

Technical Assistance

Project Number: 40105 September 2006

Lao People's Democratic Republic: Agriculture and Natural Resources Sector Needs Assessment

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 19 July 2006)

Currency Unit	—	kip (KN)
KN1.00	=	\$0.000098
\$1.00	=	KN10,147.50

ABBREVIATIONS

ADB	_	Asian Development Bank
ADTA	—	advisory technical assistance
ANR	_	agriculture and natural resources
GMS	_	Greater Mekong Subregion
Lao PDR	_	Lao People's Democratic Republic
MAF	_	Ministry of Agriculture and Forestry
ТА	_	technical assistance

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	_	General intervention
Sector	—	Agriculture and natural resources
Subsector	_	Agriculture sector development
Themes	—	Sustainable economic growth, capacity development
Subthemes	_	Promoting economic efficiency and enabling markets, institutional development

NOTE

In this report, "\$" refers to US dollars.

Vice President Director General Director	C. Lawrence Greenwood, Jr., Operations Group 2 R. M. Nag, South East Asia Department (SERD) U. S. Malik, Agriculture, Environment, and Natural Resources Division, SERD
Team leader	A. Tayyab, Senior Natural Resource Management Specialist, SERD

I. INTRODUCTION

1. The findings of the sector assistance program evaluation of the agriculture sector in 2005 highlighted the need to base the engagements of the Asian Development Bank (ADB) in the sector on a robust analysis of the most efficient use of ADB resources in promoting national agriculture and rural development priorities. It further brought out the necessity of building on the success of past program loans by focusing on the broader economic and policy constraints on the performance of the sector, while not ignoring the physical investments required.

2. To apply these recommendations in its ongoing preparation of the country strategy and program for the Lao People's Democratic Republic (Lao PDR) for 2007–2011, ADB held consultations with the Government of the Lao PDR on ADB's future engagement in the agriculture and natural resources (ANR) sector. The Government and ADB agreed that an advisory technical assistance (ADTA) would be prepared and policy tools and investment opportunities would be identified to help catalyze and contribute to sector-wide outcomes.¹ The two parties also agreed that a meaningful outcome would require extensive consultations with key stakeholders, including provincial and national government institutions, and private sector representatives. The ADTA should also take into account regional differences in resources, constraints, requirements, and priorities. The concept paper for the ADTA was approved on 22 June 2006.

II. ISSUES

3. The ANR sector of Lao PDR has a dominant role in the country, accounting for about half of the gross domestic product and 80% of employment. In addition, most of the poor in the country depend on ANR for their livelihood. In all, about 620,000 households depend on agriculture for their livelihood; of these, about 75% still engage in subsistence farming. Women are active in agriculture and form 60% of its labor force. The sector comprises diverse subsectors ranging from crop production to livestock, fisheries, forestry, water resources, and non-timber forest products. Its production systems, in a variety of agro-ecological zones, are also diverse, ranging from rainfed and irrigated rice-based farming systems in the Mekong River valley plains to shifting cultivation in upland areas and cash-crop and livestock production in upland plateau areas. Agriculture is still largely rice-based subsistence farming, and there have been no major changes in the last two decades in product diversification, value addition, and market orientation. Rice cultivation is the single most prevalent economic activity and takes place on 72% of the total cultivated area. Rice is the staple food, accounting for about 67% of daily calorie intake of most of the rural population. Recent dramatic increases in rice production, from 1.3 million tons in 1993 to 2.7 million tons in 2003 (due in part to an expansion in irrigated area, as well as the adoption of improved varieties and improved on-farm management practices), have helped reduce the incidence of rural poverty in recent years. The agriculture sector is expected to contribute even more significantly in the future to national economic growth, income, and employment for the bulk of the country's population. The challenge is how to promote the growth of the sector and to ensure that this growth benefits the majority of the poor in the rural areas.

¹ The TA first appeared in ADB *Business Opportunities* on 8 June 2006.

4. Future growth faces manifold challenges. Although Lao PDR has a large land area, highquality agricultural land is limited: less than 5% of the 236,800 km² total is arable land and permanent cropland. Only 6% of the land has slopes below 20%. The suitable land for agriculture is further reduced by the presence of unexploded ordnance, which still causes injury and loss of life and stifles economic development. Moreover, much of the rural population, outside the Mekong River valley flood plains, is scattered over sparsely inhabited mountain areas hardly reached by new technologies. The capacity for increased production is further constrained by limited irrigation facilities and potential in the lowland areas, limited access to inputs and credit, poor transport infrastructure, and low skills among farmers, particularly women and upland ethnic communities. However, despite all of these constraints, agricultural production has considerable potential for expansion. Growth in the rural economy, particularly from agricultural activities, is driven largely by better opportunities in the Greater Mekong Subregion (GMS) countries.

