PROJECT APPRAISAL DOCUMENT
ON A PROPOSED GRANT
IN THE AMOUNT OF SDR 5.6 MILLION
(US$9.00 MILLION EQUIVALENT)
TO
THE LAO PEOPLE’S DEMOCRATIC REPUBLIC
FOR THE KHAMMOUANE DEVELOPMENT PROJECT
May 19, 2008
CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31 2008)

Currency Unit = Lao Kip
Kip 9500 = US$1
1 SDR = 0.0001 USD

FISCAL YEAR
October 1 – September 30

ABBREVIATIONS AND ACRONYMS

AAA Analytical and Advisory Services
ADP Agricultural Development Project
ALG Agriculture and Livelihood Grant
BBG Basic Block Grant
CAS Country Assistance Strategy
CFAA Country Financial Accountability Assessment
CPI Committee for Planning and Investment
CRPF Compensation and Resettlement Policy Framework
DA Designated Account
DAFO District Agriculture and Forestry Office
DOF Department of Finance
DOI Department of Irrigation
DDF District Development Fund
DIW District Integration Workshop
DPC District Planning Committee
DPI Department of Planning and Investment
DPM District Procurement Manual
DPT District Planning Team
DIMU Downstream Irrigation Management Unit
EIRR Economic Internal Rate of Return
ESSF Environmental and Social Safeguard Framework
FM Financial Management
FY Fiscal Year
GDP Gross Domestic Products
GoL Government of Lao PDR
GPAR Governance and Public Administration Reform
ICB International Competitive Bidding
IDA International Development Association
IDF Institutional Development Fund
IRR Internal Rules and Regulations
IEE Initial Environmental Assessment
IPDF Indigenous People Development Framework
IPM Integrated Pest Management
This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not be otherwise disclosed without World Bank authorization.
SDR  Special Drawing Rights
SUFRORD Sustainable Forestry and Rural Development
UNCDF United Nations Capital Development Fund
UNDP United Nations Development Programme
UXO Unexploded Ordinance
VSC Village Saving and Credit
WUG(s) Water User Group(s)
LAO PEOPLE'S DEMOCRATIC REPUBLIC

KHAMMOUANE DEVELOPMENT PROJECT

CONTENTS

I. STRATEGY, CONTEXT AND RATIONALE ................................................................. 1
   A. Country and sector issues .................................................................................... 1
   B. Rationale for Bank involvement ......................................................................... 5
   C. Higher level objectives to which the project contributes .................................... 6

II. PROJECT DESCRIPTION ..................................................................................... 6
   A. Financing Instrument ............................................................................................ 6
   B. Project development objective and key indicators ............................................... 6
   C. Project components ............................................................................................. 7
   E. Alternatives considered and reasons for rejection ............................................. 13

III. IMPLEMENTATION ........................................................................................... 15
   A. Partnership arrangements .................................................................................... 15
   B. Institutional and implementation arrangements .................................................. 16
   C. Monitoring and evaluation of outcome/results .................................................... 17
   D. Sustainability ....................................................................................................... 18
   E. Critical risks and controversial aspects .............................................................. 19
   F. Grant conditions and covenants .......................................................................... 20

IV. APPRAISAL SUMMARY .................................................................................. 21
   A. Economic and financial analyses ........................................................................ 21
   B. Technical ............................................................................................................ 23
   C. Fiduciary ............................................................................................................ 24
   D. Social ............................................................................................................... 25
   E. Environment ...................................................................................................... 27
   F. Safeguard policy ............................................................................................... 29
   G. Policy exceptions and readiness ....................................................................... 30
Annex 1: Country and Province Background ................................................................. 31
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies .......... 36
Annex 3: Results Framework and Monitoring ................................................................. 39
Annex 4: Detailed Project Description ........................................................................ 45
Annex 5: Project Costs ................................................................................................. 60
Annex 6: Implementation Arrangements .................................................................... 63
Annex 7: Financial Management and Disbursement arrangements ......................... 69
Annex 8: Procurement Arrangements ......................................................................... 86
Annex 9: Economic and Financial Analysis ................................................................. 91
Annex 10: Safeguard Policy Issues ............................................................................... 99
Annex 11: Project Preparation and Supervision ........................................................... 105
Annex 12: Documents in the Project File ................................................................. 107
Annex 13: Statement of Loans and Credit ................................................................. 108
Annex 14: Country at a Glance .................................................................................. 109
Annex 15: Maps ......................................................................................................... 111
LAO PEOPLE’S DEMOCRATIC REPUBLIC
KHAMMOUANE DEVELOPMENT PROJECT
PROJECT APPRAISAL DOCUMENT
EASRE

Date: May 19, 2008
Country Director: Ian C. Porter
Sector Manager: Rahul Raturi
Sector Director: Christian Delvoie
Project ID: P087716
Lending Instrument: SIL

Team Leaders: Toru Konishi, Steven Schonberger

Sectors: Agriculture, Sub-national
Government Administration, and Irrigation and Drainage
Themes: Rural Services and Infrastructure, Decentralization
Environmental screening category: B

Project Financing Data

[ ] Loan [ ] Credit [ X ] Grant [ ] Guarantee [ ] Other:
For Loans/Credits/Others: IDA Grant
Total Bank financing. SDR 5.6 million (US$ 9.0 million equivalent)
Proposed terms: IDA Grant

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Recipient:
The Lao People’s Democratic Republic (Lao PDR)

Responsible Agencies:
The Province of Khammouane

Estimated disbursements (Bank FY/US$m)

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Expected effectiveness date: September 1, 2008
Expected closing date: March 31, 2014

Does the project depart from the CAS in content or other significant respects? [ ] Yes [x] No
Ref. PAD Section I.C

Does the project require any exceptions from Bank policies?

Ref. PAD Section IV.G

[ ] Yes [x] No

Have these been approved by Bank management?

[ ] Yes [ ] No

Is approval for any policy exception sought from the Board?

[ ] Yes [x] No

Does the project include any critical risks rated "substantial" or "high"?

[ ] Yes [ ] No

Does the project meet the Regional criteria for readiness for implementation?

[ ] Yes [ ] No

Project development objective  Ref. PAD Section II.B

The Project Development Objective (PDO) is to strengthen the planning process and public financial management associated with the decentralized delivery of services and infrastructure, including irrigation development, in Khammouane Province.

Project description  [one-sentence summary of each component]  Ref. PAD II.C

Component 1 - Local Development and Provincial Capacity Building (Estimated cost US$ 6.87 million). This component will support: (a) a District Development Fund to support rural development sub-projects at the district and the village level; and (b) provincial capacity development on public financial management, public investment planning, monitoring and evaluation, rural livelihoods support, and complementary, strategic investments at the provincial level.

Component 2 - Support for Irrigation Development along NT2 Downstream Channel and Lower Xe Bang Fai River (Estimated cost US$ 3.56 million). This component will assist with the rehabilitation and development of irrigation facilities in Gnomalat District and lower Xe Bang Fai River to utilize the discharge water from the NT2 hydropower station.

Which safeguard policies are triggered, if any?  Ref. PAD Sections IV.F

Environmental Assessment (OP 4.01)
Pest Management (OP 4.09)
Indigenous People (OP 4.10)
Involuntary Resettlement (OP 4.12)
International Waterway (OP 7.50)

Significant, non-standard conditions, if any,

Ref. PAD Section III.F

Effectiveness Conditions

(a) Establishment of the project Steering Committee (PSC) by the Recipient to monitor the overall progress of the project and to provide strategic guidance during implementation;

(b) Establishment of the Project Coordination Section (PCS) by Khammouane Province for the
purpose of executing Component 1 of the Project;
(c) Establishment of the Downstream Irrigation Management Unit (DIMU) by MAF's Department of Irrigation (DOI) for the implementation of Component 2; and
(d) Formal adoption of the Operational Manual by the Recipient.

Other Implementation Conditions

(a) Agreement shall be made by December 31, 2008 between the Nam Theum Power Company (NTPC) and the GoL stipulating the NTPC's commitments to: (i) take specified measures to mitigate the impacts of the downstream channels to the existing irrigation scheme in Tha Thot Village; and (ii) construct a new facility to divert water from the regulating dam to the Tha Thot area;
(b) Mid-Term Review report prepared based on agreed Terms of Reference should be submitted to Bank by March 30, 2011.

Withdrawal Conditions

(a) Disbursement condition for goods, works, consultant services and incremental operating costs for Component 2-1 (Rehabilitation of the Existing Irrigation Facility in Tha Thot Village), and Component 2-2 (Support for Pilot Downstream Irrigation Development in Tha Thot Area): the Agreement between the Nam Theum Power Company (NTPC) and the GoL referred to above in Other Implementation Conditions – Section (a), should be finalized.
I. STRATEGY, CONTEXT AND RATIONALE

A. Country and sector issues

Country Issues

1. With an estimated annual Gross National Income per capita of US$460 (2004-2005), the Lao People’s Democratic Republic (Lao PDR) remains among the poorest and least developed countries in the East Asia region. Social indicators are also low; in 2003, Lao PDR was ranked 135th out of 175 countries in the Human Development Report, the lowest ranking of South-East Asian countries. However, over the past few years Lao PDR has maintained relatively stable macroeconomic conditions and steady growth stimulated by the rapid economic growth of its neighboring countries. The proportion of people living below the poverty line has decreased significantly from 46 percent in 1992-1993 to 31 percent in 2004-2005. The real growth rate of the Gross Domestic Production (GDP) increased from 6.4 percent in 2004 to 7.0 percent in 2005 and 7.5 percent in 2006. The mid-term outlook remains positive, with the real annual GDP growth rate projected to remain at 6-7 percent mainly through regional trade and the utilization of natural resources, and the poverty headcount is expected to be reduced to 23 percent in 2010.

2. However, the country’s rapid growth has also raised risks and challenges. Weak governance, the low capacity related to public financial management and service delivery, and slow private sector development has been identified as among the most significant constraints to development. Increasing rural-urban income inequalities are a serious concern, indicating that the distribution of the benefits of economic growth has been uneven across the country. The incidence of poverty for rural areas was 38 percent in 2002-2003, compared to 20 percent for urban areas. This issue is further complicated by significant ethnic diversity in the more remote areas of the country. Furthermore, although natural resource exploitation is a key driver of economic growth, the most pressing challenge is to ensure the equitable benefits to the rural communities, who are most affected by such natural resource exploitation.

3. The Government of Lao (GoL) has therefore been pursuing a variety of strategies to make growth more sustainable, inclusive and equitable. In particular, the GoL has adopted a National Social and Economic Development Plan (NSEDP) for 2006-2010 that sets out the following areas as the most critical: (a) macroeconomic management, (b) structural and fiscal reform, (c) capacity and human resources development, and (d) improved service delivery.

Decentralization in Lao PDR

4. Lao PDR, while a unitary state, has traditionally delegated significant administrative powers to the provincial levels, but with limited accountability mechanisms to provincial citizens. Elected representation is limited to the National Assembly, which confirms the President, who, in turn, appoints provincial governors. The prime minister appoints district governors. Village chiefs (there are no village councils) are also elected but based on lists established by district authorities. Government staff at the national and sub-national levels are hired, appointed and promoted as part of centrally-led line ministries, although authority for “within-province” assignment and payment of staff resides with the provincial governors, to
whom the staff is accountable. Citizen concerns are primarily voiced through the national assembly members in the local constituencies, the Lao Front for National Construction, and mass organizations such as the Lao Women’s Union (LWU), the Youth Union and Trade Unions.

5. Administrative delegation to the provincial level has been complemented in the past by significant fiscal autonomy – particularly in the “surplus provinces” that have limited “upward accountability” vis-à-vis the government. Provinces account for 60 percent of GoL revenues (of which 90 percent is retained for expenditures at the province level) and 45 percent of total GoL expenditures. Provinces were provided with significant discretion in the manner in which revenues were raised and expenditures budgeted. Given their significant fiscal independence and the dependency of the national level on provincial-level revenue collection, provinces have been subject to limited fiscal oversight from the national level, particularly those provinces that are net contributors to the central budget.

6. Districts have not yet played an important role in planning and budgeting. In theory, districts are the lowest level of local government, and are responsible for budget planning and execution. However, in reality, provinces have retained most of the responsibility for decision-making over investment budgets, partly due to perceptions about limited human resource capacity at the district level. As a result, district-level budgets are largely limited to recurrent expenditures.

7. GoL has started to take some concrete actions to rationalize the administrative and fiscal roles and accountabilities of the provinces and to increase accountability to the national government for revenue management and budget planning and implementation, in line with the pillars of the NSEDP. First, a new Budget Law passed by the National Assembly in December 2006 provides for a fundamental change in the inter-governmental fiscal framework: the law centralizes tax and customs functions, channeling almost all revenue to the national level from where it is redistributed to provinces through refined revenue-sharing arrangements. Implementation of the new law has already begun: provincial-level customs, tax and treasury officials are now all directly paid from the national level, for example, and in 3-5 years the implementation of the Budget Law should be fully completed.

