> <p>Project gender consultant lead on GAP implementation</p>

Project outputs	Actions	Responsibilities
	<p>At least 35% of trainees are women in all project supported technical and business training.</p> <p>Extension training materials will include training needs and topics highlighted by female livestock farmers. Extension training schedules will ensure that location and timing of delivery are convenient for women.</p> <p>At least 50%farmers in pilot “on demonstrations” will be women.</p> <p>30% of agricultural extension workers trained are female (proportionate to actual numbers of female extension workers)</p> <p>50% women farmers (from producer groups) to enter into production contracts with agribusinesses or contract farming.</p> <p>Ensure mechanisms are in place to protect rights and benefits of female smallholders in the contract farming/ agribusiness transactions, including considerations for female small holder farmers’ produce, the provision of inputs at industry standards and rates and tailored dispute settlement mechanisms.</p> <p>20% women livestock production members are certified so that they are able to access quality prices and markets.</p> <p>50% of market meat handlers trained in food safety and environmental hygiene measure are women</p> <p>35% of scholars are women.</p> <p>20% students participated in the internship program are women</p>	
Output 2: LVC infrastructure strengthened	<p>50% of participants in consultation meetings are women. Separate consultations are held with men and women in the locations and design of slaughters houses and documented evidence of consultation.</p> <p>Ensure the design of slaughter houses include provision of adequate number of separate male and female toilets with adequate lighting.</p> <p>50% of participants in consultations are women. Separate consultations are held with men and women related to market facilities improved for meat handling hygiene. The design of markets ensures that 50% of the meat selling tables are allocated for women vendors.</p> <p>Ensure that the improvement of markets includes adequate number of separate toilets, lighting and security for women.</p> <p>Women will comprise 50% of the membership of market improvement sub-committees.</p> <p>Final designs on market improvement will be signed off by the sub-committee.</p> <p>Women will receive equal pay for equal work. Child labor will not be employed. These to be included in the contractual</p>	<p>Implementing agency in central, provincial and district levels by supporting from project consultants.</p> <p>Project gender consultant lead on GAP implementation</p>

Project outputs	Actions	Responsibilities
	<p>agreements.</p> <p>Employment opportunities targeted at men and women will be communicated through appropriate channels to communities.</p>	
<p>Output 3: Capacity to access credit improved</p>	<p>Appropriate and consistent gender measures will be agreed upon among the government, International Fund for Agricultural Development and ADB.</p> <p>The following guidelines can be used for the development of the measures, which will be guided by the gender analysis of the LVC:</p> <ul style="list-style-type: none"> (a) X% (to be determined based on the study) of the village livelihood fund loans will be provided to women (b) X% (to be determined based on the study) members of the village savings and credit committee are women, including one representative from Lao women's union. (c) The committee members will be trained on managing the village credit committees and village livelihoods funds. (d) All SLPMG members, including women farmers accessing credit will be trained on loan/credit management. 	
<p>Output 4: Project management enhanced</p>	<p>A Gender Specialist will be included as part of the project implementation team.</p> <p>Conduct training on gender awareness raising and discussing on project gender requirement for project staff at central, provincial, and district levels.</p> <p>Report on progress of GAP implementation by sex segregated data and attach with project quarterly reports.</p>	<p>Implementing agency in central, provincial and district levels by supporting from project consultants.</p> <p>Project gender consultant lead on GAP implementation</p>

GAP = gender action plan, LVC = livestock value chain, SLPMG = smallholder livestock production and marketing group

215. The PIUs/DIUs will be responsible for the implementation of the GAP and will be supported by a gender specialist hired by the Project. His/her tasks include lead and update progress of GAP implementation. The gender specialist will work closely with M&E officer, project coordinator or gender focal point in the provincial and district levels. Sex-disaggregated data for project performance monitoring and evaluation will build on the monitoring system. The mid-term review for the Project will be an opportunity to review targets and specific gender actions against overall project progress and target achievement.

216. Project preparation and consultation have been conducted with key stakeholders and agencies in the Government of Lao PDR at national, provincial and district levels including MAF, MPI and MoF. Consultations have also been held with the participating provinces with the farmers who involved in the livestock commercialization to determine their constraints, assistance need, and capacity. The proposed Project will engage women participation in project implementation, and monitoring, and project activities. It is to ensure both men and women benefits from project intervention. To achieve this, it requires appropriate levels of consultation at preparation stage for each project activity. The voices of community level both male and female's voices will take into consideration before implementing the project activities.

217. Implementation of the Project will include consultation requirements, including documented evidence of inclusive consultation with all communities in the project areas and participation of women and men in the participating villages, including ethnic people. The GAP identifies constraints, assistance need, and capacity of women in the project areas, as well as the consultation and participation mechanisms to be followed during implementation.

218. Women's participation in project activities is on a voluntary basis. It is anticipated that the women in the community will be mobilized in a number of different ways during preparation, design, implementation and operation. During activity design and preparation stages community consultation, including women's participation, will be through their involvement and contribution in the consultation process. During the project implementation, it will provide opportunities for both men and women to participate in trainings, workshops and study visits, particularly for farmers to benefit from gaining the new technique for improving their productivity. At the same time the LPGs members will get knowledge and information of marketing and accessing credit.

219. Progress monitoring and evaluation of the action plan will be incorporated into the overall monitoring and evaluation plan for the project, including review missions and reflected in progress reports. The PIUs/DIUs, with assistance from LIC, will ensure implementation and monitoring of the GAP. Gender awareness training will be conducted for government staff, consultants, contractors, and community-level institutions associated with delivering project outputs. Sex-disaggregated indicators for project performance monitoring and evaluation will build on the monitoring system of PIU and DIU. The midterm review for the Project will be an opportunity to review targets and specific gender actions against overall project progress and target achievement.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks ^a
<p>Impact</p> <p>Increased incomes for smallholder livestock producers in the project areas</p>	<p>By 2026:</p> <p>Average annual smallholder income in the project areas increases to KN8.0 million (baseline 2014: KN3.4 million)</p>	<p>District and provincial statistics</p>	<p>Assumption</p> <p>Government policies continue to support private sector-led economic growth.</p>
<p>Outcome</p> <p>Increased livestock sales from sustainable smallholder production in the project areas</p>	<p>By 2021 in project areas:</p> <p>On average, SLPMG members sell heavier live animals: pigs: 55 kg (baseline 2014: 45 kg) and cattle: 225 kg (baseline 2014: 200 kg); and sell more animals with increased annual sales of pigs: 18 (baseline 2014: 12) and cattle: 5 (baseline 2014: 3)</p> <p>50% of fresh pork and beef available in Luang Prabang and Phonsavanh (Xienkhong) towns butchered at HACCP-certified facilities (baseline 2014: 0%)</p>	<p>Project monitoring system</p> <p>National livestock census</p> <p>Annual trade statistics</p>	<p>Risk</p> <p>Current market traders and vested interests resist changes in trade practices.</p>
<p>Outputs</p> <p>1. Strengthened capacities of smallholders and other LVC actors</p>	<p>By 2021:</p> <p>300 SLPMGs of approximately 4,500 smallholders: organized (20% female committee members), complete technical training programs (35% female), and 50 are GGAP certified</p> <p>56 operators and meat handlers trained from 2 provincial (HACCP certified) and 12 district wet markets (50% female)</p> <p>50 slaughterhouse staff trained in OIE standards and butchery skills</p> <p>55 traders trained in OIE standards</p> <p>76 provincial and district government extension officers trained on quality standards in the LVC</p> <p>Provincial and district market assessments completed</p> <p>Five policy support studies completed with policy documents and associated regulations drafted</p> <p>One new course on animal butchering and meat processing established in</p>	<p>PPMS</p>	<p>Assumptions</p> <p>IFAD contribution becomes available to the project in June 2016.</p> <p>Smallholders continue to be willing to organize and modernize production practices.</p> <p>Risks</p> <p>GGAP, HACCP, and OIE certification requirements are beyond the capacity of LVC stakeholders.</p> <p>Official interventions, such as price controls or other market</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks ^a
	NAFC 65 meat retailers, butchers, processors, and animal husbandry students trained through NAFC 48 scholarships provided to students from target districts (35% female) 85 trained students participate in the internship program in project villages (20% female)		distortions, suppress production.
2. LVC infrastructure strengthened	By 2021: 300 SLPMGs have improved productive equipment and or materials to construct infrastructure Two demonstration slaughterhouses and one meat processing facility managed and operating with HACCP certification (separate toilets for men and women) Wet markets upgraded: 2 provincial and 12 district	PPMS	Risks Slaughterhouses using improper methods continue to operate undercutting viability of the HACCP slaughterhouses. Market authorities do not sustain improved standards.
3. Capacity to access credit improved	300 SLPMGs complete business training (35% female) for commercial livestock operations and preparation of business plans as a tool for accessing credit from any source	PPMS	Assumption Credit providers recognize the business plans as an indication of creditworthiness.
4. Project management enhanced	Workplan implemented on schedule Reporting and safeguard requirements met Effective M&E system in operation through entire project area with sex-segregated data	PPMS	Risk The number of qualified government staff available to work in the districts is inadequate.

Activities with Milestones	Inputs
1. Strengthened capacities of smallholders and other LVC actors 1.1 Strengthen SLPMGs 1.1.1 Select and rank SLPMGs (Jun 2016) 1.1.2 Prepare technical and business training program (include village land use planning, and pro-poor measures) for SLPMGs (Jun 2016) 1.1.3 Conduct training of trainers for PAFO and DAFO staff to deliver the SLPMG training (Sep 2016) 1.1.4 Carry out group organization, technical, and business training program of SLPMGs in phases (Jan 2016–Dec 2020) 1.2 Wet markets 1.2.1 Complete elaboration of training program for operators and meat handlers (Sep 2016)	ADB ADF loan \$21.0 million IFAD grant \$5.0 million IFAD loan \$5.0 million Government \$0.5 million

Activities with Milestones	Inputs
<p>1.2.2 Complete training of trainers for PAFO and DAFO staff to deliver the market training (Mar 2017)</p> <p>1.2.3 Complete training of market operators and meat handlers (Jun 2018)</p> <p>1.3 OIE training</p> <p>1.3.1 Prepare one training course for slaughterhouse staff (include carcass dressing and meat grading) and one for traders (Sep 2016)</p> <p>1.3.2 Complete training of trainers for PAFO and DAFO staff to deliver the market training (Dec 2016)</p> <p>1.3.3 Complete training of slaughterhouse staff and traders (Jun 2020)</p> <p>1.4 NAFC</p> <p>1.4.1 Review and update existing curricula for market orientation (Mar 2017)</p> <p>1.4.2 Elaborate diploma course for butchery and meat processing and training of teachers (Mar 2017)</p> <p>1.4.3 Prepare and implement strategy to involve private sector livestock value chain stakeholders in the course (Apr 2017)</p> <p>1.4.4 Commence butchery and meat processing course as part of regular curricula (Jan 2018)</p> <p>1.4.5 Prepare program for in-service training for current staff, scholarships, internships for senior students (Jun 2016)</p> <p>1.4.6 Implement training program (Jun 2020)</p> <p>1.5 Market assessments: Prepare and update provincial and district market assessments on an annual basis (Jun 2020)</p> <p>1.6 Policy: Select five policy topics, prepare terms of reference, and conduct studies; draft policy and associated regulations (Jun 2018)</p> <p>2. LVC infrastructure strengthened</p> <p>2.1 Community productive equipment and materials: Identify, procure, install and/or supply the equipment (Jun 2017)</p> <p>2.2 Two demonstration slaughterhouses and one meat processing facility</p> <p>2.2.1 Prepare draft management contract for slaughterhouses (Jun 2016)</p> <p>2.2.2 Design, procure works, and construct facilities (Jun 2017)</p> <p>2.2.3 Tender management contract for slaughterhouses (Dec 2017)</p> <p>2.2.4 Commence training activities in the facilities (Mar 2018)</p> <p>2.3 Wet markets: Survey, design, procure works, and carry out improvement works of 2 provincial and 12 district markets (Jun 2017)</p> <p>3. Capacity to access credit improved</p> <p>3.1 Complete the design of the SLPMG business training program and training of trainers (May 2016)</p> <p>3.2 SLPMG business training program including the preparation of business plans (Jun 2016–Dec 2018)</p> <p>4. Project management enhanced</p> <p>4.1 M&E system designed and implemented (advance action) (Mar 2015)</p> <p>4.2 NPMO and PPMOs set up and fully functioning (Mar 2015)</p> <p>4.3 Recruit start-up consultants and commence start-up component (Jun 2015)</p> <p>4.4 Procure vehicles, equipment, and office space for NPMO and the PPMOs (Sep 2015)</p> <p>4.5 Recruit and mobilize the loan implementation consultants (Jan 2016)</p> <p>4.6 Ensure the gender action plan implementation arrangements are in place and functioning (Jan 2016)</p> <p>4.7 Prepare progress reports and submit to ADB and IFAD on a regular basis (Jul 2021)</p>	