5. The overall strategy of the Government is to develop the agriculture sector as well as the nonagricultural sectors in the rural areas to create employment, increase incomes, and restructure rural economies. There are plans to develop synergies between agriculture and emerging rural industries to increase the value of agricultural produce, especially for export. The Ministry of Agriculture and Forestry (MAF) has initiated a review of programs and strategies in irrigation, forestry, and commercial agriculture by a joint funding agency–Government working group, with the objective of developing common guidelines for future investments and support services.

6. Growth in agriculture production is seen as a major means of promoting overall economic growth, and thus reducing poverty. While the domestic market for agricultural produce is limited, the GMS and Association of Southeast Asian Nations regional framework offers strong incentives for Lao PDR to expand opportunities in the ANR sector. Agricultural production in several locations has the potential for diversification, to serve such external markets. It is, however, severely constrained by regulatory uncertainty, as coordination and enforcement must be effective at different levels. Developing the demand side of agriculture in domestic and foreign markets will require a facilitating business environment. These and other constraints, including access to financial services, and lack of opportunities for capacity development of the public sector are affecting competitiveness and have limited the potential of the ANR sector. Overcoming these difficulties will require an in-depth understanding of measures for institutionalizing policy and regulatory reforms at the national and subnational levels. Given this analysis, a results-oriented agricultural investment framework with welldefined high-impact policy tools will need to be developed to promote competitive agriculture in Lao PDR.

III. THE TECHNICAL ASSISTANCE

A. Impact and Output

7. The ADTA will facilitate the transition of the ANR sector in Lao PDR to a market-based economy. The expected outcome is an integrated policy and investment framework focused on well-defined, high-impact interventions and prioritized investment opportunities to intensify, diversify, and commercialize agriculture wherever feasible. To this end, the technical assistance (TA) will (i) assess the current situation of agriculture and rural development in the country, (ii) assess past and ongoing interventions supported by ADB and other funding agencies, and (iii) consult with national and local stakeholders on where and how best to support interventions

in the future, and determine where ADB can invest for maximum impact. In addition, the TA will identify the enabling tools for institutionalizing the policy and institutional framework for economically and socially viable investments, thereby providing the program framework for an integrated rural investment strategy.

After the ADTA, a planned subsequent project preparatory TA will package the program 8. framework together with investment activities as the basis for an investment loan. To set the stage for this, the ADTA will (i) review past studies on the agriculture and rural development sectors and document recent developments; (ii) prioritize major issues, challenges, and constraints; (iii) hold national and provincial consultations on the potentials for and constraints on agriculture sector growth; (iv) identify constraints on the enabling environment for future agriculture sector growth and identify the reasons for and the sources of such constraints, as well as measures that could be taken to overcome them; (v) identify critical capacity-building requirements at both national and provincial levels that must be addressed; (vi) identify the physical constraints, which can be addressed through physical investment, such as the provision of infrastructure, or capacity development; (vii) prioritize policy, institutional, or project interventions that could facilitate growth and diversification in the sector; and (viii) prepare an integrated policy and institutional framework for the agriculture sector. In identifying the drivers for sustained agriculture and rural growth, special attention will be placed on regional challenges, the role of the private sector, the capabilities of the public sector (especially in infrastructure, agriculture support services, and regulatory framework), regional differences in investment priorities, and opportunities to leverage ADB resources for broad-based and widespread impact, either throughout the country or throughout the region. In analyzing such options, the aim will be to harmonize these investments with those of development partners in the sector. The TA, following extensive consultations, will produce a full discussion of proposed policies and investments, resource requirements, key milestones, and institutional processes required over the next 5 to 10 years. See Appendix 1 for further details.