8. Second, in addition to the key changes on the revenue side initiated by the new Budget Law, there is also an ambitious program of public expenditure management strengthening. The law also centralizes the treasury function, and provides for a single treasury account framework to replace the large number of separate accounts that are currently used at all levels of government. With the assistance of the Japan International Cooperation Agency (JICA), the Ministry of Planning and Investment (MPI) is currently carrying out a project for capacity building for public investment plan management (PCAP), rationalizing public investment planning procedures at both the national and provincial levels. The MPI has also started a program to strengthen the M&E systems at both levels.

9. In parallel, a number of approaches to strengthen accountability to local communities in planning and public expenditure management are under way, aimed at making resource utilization more effective and improving service delivery, particularly in rural areas. Among these approaches, it is noteworthy that a Poverty Reduction Fund (PRF) has been established
with the support of the Bank to provide public infrastructure and improve service delivery in selected poor districts. The PRF is near completion of its first phase (covering 20 districts) and a second phase is under preparation. In addition, and with the support of the United Nations Capital Development Fund (UNCDF), a District Development Fund (DDF) has been piloted in Saravane Province to engage districts and *kum banhs* (a group of villages) as the core vehicles to carry out participatory budgeting for public investment. The pilot has been deemed successful, and the GoL now intends to expand the DDF approach to other provinces through a (US$5.0 million) national DDF facility embedded within the recently-approved Support for Better Service Delivery (SBSD) program.

10. In terms of administrative measures, the Government has identified the *kum banh* as the mechanism to strengthen coordination between villages and districts. The Prime Minister’s Decree No. 1 of March 2000 and Decree No. 10 of June 2001 on decentralization provides for increased local responsibilities and ownership at the grassroots level as a means to enhance socio-economic development. The Decrees also stipulate that rural development activities should be planned and carried out at the lowest possible level of authority, starting with the village. However, in reality, villages in Lao PDR are relatively dispersed, and it is thus logistically difficult for villagers and district officials to interact with each other on a regular basis. In response to this, the GoL has recently identified the *kum banh* as a coordinating level to facilitate interaction between the district (the most decentralized budget level) and local communities.

11. While officially recognized, the formal role of the *kum banh* is still being determined through the piloting of various initiatives. A *kum banh*, which typically contains five to ten villages, is not a formal administrative unit but a platform for a “bottom-up” and locally owned development process. Nonetheless, *kum banhs* can be used to help coordinate inter-village socio-economic planning, service delivery, and monitoring activities. The UNCDF supported Saravane DDF project, for example, has been piloting the inclusion of *kum banhs* in the local-level planning process and the preliminary outcome is positive. In addition, the Ministry of Agriculture and Forestry (MAF) has also recently developed a new strategy (the Lao Extension Approach, or LEA) through which district agricultural extension staff will be decentralized to the *kum banh* level in order to increase interaction with villages.

*Khammouane Province.*

12. Khammouane Province is strategically placed in the center of the country. It sits astride several potential trade routes between Thailand and Vietnam, and is the site of the Nam Theum 2 (NT2) hydropower project. The province has a total population of almost 340,000, of which 85 percent live in rural areas. Khammouane Province has been one of five fiscal surplus provinces\(^1\), which has reinforced a degree of autonomy in administrative and fiscal management. Khammouane consistently collects and reports revenues that are about 5 percent greater than its own expenditure needs. In part, this reflects the opportunities to tax trade and commerce moving between Vietnam and Thailand. It also reflects revenues associated with natural resources extraction, mainly timber and mining.

\(^1\) Namely, Vientiane Province and Municipality, Savanaketh, Champasak, Khammouane and Boulikamxay.
13. Khammouane Province's population overall has social indicators for food security, health, education, and access to roads and clean water that are above the national average; however, the benefits of economic growth have not been distributed equally throughout the province. Two of Khammouane's nine districts (Boulapha and Nakai) are among Lao PDR's 47 poorest districts, and three districts (Gnomalat, Mahaxay and Xaibouathong) are amongst the 72 poor districts. Analysis of the growth elasticity of poverty reduction in the province (the decline in poverty for each unit of growth) indicates that Khammouane has been amongst the least able to transform its economic growth into poverty reduction.

14. Today, Khammouane Province stands poised at a key juncture in its development. The changes brought by the market liberalization in Lao, PDR over the past 15-20 years are expected to accelerate in the period to 2008-2015, driven by developments such as global and regional trade liberalization, the recent completion of National Road 12 to Vietnam, the construction of the USS1.1 billion NT2 hydropower project, the completion of a bridge across the Mekong River in the neighboring province of Savanaketh and the planned construction of a trans-Mekong bridge from the provincial capital of Thakek. In the coming decade, the province will likely benefit from significant opportunities for economic growth; the key challenges faced being how these opportunities will be translated into pro-poor and inclusive growth and an overall improvement in social indicators. These challenges are significant, and success will depend upon improvements the equity and quality of service delivery, and the ability of the province to plan, manage, monitor and evaluate the use of its resources.

Nam Theun 2 (NT2) Hydropower Project

15. NT2 is the largest hydropower development project in the country and is located largely in Khammouane Province. Just as there are clear national opportunities and challenges associated with this project, so there are for the province. Meeting most of these local challenges, particularly the immediate social and environmental challenges, are the responsibility of the Nam Theun Power Company (NTPC), which owns the NT2 hydropower stations. The Bank is fully engaged in supporting appropriate mitigation measures and in restoring the livelihoods of affected families within the framework of the Nam Theun Social and Environmental Project (NTSEP). In terms of opportunities, the GoL and the province are keen to utilize the discharge water from the NT2 hydropower station to develop irrigation facilities.

16. NT2 would also create additional accountabilities at the provincial level. Most immediately and directly, the provincial and district administrations have specific oversight, management and implementation roles and responsibilities in the context of NT2 and related mitigation activities. In addition, the province is sensitive to the fact that provincial residents, fully aware of the substantial resources going into NT2, have high expectations that GoL will ensure that benefits are translated into improved services and broad-based economic opportunities across the province. The challenge now is to translate this acknowledgement into capacities and sub-national governance reforms which enhance, in particular, accountability mechanisms to communities as well as improving the ability to deliver high quality policies and services.
Khammouane Development Strategy (KDS)

17. The province has developed a strategy, closely aligned with the NSEDP, which articulates the province’s development goals and strategies over the medium term. The Khammouane Development Strategy (KDS) 2006-2015 (to follow up on the 7th Party Committee Conference Agreement of the province) was prepared mainly with assistance of UNDP and the Bank, and is based on the following four goals: (a) improving governance; (b) enhancing rural livelihoods; (c) promoting economic development; and (d) promoting social development. The KDS was prepared through a process of extensive consultations, focusing on the direct participation of villages, particularly those identified as poorest by the National Growth and Poverty Eradication Strategy (NGPES) criteria. The discussion groups also included vulnerable groups (ethnic minorities and women) and covered a range of sectors such as agriculture, infrastructure, education, health, and private sector development, as well as gender and governance as cross-cutting themes. The province has also prioritized investments to capitalize on opportunities for the use of water resources in conjunction with the operation of NT2.

B. Rationale for Bank involvement

18. The proposed project is highly complementary to NT2-related activities, which are underwritten by a major commitment on the part the GoL and the Bank. With its strong emphasis on capacity-building and complementary investments, the proposed project would ensure that NT2 upstream and downstream compensatory activities are followed up by measures that enhance institutional sustainability and establish a provincial-level public sector framework that is able to deliver quality goods and services in the long term. The project, moreover, will provide opportunities – beyond those already envisaged – to profit from the downstream irrigation potential generated by the NT2 facility.

19. As a prelude to this project, the Bank has also been instrumental in supporting the province to articulate a strategic vision for its own development, defined in the KDS. While UNDP will be largely responsible for supporting the implementation of a program focusing on the public administration reform aspects of Goal 1, Improved Governance, other donors, the province, and the Government recognize the Bank’s considerable expertise and experience (gained through past projects, such as Agricultural Development Project (ADP) and Sustainable Forestry and Rural Development (SUFORD) in providing village-level livelihoods support, and in supporting the overall financial management reform program, and have requested the Bank to support implementation of the KDS through a follow-up investment project.

20. In addition, the Bank will mobilize its considerable experience in Lao PDR with support to building capacity in bottom-up planning systems, linking planning and budgeting processes, strengthening public financial management, improving the investment climate, and strengthening monitoring and evaluation systems. In each of these areas the Bank is in a position to integrate national policies and lessons learned into stronger systems at the local level. For example, the Bank’s leadership in the public financial management strengthening area makes it particularly well placed to help GoL take a coordinated approach to implementing the new inter-governmental fiscal framework in Khammouane Province over the coming years.
C. Higher level objectives to which the project contributes

21. The project will make a substantial contribution to the pillars of the Bank’s supports in Lao PDR, as stipulated in the Country Assistance Strategy (CAS) Progress Report (Report No. 39688-LA, May 4, 2007). The report sets out the four pillars to guide the Bank’s support during 2009-2011 period; (a) Sustaining the Growth, (b) Improving Social Outcomes, (c) Strategic Approach to Capacity Development and Partnerships; and (d) Supporting Nam Theun 2 (NT2) Implementation.

22. While much of the strategy is implemented through national counterparts, the GoL has been keen to see the Bank work directly with provinces given their significant role in service delivery. Khammouane Province has been selected as the first of two provinces to work with because: (a) it is the site of the NT2 project, which brings numerous opportunities and responsibilities to the province while requiring strengthened capacities to support rural community development and to manage water resources; (b) it is a relatively strong province and therefore easier to develop new integrated approaches with; and (c) the Bank has significant experience working with the province in the context of NT2 and other projects.

23. Regarding specific project components, the DDF, to be implemented as part of Component 1 will contribute directly to CAS pillar (ii) on improved social outcomes. Pillar (iii) is directly addressed through the provincial capacity development activities under Component 1, and is a key vehicle within the CAS for responding to the Government’s request that development partners increasingly address local, rather than just national, capacity constraints.

24. By design, the project will also address pillar (iv) of the CAS through supporting complementary activities such as irrigation facilities and improvements in the Gnomalat and lower Xe Bang Fai (Xe Bang Fai River), under Component 2. Component 2 activities will take place in areas where the Nam Theum Social and Environmental Project’s (NTSEP’s) downstream livelihood restoration program is planned, and will thus provide opportunities for considerable positive synergies with NTSEP.

II. PROJECT DESCRIPTION

A. Financing Instrument

25. The proposed project will be financed by an IDA Grant of SDR 5.6 million (US$ 9.00 million equivalent). Additional financial support is being sought from Japan PHRD Fund for capacity building activities under Component 1. Additional donor support will be identified to provide parallel funding to expand implementation of the irrigation development plan to be prepared under Component 2.

B. Project development objective and key indicators

26. The Project Development Objective (PDO) is to strengthen the planning process and public financial management associated with the decentralized delivery of public services and infrastructure, including irrigation development, in Khammouane Province.
27. The PDO will be achieved through the following activities:

(a) Strengthening the procedures for infrastructure and service delivery with improved local transparency and accountability (Component 1);

(b) Supporting through technical studies and piloting, the development of a strategic vision for the technically, economically and socially sustainable development of irrigation along the NT2 Downstream Channel and in areas situated along the lower Xe Bang Fai River (Component 2);

28. The expected outcomes of the project are (see Annex 3):

(a) The adoption of the procedures for planning and monitoring public investments initiated under the project at the provincial and district levels;

(b) The phased and rationalized planning for developing downstream irrigation incorporating technical, economic, and institutional aspects.

C. Project components

29. Khammouane province is responsible for implementation of the two components with the support from MAF and concerned central ministries. The proposed project was originated as a complement to NT2 in terms of ensuring that the broader downstream population benefited from NT2 related development beyond the mitigation measures. The rationale for the two components is based on the overall need to complement NT2 mitigation requirements with support for livelihoods improvement more broadly and sustainability in the province. This includes a combination of complementary rural infrastructure and livelihoods support as well as larger investments in downstream irrigation development. Support to strengthening decentralization under Component 1 will both provide direct livelihood support benefits to districts not covered by NT2 or similar programs (such as Thin Hin Boun Hydropower) as well as develop the district and provincial capacity to sustain transparent and demand-responsive service delivery beyond the NT2 mitigation support period. Support to developing irrigation under Component 2 will complement the obligations of NTPC regarding measures for flood mitigation and construction of water gates at the downstream channels. This Component would support the development of downstream irrigation through a realistic and sequenced manner, considering the constraints in operational capacity in the irrigation sector. In addition, Component 2 will further provide the knowledge and experience base for GoL and Khammouane Province to exploit further benefits from downstream flows and mitigate flood risks through rehabilitation and extension of existing schemes and help develop a technically and financially feasible plan for future development of large scale irrigation. The summary of the project activities are described below, while greater detail is available in Annex 4. The cost estimates shown here include both physical and price contingencies.