ADB = Asian Development Bank, DAFO = district agriculture and forestry office, GGAP = global good agricultural practice, HACCP = hazard analysis and critical control points, IFAD = International Fund for Agriculture Development, kg = kilogram, KN = kip, LVC = livestock value chain, MAF = Ministry of Agriculture and Forestry, M&E = monitoring and evaluation, NAFC = Northern Agriculture and Forestry College, NPMO = national project management office, OIE

= Office International des Epizooties, PAFO = provincial agriculture and forestry office, PPMO = provincial project management office, PPMS = project performance management system, SLPMG = smallholder livestock production and management group.

Sources: Asian Development Bank estimates.

B. Monitoring

2. Project performance monitoring and evaluation system (PPMES)

220. A PPMES will be developed and implemented by the NPMO with the assistance of SCC and LIC. Data will be collected at the village level to identify the current socio-economic conditions of target beneficiaries and to assess the impact of the investments. The PPMES will be based on inputs, outputs and outcomes to be measured from the baseline survey and throughout project implementation. SCC will be responsible for baseline survey, and LIC will be responsible for subsequent surveys.

3. Compliance monitoring

221. MoF has agreed with ADB on certain covenants for the proposed Project, which are set forth in the Loan Agreement including the following:

- (i) Only investments that have been screened by LIC or other ADB approved consultant, shall be financed by ADB loan funds;
- (ii) The Government will ensure that adequate funds are allocated for the periodic maintenance of infrastructure to maintain any infrastructure in functional order; and
- (iii) The Government will also ensure that a grievance mechanism is established for affected people in the participating districts.

222. ADB will monitor compliance with those covenants throughout implementation via regular review missions, quarterly progress reports submitted by the NPMO, and review of project accounts and procurement procedures.

4. Safeguards monitoring

223. Safeguard monitoring will be undertaken by the safeguard experts under LIC. Independent external monitors will be recruited by NPMO to ensure that all recommendations and mitigation measures under the EMPs, the EGPs, and the RPs are implemented in accordance to the plans.

224. For involuntary resettlement, NPMO with the assistance of LIC will set up monitoring indicators, databases, and systems. PIUs will be in charge of monitoring Resettlement Plan implementation and will submit to NPMO semi-annual reports on progress, issues, and next steps. NPMO will consolidate these reports and integrate them into the overall project progress report to be submitted to ADB.

5. Gender and social dimensions monitoring²²

225. All data, in accordance with Prime Minister's Decree No.140/PM dated 20 August 2002 and guideline paper No. 018/NPMO of 10 January 2005, will be disaggregated by sex and age, and women of ethnic groups. Routine monitoring by the safeguard monitoring entities to be recruited under the Project will focus on assessing progress and compliance with GAPs, identifying constraints and developing remedial actions to effectively address these. Monitoring results will be part of the six monthly progress reports and assessment/evaluations of the GAP will be an essential element of all reviews.

C. Evaluation

226. ADB will conduct regular (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.

227. A Midterm Review will also be undertaken within 48 months of loan effectiveness. This review will include a comprehensive evaluation of project implementation arrangements, detailed evaluation of the scope and implementation process and progress of investments, feedback from the PPMES, performance of consultants, capacity building progress, and possible reallocation of loan proceeds. During this more significant review, the impact from enhanced performance of LPGs will be assessed as will the performance of the value chain credit facility developed under the Project. Remedial action will be instituted as required.

228. Within 12 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 loan covenants.

D. Reporting

229. NPMO 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 within 6 months of physical completion of the Project. To ensure the project continues to be both viable and sustainable, project accounts and the executing agencies' AFSs, together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication Strategy

230. The Project is designed to improve the performance smallholder livestock production groups enabling them to become more commercialized in their operations through strengthening all actors within the value chain, improving the standard of value chain infrastructure and improving access to credit.

²² ADB's *Handbook on Social Analysis: A Working Document*, is available at: <http://www.adb.org/Documents/Handbooks/social-analysis/default.asp>, *Staff Guide to Consultation and Participation*: <http://www.adb.org/participation/toolkit-staff-guide.asp>, and, *CSO Sourcebook: A Staff Guide to Cooperation with Civil Society Organizations*: <http://www.adb.org/Documents/Books/CSO-Staff-Guide/default.asp>

231. Project preparation has been conducted with stakeholder agencies in the Government of Lao PDR at national, provincial and district levels including MAF, Ministry of Planning and Investment and the Ministry of Industry and Commerce. Specific meetings have been held in the participating provinces with PAFO and DAFO officials, LPMGs other village-based organizations. Requirements for ensuring appropriate levels of consultation for preparation of investments and activities have been developed.

232. Initial preparation includes consultation requirements involving documented evidence of inclusive consultation with all stakeholders and communities in the subproject catchment area and participant information on numbers of women and men by ethnic grouping. Socio-economic/gender surveys that identify vulnerable groups to provide basis for specific consultation and participation mechanisms will be followed during implementation.

233. During the Project, the process of consultation will continue throughout the feasibility study, detailed design and implementation phases to afford LPMGs and other community groups the opportunity to voice their views on how investments should be selected, designed, implemented and operated.

1. Participation

234. It is anticipated that LPMGs will be involved throughout the selection, design, implementation and operation stages. During design and preparation stages, LPMG and community participation will consist primarily of their contribution through the consultation process. During the construction/implementation phase, opportunities will arise for active participation through provision of wage labor to the contractors. This will be encouraged through the bidding documents which will encourage the contractors to investigate this option, whenever possible. LPMGs, as owners of the productive equipment and materials to be used in the Project, will have a keen interest to be involved in the O&M of such infrastructure.

2. Awareness

235. Experience has demonstrated the importance of community participation in achieving sustainable development including appropriate and well-designed infrastructure. To ensure adequate participation of the LPMGs and communities, they must first be well-informed and there must be adequate opportunities for everyone to participate if they wish.

236. Information about the Project and its investments and activities, including the objectives, potential environmental impact, implementation arrangements, resettlement and compensation matters, gender issues, issues of concerns for ethnic groups will be provided to beneficiaries. Information will be provided through meetings, pamphlets, and other announcements in both Lao language and the language(s) of the communities whenever appropriate. LPMGs and the communities will be fully informed of issues such as their right to be compensated for any loss of property including productive land and/or assets as well as gender equity and other relevant policies. Separate meetings and discussions will be arranged with the people who are directly affected by land acquisition and/or resettlement issues. The community and particularly the affected households will be provided with detailed guidance and procedures regarding resettlement and compensation.

237. A summary in the form of a consultation and communication plan is incorporated in the following table

Consultation and Participation Plan

Stakeholder group	Objective of their involvement	Approach to Participation and Depth	Participation Methods		Timing	Cost estimate
	Why Included?		Method	Who Responsible		
Communities, poor households and women	Direct beneficiaries of project, member of LPGs.	Consultation (high)	<ul style="list-style-type: none"> • Information: project orientation, options on establishment of LPG, LPMG and LBG, credit access through LDF/FILs, participation mechanisms, and entitlements for APs. Informed through meetings, information brochures. • Consultation: on willingness to join livestock production option and level of support for project, needs and impacts of Project. Consultation through surveys and village meetings, focus group discussions. • Decisions: on participation in the village planning. Communities determine participation with support from VAC; ensure they are inclusive and include representatives of disadvantaged subgroups • Decisions: on VEI priorities and level of community participation; choice of infrastructure 	PSC PIU DIU VAC LWU	From start of feasibility study to post implementation of systems	Included in cost estimate
LPG, LBG and LPMG	Direct beneficiaries of project, owners of the projects	Partnership (high)	<ul style="list-style-type: none"> • Information: project orientation, options on establishment of LPG, LPMG and LBG, credit access through LDF/FILs, participation mechanisms. Informed through meetings, information brochures. • Consultation: on willingness to join livestock production option and level of support for project, needs and impacts of the project. Consultation through surveys and village meetings, focus group discussions. • Decisions: types of animal raising, cattle, pigs, community infrastructure. 	PSC PIU DIU PAC NAFRI VA LWU	During feasibility study and throughout project implementation	

Stakeholder group	Objective of their involvement	Approach to Participation and Depth	Participation Methods		Timing	Cost estimate
	Why Included?		Method	Who Responsible		
Village Authority (VA)	Members of VAs with responsibility for government-public interaction on project implementation	Partnership (high)	<ul style="list-style-type: none"> • participatory approach, and village infrastructure selection criteria; • invite community to submit proposals; VA selects projects • Project implementation: through village level meetings, coordinate between project and community; mobilize community to participate; disseminate hygiene and sanitation promotion information and project information • Monitoring: VAs contribute to progress reports 	VA leaders and reps Community team in DIU	During feasibility study Periodically during project implementation	Included in cost estimate
Private Sector: Livestock traders, Slaughterhouses	Direct beneficiaries of project	Partnership (high)	<ul style="list-style-type: none"> • Consultation: as an industry group, consulted on needs and issues affecting businesses and how livestock businesses can support objectives of the project 	Business group representatives eg. tourism association PAC District Government	During feasibility study Periodically during project implementation	Included in cost estimate
District, Provincial Government	Representatives of government are responsible for project implementation, and representing provincial and district	Collaboration (high)	<ul style="list-style-type: none"> • Approvals: review and approve safeguard documents • Project implementation: allocate staff to PIU/DIU to provide local sector inputs • Monitoring: oversee implementation and progress through review and planning meetings; resettlement committees. • Recommend and initiate remedial 	NPSC/PIU/DIU	Ongoing during project planning and implementation	Included in cost estimate

Stakeholder group	Objective of their involvement	Approach to Participation and Depth	Participation Methods		Timing	Cost estimate
	Why Included?		Method	Who Responsible		
Ministries	Setting policy and guidelines, coordinating, issuing approvals or finance	Collaboration (medium)	<ul style="list-style-type: none"> • Approvals and advice: coordination, direction and approval of technical and implementation matters. Participation is through review of key documents, safeguards, and proposals, issuing statements and directives, project management and coordination meetings 	NPSC	As required during project implementation	Included in cost estimate

X. ANTICORRUPTION POLICY

238. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with MAF and Governor's offices for Houahphanh, Luang Namtha, Luang Prabang, and Xieng Khouang. Consistent with its commitment to good governance, accountability, and transparency ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.²³ 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.²⁴

239. To support these efforts, relevant provisions of ADB's Anticorruption Policy are included in the loan regulations 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 records and accounts of MAF, NPMO, the PCUs, and DCUs, 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.²⁵ The project design and implementation arrangements provide for mitigation of corruption risks. Risks associated with project management, including procurement and disbursement, will be mitigated by the engagement of LIC to advise and assist in the procurement of goods and services, and the engagement of other consultants. The Project will also establish a website or establish a subpage under the existing MAF's 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/>.