B. Methodology and Key Activities

The ADTA will be implemented in two phases with the full participation of the national 9. and provincial governments as well as other stakeholders at the national and provincial levels. Phase 1 will be undertaken by a core team consisting of ADB representatives, consultants, and key line agency personnel. Activities to be undertaken will include (i) a thorough review and analysis of past studies and strategies as well as the results of past investments in light of the findings of the sector assistance program evaluation; (ii) rapid assessments and field surveys in key agroecological regions to identify opportunities for agriculture sector growth as well as to determine and assess constraints for farmer-producers; (iii) observations and discussions on agriculture and rural development strategy with selected provincial governments; (iv) regional participatory planning workshops with provincial governments; (v) the preparation of a comprehensive capacity development and skills transfer plan (for both national and provincial counterparts); and (vi) the identification of opportunities, in summary form, and ways to take advantage of those opportunities through a concerted effort to find solutions to major constraints on crop diversification, market orientation, and value addition and thus facilitate rural growth. The consultants are also expected to interact with traders and processors in the region, including those in Thailand, Viet Nam, and Yunnan Province in southern People's Republic of China. The principal recommendations from phase 1 will be presented in a national workshop before being endorsed by the Government and ADB.

10. Within 2 months of the completion of phase 1, the activities under phase 2 will begin with the recruitment of the team leader. In this phase the policy and institutional framework required to accelerate rural growth through agricultural diversification and commercialization will be examined. National and provincial mandates and policies in the agriculture sector and associated sectors will be analyzed, and any distortions, in theory as well as in practice, will be identified. The issues to be addressed will include, among others: (i) nontariff restrictions on the free movement of agriculture produce, including non-timber forest products; (ii) emerging issues related to commercial agriculture and the associated gender and ethnically differentiated issues related to access to land and natural resources; (iii) the financing of the operation and maintenance of rural infrastructure, and (iv) the need to balance the development of crops introduced on a large scale recently, such as rubber, sugarcane, corn, and soybeans. The institutional requirements for sustained support for commercial agriculture will also be assessed and recommendations made to develop and strengthen capacity, especially in the provinces.

11. TA team members, in consultation with national and provincial counterparts, will carry out an initial review of key areas of concern associated with the increased focus on agricultural diversification and commercialization. These key concerns will include the need (i) to ensure equitable social impact, including the highest possible positive impact on women and ethnic groups; and (ii) to avoid adverse effects on the environment and to promote sound ecological practices where possible. A final workshop or conference will also be held to disseminate the results of the study and to plan the consolidation and further processing of an integrated framework with identified areas where ADB and other development partners can contribute. The possible contributions will include interventions to support capacity development, and policy and institutional measures considered critical in sustaining a higher level of investments in the sector. The proposed implementation schedule is in Appendix 2.

C. Cost and Financing

12. The TA will cost about \$890,000 equivalent. ADB will finance \$750,000 equivalent on a grant basis from its TA funding program. The national and provincial governments are expected to provide in-kind contribution of \$140,000 equivalent for logistic support. See Appendix 3 for the detailed cost estimates.

D. Implementation Arrangements

MAF will be the Executing Agency for the TA. Key counterparts within MAF are likely to 13. include the Permanent Secretary, and relevant staff at the Information Centre and at the International Cooperation and Investment Division. The TA will be implemented over 12 months from the date of TA approval and concurrence of the Government, and will be completed by 31 December 2007. An interministerial working group will be established to ensure the full participation of all relevant ministries in the project design. The working group will organize a series of discussions with the representatives from the ministries of finance, commerce, communications and transport, and foreign affairs; commercial banks; the Lao Women's Union; and representatives of farming communities and selected private sector groups. The provinces, and other relevant stakeholders including representatives from private sector organizations, the Lao National Commission for the Advancement of Women, the Lao National Front for Reconstruction, and farmer-producer marketing groups and contract farming agribusinesses, will be invited as needed. The national working group will help identify key counterpart staff in the provincial agriculture and forestry offices and will facilitate dialogue with the provinces by establishing provincial working groups. The provincial and district institutions concerned, the farming community, women and ethnic communities, and the private sector will be represented in these provincial working groups. These groups will meet at least once a quarter during the implementation period, and will organize focus group discussions with small farmers from different farming systems, including upland ethnic groups, and women engaged in agriculture. The provincial working groups will act as a sounding board for the proposals to be prepared under the ADTA. They will actively participate in the formulation of all proposals to be prepared under each of the two phases.