30. The component would support Khammouane province to: (a) pilot and adopt more transparent and participatory procedures for public investment to improve rural livelihoods and (b) strengthen key provincial departments to implement and sustain this approach. As a result, the provincial departments would be able to implement the new procedures and approaches adopted by the GoL.

31. Sub-component 1-1. The District Development Fund (DDF) (Estimated Cost: US$ 3.128 million). This subcomponent will provide support to the province to develop and implement the DDF, as a more transparent and participatory way to finance investments in public infrastructure and service delivery with rural communities. Civil works, goods, training, TA and incremental operating costs will be financed for approved sub-projects. This sub-component will strengthen the districts' capacity for conducting stakeholder consultation and developing and executing multi-sectoral investment plans for public infrastructure and service delivery in a participatory manner. It would be initiated in three districts (Boulapha, Himboun, and Nongbok) during the first year and expanded to all nine districts in the province over a period of five years. It is expected that the province will adopt the procedures upon completion of the project so that the project impacts would be sustainable and replicable.

32. The DDF facility will finance infrastructure and service delivery in support of poverty alleviation based on priorities identified through stakeholder consultations carried out with village and kum banh representatives. An inter-departmental team (District Planning Team - DPT) will carry out stakeholder consultations, prioritize proposed investments, and prepare a DDF investment plan for each year. The investment plan will be implemented by the districts after approval by the province. The DDF funding will consist of: (a) Basic Block Grants (BBGs) to finance public infrastructure and services, mainly at the kum banh and village levels; (b) Agriculture and Livelihood Grants (ALGs) to support production groups at the village level, and (c) contingency funds for unexploded ordinance (UXO) clearance for infrastructure investment supported by the BBGs.

33. The allocation of the BBGs would be pre-determined for each district by a formula taking into account the size of the district's population and the percentage of poor households. Typical investments supported by the BBG would cost US$3,000 – 5,000 each, in the following sectors: transport (improvement in access roads), education (rehabilitation and upgrading of primary schools), health (up-grading the local clinics), and water supply (basic water and sanitation at the villages). In addition, in order to support the implementation of the DDF, incremental operating costs and technical assistance would be provided within the BBG. It is estimated that the BBGs would benefit about 1,000 villages comprising 50,000 households. In order to monitor the transparency and accountability of the BBG activities, local representatives of the Lao National Front (LF) and Lao Women’s Union (LWU) will be invited to review (on an annual basis) district-level compliance with agreed procedures, such as the allocation of investment funds, investments in ineligible activities, and the participatory process for decision making. These representatives would be assisted by international and national consultants to be recruited under Component 1-2 (Capacity Development for the Department of Planning and Investment).
34. ALGs will support the livelihood activities for 27 villages in Mahaxay, Himboun, and Boulapha districts already identified by Khammouane Province. These villages have been classified as severely poor by national criteria yet are not currently participating in any GoL or donor-funded rural livelihoods programs. ALG will support groups of villagers through the financing of community facilities (e.g., rice mills, equipment), and demonstration materials (e.g., seeds, livestock) for village production groups, which would cost up to US$10,000 per village. Each target village will prepare a proposal with the technical support of the District Agriculture and Forestry Office (DAFO) and submit this to the district for approval.

35. **Sub-component 1-2. Provincial Capacity Development (Estimated Cost: Approximately US$3.096 million).** This sub-component will mainly support the capacity building of the provincial government to carry out provincial-level public investments that are strategically important for rural livelihoods, and increase the capacity of a few key departments. Capacity building will be based on both training of civil servants as well as “learning by doing” through pilot implementation of provincial level investment through participatory planning and implementation.

36. **Activity 1-2-1. The Provincial Development Fund (PDF) (Estimated Cost: approximately US$1.060 million).** It will provide assistance to the province to support the undertaking of provincial level investments which support multiple districts and which complement those identified through the DDF at the district level. Such investments may include: the expansion of teacher training facilities, improvements to the provincial agriculture extension services center, and other small-scale infrastructure improvements expected to cost up to US$50,000 per investment. The planning for the PDF sub-projects would be carried out by the DPI through prior consultation with the district governments and involve an annual multi-stakeholder planning workshop, to which users of sector services, as well as concerned line ministries will be invited. Proposed PDF sub-projects would be selected by the Provincial Planning Team (PPT) comprising the representatives of line departments according to the specific criteria linked to the KDS and stipulated in the operational manual. The subproject would then be presented to the Provincial Advisory Committee for Component 1 for approval. The implementation procedures would follow the guidelines developed by the JICA funded PCAP. Similar to the DDF, respective provincial line departments will be responsible for the implementation of PDF investments, whereas the DoF will manage the funds and the DPI will monitor the overall progress.

37. **Activity 1-2-2. Provincial Capacity Building (Estimated Cost: approximately US$2.036 million).** Technical assistance and training will be provided in the following areas to strengthen provincial capacity to manage the development process consistent with NSEDP and KDS priorities:

   (a) **Implementation of PDF and DDF.** Technical assistance will be provided to the province and the districts to assist in implementing the PDF and DDF. Particular attention would be given to: (a) proper consultation and priority setting, (b) overall resource allocation, (c) public disclosure of information, (d) reporting and oversight, and (e) fiduciary management (particularly procurement and financial management). The project will
contract UNCDF on a sole source basis to provide technical assistance in order to maintain consistency and allow accelerated learning with the other DDFs being implemented in other provinces in Lao PDR with UNCDF support;

(b) Public Financial Management. Further technical assistance would be provided to strengthen the core public expenditure and financial management activities of the province consistent with the GoL’s new Budget Law. The first technical assistance activity would be a participatory capacity needs assessment of the Department of Finance, which would provide a basis for a series of support and training activities addressing the institutional, organizational, and individual-level capacity gaps within the provincial PFM system. The activity would include support extending down to finance officials at the district level;

(c) Investment Planning, Monitoring, and Evaluation. The project will provide additional technical assistance and capacity building aimed at strengthening the key functions of the DPI, with a focus on local level planning, monitoring and evaluation, particularly in alignment with the NSEDP priorities and to monitor the outcomes of its investment planning process;

(d) Agriculture Extension Services. Support will be provided to update the knowledge and facilities so as to be ready to implement the LEA in the ALG targeted villages.

38. Sub-component 1-3. Component Management (Estimated Cost: Approximately US$ 0.643 million). Implementation of decentralization and provincial capacity building will be supported by a small provincial Project Coordination Section (PCS) within the DPI of Khammouane Province. Although key personnel and office space will be provided by the Province, this component will finance equipment, technical assistance (including contracted project staff) and incremental operational costs.

Component 2: Support for Irrigation Development along NT2 Downstream Channel and Lower Xe Bang Fai River (Estimated Cost $3.555 million)

39. The water to be discharged by the NT2 dam is an opportunity for increasing agricultural production during the dry season, but also poses a risk of increasing floods during the wet season. Given that the NTPC is constructing five outlets along the downstream channel to help the GoL to develop irrigation facilities utilizing discharge water from the NT2 hydropower station, this subcomponent would mainly support the GoL’s effort to develop downstream irrigation. Further, as an alternative to protect livelihoods in the lower Xe Bang Fai River from possible floods, this component would also support the rehabilitation of small pump-based irrigation facilities.

40. Sub-component 2-1. Rehabilitation of the Existing Irrigation Facility in Tha Thot Village (Estimated Cost: US$ 0.884 million). The existing irrigation facilities were designed to cover about 470 ha but have deteriorated and the irrigation area has been reduced to one-third of the designed area. While the facilities had originally been planned for rehabilitation in 2004 under the Bank-financed ADP, it was excluded as one of the main canals of the scheme and two of the secondary canals were cut by the NT2 downstream channel. Now that NTPC plans to restore the connection of the main and a secondary canal through two siphons are nearing completion, this sub-component would support the originally planned rehabilitation of the
existing irrigation facilities. This sub-component would include rehabilitation works and technical assistance for capacity building for Water User Groups (WUGs), to improve the administration and management of the irrigation facility.

41. **Sub-component 2-2. Support for Pilot Downstream Irrigation Development in Tha Thot Area (Estimated Cost: Approximately US$0.989 million).** This sub-component would support the feasibility study, detailed design, and construction of irrigation facilities utilizing discharge water from NT2 hydropower station for four new facilities serving an area of about 710 ha surrounding the existing irrigation facility in Tha Thot Area. The area has been indicated as high priority given that it is already developed for agriculture and farmers’ interest in irrigation is high; operation costs are expected to be reasonable as the delivery of water is gravity-fed. Accordingly, NTPC plans to construct a pipeline to draw water from the regulating dam and cross the downstream channel through an inverted siphon to provide water to the area. Financing under this sub-component would support the feasibility study and detailed design for the four separate facilities during the first two years of project implementation. Starting from the third year, the project would also finance the construction of one irrigation facility to serve about 130 ha. Efforts are being made to identify possible donors to finance the other three facilities. This sub-component would include civil works and technical assistance for capacity building for WUGs, to improve the administration and management of the irrigation facility.

42. **Sub-component 2-3. Strategic Plan for Irrigation Development along Downstream Channel (Estimated Cost: US$0.500 million).** The objective of this sub-component is to help GoL to develop a strategic plan to utilize water flowing through the NT2 downstream channels. With the support of the NTPC, a scoping study has been carried out to explore the possibilities for developing five irrigation facilities comprising about 21,000 ha in total. The study concluded that while it is technically feasible, economic viability needs to be carefully examined on a site-by-site basis, with possible breakdown at the sub-scheme level, as the area in question is quite heterogeneous in terms of social, environmental, topographical, and geo-morphological conditions and access to the market. The plan would support the GoL to develop: (a) scheme level pre-feasibility study to identify priority development area with basic canal layout, (b) recommendation on the institutional arrangement for operation and maintenance and capacity building programs for the WUGs, (c) technical scoping study for additional sites and modes of water storage to further utilize the discharge water, and (d) feasibility study for the identified high priority area. Technical assistance and incremental operating costs would be financed to implement the study.

43. **Sub-component 2-4. Rehabilitation and Institutional Strengthening of Small Pump Irrigation Facilities along Lower Xe Bang Fai (Estimated Cost: Approximately US$0.591 million).** While the first three sub-components aim at supporting downstream irrigation along the NT2 downstream channel, this sub-component would assist the communities along the lower Xe Bang Fai River. It would strengthen PAFO’s initiative to rehabilitate the small pump irrigation facilities and re-establish a sustainable institutional framework for operation and management. In particular, the sub-component would support the rehabilitation of pumping stations, minor concrete works (e.g. repairs to headworks), technical training and institutional strengthening for WUGs and PAFO. The cost for repairs differs from schemes to schemes
depending on the actual situation, but typical repair cost for one scheme would be less than US$5,000.

44. The GoL has developed about 30 small pump-based irrigation facilities ranging from 20-100 ha in the lower Xe Bang Fai River in Khammouane province. Most of these pumps are still operating; WUGs are responsible for operation, including payment for the electricity and operational costs. However, WUGs have experienced serious performance problems due to poor maintenance as they do not have proper technical knowledge. With few exceptions, most of the pump equipment is relatively small and simple, and WUGs can manage with good technical knowledge. Through a rapid rural assessment, it has been confirmed that the farmers are in general keen to continue irrigation during the dry season, as the dry season crop would provide them with reliable income. It has also been confirmed that farmers have actually paid substantial amounts of the cost for operation, mainly electricity and labor costs, which amount to US$15–25 per ha. The discharge water from the NT2 hydropower will result in an improved economic outlook for these pumping stations, as it would increase the water level of the Xe Bang Fai River by one to two meters. This would certainly improve the economic viability of these pump facilities.

45. Subcomponent 2.5. Component Management (Estimated Cost: Approximately US$0.591 million). This small sub-component would support the MAF, particularly its Department of Irrigation (DoI) and the PAFO in Khammouane province. Vehicles and goods, technical assistance and incremental operating costs will be provided to support their ability to work with WUGs and technical specialists in carrying out planning, training and construction activities, as well as to support administration, procurement and reporting needs.