²³ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

²⁴ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

²⁵ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

240. 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.²⁶

²⁶ For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF PAM CHANGES

241. All revisions/updates during course of implementation will be recorded under this chapter. The PAM was discussed during the technical discussions held in Vientiane, Lao PDR on 3 October 2014, which was upgraded to loan negotiations on 15 October 2014.

TERMS OF REFERENCE FOR CONSULTING SERVICES

I. Background

1. Consulting services for the Northern Smallholder Livestock Commercialization Project (the Project) will be provided as follows:

- (i) **Advance Action Consultant (AAC).** AAC (international) will be financed through the Project Preparatory Technical Assistance (PPTA) 8558 resources and engaged by the PPTA firm. AAC will assist the National Project Management Office (NPMO) during the period leading up to loan effectiveness so that the executing agency (EA) can mobilize the start-up specialists and expedite initial project progress.
- (ii) **Start-up Component Consultants (SCC).** SCC (international and national) will be recruited as individual consultants by NPMO to assist with start-up activities. They will be recruited prior to loan effectiveness and mobilized immediately after until the Loan Implementation Consultant is fully mobilized, a period of around 18 months. This component will be financed under the ADB Loan using ADB recruitment procedures.
- (iii) **National Project Management Office Support.** Three long-term specialists will be recruited by NPMO as individual consultants to provide long-term support for project operations. One project management specialist, one project accountant and one procurement specialist (all national positions) will be recruited immediately following loan effectiveness and will support the Project through to completion. These positions will be financed under the ADB Loan using ADB recruitment procedures.
- (iv) **Loan Implementation Consultant (LIC).** LIC (international/national) will be financed under the ADB Loan and will be recruited using ADB procedures. LIC will be recruited as a firm, and will provide project management support to NPMO, the PAFOs (PIUs) and DAFOs (DIUs) over a period of around five years from 2016 to 2021.
- (v) **Financial Audit:** ADB Loan will be used to recruit a financial audit firm to audit the Project accounts and the rural credit facility. Inputs will be provided each year during the life of the Project.

2. All consultants and entities will be selected and engaged in accordance with the *ADB's Guidelines on the Use of Consultants*. The outputs and deliverables from all consulting services shall be in accordance with the Government policies, and in support of the development strategies of the target provinces, and the needs of the beneficiaries.

II. Advance Action Consultant

3. The TOR for the ACC will be prepared by the PPTA firm for approval of the ADB. The AAC will comprise a Project Management Specialist (international). The AAC will assist the NPMO to (i) recruit the start-up component consultants (SCC) and prepare the draft RFP for recruitment of the Loan Implementation Consultant (LIC), (ii) prepare draft procurement documentation for operational equipment and materials for the first 18 months of project implementation, and (iii) the workplan for the first 18 months of implementation including training for project implementation. Inputs will be provided intermittently immediately following fact-finding through to June 2015, a period of around 10 months.

III. Start-up Component Consultants (SCC)

4. SCC will be recruited as individual consultants by NPMO to assist with start-up activities immediately following loan effectiveness and until the Loan Implementation Consultant is fully mobilized, a period of around 18 months. The start-up consultants' TORs are provided below. In total, 10.5 international and 10 national person-months of individual consultants will be recruited. Table A1.1 provides the inputs of the individuals under SCC.

Table A1.1: Start-up Component Consultants

	2015	2016	Total
International			
Project Management Specialist	3	3	6
Rural Credit Specialist	2	-	2
Project Performance Monitoring and Evaluation Specialist	1.5	1	2.5
Subtotal International	6.5	4	10.5
National			
Rural Credit Specialist	3	1	4
Project Performance Monitoring and Evaluation Specialist	4	2	6
Subtotal National	7	3	10
Total	13.5	7	20.5

A. Project Management Specialist (6 person-months, international, intermittent)

5. Qualifications: A master's degree or equivalent in engineering, agronomy, or a related discipline. Experience: Preferably 15 years of experience in providing consulting services in rural infrastructure/agriculture development in developing countries in a humid climate, preferably in environments with similar characteristics to the mountainous areas of Lao PDR. Must have at least 10 years' experience with the implementation of ADB projects.

6. This expert will provide implementation support to the NPMO after loan effectiveness and will coordinate the inputs of the other individual start-up consultants under the Project. In addition, the expert will also have technical specialist skills - a rural infrastructure/agriculture engineer so he/she can also support technical specialists in their respective areas. The specialist will be based in the NPMO and directly support the Project Director and the two Deputy Directors. Duties of the specialist will include the following:

- (i) Supervise the work of the individual start-up national consultants team to ensure that inputs and activities are of a high quality and effective;
- (ii) Assist NPMO in the initial scheduling and planning of project implementation;
- (iii) Assist in the ranking and arrangement of livestock production groups;
- (iv) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (v) Assist the monitoring and evaluation specialist in the preliminary design, planning and supervision of the monitoring of: implementation safeguards and benefits; and
- (vi) Provide orientation to NPMO, PAFOs and DAFOs on the project design.

242. In terms of planning, the specialist will:

- (i) Review, analyze and report on the government's budget planning and disbursement procedures;
- (ii) Together with NPMO, PIUs/DIUs assist in the identification and ranking of the SLPMGs;
- (iii) For the SLPMGs in Phase 1, and in conjunction with NPMO, PIUs/DIUs help to prepare a work plan for the first 18 months of the project, with a detailed work plan for the first 6 months;
- (iv) Based on the SLPMG work plans, and together with NPMO and the PIUs/DIUs, prepare work plans for each PIU and DIU for the first 18 months of the project, with a detailed work plan for the first 6 months; and
- (v) Each work plan will identify and quantify times required for each activity, human resources required, budget requirement and a detailed works schedule together with an approach highlighting any constraints and risks.

B. Rural Credit Specialists (2 person-months, international, intermittent; 4 person-months, national, intermittent))

7. Qualifications: International - a master's degree or equivalent in accounting, banking and finance, financial management, rural credit or equivalent. Experience: Preferably 15 years of experience in providing consulting services in rural finance, especially for saving and credit services to the agriculture sector in developing countries, preferably in environments with similar characteristics to the mountainous areas of Lao PDR. Preferably with at least 10 years' experience with the implementation of ADB and/or other development funded projects. National – a tertiary education or equivalent in accounting, banking and finance, financial management, rural credit or equivalent. Preferably 7 years' experience in the provision of consulting services in rural finance, especially for saving and credit services to the agriculture sector, and at least 5 years' experience on the implementation of ADB and/or other development funded projects.

8. These experts will examine in detail the status of the ongoing Village Livelihoods Fund (VLF) under the previous project and suggest ways and means of improving its performance. They will also assess how to potentially interlink the VLF and the rural finance component that will be funded by IFAD for the Project. They will be based in NPMO and directly support the three Project Coordinators. Duties of the specialist will include the following:

- (i) Working with the Lao Women's Union, MAF, MOF, Bank of Lao and other stakeholders on VLF program review current portfolio and provide recommendations how the VLF program can be improved to be financially viable and organizational sustainable to serve livestock smallholders;
- (ii) Develop various options for future direction of the VLF including analysis on the strengths, weaknesses, opportunities threats (SWOT) for the selected options;
- (iii) Assess potential links between the VLF and the rural finance services that will be provided by IFAD and develop strategies how the VLF can be interlinked with services from commercial banking financial institutions;
- (iv) Assist IFAD to coordinate with ADB to ensure in developing saving and lending services through commercial financial institutions and ensure the services comply with IFAD and ADB procedures; and
- (v) In close coordination with MAF, ADB, IFAD, MOF and other stakeholders, develop detailed guidelines to implement saving and lending services (rural finance) component of the Project.

C. Project Performance Monitoring and Evaluation Specialists (2.5 person-months, international, intermittent; 6 person-months, national, intermittent)

9. A Project performance monitoring and evaluation system (PPME) is required to monitor the progress of project implementation and monitor the delivery of outputs, outcomes and impacts under the Project. A PPME design will be developed under the start-up component. The specialists will have tertiary qualifications in engineering/planning or equivalent, with at least ten years' experience on international development projects or a related field and have at least 7 years' experience as a PPME specialist or related area. They will be responsible to the Project Management Specialists and be based in NPMO, with frequent travel to the target provinces as required. Duties of the specialist will include the following:

- (i) Assist the Project Management Specialists and NPMO to develop a PPME framework, based on the Design and Monitoring Framework (DMF), including all provisions of safeguard plans/frameworks;
- (ii) Assist in the work-shopping of the PPME, and help obtain ADB approval;
- (iii) Assist PIUs/DIUs in the design of socio-economic and other surveys to ensure an adequate baseline can be established for indicators identified in the PPME and safeguards and gender and social development documents;
- (iv) Assist NPMO and PAFOs/DAFOs to collect, record and analyze all necessary data so that a baseline can be developed for the PPME; and
- (v) Provide training and guidance to NPMO and PAFOs/DAFOs on their duties and responsibilities under the PPME.

IV. National Project Management Office Support

10. NPMO Support will comprise three long-term individual consultants to assist with project management, general procurement and project accounting. They will be recruited immediately following loan effectiveness and will support the Project through to completion. The TORs are provided below. In total, 120 national person-months of individual consultants will be recruited. Table 1 provides the inputs of the individuals under NPMO support.

Table 1. NPMO Support

	2015	2016	2017	2018	2019	2020	2021	Total
National								
Project Management Specialist	6	12	6	6				30
Procurement Specialist	6	6	9	5		2	2	30
Project Accountant	7	10	10	9	9	9	6	60
Total	19	28	25	20	9	11	8	120

A. Project Management Specialist (30 person-months, national, intermittent)

11. Qualifications: A master's degree or equivalent in engineering, agronomy, or a related discipline. Experience: At least 15-years' experience in providing consulting services in rural infrastructure development. Experience with the implementation of ADB projects is an advantage. Duties: This specialist will provide implementation support to the NPMO after loan effectiveness and will coordinate the inputs of the other individual consultants under the Project. In addition, the specialist will also have technical specialist skills such as a rural infrastructure

engineer or livestock specialist. The specialist will be based in the NPMO and directly support the Coordinators in the three units of the NPMO. The specialist will have a minimum of 15 years' experience in rural infrastructure development. Experience in Lao PDR working in similar projects will be considered an asset. Duties of the specialist will include the following:

- (i) Supervise the work of the individual national consultants team to ensure that inputs and activities are of a high quality and effective;
- (ii) Ensure that a technical review is undertaken for initial investment studies and recommendations are provided;
- (iii) Assist NPMO in the initial scheduling and planning of project implementation;
- (iv) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (v) Assist in the preliminary design, planning and supervision of the monitoring of: implementation safeguards and benefits;
- (vi) Ensure that safeguard officers (SO) are appointed to and operational in each PIU and DIU and that safeguard awareness programs are undertaken in each province;
- (vii) Lead the individual start-up national consultants in assisting the NPMO to review technical and safeguard aspects of investment studies;
- (viii) Bring project implementation or O&M issues identified by other consultants or the monitoring teams to the attention of the NPMO and relevant PIUs, accompanied by recommendations for action; and
- (ix) Assist NPMO and PIU with preparing and compiling all monthly, quarterly and annual progress reports.

243. In terms of planning, the specialist will assist the international project management specialist to:

- (i) Review, analyze and report on the government's budget planning and disbursement procedures;
- (ii) Together with NPMO, PIUs/DIUs assist in the identification and ranking of the SLPMGs;
- (iii) For the SLPMGs in Phase 1, and in conjunction with NPMO, PIUs/DIUs help to prepare a work plan for the first 18 months of the project, with a detailed work plan for the first 6 months;
- (iv) Based on the SLPMG work plans, and together with NPMO and the PIUs/DIUs, prepare work plans for each PIU and DIU for the first 18 months of the project, with a detailed work plan for the first 6 months; and
- (v) Each work plan will identify and quantify times required for each activity, human resources required, budget requirement and a detailed works schedule together with an approach highlighting any constraints and risks.