14. Phase 1 will be undertaken over a 4-month period by a team consisting of two international experts (a rural sector economist and an institutions specialist), and three national experts (a cropping systems and marketing specialist, a non-timber forest products marketing specialist, and a gender development specialist). Start-up and documentary review will be undertaken during the first 4 weeks of the study. The following month will be dedicated to field trips and visits to selected provincial governments. These will be followed by a series of regional workshops over 6 weeks. In the final month, the consultants will (i) analyze and synthesize the study findings, (ii) outline the scope of an integrated policy, and (iii) draw up an investment framework.

15. It is not possible at this stage to predict the specific needs for consulting services in phase 2. Those needs will depend on the results of phase 1, which must be carefully managed and endorsed by the national and provincial governments. Generally speaking, however, the team of consultants for phase 2 is expected to consist of specialists in (i) agriculture development policy and institutions; (ii) rural finance and infrastructure; and (iii) agricultural marketing, processing, and business development. Supplemental expertise in environmental impact assessment and social impact assessment will also be provided. The total international input will be about 22 person-months, and national consultants are expected to be recruited for 20 person-months. The team for phase 1 will be led by an internationally experienced rural sector economist with extensive knowledge of the agriculture and rural development issues facing Lao PDR. The terms of reference of the consultants are outlined in Appendix 4.

16. The consultants will be recruited in two packages (phase 1 and phase 2) according to ADB's *Guidelines on the Use of Consultants*. Since each package will be relatively small, companies are not likely to be interested in bidding for the individual packages. Individual international and national consultants will thus be recruited.

IV. THE PRESIDENT'S DECISION

17. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$750,000 on a grant basis to the Government of the Lao People's Democratic Republic for Agriculture and Natural Resources Sector Needs Assessment, and hereby reports this action to the Board.

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Rural economic growth and market integration	Increased agriculture production and value added, increased rural income, reduced rural poverty, and narrowed regional inequality and rural-urban gap	National and provincial government statistics Reports of Asian Development Bank (ADB), World Bank, and other funding agencies	 Assumptions Investment priorities and allocation of resources are consistent with strategies Government is willing and able to improve provincial governance structure to implement investments efficiently and effectively ADB remains consistent in its lending strategy throughout the country strategy program period and is able to provide enough funds to make a meaningful impact
Outcome Investment priorities identified for regions, provinces, and the country	Investment programming fully harmonized with that of all development	National and provincial statistics Joint funding agency–	 Assumptions Investment priorities are consistent with those of national Government Recommendations on
Key policies and institutional measures formulated to improve governance of agriculture and rural development in the provinces	partners Implementation of spatially differentiated package of policy measures for investment	Government reviews Private sector–led assessments	 policy and institutional improvements are acceptable to all key government stakeholders Recommended policy and institutional framework package is realistic and implementable within the
Relevant and valid investment undertaken in agriculture sector with maximum impact	Common indicators established for progressive improvement in the enabling environment		program period and within the skills level of implementers Risks
	(level of nontariff barriers, time taken in business licensing, access to technical and financial services disaggregated by size of landholding, gender, and ethnicity)		 Overly complex policy and institutional package is prepared Government commitment to support investment priorities and required changes in policies is lacking
Enabling environment	Public-private partnerships established for value		Physical investment components are implemented inefficiently

DESIGN AND MONITORING FRAMEWORK

Design	Performance	Data Sources/Reporting	Assumptions
Summary	Targets/Indicators	Mechanisms	and Risks
for agriculture growth improved through reorientation of sector institutions Outputs	addition, and innovative research and extension services undertaken (level of investments in processing, number of contracts for sourcing products and raw materials)		Assumptions
Agriculture and rural	Successful completion	Consultants' reports	 Study design and work
development priorities	of provincial workshops		 Study design and work plan are adequate
of provinces and national Government	as scheduled	ADB review missions	 There is cooperation in data and information
confirmed	Preparation and	Workshop proceedings	gathering
Policy and regulatory measures for facilitating	acceptance of phase 1 report as scheduled		Provinces cooperate in and take ownership of review and analysis of
an enabling	Preparation of package		current conditions
environment for	of policy and		Government
agriculture growth established	institutional measures at the end of phase 2 as scheduled		coordination between agencies and between the provincial and
Optimum points of			federal levels is effective
intervention for ADB			All stakeholders
policy assistance and investment identified			participate fully in consultative process
Overall scope of policy and investments			Risks
identified			Stakeholders do not take full ownership
Program elements (policy and institutional			Coordination between government agencies is
framework) prepared			ineffectiveConsultative process is
			weak or incomplete
			Policy and investment package is not endorsed humber of the answinger.
Activities with Mileston			by the provinces Inputs \$'000
1.1 Mobilization of co			Inputs \$'000
1.2 Field trips to sele			ADB [750.0]
1.3 Regional and pro	ovincial workshops		Government [140.0]
	and investment priorities		
1.5 Preparation of th	e policy and investment pa	скаде	