D. Lessons learned and reflected in the project design

46. Project implementation arrangements reflect the important lesson of avoiding the establishment of project-specific parallel government institutions (such as a project management unit and a team of external consultants), instead supporting the existing government structures, including the line ministries and the provincial and district governments. As the project’s main objective is to strengthen the planning process and public financial management associated with the decentralized delivery of services and infrastructure, this is critical to achieve sustainable and effective impacts that will last beyond the project’s lifetime. The project has been designed to work closely with Khammouane Province to support local economic development and improve service delivery (Component 1); and (b) the MAF to capitalize on the opportunity for developing new irrigation facilities (Component 2).

47. Technical design for each component has taken into consideration lessons learned from similar operations supported by the Bank as well as other donors. The DDF and PDF elements of Component 1 have drawn heavily on the experience gained through the Poverty Reduction Fund (PRF) financed by the Bank, as well as the Governance and Public Administration Reform (GPAR) Saravane Project, jointly funded by UNCDF, United Nations Development Programme (UNDP) and the European Community (EC), and operational since early 2005. Both PRF and the DDF project in Saravane have demonstrated that community-driven development approaches to provision of local infrastructure and services is feasible in Lao, PDR. In addition, the DDF in
Saravane has shown that a DDF facility can deliver locally prioritized public goods and services without recourse to parallel planning, budgeting and implementation arrangements. Moreover, Saravane has also demonstrated that it is possible to introduce a substantially improved degree of transparency, accountability and participation into local public expenditure management. DDF-financed investments in Saravane have also been shown to be largely pro-poor, with expenditures being concentrated in the education, transport infrastructure, health, and agricultural sectors.

48. The lessons learned from ADP and SWORD have also been incorporated into the design of the DDF’s ALGs. These two projects have helped to introduce bottom-up, farmer-driven, marketed-oriented and proposal-based approaches for village support. At the same time, they have shown that the participation of the poor requires effective facilitation, and that care must be given to ensure that the wishes of villagers, rather than the views of the agricultural extension staff, guide the determination of priorities. The Village Investment for the Poor component of ADP has demonstrated that poor villages and households can be effectively targeted through application of simple indicators and facilitated village processes. The ALG has been designed to engage agriculture extension services at the provincial level, and support the implementation of the current government policy on agricultural extension (LEA), while maintaining the bottom-up approach. Implementation of the ALG will rely on agricultural extension staff assigned from the districts to kum banhs to assist target villages in organizing village production groups and to prepare proposals, and the process will be monitored by Provincial Agriculture and Forestry Extension Center (PAFEC), with technical guidance from the National Agriculture and Forestry Extension Services (NAFES).

49. Activities related to irrigation (Component 2) have also been designed based on Bank and donor experience in funding development of the irrigation sector in Lao PDR. Under ADP, extensive rehabilitation of irrigation schemes has been supported with clear lessons regarding the importance of ensuring effective formation of water user groups and linking irrigation management to extension and marketing support. The Irrigation Diagnostic Study (August 2007), commissioned by the DoI, recommends the following orientations for future irrigation projects: (a) incrementally developing irrigation facilities given limitations in management capacity; (b) assigning clear responsibilities to WUGs for operations and management; (c) providing continuous technical support and guidance to WUGs after the transfer of management responsibilities; and (d) monitoring the performance of WUGs.

50. Lastly, it should be noted that overall project design has also been strongly influenced by the acknowledged need in Lao PDR to strengthen capacities. Reform and high level change will only translate into practice when stakeholders are equipped with the right kinds of skills and knowledge, and provided the opportunity to directly apply those new procedures and competencies. The proposed project design reflects this in a variety of ways: an emphasis on real-time “learning by doing” (for both Components 1 and 2 facilities).

E. Alternatives considered and reasons for rejection

51. Overall Project Design. A project limited to support for district-level investments was considered. Limiting the project to a DDF was rejected because sub-national fiscal reforms require improved planning, budgeting and monitoring of execution at both the provincial and
district levels in order to be sustainable. Accordingly, while the DDF is the heart of the project, it is complemented by the PDF which will allow for capacity building and testing of complementary reforms amongst provincial-level agencies. In designing the DDF, providing additional agriculture and livelihoods support to the poorest villages has also been recognized by the province and the GoL to be a key element of the project. Whereas lowland villages around Thakek are experiencing relatively rapid economic development as a result of increasing trade opportunities with Vietnam and Thailand, upland villages in the eastern part of the province continue to experience food insecurity. Annual household incomes in villages in the eastern part of the province (mainly upland) are estimated to be substantially lower than those of households in the eastern areas (mainly lowland). Now that under the NTSEP, substantial support is being provided to villages in Nakai District, the province is very keen to support villages in Boulapha and Mahaxay Districts, which have received much less support from donor programs.

52. The incorporation of the irrigation development component is consistent with priorities identified under the KDS, as well as the national priority assigned to better utilization of discharge water from the NT2 hydropower station to support irrigation while protecting concerned villages from possible floods. For specific activities planned under Component 2, small investment funds to support the GoL’s effort to develop downstream irrigation have been included to allow the GoL to capitalize on the potential benefits of a few outlets from the downstream channel to be constructed by the NTPC. The focus on empowering local water users complements the participatory planning and budgeting mechanisms being introduced under DDF and PDF in Component 1, though applied to larger-scale investments. On the other hand, it has been agreed that the project will focus on irrigation while the GoL will collaborate with the NTPC and other donors to support the implementation of flood mitigation measures.

53. With respect to the agriculture and livelihoods support sub-component of the DDF, due consideration was given to the alternative of promoting the development of a village savings & credit (VSC) system. However, given the intensity of effort and level of resources required to establish a viable VSC system, this option was discounted and preference given to a simpler, well-targeted small grant facility and the facilitation of village-level group production and marketing. Another alternative also examined for the village agriculture and livelihoods support was more comprehensive support for extension services in the province. Again, this was judged to be beyond the scope of the project; instead, the proposed project will focus on piloting a more livelihoods-based approach to extension services in a limited number of poor communities and households.

54. Approach for addressing Governance. A wider approach to “governance” was examined as one way for the project to address a broader range of capacity development issues in Khammouane. This was deemed to be better dealt with by GPAR, managed by the Public Administration and Civil Service Authority (PACSA). The project, however, still intends to address a more focused set of governance issues by undertaking Component 1 activities aimed at strengthening public investment planning and public financial management capacities which are closely linked to the DDF/PDF investment financing facility and by extending this approach in the context of strategic investments in irrigation.
55. **Approach for Community Driven Development.** Two community-driven development (CDD) approaches currently co-exist in Lao PDR: the Poverty Reduction Fund (PRF) approach and the DDF approach. The PRF approach is based on a project implementation unit (PIU) with staff at the national, provincial, and district level that manage the sub-project cycle. Such an approach has \textit{a priori} greater capacity of empowering communities, as it places staff on the ground that can assist in promoting an often inexistent dialogue between communities and district officials. The DDF adopts a program approach, and puts stronger emphasis in reinforcing the district capacity of planning and implementing local infrastructure subprojects with proper consultation with the stakeholders. Therefore, DDF does not have a National PIU and staff at the district level, as funds are managed directly by district authorities. DDF is currently being implemented in Saravane province, and the proposed project also has adopted the DDF approach as part of strengthening the capacity of Khammouane Province. Considering the current stage of the development of Lao PDR, the Bank considers that these two approaches have to be continued for the time being. However, discussions are ongoing within the Government of Lao to evaluate each approach's strengths and weaknesses and develop a harmonized approach suited to the needs and conditions of Lao PDR. It has been agreed that a joint evaluation would be carried out during the implementation of the proposed project with the PRF.

### III. IMPLEMENTATION

#### A. Partnership arrangements

56. The project is expected to work in partnership with a number of other development partner organizations and programs, \textit{inter alia}:

(a) NT2 hydropower downstream activities – Component 2 of the proposed project will have a direct linkage with the NT2 downstream activities. During appraisal, agreement has been reached with the GoL and NTPC about the responsibilities of NTPC regarding the construction of the siphons and outlets from the downstream channel to ensure a maximum of synergies;

(b) JICA PCAP activities – JICA proposes to continue providing technical assistance for strengthening investment planning processes at the provincial level. The project’s PDF and DDF facility will provide tangible leverage for the implementation of investment planning reforms. Capacity development activities planned under Component 1 will also involve a partnership with PCAP;

(c) UNCDF technical assistance and linkages with other DDF programs (SBSD, Saravane) – through an agreement between the province and UNCDF, the proposed project will call upon UNCDF’s specialized technical support for the implementation of Component 1. In addition, the project will collaborate with GPAR/SBSD (which includes a substantial DDF-style component that will roll out to four or five provinces) and ensure that lessons learned are shared;

(d) While not yet finalized, it is likely that the Province will work with the UNDP supported GPAR-SBSD project which is supporting governance reforms throughout the country. Key issues supported here might include a strengthening of the Office of the Governor, as well as \textit{kum-ban} strengthening;

(e) UNDP supported improvements to provincial monitoring and evaluation (M&E) systems, which is part of a broader national project on improving national M&E for the NSEDP;
The Public Financial Management Strengthening Program is a multi-year and multi-donor initiative (underpinned by a World Bank administered multi-donor trust fund) operating at the national level. The project has developed close linkages with this program in order to support complementary reforms and capacity strengthening at the local level.

B. Institutional and implementation arrangements

57. **Overall Project Execution.** The Province will assign a Project Director and Project Coordination Section (PCS) which will be established within the Department of Planning and Investment (DPI) responsible for overall project implementation coordination and reporting for both Components 1 and 2. Given the national importance of the NT2 related downstream irrigation development activities, component 2 activities will be closely coordinated with MAF’s Department of Irrigation (DOI).

Component 1. Local development and provincial capacity building.

(a) **Sub-component 1-1.** District Development Fund (DDF). The province will establish the DDF and assign responsibilities for management to the DPI, which will delegate the implementation of the BBG and ALG under the DDF to the districts. Both BBG and ALG will be managed by the DPT; execution of the BBG would be assigned to the line departments at the district level (e.g., Department of Education for school rehabilitation); the DAFO will help the target villages prepare a proposal, and the DPT will review and approve. DPT will prepare an annual report to DPI for review and approval. DPI will release the UXO contingency funds in response to the request by the district;

(b) **Activity 1-2-1.** Provincial Development Fund (PDF). The DPI will manage the PDF. The PCS will be responsible for coordinating line departments in the province as well as district governor offices and preparing a proposal for the PDF investment plan. The plan will be presented to an Advisory Committee for Component 1 for review and approval;

(c) **Activity 1-2-2.** Provincial Capacity Building. The DPI is responsible for overall management of this subcomponent, particularly for fiduciary matters; however, the DPI will delegate to the respective line departments the activities related to the public financial management (Department of Finance, (DOF)), public investment planning (DPI) and livelihood support respectively in terms of preparing terms of reference, technical specifications (PAFO). Procurement of the consultants and civil works will be carried out jointly by the procurement committee, including the staff of the PCS and the representative of the DOF, DPF and the PAFO, which will be established for each procurement case;

(d) **Sub-component 1-3.** Component Management. The DPI will be responsible for the implementation of this sub-component.

58. To fully integrate the component to the province’s structure, the flow of funds would be managed by the DOF, which will release funds to the concerned parties with an instruction of the PCS.
Component 2. Support for irrigation development along NT2 downstream channel and lower Xe Bang Fai river.

59. The Province will implement this component through MAF’s Department of Irrigation (DOI) and ensure that the day-to-day management is carried out by the PAFO. The DOI will assign one of its staff as a Component Manager for Component 2.

60. Considering the fact that the project activities would largely take place in the province, a small unit named the Down Stream Irrigation Management Unit (DIMU) will be established within PAFO to manage component activities. DIMU will be headed by the Component Manager described above, and responsible for: (a) preparing procurement documents for review and approval by the Project Procurement Committee, (b) monitoring the performance of the consultants and contractors; (c) liaising with the stakeholders; (d) managing Component 2 account; (e) preparing the periodical reports for the review of the Project Steering Committee.

61. **Project Oversight.** A Project Steering Committee (PSC) will be established for overseeing both components, the PCS serving as its secretariat. The main task of the PSC will be to: (a) review and approve the periodical project progress report and plan, (b) provide technical advice to PSC and DIMU for general project implementation issues, (c) review and follow up the annual audit report, and (d) major implementation issues (e.g., revision in the operational manual, appointment of key staff in the PSC and DIMU).

62. PSC will organize a meeting every six months. The PSC will be chaired by the Deputy Governor of Khammouane Province and comprise the representatives of the key departments of Khammouane Province and a representative of the key ministries at the central level.