B. Project Accounting Specialist (60 person-months, national, intermittent)

12. **Qualifications:** The Project Accounting Specialist shall have tertiary qualifications in accounting or similar discipline, or its equivalent. Possing CPA qualifications is preferred. **Experience:** The specialist shall have extensive experience (minimum 10 years) in designing and implementing accounting systems or similar projects in Lao PDR. The specialist must have good working knowledge of English, and work experience with any donor-funded project a distinct advantage. **Duties:** The specialist will advise and assist NPMO on overall accounting functions and activities of the Project. The specialist will perform the following tasks:

- (i) Develop a suitable project accounting system, chart of accounts, and procure and adapt any necessary software to ensure an effective and efficient project accounting, monitoring and reporting system to project executing and implementing agency managers and ADB. The system will be capable of producing routine reports by which the Project's financial and physical progress can be monitored and evaluated;
- (ii) Ensure that financial transactions are, in all cases, recorded in project accounts accurately and on a timely basis and in accordance with ADB and Government requirements and agreed financial policies and procedures for the Project;
- (iii) Ensure that Project expenditures on contract payments are made in accordance with the terms and conditions of the respective contracts and are adequately certified by duly authorized officials in relation to works completed and/or goods or services provided;
- (iv) Ensure that adequate internal control is established and maintained in terms of separation of responsibilities for processing and authorizing payments and in the management and accounting for project expenditures and assets;
- (v) Ensure that all financial records are retained for audit purposes and for review by ADB and Government until at least one year following Project completion;
- (vi) Ensure that Project financial transactions are recorded in the accounts in accordance with Government of Lao PDR regulations and ADB requirements and that records are reconciled periodically, at least on a monthly basis;
- (vii) Ensure that the Imprest Account and Sub-Accounts to be established for the Project in local commercial banks are administered in accordance with ADB requirements;
- (viii) Ensure that withdrawal requests for reimbursements from ADB are prepared and submitted to the Government and to ADB on a timely basis and in accordance with ADB procedures to replenish the Imprest Account. Ensure that Statements of Expenditures (SOEs) supporting withdrawal requests accurately reflect qualifying project expenditures and that underlying documents that verify these expenditures are retained and available for review as required;
- (ix) Periodically, but at least quarterly, reconcile project records with ADB records relating to disbursements from ADB's Loan for all Project components. Project records and bank statements should be reconciled more frequently, at least monthly;
- (x) Ensure timely preparation and distribution of integrated quarterly financial management and project management reports and annual project financial reports and statements required by ADB, under the provisions of the Loan Agreement, as well as by the Government of Lao PDR. Provide any special financial reports that may be required from time to time on specific aspects of project's financial progress or position as may be requested by ADB and/or the Government;
- (xi) Ensure that annual Project budgets are consistent with agreed program activity levels and expenditures and that budgetary allocations for the Project are available to meet projected cash flow requirements for contract payments, pending reimbursement by ADB, and for administrative expenditures of NPMO and implementing units;
- (xii) Ensure that Project assets and inventories are safeguarded and revalued and verified periodically in accordance with the requirements of ADB and Government of Lao PDR and to support annual Project financial audits;

- (xiii) Liaise effectively with auditors to ensure effective annual audits in accordance with ADB's requirements;
- (xiv) Conduct on-the-job training on project accounting and through classroom presentations; and
- (xv) Prepare progress reports for inclusion in the monthly, quarterly and annual progress reports to be prepared by NPMO.

C. Procurement Specialist (30 person-months, national, intermittent)

13. **Qualifications:** The national procurement specialist will have tertiary qualifications in engineering, rural development, agriculture or similar from an established and recognized institution and will be fluent in the English language. **Experience:** The specialist will have at least 10 years' experience in procurement, and will have demonstrated knowledge and understanding of ADB procurement procedures and rural infrastructure engineering, and experience with the project implementation of ADB-financed projects. The specialist will also have good skills in communicating in English.

14. Under the close supervision of the NPMO, the specialist will work closely with other government staff assigned to the Project to ensure smooth start-up of project implementation. The specialist will build on the work previously undertaken in the area of procurement under advance action. The specialist will assist the EA to undertake (i) recruitment of consultants, and (ii) preparing for project procurement in compliance with Project documents (e.g., loan agreement, the report and recommendation of the president [RRP], the project administration manual [PAM], procurement plan, project safeguards documents) and other Government and ADB requirements; including ADB's Guidelines on Procurement and the Use of Consultants (2013, as amended from time to time), and ADB's Safeguard Policy Statements (2009). Duties of the specialist will include the following:

- (i) **Recruitment of consultants.** The specialist will facilitate the preparation of required documents related to the recruitment of the Loan Implementation Consultant and other consulting packages as required. In close coordination with NPMO (and subject to review and approval of NPMO and ADB), the specialist will:
 - (a) Finalize the detailed terms of reference for each assignment (i) by using initial material developed during the PPTA, and (ii) through consultative meetings with relevant agencies of the Government to determine the detailed requirements to properly carry out the assignment;
 - (b) Develop detailed cost estimates for the assignment that is acceptable to both ADB and NPMO;
 - (c) Develop the evaluation criteria to be used (a) in determining firms to be short-listed for a subject assignment, and (b) when assessing technical and financial proposals submitted by short-listed firms;
 - (d) Prepare the draft request for proposal (RFP) to be used for the consultancy recruitment, including the Data Sheet, using updated templates available in the ADB website; and
 - (e) Translate all required outputs to the English language, whenever necessary.
- (ii) **Procurement Competitive Bidding.** The specialist will facilitate the preparation of required documents related to procurement to be carried out by NPMO under

the Project. In close coordination with NPMO (and subject to review and approval of NPMO and ADB), the specialist will:

- (a) Monitor the Government's approval of the government requirements/technical specifications of civil works/goods to be procured; The specifications must be drafted to permit the widest possible competition and, at the same time, present a clear statement of the required standards of materials, plant, other supplies, and workmanship to be provided;
- (b) Based on the technical design of the civil works to be procured, the specialist will prepare the Employer's Requirements (ERQ). To the extent possible, the ERQ shall include (a) specifications, (b) drawings, and if available (c) supplementary information (e.g., compliance with loan covenants, Government's core labor standards, and safeguard requirements);
- (c) Develop the evaluation and qualification criteria, which will be used to evaluate the bids and qualify bidders if the bidding was not preceded by a prequalification exercise and post-qualification is applied;
- (d) Identify provisions (e.g., data and contractual requirements) that need to be specified in the procurement contract through consultative meetings with relevant agencies of the Government;
- (e) Prepare the draft bidding document to be used for the procurement, including the Bid Data Sheet, using updated templates available in the ADB website; and
- (f) Translate all required outputs to the English language, whenever necessary.

V. Loan Implementation Consultant (Firm)

15. A qualified international firm will be recruited to (i) assist NPMO to implement the Project and meet the reporting and procedural requirements of ADB; (ii) undertake feasibility studies/investment reports including technical design and costing, economic and financial analysis and safeguards review and compliance; (iii) undertake detailed design, contract award and construction supervision; (iv) assist in project performance monitoring and evaluation; and (v) ensure adequate provision for compliance with social and environmental safeguards, including monitoring and review during the construction and post-construction period.

16. The LIC services comprise a total of 403 person-months made up of 90 person-months of international specialists and 313 person-months of national specialists. The estimated requirement for consultant expertise is outlined below.

Loan Implementation Consultants Inputs by Year
(Person-months)

	Key/Non Key	2016	2017	2018	2019	2020	2021	Total
1. International Consultants								
Team Leader/Livestock-Value Chain Specialist	K	3	7	7	5	4	2	28
Project Performance Monitoring Evaluation Specialist	K	2	0	0	0	1	2	5
Financial/Economic Specialist	K	0	1	1	1	0	1	4
Community development specialist - ToT	K	2	2	1	0	0	1	6
Livestock production specialist	K	3	2	1	0	0	0	6
Agri-business Development Specialist	K	3	4	2	2	0	0	11
Rural credit specialist	K	2	1	1	0	0	0	4
Agriculture Land Use Specialist	NK	2	0	0	0	0	0	2
Agricultural curriculum development specialist (PAC training, scholarship and curricula development)	K	2	2	2	0	0	0	6
Social/Gender/Ethnic Specialist	K	1	3	0	0	0	2	6
Resettlement Specialist	K	1	3	0	0	0	2	6
Environmental Specialist	K	1	1	1	1	1	1	6
Sub-total		23	31	18	11	8	11	102
2. National Consultants								
Deputy Team Leader/Livestock Value Chain Specialist	K	6	11	11	11	11	10	60
Project Performance Monitoring Evaluation Specialist	K	6	11	11	11	11	10	60
Financial/Economic Specialist	K	0	2	2	2	2	0	8
Agri-business Development Trainer	K	6	11	11	11	11	10	60
Rural credit specialist	K	4	2	2	0	0	0	8
Land Use Specialist	NK	3	3	0	0	0	0	6
Social/Gender/Ethnic Specialist	K	2	6	3	3	3	1	18
Resettlement Specialist	K	2	6	3	3	3	1	18
Environmental Specialist	K	2	6	3	3	3	1	18
Structural and Building Engineer	NK	1	4	4	3	0	0	12
Infrastructure Engineer	NK	1	7	6	4	3	0	21

	Key/Non Key	2016	2017	2018	2019	2020	2021	Total
Construction Supervisors	NK	0	0	4	10	10	0	24
Sub-total		33	69	60	61	57	33	313
TOTAL		56	100	78	72	65	44	403

A. Terms of Reference

1. Team Leader/livestock value chain specialist (international, 28 person-months, intermittent)

17. Qualifications. A master's degree or equivalent in engineering, agronomy, or a related discipline. Experience: Preferably with 15 years of experience providing consulting services in rural infrastructure/livestock development in developing countries in the humid tropics, preferably in environments with similar characteristics to the project area. Preferably with 10 years of experience in the implementation of multilaterally funded development projects, preferably projects with ADB funding

18. This specialist will provide implementation support to the NPMO and will coordinate the other specialist inputs under the project. In addition, the specialist will also have technical specialist skills so he/she can also support technical specialists in their respective areas. The specialist will be based in NPMO and directly support the three coordinators. Duties of the specialist will include the following:

- (i) Establish the overall Project Quality Assurance regime;
- (ii) Supervise the consulting team and ensure that inputs and activities of both the international and national consultants are of a high quality and effective;
- (iii) Assist the NPMO in the scheduling and planning of project implementation;
- (iv) Provide advice and guidance on procurement, disbursement and liquidation of expenditures following ADB procedures;
- (v) Ensure that baseline surveys and annual surveys are carried out to obtain the necessary information to measure implementation and impact performance;
- (vi) Coordinate and supervise feasibility studies/investment reports ensuring that all technical, economic, financial, social and environmental due diligence is undertaken;
- (vii) Assist NPMO to identify all livestock value chain actors, and devise strategies/activities to help improve their performance;
- (viii) Assist NPMO monitor the performance of livestock value chain actors during and following interventions;
- (ix) Assist in the design, planning and supervision of the monitoring of implementation safeguards and benefits;
- (x) Ensure that appropriate levels of community participation are undertaken in the preparation and detailed design activities;
- (xi) Prepare the feasibility/investment reports for submission to and review by the NPMO and ADB;
- (xii) Lead the consulting team in assisting the NPMO to review technical and safeguard aspects of investment studies;
- (xiii) Ensure the pro-poor measures identified in the community consultations are designed and carried out;
- (xiv) Assist the NPMO in addressing O&M issues;

- (xv) Supervise the safeguard and social monitoring during construction implementation;
- (xvi) Assist the NPMO to resolve safeguard and implementation problems and issues that may arise from time to time;
- (xvii) Participate in the mid-term review; and
- (xviii) Lead a team to prepare the project completion report.