IMPLEMENTATION SCHEDULE

Activity		1		2	2			3		4				5				6			7				8			9			10			11				12			
Phase 1	1 2	3 4	4 1	2	3	4 ⁻	1 2	3	4	1	2	3	4	1	2	3 4	4 1	1 2	3	4	1	2	3	4 1	2	3	4	1	2	3	4 1	2	3	4	1	2	3	4	1 2	2 3	3
Start Up, Documentary Review and Initial Strategic Discussions																																									
Field Trips to Selected Provinces																																									
Inception Report Background Papers on Opportunities/Constraints																																-	-		\vdash		_	_	+	+	+
Participatory Problem Analysis Workshops																																							Ţ	Ţ	Ţ
Summarize Results of Workshops and Formulate Draft Recommendations on an Integrated Policy and Investment Framework																																									
Consultations with the Government, Provinces, and Development Partners on Suggested Strategic Approach and Investment Proposal																																									
Prepare Terms of Reference and Costing for Phase 2 of the Advisory Technical Assistance																																									
Consolidate the Final Phase 1 Report																																									
Hold National Level Wrap up Workshop																																									

Source: Asian Development Bank

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COST ESTIMATES AND FINANCING PLAN (\$'000)

ltem		Total Cost
λ. A	sian Development Bank (ADB) Financing ^a	
1.	Consultants	
	a. Remuneration and Per Diem	
	i. International Consultants	420.0
	ii. National Consultants	60.0
	b. International and Local Travel	150.0
	c. Reports and Communications	25.0
2.	Training, Seminars, and Conferences	20.0
3.	Miscellaneous Administration and	35.0
	Support Costs, including Translators	
4.	Representative for Contract Negotiations	5.0
5.	Contingencies	35.0
	Subtotal (A)	750.0
. G	overnment Financing	
	Office Accommodation and Transport	50.0
2.	Remuneration and Per Diem	45.0
	of Counterpart Staff	
3.	Others	45.0
	Subtotal (B)	140.0
	Total (A+B)	890.0

Source: ADB estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The recruitment of international consultants (22 person-months) and national consultants (20 person-months) for the advisory technical assistance (ADTA) is envisaged. The team that will be responsible for phase 1 of the technical assistance (TA) will comprise international (4 person-months) and national specialists (8 person-months) in agriculture and rural development planning, agricultural policy, crop production and marketing, non-timber forest products and gender development. The consultants will be expected to work closely with national and provincial counterparts. An extensive consultative process will be carried out in each of the two phases—this will include field interviews with farmer-producers during visits to the provinces, as well as meetings and workshops with provincial stakeholders. The team leader for phase 1 will prepare an inception report within 6 weeks of the start of the TA. The report will include (i) a scoping paper with an inventory of existing data and information, (ii) the key gaps in information requiring intensive analysis, (iii) capacity-development priorities at the national and provincial levels, and (iv) a detailed work plan. This work plan will include, among others, relevant details on the representative workshops to be held with the key stakeholders-including small farmers from different farming systems, ethnic groups, and women engaged in agriculture and natural resources sector. To help integrate the work of the Asian Development Bank with that of development partners working on initiatives in rural growth and poverty reduction, consultations will also be organized with other development partners working in the ANR sector. Brief monthly progress reports and a consolidated report will be prepared at the end of phase 1, following a format agreed on at inception. The reporting requirements for phase 2 will include an inception report, followed by (i) policy briefs, (ii) thematic and technical working papers, and (iii) a final report. The proposed structure of the final report is in the Supplementary Appendix.