63. **Financial Management.** IDA funds for the project will be deposited into one Designated Account (DA) established in the Bank of Lao PDR and managed by the Ministry of Finance. Under the DA, two component accounts denominated in Kip would be established within a commercial bank. The two components accounts will be established in Khammouane province to support activities under Component 1 and Component 2, and would be managed by the respective component managers under the supervision of the Project Director. The quarterly and annual action plans of the two components will be prepared, and then approved by the project steering committee. Both components will prepare and submit their financial reports for the verification of the project director. PCS will then combine them so as to make up consolidated financial statements and reports for the entire project. Such consolidated financial statements and reports will be submitted to the PSC and to the World Bank.

C. **Monitoring and evaluation of outcome/results**

64. The PCS will ensure regular monitoring of the project and prepare quarterly financial reports and semi-annual progress reports. This will include a close tracking of inputs provided, activities undertaken, and outputs achieved, as well as qualitative assessments of process implementation.
65. The project will also assess its progress towards results and overall objectives through impact evaluation. Baseline and follow up surveys for a sample of districts, *kum banhs* and villages, including those receiving irrigation assistance, as well as institutional skills assessments for the key provincial and district departments will be carried out at the beginning, mid-term and end of project. The results of these surveys will be used to (a) measure the comparative cost effectiveness, targeting and demand responsiveness of the investments under DDF and PDF as compared with other rural investment approaches, including PDF; and (b) confirm the level of skills improvement and integration of new processes and procedures in standard planning, budgeting and investment management under Component 1; and (c) the economic returns to irrigation development under Component 2.

D. Sustainability

66. Project activities have been designed to ensure sustainability and replicability by avoiding parallel implementation units. The DDF and PDF are based on GOL’s own planning and budgeting reforms so that the processes used during project implementation will stand a good chance of being replicated after the completion of the project. The GoL has already expanded the implementation of the DDF in other provinces after successful piloting in Saravane Province.

67. Sustainability of the activities supported by the villages will depend largely upon the target villages. The activities have been designed to support financially and technically feasible livelihoods activities identified jointly by the villagers and extension staff with the support of external technical consultants. The project will also support capacity building of the villages’ entrepreneurial skills. However, it should be noted that the replicability of the ALG will depend on the financial commitment of PAFEC to support its extension staff to carry out necessary visits to villages, and the province to continue funding for ALG facilities for other villages. During the mid-term review, the effectiveness of the ALG would be reviewed jointly by the Province, MAF, and villagers in order to develop a strategy and action plan for possible continuation.

68. Irrigation-related activities have been designed to incorporate the lessons learned and ensure sustainability for the irrigation facilities rehabilitated or established by the project. The proposed irrigation facilities are relatively small, corresponding to the management capacities of WUGs. The rehabilitation of pump-based facilities will only be carried out where pumps are simple and for which WUGs can therefore ensure routine maintenance. Finally, following scheme rehabilitation a technical assistance program covering administrative as well as technical aspects of irrigation management will be implemented to strengthen WUG management and operational capacities.
E. Critical risks and controversial aspects

69. The overall risk rating for the project is estimated as *substantial* mainly because of concerns regarding fiduciary governance, coordination between provincial and national administrations in project execution, provincial implementation capacity and generic Lao PDR corruption. The primary mechanisms for mitigating these risks in the project are the incorporation of transparency mechanisms to strengthen accountability for the use of funds and implementation at all levels, clear designation of responsibilities and significant capacity building support. Specific actions and details are covered in the annexes on Financial Management (Annex 7) and Procurement Arrangements (Annex 8). Particular attention has been made to mitigate the following major inherent risks related to fiduciary aspects of the project:

(a) National treasury operation in Lao PDR is still weak in terms of cash management, internal and external control. Low salary levels of public servants may trigger abuse of the per diems and training allowances to be granted by the project. In order to mitigate this risk, the project would induce the following mechanisms in the provinces: assignment of an internal auditor with each of the implementing agencies (DPI and DoI) supported by technical assistance for training and oversight, annual audits by the State Audit Organization (SAO), external audit for the project accounts, extensive monitoring and training under Activity 1-2-2 in financial management (on particularly fuel and per diem allowances), as well as the Bank's regular supervision missions;

(b) Procurement Risks. Problems of bid collusion amongst contractors, inappropriate disqualification of lowest bidders, unequal access to bidding documents and failure to provide contracted works, goods and services, are specific concerns, as are simple errors in procurement procedures due to the lack of experience of district staff and communities. These risks would be mitigated through: (a) fairly low thresholds to limit shopping arrangements to very small works and goods packages; (b) use of standardized bidding documents, including specifications, for typical BBG subprojects; (c) adoption of community accountability mechanisms including public display at the village, kum banh and district levels of the bidding process, results and contract costs, as well as sign off by the communities prior to payment to contractors for all components; (d) technical audits to confirm quality of works reported as completed and satisfactory; (e) periodic analysis of contracting unit costs, etc. for common subprojects under the proposed project and similar projects operating in Khammouane Province and Lao PDR to identify potential collusion, (f) well publicized sanctions in terms of reduction or freezing of funds allocation to districts which have not complied with DDF procedures; (g) advertisement of the phone number of the State Inspection Authority and procedures for anonymous reporting of concerns and agreement with the Authority on monitoring investigation of concerns received; and (h) technical assistance for preparation of bidding documents and analysis of bids for NCB and ICB procurement;

(c) In addition to the specific fiduciary risks, a number of risks related to coordination and capacity issues are identified in the following risk table:
<table>
<thead>
<tr>
<th>Potential risks</th>
<th>Risk Mitigation Measures</th>
<th>Risk Rating</th>
</tr>
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</table>
| Lack of coordination between local and central administrations delays implementation | • Establishment of oversight committee including central ministry and provincial government representatives  
• Clear assignment of roles and responsibilities in the Operational Manual for technical implementation as well as financial management, flow of funds, procurement and reporting | S           |
| Corruption in financial management and/or procurement diverts funds from objectives | The following measures would be carried out under Activity 1-2-2: Technical assistance to help implement the DDF and the PDF.  
• Integration of community accountability mechanisms, including public display of allocations and contract awards  
• Training in financial management and procurement responsibilities and accountabilities consistent with broader country approach  
• Technical field audits to supplement financial audits  
• Comparison of costs between districts and with results from other UNCDF-supported DDFs and similar projects in Lao to identify cost outliers  
• Sanctions in terms of reduced funds availability in cases of not following key procedures at district level  
• Financial management software would be installed after three months from effectiveness | S           |
| Inadequate preparedness for project implementation and Resulting delay in initial implementation | • Advancing preparedness for implementation of the project using Japan PHRD Grant to finance key activities such as: (a) detailed design for rehabilitation of the existing irrigation facility in Tha Thot Village and (b) preparation of Operation Manuals, and (c) initial stakeholder consultation for DDF. | M           |
| Weak local capacity support mechanisms                                           | • Phased implementation to allow learning / fine tune in activity design.  
• Technical backstopping from UNCDF technical support team  
• Experience and training of core provincial civil service group under GPAR-LSP preparation phase  
• Intensive training in core skills of planning, budgeting and M&E. | M           |
| Inadequate compliance with safeguards, particularly regarding resettlement compensation | • Very limited anticipated land losses associated with canal and rural road rehabilitation  
• Training in safeguards provisions incorporated in manual and dissemination to villagers as part of training of participants  
• Required reporting and Bank follow up supervision | M           |
| Poor quality design and/or operation of irrigation works.                       | • Prior review of designs  
• *A priori agreement and programming of technical support for formation of WUGS, construction oversight and training of villagers in water management | S           |
| High staff turnover limits effectiveness of capacity enhancement               | • Careful selection of participants based on criteria of in-service responsibilities and expected tenure in position/agency | M           |

Rating: H (High); S (Substantial); M (Modest); N (Low or Negligible)

F. Grant conditions and covenants

Effectiveness conditions

(a) Establishment of the project Steering Committee (PSC) by the Recipient to monitor the overall progress of the project and to provide strategic guidance during implementation;
(b) Establishment of the Project Coordination Section (PCS) by Khammouanne Province for the purpose of executing Component 1 of the Project;

(c) Establishment of the Downstream Irrigation Management Unit (DIMU) by MAF's Department of Irrigation (DOI) for the implementation of Component 2; and

(d) Formal adoption of the Operational Manual by the Recipient.

**Other Implementation Conditions**

(a) Agreement shall be made by December 31, 2008 between the Nam Theum Power Company (NTPC) and the GoL stipulating the NTPC’s commitments to: (i) take specified measures to mitigate the impacts of the downstream channels to the existing irrigation scheme in Tha Thot Village; and (ii) construct a new facility to divert water from the regulating dam to the Tha Thot area;

(b) Mid-Term Review report prepared based on agreed Terms of Reference should be submitted to Bank by March 30, 2011.

**Withdrawal Conditions**

(a) Disbursement condition for goods, works, consultant services and incremental operating costs for Component 2-1 (Rehabilitation of the Existing Irrigation Facility in Tha Thot Village), and Component 2-2 (Support for Pilot Downstream Irrigation Development in Tha Thot Area): the Agreement between the Nam Theum Power Company (NTPC) and the GoL referred to above in Other Implementation Conditions – Section (a), should be finalized.

**IV. APPRAISAL SUMMARY**

**A. Economic and financial analyses**

70. **DDF and PDF.** It is not possible to calculate *ex ante* economic internal rates of return (EIRR) for the investments to be financed through the DDF and PDF, largely because the project will be providing discretionary annual allocations to the province and districts, which would then prioritize investments through consultations with and participation of the stakeholders. The investments will be small in size, each of which would cost less than US$50,000. Judging from the experience in a similar project in Saravane Province, financed by UNCDF, most of the DDF-funded investments would be between US$3,000 and US$5,000. The investments also would cover many sectors ranging from education, health, water and sanitation, and roads.

71. Nevertheless, DDF-funded investments will most likely be economically sensible, mainly because they would be determined through consultations with the concerned stakeholders at the village level. Although there is no data from Lao PDR to assess how such efficiencies resulting from better resource allocation translate into economic rates of return, evidence from a similar project in Bangladesh suggests that discretionary facilities implemented by local governments achieve productive efficiency gains ranging from 23 to 37 percent. Assuming these savings accrue at a similar rate for the DDF/PDF grants that will be allocated by the proposed project, then the project can expect to yield absolute gains in productive efficiency in an amount ranging
from about USD $1 million to $1.5 million over the project implementation period alone. The proposed project’s DDF and PDF facilities are thus expected to generate substantial benefits in terms of allocative and productive efficiency, as well as a large number of infrastructure related but unquantifiable benefits. The relative cost effectiveness of DDF and PDF investments compared with other approaches applied in Lao PDR will be assessed as part of mid-term and final evaluation.

72. **DDF - ALG.** A preliminary assessment carried out for a small number of target villages has indicated good commercial potentials for certain products (e.g., bamboo crafts and livestock). Although at the appraisal stage there is no a priori detailed analysis on the financial and economic returns on support to village-level production groups; during the first phase, a detailed analysis (both demand and supply side) would be prepared with the technical assistance. In addition, technical assistance would assist the concerned villagers in organizing themselves into production groups and developing a business plan. The second phase, the support for the production group through the provision of seed grants, would be started only after the business plan would clearly show good financial viability. Technical assistance is planned to monitor the performance of the village production groups and provide timely guidance to facilitate them.

73. **Irrigation.** The three types of the irrigation investment are planned under Component 2;

(a) Rehabilitation of the existing irrigation facility in Tha Thot village. The EIRR of the proposed rehabilitation work is estimated at about 12.9 percent under a conservative scenario without assuming the conversion to higher value crops (e.g., vegetables), confirming the economic viability of the proposed rehabilitation works. The proposed rehabilitation work would benefit about 400 families with about 1.2 ha each in the scheme. The estimated cost for rehabilitation (US$2,408 per hectare) is relatively high compared to other projects, as extensive repairs, such as resectioning the main canals and repairs to the weir would be needed. The current irrigation area is about 150 ha and average yield of rice, which is the main crop is 2.2 tons per ha; without the project, the irrigation area would decline to 100 hectares as a result of continued deterioration of the scheme. With the project, the irrigation area would be fully restored to the planned 250 ha with the yields of 4.5 tons per ha. The estimated return for labor would also be increased from about US$3.2 per day to US$5.8 per day, which is far above alternative income opportunities in the province;

(b) Development of a pilot downstream irrigation scheme in Tha Thot Area. Sub-component 2-2 would support the GoL’s aspiration to develop a series of new irrigation facilities using discharge water from the NT2 hydropower station. The preliminary EIRR estimated by the pre-feasibility study financed by the NTPC is about 12.0 percent for entire downstream irrigation area comprising about 17,000 hectares; and during appraisal, the preliminary EIRR was estimated at about 13.0 percent for the project area. While the detailed economic analysis would be carried out during the first and second year of project implementation in conjuction with the planned feasibility study, the economic viability of the particular irrigation scheme proposed under the project is very likely because: (a) the proposed area is fully cultivated (mainly rice) and farmers’ interest in irrigation is quite high, therefore quick benefits from the construction are expected; (b) the NTPC will provide an outlet and the construction cost would thus be reduced by at
least 20 percent compared to the other irrigation facilities in the country, and (c) the proposed system is gravity based, and operation of the scheme would be affordable and technically feasible for the concerned farmers;

(c) Rehabilitation of small pump facilities along Xe Bang Fai River. A preliminary EIRR based on the 8 irrigation schemes is estimated at 89.5 percent. This activity would support rehabilitation of about 30 pump facilities (20-100 ha). The activity would mainly support minor repairs to pumps and head concrete structures, which would cost up to US$5,000 per scheme. Rapid rural surveys carried out during preparation confirmed that the farmers are paying the operation cost (mainly electricity and labor), but do not perform necessary routine maintenance works due mainly to a lack of knowledge and insufficient technical support from the PAFO. The EIRR of these small repair works are very high, as these works are inexpensive deferred maintenance, and the repair works would substantially increase the efficiencies of the current operations (typically, there is substantial leakage from pumps and canal distribution system) and increase the sustainability of the scheme. Further it is noteworthy that the operation costs for these pump facilities would be substantially reduced after completion of the NT2 hydropower station, as water levels in the Xe Bang Fai River during the dry season would increase by 2-3 meters and pump lift would be reduced accordingly. The activity would also include technical training for WUGs to ensure the sustainability of the facilities upon rehabilitation.