2. Deputy Team Leader/Livestock value chain specialist (national, 60 person-months, full-time)

19. **Qualifications.** An undergraduate degree in civil or agricultural engineering or a related discipline. Experience: Preferably with 10 years of experience in designing, constructing and operating agricultural infrastructure and/or livestock projects. Experience with implementing multilaterally funded development projects, preferably with ADB funding.

20. This position will support the Team Leader to provide implementation support after loan effectiveness and to coordinate the other specialists' inputs under the project. The position will also have technical specialist skills so he/she can also support technical specialists in their respective areas. The specialist will be based in the NPMO and directly support the three coordinators. Assist the Team Leader (TL) to manage LIC consultants, and liaise with Government, ADB and other stakeholders. Specific tasks will include but will not be limited to:

- (i) Provide support to the Team Leader in the management and technical duties as listed above;
- (ii) With the Team Leader, supervise the consulting team and ensure that inputs and activities of both the international and national consultants are of a high quality and effective; and
- (iii) Assist the Team Leader with all tasks defined for the Team Leader position, and fulfil the same duties when the Team Leader is absent from the Project.

3. Financial/Economists (international, 4 person-months; national 8 person-months)

21. **Qualifications.** The specialists will have tertiary qualifications in economics and/or finance, financial management or equivalent from an established and recognized institution and will be fluent in the English language. They will be familiar with economic and financial analysis requirements and methodologies used for internationally funded.

22. **Experience.** The specialist should have a minimum of 10 years' experience in the financial and economic analysis of rural infrastructure/livestock development projects preferably financed by ODA donors.

23. **Duties.** The specialists will be responsible for undertaking economic and financial due diligence of the feasibility studies/investment reports. The international specialist will work together with the national specialist at the initiation of field studies to ensure that the approaches and methodologies being used meet acceptable international standards. Subsequently, the national economist will complete the analysis required for the balance of the investments/activities. Specific tasks for the position include the following:

- (i) Review the economic and financial analyses done during loan preparation and determine the appropriateness of the models and assumptions used;
- (ii) Make any necessary adjustments considered necessary and review input costs and expected benefits;

- (iii) Determine likely production models of LPMGs and operations of slaughterhouses and wet markets and consequent benefits of each;
- (iv) Assess financial performance of similar slaughterhouses available in Lao PDR and neighbour countries; and draft financial projections for such investments to be funded by the Project;
- (v) Assess FIRR of various investments on other livestock value chains for smallholders and related enterprises that could be funded by rural finance component funded by IFAD;
- (vi) On the basis of capital and recurrent costs undertake an economic analysis of each investment/activity and determine an expected economic and financial internal rate of return;
- (vii) Examine likely operational costs of the slaughterhouses and determine appropriate fees;
- (viii) Review farm budgets and expected farmer income to determine the capacity to fund operation and maintenance costs;
- (ix) Contribute to the assessment of the investment/activity viability and feasibility in the feasibility studies and investment reports; and
- (x) Suggest measures to enhance or improve economic and financial viability in the case of investments/activities with promising social benefits but marginal economic and/or financial rates of return.

4. Project Performance Monitoring and Evaluation Specialists (international 5 person-months, national 60 person-months)

24. Qualifications. The specialists will have tertiary qualifications in rural development or a related field. Experience: The specialists will preferably have 5 years of experience as monitoring and evaluation specialists or in a related area.

25. The specialists will assist in the overall survey and monitoring of the Project and provide the principles for analyzing the results. In addition, the specialists will be responsible for establishing performance monitoring of the implementation of subprojects to facilitate reporting to the Government and ADB. The specialist will work closely with the safeguard specialists to ensure all the provisions of the safeguard plans/frameworks are covered by the PPM. Specific tasks of the specialists will include the following:

- (i) Work closely with the safeguard specialists to ensure annual monitoring surveys are designed and implemented to enable complete collection of data;
- (ii) With reference to the DMF and within the context of the baseline surveys and together with NPMO staff, review the PPME design developed under the Start-up Component which will be based on measurable inputs, outputs and outcomes. The system shall be disaggregated by gender and age. PIUs and DIUs will play a major role in collecting the monitoring data needed;
- (iii) Together with NPMO staff, brief PIUs and DIUs on their duties and responsibilities under the project monitoring system;
- (iv) Assist to undertake annual surveys in 300 LPMGs together with PIU and DIU staff and adjust the data requirements and data collection procedures as needed to meet on the ground conditions;
- (v) Document procedures and agreed data requirements along with the duties of the PIU and DIU staff providing monitoring schedules for each subproject;
- (vi) Periodically review the data being collected, analyze results and report any deficiencies, problems, issues or shortcomings to the NPMO;

- (vii) Prepare an annual PPME report at the end of each year and at project completion for inclusion into the EA's project completion report.

5. Community Development Specialist (international 6 person-months)

26. The Community Development Specialist will assist PIUs and DIUs to develop and implement a community participation and consultation plan in 300 LPMGs. S/he will also provide capacity development to assist PIUs and DIUs to effectively roll out the plan. The specialist will have a tertiary qualification or equivalent in a relevant discipline such as social sciences or equivalent and at least 12 years' experience in social and gender issues associated with rural development/livestock projects with a minimum of six (6) years' experience in Southeast Asia, preferably in Lao PDR. The services will include the following:

- (i) In collaboration with stakeholders, prepare and implement an agreed stakeholder participation plan to ensure stakeholder participation at all levels and at all stages of the Project;
- (ii) Provide training and assistance to PIUs and DIUs to strengthen their capacity to plan, manage, and monitor community awareness and development activities;
- (iii) Prepare a budget for the participation plan for each LPMG. Conduct orientation to launch the investments/activities and distribute project information. Document all procedures that will be necessary for PIU/DIU to manage and monitor the plan;
- (iv) Assist LPMGs to identify, select, plan, design and implement the productive equipment and materials through an iterative participatory process, involving (a) self-assessment of needs and demands; (b) costing of priority works; (c) prioritizing works to meet available budget; (d) final selection and design of works; (e) identifying means of project implementation and work program; (f) implementation with assistance of PIUs/DIUs;
- (v) Review awareness and communication strategies and materials, training manuals prepared under other projects or programs, and adapt these materials and manuals to local conditions in consultation with PIU/DIU teams, health and education offices, Women's Union and mass organizations. Develop and produce new project awareness materials as needed;
- (vi) Provide ongoing support to PIUs and DIUs for implementing and monitoring the programs; and
- (vii) Assist PIUs/DIUs to prepare progress reports to NPMO on community awareness and participation activities. Prepare guideline report formats for monthly, quarterly and annual reports to NPMO.

6. Livestock production specialist (international, 6 person-months, intermittent)

27. Qualifications and experience. The specialist will have tertiary qualifications in livestock production systems, animal science, or a relevant discipline. S/he will have at least 10 years work experience in intensive (and/or commercial) livestock production or projects dealing with intensively with livestock in tropical and subtropical developing countries.

28. Responsibility. The specialist shall liaise closely with NAFC in Luang Prabang. S/he shall assess existing livestock production and processing systems in the project areas making recommendation for improvements, and preparing a training program on livestock production and processing. The specialist shall use the related on-going ADB and IFAD financed projects

as a starting point for his/her analysis. The specialist's responsibilities will include, but not be limited to, the following tasks:

- (i) Assess livestock production and processing systems in terms of:
 - (a) environmental sustainability (with particular attention to solid and liquid livestock waste, water and energy consumption);
 - (b) animal health and welfare (prevention of animal diseases, humane treatment of livestock);
 - (c) livestock product and feed safety (feed quality, use of animal medicines and chemicals, use of food additives for livestock processed products);
 - (d) productivity; and
 - (e) employment generation, including that for farmers who produce feed crop and other who are involved in the supply chains;
- (ii) Prepare a report that describes findings of (i) and recommendations to strengthen the systems based on proven international best practices and ensure those recommendations are reflected in project design to the extent possible; and
- (iii) Prepare a training program outline with cost estimates on livestock production and processing tailored to the specific needs, capacity, and requirements.

7. Agribusiness Development Specialists (international 11 person-months intermittent, national 60 person-months)

29. **Qualifications.** The specialists will have a tertiary qualification in agribusiness or agribusiness related subject, such as agricultural marketing or agricultural trade and be fluent in the English language.

30. **Experience.** The specialists will have a minimum ten years of experience working for private sector agro-enterprises, providing agribusiness consulting services or similar agribusiness related work experience. Experience in the livestock sector will be an advantage, as will knowledge of certification schemes, food safety systems, meat processing, slaughterhouses and wet markets.

31. The Agribusiness Development Specialists will be responsible for guiding and coordinating the overall value-chain activities within the project and ensuring successful outcomes. The national Agribusiness Development Specialist will provide continuous support to the project, whilst the international Agribusiness Development Specialist will provide specialist technical support to the national counterpart on an intermittent basis.

32. Specific tasks for the positions include the following:

- (i) Introducing GAP and HACCP certification schemes for slaughterhouses, wet markets and processing facility;
- (ii) Liaising with building contractors during the construction of the slaughterhouses, processing facility and wet markets;
- (iii) Coordinating with the private sector operators of the slaughterhouses to provide capacity building training for management and staff;
- (iv) Supervising the preparation of training materials by the Agricultural Curricula Development Specialist.
- (v) Supervising capacity building training for traders, butchers/meat retailers and processors;
- (vi) Strengthening agribusiness skills of LPMGs, traders and support services;
- (vii) Facilitating contract farming initiatives;

- (viii) Supporting market assessments/studies;
- (ix) Facilitating the development of value chain partnerships; and
- (x) Identifying new meat products for development and new markets for development, including the export market.

8. Rural Finance Specialists (international 4 person-months intermittent; national 8 person months intermittent)

33. Qualifications. A master's degree or equivalent in accounting, banking and finance, financial management, rural credit or equivalent. Experience: Preferably 15 years of experience in providing consulting services in rural finance, especially for saving and credit services to the agriculture sector in developing countries, preferably in environments with similar characteristics to the mountainous areas of Lao PDR. Preferably with at least 10 years' experience with the implementation rural finance development projects funded by ADB, IFAD and/or other development partners:.

34. They will be responsible for:
- (i) Review project documents on rural finance that have been prepared for the Project by other consultants, ADB and/or IFAD staff;
 - (ii) Assist the Project to develop working mechanisms between IFAD and the Government to implement rural finance component to be funded by the Project;
 - (iii) In close coordination with MAF, ADB, IFAD, MOF and other stakeholders, finalize the detailed guidelines to implement saving and lending services (rural finance) component of the Project;
 - (iv) Prepare guidelines to interlink between the VLF and the rural finance services that will be provided by IFAD and develop strategies how the VLF can be interlinked with services from commercial banking financial institutions;
 - (v) Assist IFAD to coordinate with ADB to ensure that the financial services that will be provided under the Project comply with IFAD and ADB procedures and guidelines;
 - (vi) Assist IFAD in preparing selection criteria for financial institutions (FIs) to be selected as the implementing agencies of the projects
 - (vii) Prepare modules and provide financial literacy training for livestock smallholders and enterprises; and assist the selected financial institutions to prepare manuals to select and provide subloans to targeted beneficiaries; and
 - (viii) Work with the Lao Women's Union, MAF, MOF, Bank of Lao and other stakeholders to monitor the progress of the VLF and the additional rural finance services funded by the project.