- 2. The core areas of the work will include the following:
 - (i) Conducting a literature review and holding strategic discussions with national government personnel, key private and public sector informants, other funding agencies, and nongovernment organizations and within the team itself. The review and discussions will deal with all technical issues including social, gender, ethnicity, and environmental issues that affect agricultural and rural development.
 - (ii) Making field trips to selected provinces, including border provinces contiguous to Lao PDR in southern People's Republic of China, northeastern Thailand, and western Viet Nam, to discuss with provincial authorities, government personnel, farmers, and selected private sector representatives ways of improving the enabling environment for agriculture sector growth, and to identify new promising avenues of growth in the sector such as the recent move to increase rubber and cash-crop plantations.
 - (iii) On the basis of the field trips (a) identifying major infrastructure, investment, institutional, and policy constraints that are likely to affect growth in agriculture;
 (b) identifying promising areas for future growth; (c) assessing the constraints on private sector investment in agriculture production, marketing, and processing; and (d) identifying key environmental resource management issues that may require further remedial actions to improve farm productivity or prevent environmental deterioration.
 - (iv) Identifying the major issues related to trade facilitation and investment, to provide analyses of goods that are being traded formally and informally, and trade and non-trade policy barriers to trade.
 - (v) Preparing briefing papers on the findings for discussion during provincial workshops.

- (vi) Holding regional workshops with provincial governments to discuss the results of the analyses and to determine, from the point of view of the provinces, where and how the Asian Development Bank can make its greatest impact in agriculture sector investment.
- (vii) Analyzing the workshop findings and formulating proposals for a time-bound program to institute policy and institutional reforms conducive to the growth of the sector.
- (viii) Preparing an institutional development plan in consultation with counterparts, with particular reference to capacity development, skills transfer, and the methods to be followed in implementing the plan throughout the ADTA.
- (ix) Outlining an integrated investment program identifying physical investments and specific supporting measures, such as laws and regulations, infrastructure, research and extension services, investment priorities, and public-private partnerships.
- (x) Preparing terms of reference to deepen the policy and institutional work to be done in phase 2.
- (xi) Preparing the terms of reference for the follow-on phase.
- (xii) Presenting the findings of phase 1 to all stakeholders at a national workshop.

3. Detailed terms of reference for team leader/rural sector economist (2.5 person-months) during phase I include:

- (i) Supervise the day to day work program of the consultants.
- (ii) Provide the point of liaison between the consultants and the Government.
- (iii) Assist in an initial document review of related material and literature.
- (iv) Plan field trips to representative areas including border areas, upland/mountainous areas and lowland agro-ecosystems.
- (v) Lead the consultative workshops in provinces to gain an appreciation of the desires of provincial administrations.
- (vi) In cooperation with the institutional specialist and national specialists, identify main constrains (infrastructure, institutional and policy) that are likely to impede private ANR sector development. Based on this, guide preparation of thematic papers and lead the Team in undertaking analytical work on opportunities and constraints in the ANR sector.
- (vii) In cooperation with the institutional specialist and national specialists, identify industries and locations where ANR development prospects are promising.
- (viii) Identify the main constraints to the development of regional trade in agricultural commodities including trade policy and barriers to trade.
- (ix) Organize and implement regional workshops to present findings of field visits.
- (x) Prepare an outline investment program to address the problems identified.
- (xi) Prepare areas where further policy development is needed to achieve development of the ANR sector.
- (xii) With other team members, prepare TOR for the second phase of the Study.
- (xiii) Be responsible for the deliverables under the TA and for maintaining communications between ADB and the Team.

4. Detailed terms of reference for institutions specialist (1.5 person-months) during phase 1 include:

(i) Assist in an initial document review of related material and literature.

- (ii) Participate in field trips to representative areas including border areas, upland/mountainous areas and lowland agro-ecosystems.
- (iii) Participate in the consultative workshops in provinces to gain an appreciation of the desires of provincial administrations.
- (iv) Identify main institutional constrains that are likely to impede private ANR sector development including the horizontal and vertical lines of command and technical support that exist between national and provincial levels and within technical areas of responsibility.
- (v) Assist in the identification industries and locations where ANR development prospects are promising and assess the institutional changed needed to achieve their development.
- (vi) Participate in regional workshops to contribute institutional aspects based on field visits.
- (vii) Prepare an outline institutional development and capacity building plan to complement the identified investment program to address constraints identified.
- (viii) With other team members, prepare TOR for the second phase of the Study.