B. Technical

74. **DDF and PDF.** Based on the Saravane pilot and consultations during the KDS preparation process, the majority of infrastructure supported by the DDF would be upgrading of rural roads, village potable water supply, and upgrading/expansion of school and health post buildings. Standard designs have been prepared based on government specifications as the basis for sub-projects and final designs and supervision of construction will be carried out by the private sector. The process would be monitored and guided by the UNCDF technical support team, to be financed under the project. An annual technical audit of sub-projects will identify design or construction quality concerns in order to strengthen the standard designs, as well as training of technical staff and district committees.

75. **Irrigation.** The existing irrigation facility in That Thot village was constructed in the late 1980s, serving about 470 ha of the command areas in the wet season and about 280 ha in the dry season, mainly for rice farming during both seasons. While the system is still being used, most of it has deteriorated seriously and needs major rehabilitation including repairs to the reservoir and the canal system. The reconnection of the main irrigation canal, which has been cut by the NT2's downstream channel, will be completed shortly.

76. The potential irrigation development area of the Tha Thot area using the discharge from the NT2 hydropower station is estimated at approximately 1,200 ha in total, divided into five sub-facilities. During the pre-feasibility study, the GoL and the NTPC agreed that one of the two outlets at the Regulating Dam will have a capacity of 3.18 m³/s for releasing water to the Tha Thot area of 1,200 ha. The outlet for the Tha Thot area will be further divided into two outlets, one of which will have a capacity of 1.52 m³/s for the right bank of the Downstream Channel and the other of which will have a capacity of 1.66 m³/s for the left bank. The proposed expansion
would be the second sub-scheme located on the right bank of the Downstream Channel. Water
would be released from the Regulating Dam and distributed by gravity. Detailed feasibility
study and the detailed design would be carried out during the first year of implementation.

C. Fiduciary

Financial Management

77. In general, and as noted by the 2007 Public Expenditure Review (PER), fiduciary risk in
Lao PDR is high. According to the PER, the reasons for this are a lack of realism in budgets and
weaknesses in the budget processes, budget execution, accounting and control, and reporting.
Weak institutional arrangements and capacity for internal and external audits contribute to the
high fiduciary risk. Skills shortages in PFM and insufficient capacity building mechanisms and
coordination exist at all levels. There is an acute shortage of staff with PFM skills. These skills
range from public expenditure analysis and planning and Treasury administration to
procurement, accounting, auditing, and financial information and communication technologies.
Skills are particularly poor at the local level. Capacity-building mechanisms are inadequate.
Risk at the sub-national level is compounded by a lack of mechanisms for downward and upward
accountability.

78. The proposed project, which places a particular emphasis on district- and provincial-level
financial management to handle DDF and PDF activities must, therefore, be seen as “high risk”
in fiduciary terms. As a result, a range of measures will be introduced by the project, aimed
explicitly at either building sub-national FM capacities or at establishing basic systems and
procedures (e.g. timely and regular financial reporting) tailored to the capacities of local
officials. Regular external audits of all project activities will be supported, and carried out in
tandem with the SAO. In addition, the DDF and PDF introduce nascent mechanisms for
downward accountability and disclosure requirements. Although such measures are generic
capacity development activities, they are also intended to reduce the fiduciary risk associated
with the project’s decentralized investment financing facilities. Finally, the PSC budget includes
provision for a dedicated and project-housed FM unit.

79. As with FM in general, public procurement in Lao PDR is also subject to substantial
risks. Although GoL has adopted new and improved regulations and created an office dedicated
to establishing procurement policy and procurement monitoring practices (the Procurement
Monitoring Office, PrMO), clear processes still do not exist for managing procurement
operations, monitoring procurement outcomes (and collecting and publishing such information),
and ensuring the application and enforcement of improved procurement procedures. In addition,
little systematic procurement capacity building has taken place at the local level.

80. The proposed project’s procurement activities are expected to be carried out by the
procurement committee established by the project steering committee. As a general principle,
the project will rely upon Lao PDR’s existing set of procurement rules and regulations for all
goods and works procured by the National Competitive Bidding, and on Bank procedures for the
procurement of consultant services.
81. **DDF and PDF.** Given the decentralized modality inherent in the DDF facility, districts will need to undertake procurement of a range of goods, works and services. Districts, in other words, will operate as procuring entities. However, districts in Khammouane have limited or no experience in public procurement. The proposed project will therefore:

(a) Develop a District Procurement Manual (DPM), based on national procurement regulations\(^2\) and on the existing District Procurement Manual used by the Saravane project. The DPM will be a part of the operational manual and will be subject to Bank approval;
(b) Provide relevant district-level staff with intensive training in the use of procurement methods and application of procurement procedures;
(c) Establish district procurement activity reports as an integral part of regular district reporting;
(d) Closely monitor district level procurement activities so as to ensure compliance with agreed procedures and to identify any bottlenecks or problems.

82. A similar set of arrangements will apply to provincial-level procurement activities linked to PDF expenditures.

83. In both cases (DDF and PDF), the Bank will not need to ensure prior reviews of procurement packages and processes. However, the Bank will require that districts and the province allow for a sample-based post-review of up to 10 percent of all procurement packages.

84. **ALG.** For this sub-component, procurement will be handled by the PCS/DPI, acting on behalf of the province. Any open tendering processes, however, will be delegated to PAFEC but with the PCS and DPI making final decisions on PAFEC's recommendations. Technical assistance for this sub-component will be procured by the PCS with the terms of reference prepared by the PAFEC and PAFO.

85. **Other procurement.** The PCS and the DIMU will procure goods and services that are required for the overall management and administration of the project in accordance with the Bank’s procurement guidelines.

D. **Social**

86. **Overall Approach.** The community-driven/participatory approach to planning prescribed by the proposed project ensures that development options or interventions produce the maximum benefits to the community while minimizing or avoiding negative impacts to the villagers. For unavoidable impacts, the Bank’s Policy on Involuntary Resettlement and Land Acquisition (OP/BP 4.12) requires that losses are compensated at replacement cost and should be done in close consultation with the affected households/persons. Compensation and relocation assistance are required to be completed prior to the commencement of civil works. A grievance redressal structure and procedure is also included. The technical guidelines to mitigate the

identified social impacts are included in the Operation Manual and they will be applied during project implementation. Given that the specific project sites for some activities would be identified by the province and districts during project implementation, the Environmental and Social Safeguard Framework (ESSF) have been developed and would be applied.

87. **Land acquisition and Resettlement.** Implementation of the project will improve the social conditions of local people, and adverse impacts resulting from land acquisition and resettlement are not expected. A rapid social assessment, carried out with assistance from an international social specialist, concluded that the project is not expected to require relocation but that minor land acquisition may become necessary for small infrastructure investment activities. Given that specific project sites and activities will be identified by the province and districts during project implementation, the Compensation and Resettlement Policy Framework (CRPF) and the Environment and Social Safeguard Screening Framework (ESSF) have been developed and they will be applied to the sub-projects that involve resettlement and land acquisition. The CRPF, including a guideline for preparation of the Resettlement Action Plan (RAP), has been included in the project Safeguard Manual. If land donation is required, efforts will be made to ensure that it is voluntary and will not cause adverse impacts on the livelihood of the land donor. Proper records on this will also be kept.

88. **Indigenous Peoples.** The population of Khammouane Province is ethnically heterogeneous, with almost 40 percent of the total population being made up of ethnic minorities. For the most part, ethnic minority populations inhabit the upland and eastern parts of the province, whilst the Lao Loum population is generally located in the Mekong valley and immediately adjacent areas. Ethnic minority groups live in Boulapha, Gnomalat and along some stretches of the Xe Bang Fai River. The ethnic minority communities to be involved in the project are expected to benefit from investment activities. Small infrastructure investments financed through the project may trigger the need for land for project-funded investments and consequently adversely affect some ethnic minority households or communities. An Indigenous Peoples Development Framework (IPDF) has been developed to ensure adequate consultation with and participation of the local population during the planning and implementation of the project. The IPDF includes the description of the impact, socio-economic characteristics of the ethnic group/s and suggested mitigation measures. A preliminary screening of ethnic groups in the development process has also been prepared in the safeguard section of the Operational Manual. This IPDF will help maximize project benefits to the ethnic minority communities and mitigate any possible adverse impacts.

89. **Consultation Framework.** The process of developing the KDR and KDS which formed the basis for the project design was based on extensive consultations with stakeholder groups, including villagers, mass organizations (LWU, LF), district officials, the private sector and donor and NGO representatives. These consultations were arranged around specific themes (such as education, health, gender, and rural development or private sector development) as well as part of the overall priority setting process across themes. The proposed project, which is to support KDR and KDS in general, has also been discussed with the stakeholder groups. Efforts will be made to facilitate effective communication and consultation with the local communities, especially the affected population, throughout the implementation of the project. In particular, under Component 1 extensive consultation is planned to set out priorities for investment to be
carried out by the DDF (Subcomponent 1-1) and PDF (Activity 1-2-1). Under Component 2, a technical assistance program is planned to provide direct support to the concerned communities to ensure maximum benefits from the planned irrigation works.

E. Environment

90. Overview of the Project Activities. Implementation of the project will involve small civil works for: (a) rehabilitation of the existing Tha Thot irrigation facility; (b) development of small downstream irrigation facilities in Gnomalat; and (c) construction of small infrastructure (roads, water supply, schools, etc.) as selected by the districts/province. These activities will take place in a variety of agro-ecological settings ranging from riverside areas of the Mekong valley (Gnomalat and Xe Bang Fai) to uplands in the Annamite Mountains bordering Vietnam (Boulapha). The major form of land use in Gnomalat is paddy field and town development (including NT2 major camps) while that along Xe Bang Fai is paddy field and villages, including Buddhist temples.

91. Environmental Assessment and Proposed Mitigation Measures. An initial environmental examination (IEE) was carried out with assistance from an international environmental specialist. The IEE study concluded that implementation of the project will not create adverse impacts on the local environment and local people. However, good engineering practices will have to be applied during the execution of all the civil works with close supervision and monitoring of contractor performance. The project will not procure any pesticides. Increases in the use of pesticides and fertilizers due to rehabilitation of Tha Thot irrigation system would be small, and mitigation would be made through applying a “chemical prohibition list” and training/increasing knowledge of local official and farmers on pesticides, Integrated Pest Management (IPM) and other options are considered adequate. The IPM program developed for the NTSEP would be used as a starting point for the development of the training materials. Given the small scale of the civil works and location of the project sites, the study confirmed that the project will not create large degradation of natural habitats as specified in the policy and significant loss of natural habitats is not expected; therefore the IDA OP/BP4.04 (Natural Habitat) will not be triggered. However, to ensure full compliance with the Bank’s safeguard policy, concerns regarding natural habitats, culture property, and safety of dam are included in the ESSF, to be applied for all the sub-projects. Code of practice and technical guidelines for addressing various issues have been prepared and included in the safeguard section of the Operational Manual.

92. Review and Disclosure. The IEE has been submitted to the Department of Environment of the Water Resources and Environmental Agency through its Khammouane provincial office for review and approval. The report has been sent to the Bank before appraisal and found to be satisfactory. In line with the GoL and the Bank’s public disclosure policy, the IEE (including ESSF) was disclosed in English on March 3, 2008, and Lao language version was disclosed on March 8, 2008. The IEE and other safeguard related reports are available for public access at the World Bank Vientiane office, the DOI office in Vientiane, and the PAFO offices in Khammouane and all the districts.