9. Agricultural Land Use Specialists (international 2 person-months, intermittent; national 6 person-months, intermittent)

35. Qualifications. Tertiary qualifications or equivalent in an agricultural discipline or planning.

36. Experience. At least 15 years of experience in the provision of consulting services in agricultural land use in developing countries, preferably in environments with similar characteristics to the mountainous areas of Lao PDR. Preferably with at least 10 years' experience with the implementation of agricultural development projects funded by ADB, IFAD and/or other development partners.

37. Specific tasks include:
- (i) Assist the PIUs, DIUs and SLPMGs to review land use within the village and livestock production areas;
 - (ii) Based on the reviews, assist the PIUs, DIUs and SLPMGs to develop appropriate land use plans and associated regulations with due regard to all competing land uses within the village and livestock production areas;
 - (iii) Assist the PIUs, DIUs and SLPMGs to consult with village authorities on the draft land use plans and regulations;
 - (iv) Assist the PIUs, DIUs and SLPMGs to secure government approval for the land use plans and regulations;
 - (v) Assist the PIUs, DIUs and SLPMGs to develop and implement a simple monitoring system covering land use; and
 - (vi) Provide on-the-job training to PIUs and DIUs on agricultural land use planning.

10. Agricultural Curricula Development Specialist (international 6 person-months, intermittent)

38. Qualifications. Tertiary qualification or equivalent in livestock science.

39. Experience. At least ten years' experience preparing agricultural curricula and teaching in a formal educational establishment, such as an agricultural college. Experience in preparing short vocational training courses will be an advantage.

40. The Agricultural Curricula Development Specialist will be responsible for upgrading diploma course curricula at the Northern Agriculture and Forestry College (NAFC) with a focus upon commercialization. The Specialist will also prepare short vocational training course modules to be used by NAFC for training workers in the meat industry.

41. Specific tasks for the position include the following:

- (i) Upgrading NAFC animal production diploma courses focusing upon market oriented livestock production, including development of business plans;
- (ii) Preparing a course to produce qualified butchers;
- (iii) Preparing short vocational training modules on:
 - (a) OIE standard animal welfare for slaughter and handling;
 - (b) meat grading and carcass dressing;
 - (c) best practice food safety & environmental hygiene for district wet markets; and
 - (d) preparation of processed meat products.

11. Social/Gender/Ethnic Groups Specialists (6 person-months international and 18 person-months national; both intermittent)

42. Qualifications: The international specialist will have tertiary qualifications from an internationally recognized institution. The national specialist will have similar qualifications from a national educational institution.

43. The international specialist will preferably have 10 years of experience in the South East Asia environment, including experience on gender mainstreaming and capacity building strategy development. At least three years' experience will have been obtained in Lao PDR. The national specialist will preferably have 10 years of experience in related fields on internationally

funded projects. Both experts will be fully experienced with ADB's safeguard policy, especially as it relates to gender and Ethnic Groups.

44. The safeguard requirements of the ADB seek to improve the benefits of the project to the poor and the disadvantaged groups within the target area. This will require specialist expertise in identifying affected groups and in accommodating their interests wherever feasible. The social and gender specialists will be needed to support project initiatives in community development including gender activities. There will be capacity building in these areas that will also form part of the responsibilities of the specialists. Many of the LPMGs participating in the project do have Ethnic Groups among their population either as a majority or a substantial group. The specialists will thus assume responsibility for reviewing construction plans and detailed design and ensuring that in cases where land acquisition is needed, the required safeguard procedures are followed with particular attention paid to those cases where ethnic groups are among their beneficiary population. Specific tasks of the specialists will include the following:

- (i) Undertake gender analysis for the Project area, and update/revise the GAP;
- (ii) Prepare and undertake orientation sessions on poverty, gender issues, GAP, and ethnic group issues and implementation responsibility with key EA/IA staff, provincial authorities;
- (iii) Assist NPMO, PIUs and DIUs in preparing GAP annual plan and implementing provincial GAP, ensuring achieving gender related targets set in DMF and project GAP;
- (iv) Review the Ethnic Group Planning frameworks and other documentation prepared during loan preparation and make adjustments to meet the realities observed on the ground;
- (v) Provide technical gender inputs to different project interventions, including delivering gender sensitization workshop, developing and guiding NPMO/PIUs/DIUs in applying sex-and ethnicity disaggregated M&E system to monitoring GAP and DMF target achievement, and providing gender inputs to stakeholders' capacity building strategy;
- (vi) Working with training coordinators and key training to integrate gender, poverty and ethnic group relevant contents in all AI related training programs and ensure participatory training methodology build in to encourage women and ethnic group active participation;
- (vii) Provide guidance to PIU and DIU in identifying interventions to achieve ethnic group participation in activities, particularly amongst the women;
- (viii) Monitor community involvement in Project implementation, including O&M operation and bring issues or problems to the attention of NPMO and relevant PIUs/DIUs;
- (ix) Document the results of the GAP implementation and make recommendations for changes in order to achieve GAP target, ensuring vulnerable groups, including women, ethnic group can benefit equally as other groups;
- (x) Provide input to all monthly, quarterly, annual and project completion reports.

12. Resettlement Specialists (6 person-months international and 18 person-months national, both intermittent)

45. Qualifications. The specialists will have tertiary qualifications in an appropriate discipline. Experience: The international specialist will have more than 10 years' experience working in the field of land legislation, land acquisition and resettlement for internationally funded development projects, some of which will have been undertaken in Southeast Asia, preferably Lao PDR. The

national specialist will also be an experienced specialist with a minimum of 5 years practical experience. The national specialist will be conversant with the land legislation of Lao PDR and will also have experience in internationally financed development projects where land acquisition was an issue. Both experts will be fully experienced with ADB's safeguard policy, especially as it relates to land acquisition.

46. The specialists will assume responsibility for reviewing construction plans and detailed design and (i) ensuring that either no land acquisition is required and documenting that fact or (ii) ensuring that in the few places where land acquisition is needed that required land acquisition and resettlement procedures are followed with particular attention being paid to those subprojects which include ethnic groups among their beneficiary population. Specific tasks of the specialists will include the following:

- (i) Inspect all proposed subprojects and review the likelihood and scope of any involuntary land acquisition which may be required, especially in areas with significant numbers of Ethnic Groups;
- (ii) Review the land acquisition and resettlement framework and other documentation prepared loan preparation and make adjustments to meet the realities observed on the ground;
- (iii) Document subprojects without land acquisition and resettlement concerns where preparation of a resettlement plan will not be required and justify this fact;
- (iv) In conjunction with NPMO determine the activities where land acquisition will be required, especially those with a significant number of Ethnic Groups and prepare a schedule for resettlement plan preparation, linking it to the schedule for feasibility studies and detailed design;
- (v) Prepare resettlement plans where required in accordance with ADB policies and procedures. Special attention will be paid to those investments/activities with Ethnic Groups and special measures will be designed for them if required;
- (vi) Undertake periodic reviews to ensure that the resettlement plans are being implemented as and procedures are being followed; and
- (vii) Provide input to all monthly, quarterly, annual and project completion reports.

13. Environmental Specialists (international, 6 person-months; national, 18 person-months, both intermittent)

47. Qualifications. The specialist(s) will have appropriate tertiary qualifications in environmental science, natural resource management or a related discipline from a recognized institution.

48. The specialist(s) will have more than eight years of experience working in the field of environmental management, environmental monitoring, for internationally funded development projects, some of which will have been undertaken in Lao PDR or elsewhere in the Mekong sub-region, and will be familiar with the laws of Lao PDR associated with the environment. The specialist(s) shall have experience in internationally funded development projects as an environmentalist and be familiar with ADB's safeguard requirements.

49. The national specialist will also have considerable experience in environmental monitoring and will be familiar with the laws of Lao PDR associated with the environment as well as having had experience in internationally funded development projects, preferably related to infrastructure development, as an environmentalist. Training skills would also be an advantage to the international and national specialists.

50. The main role of the specialists will be to undertake any due diligence required, prepare IEEs and EMPs if required, prepare environmental guidelines for contractors where IEEs are not required, and monitor that the guidelines are being followed during the construction period. Specific tasks of the specialists will include the following:

- (i) Review the project scope, the range of investments/activities and the nature of works planned, paying specific attention to any environmental issues identified during the screening process;
- (ii) Visit each investment/activity location and liaise with the Department of Natural Resources and Environment to ensure that all environmental concerns have been identified and documented;
- (iii) With reference to the results of the field visits, revise and update the environmental documentation and requirements prepared during loan preparation;
- (iv) For investments/activities with no environmental concerns prepare a due diligence report documenting the fact that no IEE will be required;
- (v) Review construction schedules with NPMO, PIUs and DIUs and prepare a schedule for IEE preparation for any investments/activities where one will be required and undertake IEEs according to the schedule;
- (vi) With reference to the documentation prepared during loan preparation, prepare an environmental management plan for the construction phase of the project. The plan will include guidelines for contractors requiring good environmental management practices, the opportunity for input from participation beneficiaries and a grievance mechanism;
- (vii) Periodically review construction activities during the construction phase to ensure compliance with the guidelines;
- (viii) Liaise with the DONRE officers in each province and make spot checks during implementation to ensure that environmental plans are being properly implemented;
- (ix) Assist in the preparation and implementation of training activities with regard to the environmental aspects of the Project;
- (x) Assist with the preparation of the Environment and Social Monitoring System to be prepared for the rural credit component; and
- (xi) Provide input to all monthly, quarterly, annual and project completion reports.

14. Structural and Building Engineer (national, 9 person-months, intermittent)

51. Qualifications: The specialist will have appropriate tertiary qualifications in engineering or a related discipline from a recognized institution.

52. The specialist will have more than 10 years' of experience working in the consulting industry on the design and construction of buildings and structures, with at least 5 years' experience on internationally funded development projects. S/he will be familiar with the building and construction laws and regulations of Lao PDR.

53. Specific tasks include:

- (i) Undertake field visit to ascertain the physical circumstances affecting any proposed building;
- (ii) Work with safeguard specialists to ensure all safeguard provisions are incorporated into designs;
- (iii) Organize and coordinate all UXO work, topographic survey and geotechnical investigations;

- (iv) Undertake all designs of buildings required under the Project;
- (v) Supervise AutoCAD staff preparing the detailed design drawings;
- (vi) Prepare all specifications, bills of quantity, bidding and contract documentation;
- (vii) Assist NPMO in the conduct of all bidding and evaluation procedures, and subsequently the contract award; and
- (viii) Prepare guidelines for construction supervision and reporting.

15. Infrastructure Engineer (national, 18 person-months, intermittent)

54. Qualifications: The specialist will have appropriate tertiary qualifications in engineering or a related discipline from a recognized institution.

55. The specialist will have more than 10 years' of experience working in the consulting industry on the design and construction of civil infrastructure, with at least 5 years' experience on internationally funded development projects. S/he will be familiar with the laws and regulations of Lao PDR.

56. Specific tasks include:

- (i) Undertake field visit to ascertain the physical circumstances affecting any proposed infrastructure;
- (ii) Work with safeguard specialists to ensure all safeguard provisions are incorporated into designs;
- (iii) Organize and coordinate all UXO work, topographic survey and geotechnical investigations;
- (iv) Undertake all designs of infrastructure required under the Project;
- (v) Supervise AutoCAD staff preparing the detailed design drawings;
- (vi) Prepare all specifications, bills of quantity, bidding and contract documentation;
- (vii) Assist NPMO in the conduct of all bidding and evaluation procedures, and subsequently the contract award; and
- (viii) Prepare guidelines for construction supervision and reporting.

16. Construction Supervisors (national, 24 person-months, intermittent)

57. Qualifications: The specialist will have appropriate tertiary qualifications in engineering or a related discipline from a recognized institution.

58. The specialist will have more than 10 years' of experience working in the consulting industry on the construction of civil and building works, with at least 5 years' experience on internationally funded development projects. S/he will be familiar with the laws and regulations of Lao PDR.