5. Detailed terms of reference for cropping systems and marketing specialist (3 personmonths) during phase I include:

- (i) In consultation with the international economist, develop models for representative cropping systems with associated whole farm budgets as appropriate to the Study.
- (ii) Undertake value chain analysis of selected crops and livestock products and identify crops that offer potential to assist in accelerating rural development across the range of agro-ecosystems.
- (iii) Provide the technical production parameters and their associated unit costs to establish a comparative advantage the crops with development potential.
- (iv) Identify the labor inputs required in representative production models as labor is often one of the main constraining resources in certain agro-ecosystems of Lao PDR.
- (v) Estimate potential demand for crops and associated post harvest handling infrastructure needed for their development.
- (vi) Assist in identifying ANR products that offer potential for increasing commercial development and support these with broad analyses for future demand.
- (vii) Assist in identifying trading constraints particularly in unofficial barriers to trade for ANR products.
- (viii) Assist in establishing comparative advantages of identified crops and other ANR products and identify the marketing chain and costs associated with moving products from farm gate to the market.

6. Detailed terms of reference for NTFP marketing specialist (2 person-months) during phase 1 include:

- (i) Assess existing work and networking in the sector and undertake market chain analyses of selected NTFP products as identified by the team.
- (ii) Assist in identifying NTFP products that offer potential for increasing commercial development and support these with broad analyses for future demand.
- (iii) Assist in identifying trading constraints—particularly in unofficial barriers to trade for NTF products.

(iv) Assist in establishing comparative advantages of identified crops and other NTFPs and identify the marketing chain and costs associated with moving products from the harvested area to the market.

7. Detailed terms of reference for gender development specialist (3 person-months) during phase 1 include:

- (i) Consolidate existing information and help document problems faced by ethnic farming communities, and women in access to forests and swidden cultivation.
- (ii) Facilitate consultative workshops with key stakeholders, including upland farmers, women and ethnic groups
- (iii) Prepare hand out materials (in Lao) informing participants on the objectives of the ADTA and also as a basis for discussion.
- (iv) Lead regional workshop discussions based on the materials prepared by the team to ensure that there is full participation by the workshop attendees, including women and ethnic groups and that dependable useful conclusions and recommendations are obtained from them. Through focus group discussions and workshops, prepare specific recommendations to facilitate participation of women and ethnic minorities in activities associated with commercial farming.
- (v) Analze options and identify network and processes which can provide opportunities for women in agricultural training in newly introduced cash crops, access to agriculture extension, group based rural micro finance and marketing, and literacy and numerical skills etc.
- (vi) Assisting in incorporating the key findings from the workshops and discussions in relevant thematic papers, and documentation to be produced at the end of phase 1.

8. Phase 2 of the ADTA is likely to include 18 person-months of international expert services and 12 person-months of national expert services. The analysis in this phase is likely to involve the following tasks, among others:

- (i) Identifying the key policy, institutional, and administrative roles of the national, provincial, and district governments and other agencies in providing a positive enabling environment for the agriculture sector.
- (ii) Recommending a reorientation of the roles of major institutions.
- (iii) Identifying key policy and institutional constraints on sustainable growth opportunities. The constraints may range from the lack of a sound operation and maintenance system for rural infrastructure to constraints on the marketing of certain commodities or the provision of access to land.
- (iv) Drawing up an indicative listing of major potential investment opportunities in the identified priority products with high demonstration effect, defining clearly the rationale and opportunities for mobilizing resources.
- (v) Establishing the competitiveness of the selected agricultural and non-timber forest products by matching domestic production growth potential with the performance of target markets.
- (vi) Identifying specific supporting measures to stimulate high-value agriculture and support the Smallholder Development Project.¹ The measures will include laws and regulations; infrastructure; training, research, and extension services; priority

¹ ADB. 2002. Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the Lao People's Democratic Republic for the Smallholder Development Project. Manila.

investments; and public-private partnerships. Cases in the region where such measures have been successfully adopted will also be identified and explored further.

- (vii) Proposing steps to increase organizational, innovative, and entrepreneurial activities among farmers and other private sector operators in high-value agriculture.
- (viii) Institutionalizing processes and developing a policy framework at the provincial level for prioritizing and catalyzing investment opportunities to sustain competitive agriculture and rural growth opportunities.
- (ix) Identifying possible environmental or social impact, and the measures that would be needed to prevent or mitigate the negative impact, including institutional and policy measures.
- (x) Identifying key policy and institutional measures that will form the basis of the policy dialogue with the Government during the preparation of the investment proposal under the project preparatory TA.
- (xi) Packaging the policy and institutional recommendations into a time-bound program, which can be presented to the development partners to promote a shared understanding on investment priorities.
- (xii) Holding preliminary discussions and presenting the program to the Government and the development partners.