93. Implementation of the Mitigation Measures. A safeguard section of the Operational Manual developed for the project have been translated into actions by implementing entities
(PCS for Component 1 and DIMU for Component 2) in close consultation with the Bank. The Manual outlines the basic principles of the environment and social safeguard activities, the screening and approval of ESSF, and technical guidelines for good engineering practices during construction, IPM, upgrading of small rural roads, and other small-scale infrastructure, including the monitoring forms. The code of good engineering practices will be included in the bidding document and the potential contractors will be informed of this obligation. Training of farmers and local officials on IPM and other options to avoid increasing use of chemicals has been included in the project design. Farmers will be encouraged to adopt organic farming and/or other appropriate technology/practices. When possible, a program to exchange knowledge and experience between Lao PDR and the northeast of Thailand will be developed and an effort will be made to secure additional funds for its implementation. Close consultations with local officials and farmers will be continued during project implementation.

94. **Environmental and Social Safeguard Framework.** To mitigate the potential negative impacts due to unidentified activities, an ESSF has been developed (Annex 10) to ensure that adverse impacts will be identified and adequately mitigated. The ESSF describes how safeguards issues will be dealt with by: (a) detailing specific safeguards procedures and measures for activities with environmental and/or social impacts, (b) detailing the types of activities that will not be supported by the proposed project, (c) detailing the types of activities that may only be permitted in conjunction with specific safeguards procedures, and (d) outlining institutional and monitoring arrangements. Specific procedural requirements and implementation arrangement on key safeguards aspects have been developed and attached to the ESSF as annexes.

95. **Training.** Training of safeguard principles and instruments (ESSF, Environmental Management Plan (EMP), CRPF, IPDF, etc.) will be provided to the project staff and key farmers. This is to ensure that: (a) the proposed project activities will be properly screened through the ESSF; (b) a code of good engineering practice is included in the bidding documents and contracts and supervision and monitoring of the contractor performance is conducted by the supervision consultant; and (c) close consultation with local agencies and communities is carried out throughout project planning and implementation. A budget ($50,000) has been included as the project cost for the safeguard training for the province and the MAF, to ensure compliance with the environmental safeguard stipulated under the project.

96. **Special note for linkage with NT2 activities.** The project would have a linkage with the NT2 activities, mainly through irrigation activities planned in Gnomalat. However, the linkage is passive, and the project team would not expect major environmental or social issues to be caused by the linkage with the NT2 activities under the proposed project. In particular, the existing irrigation facility in Tha Thot Village would not be affected by the NT2 activities in terms of water sources. In order to define the scope of the project to support the irrigation activities under the project, an agreement would be made by December 31, 2008 between the GoL and NTPC to define the NTPC’s commitment to mitigate impacts of downstream channels to Tha Thot Village, and construct a new facility to divert water from the regulating dam to the Tha Thot Area. Whereas development of a small irrigation scheme utilizing water to be discharged from NT2 is expected, the proposed project is not responsible for water quality of the
discharge. NTPC will continue to monitor the water quality as part of their obligations under the NT2, and water quality would be assured before construction of the irrigation scheme starts.

F. Safeguard policy

97. The Bank has defined the proposed project as a 'Category B' project. The activities proposed for the different components will involve only small scale civil works, for which no major adverse impacts on the local environment and local communities are expected. Five of the Bank’s safeguard policies, four policies are triggered: Environmental Assessment (OP 4.01); Pest Management (OP 4.09); Indigenous Peoples (OP 4.10); Involuntary Resettlement (OP 4.12), and International Waterway (OP 7.50). Although the policy on the Natural Habitat (Op 4.04) and the Physical Cultural Resources (Op. 4.11) are not triggered, efforts will be made to avoid adverse impacts during the planning, design, construction, and operation of investment supported by the proposed project.

98. Project activities will occur within the Xe Bang Fai River, and not the Mekong river mainstream; therefore, prior agreement with the riparian countries is not required according to the Mekong Agreement signed jointly by Thailand, Vietnam, Cambodia and Lao PDR in 1995. Further, the notification is not required under the Mekong Agreement, as the planned activities are minor. However, the project has been notified through the Bank to Cambodia, Vietnam, China, Thailand and Myanmar in compliance with OP 7.50.

99. The IEE confirmed that taking into consideration the small of scale civil works, scope of the project, and location of the proposed project sites, the project will not create large degradation of natural habitats as specified in the policy, while significant loss of natural habitats is not expected; therefore, OP/BP4.04 (Natural habitat) will not be triggered. The IEE also confirmed that the project will not adversely affect sites with archeological, paleontological, historical, religious, or unique natural values and will not involve logging or large forest clearance as defined in the Bank’s Forestry Policy (OP. 4.36). Supporting the rehabilitation of the existing irrigation facility in Tha Thot Village, which draws water from a weir (less than 6 meters high); will not trigger the Dam Safety Policy. The project will not involve construction of any dam as specified in the policy, but may be affected by the operation of NT2 dam, to be operational in 2010. Given that the design and construction of the NT2 dam are periodically reviewed and supervised by a team of international experts on Dam Safety, the risks due to NT2 failure is small.

100. The project is not located in any known area of territorial dispute as defined under the policy. The project activities may involve small land acquisition and may impact on ethnic groups; these issues will be addressed through the involuntary resettlement and indigenous people policies. Limited UXO clearance associated with the investments to be carried out under the project may be necessary and a small contingency fund has been allocated for this purpose. Field visits to the potential project sites at Boulapha, Gnomalat, and along the Xe Bang Fai River confirmed this conclusion.
G.  Policy exceptions and readiness

101.  No policy exceptions apply to this project.

102.  Project readiness is considered to be satisfactory based on institutional arrangements and the progress achieved in completion of the operational manuals for both Component 1 and 2. A Project Coordination Section, and a Downstream Irrigation Management Unit (DIMU) have been set up for preparation, and it is expected that the PCS and DIMU would be formally established for implementation upon Board approval, as part of the conditions for effectiveness. The Operation Manual will set out detailed procedures for implementing the project activities, including preliminary terms of reference for major technical assistance under Component 1 and Component 2. On implementation capacity, key staff of the DPI and DOI have been strengthened during the extensive preparation period for the KDS and found adequate for implementation of the project.
Annex 1: Country and Province Background

LAO PDR: Khammouane Development Project

Lao PDR – Poverty in the midst of development potential

1. Despite a rich natural resources endowment and the considerable opportunities for socio-economic development offered by its geographical location at the heart of a dynamic Mekong region, Lao PDR and many of its people remain remarkably poor. By regional standards, income levels are low, and social indicators are even worse. There has been economic growth, and large numbers of people have been able to cross over the poverty line – but it is abundantly clear that the country’s potential far exceeds its current socio-economic situation. There is no single, simple explanation for this – a wide range of factors (governance, inequalities, human capital endowments, private sector development, etc.) underpin Lao PDR’s relative inability to perform and to deliver pro-poor, inclusive and sustainable socio-economic development.

Khammouane province

2. Khammouane province, in many respects, embodies many of the problems and constraints that have hobbled Lao PDR’s development. Although one of the historically better off provinces in Lao PDR, economic opportunities and relative fiscal “surplus” have not translated into significantly more pro-poor growth, better public services and socio-economic development to the extent that might have been expected.

3. Khammouane’s potential for economic growth is clearly in evidence. Lying in the centre of Lao PDR, Khammouane is situated in a geographically advantageous position. The changes brought by the market liberalization of the past 15-20 years are due to accelerate in the period to 2015, driven by developments such as global and regional trade liberalization, the recent completion of National Road 12 to Vietnam, the construction of the USD 1.1 billion Nam Theun 2 hydropower project, the imminent completion of a bridge across the Mekong River in the neighboring province of Savanakhet and the potential construction of a trans-Mekong bridge from the provincial capital of Thakek itself. The opportunities for enhanced economic growth – and the concomitant potential for poverty reduction – are considerable. The primary issue is one of carpe diem, seizing opportunities, and turning them into sustainable, inclusive and pro-poor development.

Khammouane’s development report and strategy

4. In response to the developmental challenges that it faces, Khammouane has (with Bank support) engaged in a consultative process of assessing problems and constraints, and – as a consequence – has drawn up a coherent development strategy. The principal outputs from this overall process have been the Khammouane Development Report (KDR) and the Khammouane Development Strategy (KDS).
5. **Khammouane Development Report.** The KDR spells out a range of problems, constraints and issues — in terms of four basic “sectoral” areas (governance, rural livelihoods, economic development, and social development, as well in terms of a number of cross-cutting areas (environmental management, infrastructure and gender). The following sections provide a very brief summary of the issues examined in the KDR.

6. The assessment of governance, which the KDR treats in very broad terms, reveals a province where decentralization has been managed in an *ad hoc* way, such that powers, functions and resources have not been coherently devolved to lower tiers of the local administrative system. Planning and budgeting in Khammouane reflect this, with the province taking on the preponderant responsibility for these activities, to the detriment of districts — despite a broad-based recognition that districts should be on the front-line of service delivery. The delivery of public goods and services is seen as being constrained by local capacities. Gender issues are also highlighted as being of some concern in the KDR’s governance assessment.

7. With respect to rural livelihoods, the KDR makes a number of important observations. Firstly, there is a clear poverty “corridor” in Khammouane provinces, with districts situated in the eastern part being significantly poorer than those in the western, Mekong “corridor”. Secondly, agriculture continues to be the principal source of employment for most of the province’s population. Farming and livestock production systems are generally characterized as traditional, with only limited use being made of modern technology and inputs. Thirdly, the key constraints to improving rural livelihoods are knowledge and financial capital. Fourthly, and finally, extension services are limited.

8. According to the KDR, the structure of the provincial economy is gradually changing — the agriculture and forestry sector is declining in relative importance, whilst the industrial/handicrafts and service sectors are gradually becoming more important elements. Increased trading opportunities with Thailand and other ASEAN countries are an important stimulus to economic growth in Khammouane. Tourism is also developing in the province.

9. Much of the assessment of social development in the KDR focuses on the health and education sectors. Provincial and local health services are generally of low quality, and are often inaccessible (particularly in the more mountainous eastern districts). Health indicators for the province are surprisingly bad given the relative prosperity of Khammouane — the infant mortality rate, for example, is significantly higher than for Lao PDR as a whole. In the education sector, primary education is characterized by high drop-out and repeater rates, closely correlated with poor access to schools and ethnicity. The province’s network of secondary education facilities is under-developed — as a result, may secondary school aged children simply do not continue their education because the nearest secondary school is too far away.

10. Khammouane’s environment and natural resources are crucial to rural livelihoods. However, forest resources have been severely depleted — largely due to unsustainable levels of logging, fuelled in turn by high demand from the province’s wood processing sector. Local fisheries also seem to be under threat due to a combination of factors — hydro-power development, irrigation, deforestation and over-exploitation. However, the province is endowed
with significant water resources, which are now subject to major hydro-power developments, as well as important mineral resources, which have only recently begun to be exploited.

11. The final part of the KDR looks at the province’s infrastructure endowment, particularly its road network. The provincial road network is patchy – and many villages still cannot be accessed by road, especially in the eastern areas of the province. The electricity grid is equally patchy – although 57 percent of all villages in the province have access to electricity, in districts like Boulapha and Nakai, less than 10 percent of villages are connected to the grid.

12. **Khammouane Development Strategy.** Based on the findings of the KDR, the province has developed an over-arching development strategy, the KDS, aimed at addressing some of the major developmental challenges facing Khammouane in the coming years.

The KDS identifies four major goals, as follows:

**Goal 1: Improve Governance**

By 2015, local government will be more effective, transparent and gender inclusive, through capacity building of government staff at all levels.

To achieve this goal, a wide range of activities have been identified, *inter alia:*

- promoting the rule of law;
- building the capacity of officials in key service delivery agencies;
- strengthening the provincial planning process;
- improving public financial management;
- promoting decentralized and demand-driven infrastructure and service delivery;
- increasing popular participation;
- fostering gender equality.

**Goal 2: Strengthen Rural Livelihoods**

By 2015, the quality of life of rural communities has been improved and poverty has been reduced through improved infrastructure and the uptake of sustainable livelihood alternatives.

Actions identified for achieving this goal are as follows:

- agricultural production development;
- rural enterprise development;
- training and capacity building;
- planning, monitoring and evaluation;
- regulations reform and development particularly in areas of land tenure and agri-business enhancement and promotion;
- social services improvement: a cross-sectoral strategy area affecting all aspects of rural livelihoods and including rural infrastructure expansion (roads and electrification), health and
education improvements, local governance improvement and promotion of greater co-management;
• financial access expansion: strengthened financial organisation and promotion of appropriate micro-finance for production inputs and post-harvest processing based on business plans.