59. Specific tasks include:

- (i) Supervise contractors on the construction of all buildings and infrastructure;
- (ii) Develop and implement quality assurance procedures, consistent with the provisions of the drawings, specifications and bills of quantity;
- (iii) Ensure all appropriate materials testing is conducted;
- (iv) Monitor construction work to ensure compliance with safeguard provisions;
- (v) Measure all construction work on a monthly basis and check and process interim payment certificates from the contractors;
- (vi) Prepare all daily and monthly progress reports; and
- (vii) Undertake commissioning of all works and provide certificate of completion.

B. Implementation Arrangements

60. The Project period from loan approval to the loan closing date is seven (7) years. The contractual period for LIC is expected to be five (5) years, from mid-2016 to mid-2021. LIC will be primarily based in NPMO in Vientiane Capital City, which will provide suitable office accommodation for up to ten (10) consultants at any one time. LIC will also be required to periodically spend time in each of the participating provinces, for which each PIU and DIU will provide suitable office accommodation for up to five (5) consultants at any one time.

61. NPMO, PIUs and DIUs will make available to LIC all relevant data, maps and reports, and ensure access to all equipment purchased under the Project at no cost to LIC, including vehicles, office equipment and communication equipment. NPMO, PIUs and DIUs will provide counterpart and support staff to work with LIC, and will arrange necessary introductions to concerned government organizations, ministries and their departments. Each PIU will also provide translators and interpreters to work with LIC.

VI. Reporting

62. LIC will produce the following reports in English:

- (i) An inception report within three (3) months of mobilization;
- (ii) A feasibility report/investment report for each province, covering productive equipment and materials, wet markets and slaughterhouses and including cost estimates and the cost implications of the recommended works;
- (iii) Quarterly progress reports to be submitted to NPMO, ADB and each PIU and DIU;
- (iv) A consolidated annual progress report to be submitted to each NPMO, ADB and each PIU and DIU;
- (v) A draft project completion report to be submitted to NPMO, ADB and each PIU and DIU within three months before the end of the Project; and
- (vi) Submit a final project completion report within one month of receipt of comments from NPMO, ADB and each of the PIUs and DIUs.

63. With the assistance of translators, LIC will facilitate the translation into the Lao language and distribution to provincial and district stakeholders, the following reports:

- (i) The executive summary of each feasibility study/investment report;
- (ii) The executive summary of each initial environmental examination and social impact assessment; and
- (iii) The public information brochure regarding the resettlement plan and/or land acquisition and compensation plan.

VII. Terms of Reference: Financial Audit

64. **The auditor** will follow the guidance prepared by ADB for the terms and definitions used in the TOR and other specific information prepared for the Project. The objective of the audit of the APFS is to enable the auditor to express an independent and objective opinion on: (i) APFS for the year(s)/period(s) then ended, and assess the progress with the overall budget, in accordance with the acceptable accounting standards and conform with ADB procedures and guidelines²⁷; (ii) compliance with laws, regulations and funding agreements that have a direct and material financial effect on the investment; and (iii) eligibility of claims made in Statements of Expenditure (SOEs) and the Imprest Account Statement.

65. **Record keeping and Scope of Works:** The Project's accounting system (books and records) provides the basis for the preparation of the audited APFS. The system was established to record the financial transactions of the Project, and is maintained by related Project's EA/IAs. The auditing shall be carried out in the NPMO and PIUs. Since the Project is implemented in provinces and districts, the auditors may have to travel to those provinces to do audit and randomly choose the areas that will be visited.

66. The APFS to be audited will focus on *Financial statements (FSs)*, prepared by the EA /IAs that should include: (i) A Summary of Sources and Uses of Funds received showing the ADB funds, funds received from other financiers²⁸ and counterpart funds separately; (ii) A summary of expenditures shown under the category of the main project components, the expenditures, the allocation of loan proceeds, the procurement plan²⁹ (as referenced in loan and appraisal documentation) for both current fiscal year and cumulative to date, based on the categories; (iii) Supporting schedules to the FSs which at least include: (a) A reconciliation of the amounts shown as "received by the project from ADB" with those shown as being disbursed by ADB (for direct payment); (b) SOE: listing individual SOE withdrawal applications by specific reference number and amount in each financing agreements; and (c) Imprest- and sub-account(s) statement showing movement and reconciliation with the bank statements; (d) A Summary of the principal accounting policies that have been adopted, and other explanatory notes; and (e) A Management Assertion that the fund of ADB has been expended in accordance with the intended purposes is included as an attachment of the FSs.

A. Audit Phasing³⁰

Month of fiscal year (FY) and report submission

Period	FY start	FY End	Report Submission to ADB	Remarks
1	01/10/2015	30/09/2016	15/03/2017	
2	01/10/2016	30/09/2017	15/03/2018	
3	01/10/2017	30/09/2018	15/03/2019	
4	01/10/2018	30/09/2019	15/03/2020	
5	01/10/2019	30/09/2020	15/03/2021	
6	01/10/2020	30/09/2021	15/03/2022	combined

²⁷ Including ADB's Project Administration Instruction (PAI 5.07 no. 25) and the loan agreement which require 4 opinions: use of loan proceeds, compliance with financial covenants, use of imprest fund procedure which includes imprest accounts and sub-accounts and use of statement of expenditures where applicable.

²⁸ For projects that receive funding from other sources, the annual project financial statements should include all sources of funds not only counterpart funds. (PAI No. 5.07 no. 18)

²⁹ PAI No. 5.07 requires that the APFS should include comparative figures for the preceding reporting year and cumulative figures from the loan effectiveness date to the end of the current reporting year.

³⁰ Note that audit periods for one auditor are allowed for all fiscal years of the Project.

Period	FY start	FY End	Report Submission to ADB	Remarks
7	01/10/2021	xxx ³¹	15/03/2022	

67. **Contract and Procurement Mode.** Although the auditor will be contracted for the audits phases mentioned above (maximum three years per contract), the auditor should submit the financial proposal in US\$ in a format indicating the amount for each financial year independently. If performance is not satisfactory in one year then the client will not be bound for subsequent year’s audits. If the performance is satisfactory, the auditor may participate in the bidding process for the next fiscal years, but the total assignment should be up to 6 years for one project. The least cost based selection ³² is the procurement method agreed for auditor recruitment. The contract will be on lump sum in accordance with annual based performance (will be reviewed on annual basis).³³.

68. **Applicable auditing standards.** Lao Standard of Auditing (LSA) is the “Agreed project auditing standards” with regard to the APFS preparation. The audit will be carried out in accordance with the following aspects:

- (i) the auditor will plan and conduct the audit in accordance with a risk based framework with a detailed audit work program which is sufficiently extensive in its coverage of the project’s FSs to support the opinion given.
- (ii) the auditor will gather evidence and prepare working papers to properly document the evidence seen in support of the opinion given, sufficient audit evidence will be gathered to substantiate in all material respects the accuracy of the information contained in supporting schedules attached to the FSs.
- (iii) the auditor will review and evaluate the system of internal controls in effect, including internal audit procedures, to determine the degree of reliance that may be placed upon them and to determine the extent of testing of actual transactions needed to assure the auditor of the accuracy of the accounting records,
- (iv) the audit coverage will consider the risk of material misstatement(s) as a result of fraud or error. The audit program should include procedures that are designed to provide reasonable assurance that material misstatements (if any) are detected.

69. The auditor should obtain an understanding of the design and operation of internal control over compliance with requirements that could have a direct and material financial effect on the funding agreements. The auditor’s work in this area is in addition to the consideration of internal control over financial reporting that is part of the FS audit. Specifically, the auditor must obtain an understanding of the internal control over compliance that is sufficient to plan the audit to support a low assessment level of control risk for donor program. The auditor needs to test the internal control unless the internal control is likely to be ineffective in preventing or detecting noncompliance. The auditor shall also review the following:

- (i) Whether ADB financing (and all external financing where ADB is not the only financier) has been used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which the financing was provided, as detailed in the supporting documents;

³¹ Till end of financial transaction if no project extension.
³² Please discuss with COSO to decide the procurement mode under this contract. COSO will decide based on the total cost, complexity and other factors .
³³ Full payment after the audit report is acceptable to ADB and the Government.

- (ii) Whether counterpart funds have been provided and used in accordance with the relevant financing agreements, with due attention to economy and efficiency, and only for the purposes for which they were provided;
- (iii) Whether goods, works and services financed have been procured in accordance with the relevant financing agreements including specific provisions of the [ADB Procurement Policies and Procedures](#). Fixed assets procured by all financiers shall also be reviewed;
- (iv) Whether the expenditures submitted to ADB are eligible for financing and all necessary supporting documents, records, and accounts in support of credit withdrawals have been adequately maintained with clear linkages between the books of account and reports presented to ADB;
- (v) Whether the funds disbursed through SOEs have been utilized for the purposes defined in the funding agreements. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor;
- (vi) Whether the imprest account and sub-accounts, if used, have been maintained in accordance with the provisions of the relevant financing agreements and funds disbursed out of the account were used only for the purpose intended in the financing agreement and other supporting documents.

70. **Accounting Policies and Changes.** The auditor should comment on the project's accounting policies, and confirm the extent to which the agreed project accounting policies have been applied. In particular, the auditor should note the impact on the APFS arising from any material deviations from the agreed accounting standards. The auditor should also comment on any accounting policy changes, either during a financial year, or from one year to another.

71. **Compliance with laws, regulations and funding agreements:** The auditor should be aware of the unique characteristics of the compliance auditing environment. Governments and not-for-profit organizations differ from commercial enterprises in that they may be subject to diverse compliance requirements including its compliance with financial covenants and financial assurances. Management is responsible for ensuring compliance with relevant laws, regulation and funding agreements. That responsibility encompasses the identification of applicable laws, regulations and funding agreements and the establishment of internal control designed to provide reasonable assurance that the auditee complies with those laws, regulations and funding agreements.

72. In addition to the opinion on the FSs, the auditor should provide an opinion on whether the auditee complied with laws, regulations and provision of contracts and funding agreements that have a direct and material financial effect on the project investments. Where applicable, the auditor should prepare a report with separate schedule of findings and questioned costs. The scope of the audit should also refer to compliance with the Procurement procedures as set out in the funding agreements.

73. **Responsibility to Consider Fraud in an Audit:** The primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and with management. It is important that management, with the oversight of those charged with governance, place a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment. It is the responsibility of those charged with governance of the entity to ensure, through oversight of management, that the entity establishes and maintains internal control to provide reasonable assurance with regard to

reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws, regulations and funding agreements.

74. **Independence of the Auditor.** The auditor must be completely impartial and independent from all aspects of management or financial interests in the EA/IA being audited. The auditor should not, during the period covered by the audit nor during the undertaking of the audit, be employed by, serve as director for, or have any financial or close business relationships with any senior participant in the management of the EA/IA. It may be appropriate to remind an auditor of any existing statutory requirements relating to independence and to require an auditor to disclose any relationship that might possibly compromise his/her independence.

75. In addition management is responsible for establishing a control environment and maintaining policies and procedures to assist in achieving the objectives of ensuring the orderly and efficient conduct of the entity's business. Therefore, in order to ensure that those assertions are addressed in the audit of the entity, it is important that International Standard on Auditing (ISA 240) "The Auditor's Responsibility to consider Fraud in an Audit of Financial Statements" be followed. All auditors are required to follow the ISA 240.

B. Audit Report³⁴

76. **Audit Report:** The auditor will issue the auditor report on the APFS³⁵. The audit report on the APFS should include the following:

- (i) the audit report will state the purpose of the report and its intended use,
- (ii) the audit report will state which/whose generally accepted accounting standards have been applied and indicate the effect of any deviations from those standards,
- (iii) the audit report will state that the audit was conducted in accordance with Lao Standards on Auditing (LSA),
- (iv) the audit opinion will cover the current period and compare the achievement with the overall periods,
- (v) the audit opinion will state whether or not the FSs presents fairly in accordance with the adopted accounting policies for the specified program /project and that the funds were utilized for the purposes defined by the funding agreement,
- (vi) the audit opinion will cover in all material respects the supporting schedules, including those noted above.
- (vii) the auditor should provide an opinion on whether the auditee complied with applicable laws, regulations and the procurement procedures and other provisions of the funding agreements that have a direct and material financial effect on the entity's financial report (audit report on the project FS only).
- (viii) Clarify that the audit report has covered all the project's participating provinces.

C. Management Letter³⁶

77. In addition to the audit report, the auditor will prepare a management letter, in which the auditor will:

³⁴ Template and samples of audit reports will be provided.

³⁵ This is only for APFS. The audit report on the entity Financial statements is prepared separately

³⁶ Template and samples of management letters will be provided.

- (i) Give comments and observations on the accounting records, systems and controls that were examined during the course of the audit;
- (ii) Identify specific deficiencies or areas of weakness in the accounting and internal control systems that were identified during the audit, and make recommendations for their improvement;
- (iii) Also include responses from the EA and IAs to the issues highlighted by the auditor report on the degree of compliance with each of the financial covenants in the financing agreement and give comments, if any, on internal and external matters affecting such compliance; and provide recommendations for improvement;
- (iv) Communicate matters that have come to the auditor's attention during the audit which might have a significant impact on the implementation of the project;
- (v) Give comments on the extent to which outstanding issues/qualification issues have been addressed;
- (vi) Give comments on the status of significant matters raised in previous management letters; and on previous audits' recommendations that have not been satisfactorily implemented;
- (vii) Give comments on significant matters that the auditor considers should be brought to ADB's attention and any other matters that the auditor considers pertinent, including ineligible expenditures;
- (viii) Include responses from the EA and IAs to the issues highlighted by the auditor;
- (ix) Provide practical recommendations on the steps that could be taken to become materially compliant with the agreed project accounting policies (see Terms and Definitions), together with a time frame for making these changes;
- (x) The management letter should address as a minimum the following:(a) the assessment of the internal controls system(s) in providing project management with useful and timely information for corrective action: (b) the general effectiveness of the internal controls system in asset management and maintenance; (c) the assessment of the internal control system in ensuring compliance with laws, regulations and financing agreements; and (d) any identified weaknesses in the internal control environment, including the auditor's assessment of the project impact and recommendations for remedial action; and
- (xi) Any other matters that the auditor considers should be brought to the attention of the project's management.

D. Available Information

78. The auditor should have access to all legal documents, correspondences, and any other information associated with the project and deemed necessary by the auditor. The auditor will also obtain confirmation of amounts disbursed and outstanding at ADB. Available information should include copies of the relevant project appraisal document; financing agreement; financial management assessment reports; supervision mission reports and implementation status reports; and other supporting documents.

79. The auditor shall have the right of access to banks and depositories, consultants, contractors and other persons or firms engaged by the project. In case access has been restricted, the auditor must note this in the management letter.

80. ADB can request access to the auditors unedited audit working papers. If necessary, the audit firm can be requested to participate in a wrap-up session for the Ministry of Finance

(MOF), the EA/IAs and ADB to share common findings across projects being audited and provide recommendations for addressing bottlenecks in preparation for the next audit.

E. Auditor Qualification

81. Requirements on the Qualification of the Auditing Company and Auditors are as follows:

1. For Auditing Company

82. The auditor must be authorized to practice in Viet Nam and be capable of applying the agreed auditing standards.

83. The detailed requirements on the qualification of the auditing company are:

- (i) Be a legal entity with business license granted by the competent authority;
- (ii) Be included in the 2012 Certified Public Auditor List acceptable to Lao Association of Certified Public Accountants, if any;
- (iii) The auditor should have adequate staff, with appropriate professional qualifications and suitable experience in finance/financial management in Official Development Assistance (ODA) funded projects or Government projects/ programs, including experience in auditing the EFS comparable in nature, size and complexity to the entity whose audit they are to undertake; and
- (iv) The audit firm must notify and get written endorsement of the EA every time the auditor substitutes a staff member assigned for the project audit.

2. For Individuals

84. The general requirements on the Qualification of Individuals are as follows:

- (i) The assignment will include xx international and xx national experts³⁷;
- (ii) Auditors shall hold relevant professional qualifications with in-depth experience in conducting audits of project FSs. They should be properly granted with certified auditor certificate by the Ministry of Finance (MOF) or legal international auditor certificate. For particular proposed consultants as auditors as mentioned below, at least 50% personnel must have certificates of auditor granted by MOF or relevant international audit certificates.
- (iii) Auditors should hold a fair opinion on, and be independent of, control of the submitting entity and the employer by whom they were appointed.
- (iv) The auditor should follow procedures and methodology that conform to Lao Standards on Auditing (LSA).

85. The required qualifications and competence of the key national experts are summarized below:

- (i) **Audit Director.** A university graduate (preferably with a post-graduate degree) in accounting/finance, certified auditor certificate by the MOF and international certificate (ACCA or other recognized international accounting/ auditing certificate), at least 15 years or above experience working in auditing services with 4-year experience in management of auditing teams. The actual working years in auditing must be 8 years or above since being granted with Vietnamese

³⁷ Please specify the reasons if the international expert is excluded. The figures for person-months are only indicatives since the firm will be paid on lump sum based performance.

- or international auditor certificate. Should have worked as Audit Director for at least 3 audit contracts on ADB, the World Bank or other international donors funded projects. Fluent English is compulsory;
- (ii) **Audit senior/ Team leader.** A university graduate, preferably with a post-graduate degree in Accounting/finance, certified auditor certificate by the MOF, preferably to whom holding international certificate (ACCA or other recognized international accounting/auditing certificate), at least 8 years or above experience working in auditing services. The actual working years in auditing must be 5 years or above since being granted with Lao or international auditor certificate; should have worked as Audit Senior/Team Leader for at least 3 audit contracts on ADB, the World Bank or other international donors funded projects (experience in irrigation would be preferable). Fluent English is compulsory.
- (iii) **Audit assistant/ Auditor.** A university graduate (preferably with a post – graduate degree) in Accounting/finance, preferably holding Lao auditor certificate certified by the MOF, 5 years experience or above working in auditing services. Should have worked as Auditor for 3 audit contracts on ADB's, the World Bank's or other international donors' funded projects, experience in irrigation and other rural infrastructure would be preferable). English proficiency would be preferable.

86. Outline Responsibilities of proposed position:

- (i) Audit Director
- (a) Direct all auditing activities from planning; personnel arrangement; work assignment, audit procedures performance, resolving problems arising during the audit process; synthesizing audit data, preparing audited APFS;
 - (b) Be responsible for professional guidance for the entire contract audit and management comments during the audit period;
 - (c) Manage, control and review quality of each group at each stage of the audit process; unify the common issues related to audit work in groups;
 - (d) Be the point of contact with the PMU and resolve the rising issues related to the audit contract.
- (ii) Audit Senior/Team leader
- (a) Be in charge of audit team to perform auditing activities in a number of audited agencies as planned;
 - (b) Prepare the working plan for the audit team and arrange the audit groups to implement each task;
 - (c) Synthesize data and summarize management issues in the audited agencies;
 - (d) Inspect and review the minutes of audit of each group to provide recommendations on the financial management, project activities management in the audited agencies, and prepare the draft of the audit report.
- (iii) Auditor
- (a) Implement the audit program, audit assigned sections in the agencies, be responsible for the data and issues related to the auditing activities.
 - (b) Support the preparation of the audit report; draft the minutes of audit; report to the Team leader regarding the issues related to the audit in the agencies.

87. In order to meet with the working plan and the scheduled report delivery as requested, the auditing company shall include one Team Leader and about xx auditors and other positions having suitable qualification and experience. For each audit period, the following are the indicative person-months for each position in the audit team for each fiscal year: Audit Director: xx person-months; Team Leader: xx person-months; and Auditor: xx person-month each. The person-months are only estimates since the audit firm will be paid not on person-months spent, but will be remunerated on lump sum based performance for each annual package.

88. The auditing company should provide to the Government project management unit the following: working schedule, management and execution method together with allocated man power to implement the auditing activities to ensure good contract performance.

89. **Reporting Requirements.** The audited financial statements including the report should be received by ADB not later than six months after the end of the fiscal year/period to which the audit refers and should be prepared in English in 08 hard copies.

90. Reporting Relationships

- (a) The audit services will be contracted by NPMO, and the Auditor shall report to: the Project Director and Chief Accountant
- (b) The Auditor should maintain and file the work papers and provide them to the Government and/or ADB when requested.

VIII. Service Contract: Provision of Quality Compliance and Certification Services

91. Qualifications. The company will be accredited by an international accreditation body for the provision of quality compliance inspection and certification services.

92. Experience. The company will have experience of providing quality compliance and certification services for the agriculture sector in the SE Asian region, preferably Lao PDR.

93. The company will provide on-going services over a multi-year period to lead the Project certification activities. This will include carrying out compliance audits, training to meet certification requirements, certification and continuing surveillance audits.

94. Specific tasks of the service contract include the following:

- (i) Providing GAP certification for up to 50 livestock farmer groups (cattle/buffalo, pigs, goats).
- (ii) Identifying the most appropriate food safety certification for two slaughterhouses to be established by the Project i.e. GMP, HACCP, ISO 22000 and providing certification for the two slaughterhouses.
- (iii) Providing HACCP certification for two wet markets to be upgraded by the Project.
- (iv) Identifying the most appropriate food safety certification for a meat processing facility to be established for Pakseung Agricultural College by the Project i.e. GMP, HACCP, ISO 22000 and providing certification for the meat processing facility.

APPENDIX 2: COMPOSITION OF STEERING COMMITTEES

I.	National Project Steering Committee (NSC)				
	No.	Name and Surname	Position	Organizations	NSC Positions
	1		Vice Minister	MAF	Chair
	2		Vice Provincial Governor of Province	Provincial Governor Office	Deputy Chair
	3		Vice Provincial Governor of Province	Provincial Governor Office	Deputy Chair
	4		Vice Provincial Governor of Province	Provincial Governor Office	Deputy Chair
	5		Vice Provincial Governor of Province	Provincial Governor Office	Deputy Chair
	6		Director General of Dept. External Finance	MOF	Member
	7		Director General of DIC	MPI	Member
	8		Director General of DTD	MOIC	Member
	9		Director General of DIE	MOIC	Member
	10		Director General of DFD	MOH	Member
	11		Director General of DESIA	MONRE	Member
	12		Director General of DOPC	MAF	Member
	13		Director General of DAEC	MAF	Member
	14		Director General of DLF	MAF	Member
	15		Director General of NAFRI	MAF	Member
	16		Director General of NAFC	MAF	Member

II.	Provincial Project Steering Committee (PPSC)					
		<i>Name and Surname</i>	<i>Position</i>	<i>Organizations</i>	<i>PCU Positions</i>	
	1		Vice Governor	Provinces	Chair	
	2		Vice District Governor	Districts	Deputy Chair	
	5			PAFO		
	6			PFO		
	7			PPIO		
	8			PICO		
	9			PHO		
	10			PONRE		

MAF= Ministry of Agriculture and Forestry; MOF= Ministry of Finance; MPI=Ministry of Planning and Investment; MOIC=Ministry of Industry and Commerce; MOH=Ministry of Health; MONRE= Ministry of Natural Resources and Environment;
PAFO= Provincial Agriculture and Forestry Office; Provincial Finance Office; PPIO=Provincial of Planning and Investment Office; Provincial Health Office; Provincial Natural Resources and Environment Office