Goal 3: Promote Economic Development

By 2015, the economy has been continuously and strongly developed (averaging 12 percent per annum growth) through the linking of agriculture with industry and services, the promotion of production activities in all sectors and the sustainable utilization of natural resources.

Here several areas of work were identified that would promote economic development:

• developing the private sector by:
  - linking farmers to markets on the basis of extension through Kum Bans and producer groups;
  - promoting contract farming;
  - clarification of the role of the province and provincial public sector in private sector development;
  - strengthening linkages to central level institutions specialized in private sector development;
• promoting tourism throughout the province.

Goal 4: Promote Social Development

By 2015, people of all ethnic groups have better quality of life, better knowledge, improved capacity and health through the improvement of social services and the promotion of cultural values.

In the health sector, priority actions identified were as follows:

• improving the quality and availability of basic preventative and curative services, through increasing the number of (female) village health workers, undertaking school health programs, and strengthening technical backstopping;
• introducing pre-payment schemes (such as community-based health insurance);
• improving human resources as a way of raising the quality of services.

For the education sector, activities such as the following were prioritized:

• increasing retention rates and reduce repetition rates in primary school education through:
  - developing appropriate curricula;
  - reviewing and improving teacher training;
• improve access to, and increase retention rates in, secondary school education by:
  - reviewing the existing secondary school network and extending it through the construction of new schools;
  - reviewing and improving the secondary school curriculum;
- sensitizing secondary school students on post-secondary education opportunities;
- improving the quality of secondary school teaching;
- expanding access to vocational schools.

13. Finally, in the cross-cutting area of infrastructure, the KDS points to the need for major investments in the road and other infrastructure networks, prioritization of which requires a more participatory and consultative planning and budgeting process.
Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

LAO PDR: Khammouane Development Project

1. The following is the list of the Bank financed projects in the rural development and natural resources management, which are considered to relevant to the proposed project; the description of the implementation status is as of January 15, 2008.

2. **Lao PDR: Poverty Reduction Fund (PRF) (P077326) Current ISR Rating: Satisfactory.** The main objectives of the project is to improve the access to public infrastructure and services at the village level, build capacity and empower villages in poor districts to manage their own public investment planning, and strengthen local institutions to support participatory decision making and conflict resolution processes at the village, and district levels.

3. In general, implementation of the project is satisfactory. The project has supported the construction of schools, irrigation, roads, and water supply; the overall implementation is on schedule, and the outcome of the project has meeting the appraisal target. Extensive village participation in identification and procurement of the subprojects has resulted in high satisfaction rate and good control over overall budget. The project has set a standard on the CDD project in Lao PDR.

4. The challenges for the PRF is to institutionalize the outcome into the government’s structure to ensure replicability and sustainability, as the implementation of the project is carried out mainly by the project funded special entity. In this context, under the forthcoming second phase of the PRF, extensive technical assistance would be provided to the concerned district governments so as to learn about better resource utilization for poverty reduction through effective engagement of the villages.

5. **Lao PDR: Sustainable Forestry for Rural Development (P064886) Current ISR Rating: Moderately Satisfactory.** The main objective of the project is to assist achieving forestry management of production forests and to achieve rural poverty in selected forest areas and to help advance a broad set of forest policy reform.

6. The current implementation status of the subcomponent *Village Development Fund*, which aims to provide the poor villages with a small grant to support infrastructure and/or livelihood improvement, is particularly relevant to the proposed project. While the project provides accelerated support for village development (234 villages in December 2006 compared to 20 in December 2005), the following issues have been found: (i) size of the grant is too small,(US$3,000 is too small for village infrastructure), and about 80 percent of the funds are used for livestock to help individuals (ii) the current guidelines does not specifically address to protect vulnerable groups (ethnic minorities, women) to ensure fair share of the benefits, (iii) the grant program has been converted to the village based revolving funds (as the grant is mainly supporting private goods for particular individuals), but not adequate monitoring has not been carried out. The implementation of the subcomponent is carried out mainly by the project, without engaged concerned agriculture extension services.
7. This particular project provides the following lessons: (i) well targeted grant, particularly focusing on inclusion of vulnerable groups and support to groups, rather than individuals, be deployed to provide livelihood support to the villages, (ii) a separate financial facility to support infrastructure to address critical basic human needs (e.g. water supply) to ensure adequate funding, (iii) engagement of the concerned government entity to ensure their responsibilities for implementation and sustainability beyond the project’s life. These lessons have been incorporated in designing the ALG of the DDF.

8. Lao PDR: Agricultural Development Project (P065973) Current ISR Rating: Satisfactory. The main objective of the project is to reduce rural poverty by improving and increasing agriculture production. This will be achieved by supporting components such as irrigation, livestock and village level infrastructure through a community based approach.

9. The project mainly supports the construction of rehabilitation of the existing irrigation schemes (mainly medium to large size), village water supply, and access roads in the four provinces, including Khammouane province. The project also aims at improving skills of agriculture extension staff to support the villages. The implementation of the project has been improved substantially during the last 12 months, while in the past, serious fiduciary issues have been encountered. The project provides the following positive lessons in project design: (i) relatively simple menu approach for village support is effective and manageable and (ii) involvement of agriculture extension staff is effective for farmers to apply appropriate technologies to improve yields, whereas the project also emphasizes the importance on technical supervision (construction of some irrigation facilities has been delayed due to the design flaws) as well as oversight on fiduciary aspects.

10. Lao PDR: Nam Theun Social and Environmental Project (NTSEP) (P049290) Current ISR Rating: Moderately Satisfactory. The objective of the project is to generate revenues, through environmentally and socially sustainable development of NT2’s hydropower potential, which will be used to finance priority poverty reduction and environmental management programs.

11. The core of the project is the livelihood restoration and sustainable development for the affected population in sustainable NT2 hydropower development. The project mainly comprises the following three parts: (i) the plateau program to help affected people to restore livelihood through forestry, fishery, and agriculture activities, (ii) the project area program to provide fair compensation for the land appropriation and facilitate livelihood restoration, and (iii) downstream program to mitigate the potential risks caused by the discharge and restore livelihood for the affected people mainly through combination of a village based credit and saving scheme, rural infrastructure, and various agriculture activities. Particularly, in designing the proposed project (KDP), synergies with the downstream program has been sought to support the downstream irrigation and mitigate potential flood risks under Component 2.

12. The NTPC has been implementing the project mainly by its own staff; the implementation of the downstream program has been delayed due to the staff constraint. Sustainability of the project impacts have also become an issue. The NTPC is currently
finalizing an implementation plan to rearrange responsibilities sharing with the respective staff of
the central and provincial government.

13. Lao PDR: Provincial Infrastructure Project (P042237) Closed on June 2007, Final ISR
Rating: Satisfactory. The objectives of the project are to build, strengthening, management and
technical capacity of the local governments and provide infrastructure, particularly water supply
and roads to meet the local needs. In addition to the construction of infrastructure, the project
has provided extensive training to local government officials on technical and administrative
aspects. The project has been closed in a satisfactory manner with an extension of 7 months.

14. The basic design of the project has been found practical and effective; first, the project
has successful establish a model in the country for provincial development engaging the line
ministries responsible for respective sector. The technical training program benefiting all levels
of stakeholders – from the government to the village level has been well integrated with
infrastructure portion of the project.
Annex 3: Results Framework and Monitoring

LAO PDR: Khammouane Development Project

<table>
<thead>
<tr>
<th>PDO</th>
<th>Outcome Indicators</th>
<th>Use of Outcome Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Project Objective: strengthen the planning process and public financial management associated with decentralized delivery of public services and infrastructure, including irrigation development, in Khammouane Province.</td>
<td>• More equitable access to infrastructure and production and social services during the project implementation period&lt;br&gt;• Improvement of provincial budget procedures according as the new Budget Law&lt;br&gt;• Development of a sustainable approach to utilization of NT2 downstream water and irrigation rehabilitation along Xeibang Fai based on studies and results of pilots.</td>
<td>Project Year 1-3 (Prior to mid-term review)&lt;br&gt;• Basis for any adjustments to targeting mechanisms to ensure reaching underserved areas.&lt;br&gt;• Ensure participation of Govt, NTPC and donors in development and discussion of the irrigation strategy.</td>
</tr>
<tr>
<td>Interim Objective 1: strengthening infrastructure and service delivery with improved local transparency and accountability (Component 1);</td>
<td></td>
<td>Project Year 4-5 (After mid-term review):&lt;br&gt;• During the mid-term review, policy review would be carried out with the province, PAFES and DoI and jointly develop new budget procedures, and policy to be adopted.&lt;br&gt;• Basis for consideration along with UNCDF pilots, of national scale-up of DDF/PDF approaches&lt;br&gt;• Basis for joint review by Government, NTPC and donors of experience under pilot for updating strategy</td>
</tr>
<tr>
<td>PDO</td>
<td>Outcome Indicators</td>
<td>Use of Outcome Information</td>
</tr>
<tr>
<td>-----</td>
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<td>-----------------------------</td>
</tr>
</tbody>
</table>
| Component 1-1 (District Development Fund):  
*Basic Block Grant:* Through implementation of DDF, the project would set out a standard to strengthen infrastructure and service delivery through introduction of kum banh level planning and village representatives and district level budgeting and implementation and improved transparency local transparency and accountability.  
*Agriculture and Livelihood Grant:* Complementing local infrastructure with targeted production support (technical and financial inputs) in the poorest villages which are not covered by current assistance programs. |  
- Confirmation that target villages selected for public investment are underserved  
- Number of target villages with prepared intervention plans approved for funding.  
- Correlation between village priorities and funded subprojects  
- Estimated cost savings due to better targeted and transparent investment in the targeted village compared to other projects involving similar infrastructure.  
- Number of agriculture production groups which achieve planned production goals. | Years 1 to 3: Adjust targeting and planning processes as needed. Determine if procedures from other projects, such as PRF can provide lower costs.  
Assess the degree to which PAFO can facilitate the development of village production group based on the targeted village potentials through an effective participatory planning.  
Years. 3 to 5:  
Assess consistency between districts in implementing DDF to strengthen management approach for replicability  
Determine if support is sufficient to develop sustainability of village groups. |
| Component 1-2-1 (Provincial Development Fund):  
Provincial public investments clearly driven by improved planning process. |  
- PDF investments reflect priorities expressed through consultation process  
- Public access of information on public investments approved at the provincial level  
- Recurrent costs of PDF investments identified and included in provincial budget. | Year 1 and : PDF is not active  
Years. 2 to 5: Compare planned and actual provincial expenditures with priorities in KDR and emerging from PDF process. |
| Component 1-2-2 (Support for Provincial Capacity Building)  
Enhanced provincial level capacity to ensure allocation of public resources consistent with agreed priorities and ability to attract private investment. |  
- Updated Public Investment Plan planning format used at district and provincial levels.  
- Annual provincial budget plan aligned with priorities identified through KDR/KDS  
- Comprehensive and timely budget reports  
*Capital and recurrent budgets clearly linked.* | Year 1-3: Review with Province and central ministries (MoF and CPI) for alignment and integration with updated national systems.  
Year 4-5 compare planned and actual provincial expenditures with priorities in KDR and emerging from DDF and PDF process. Review whether improved linking of capital and recurrent budgets has increased |
<table>
<thead>
<tr>
<th>PDO</th>
<th>Outcome Indicators</th>
<th>Use of Outcome Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 2 (Downstream Irrigation):</td>
<td></td>
<td>sustainability of local public investments.</td>
</tr>
<tr>
<td>Support irrigation development along the NT2 downstream channel and in areas situated along the lower Xe Bang Fai River.</td>
<td>• Strategic plan for irrigation includes participation, environmental, social, economic and market analysis. &lt;br&gt;• Number of water user groups formed under project taking over the responsibilities of O&amp;M requirements in a sustainable manner. &lt;br&gt;• Actual economic returns to irrigation investment at least 12 percent. &lt;br&gt;• Assessment with stakeholders of pilot experience with use of downstream waters and rehabilitated pump facilities.</td>
<td>Year 1: Determine if approach to irrigation for rehab and extended scheme is effectively incorporating participation and economic aspects. &lt;br&gt;Year 2: Assess if the Government has formulated a technically and financially feasible solution to utilize discharge water from NT2 hydropower station. &lt;br&gt;Year 3 to 5: Upon rehabilitation, Farmers have improved returns and irrigation works are being effectively maintained and managed. &lt;br&gt;Year 3 to 5: Provide preliminary results as input to national program for strengthening irrigation management in Lao PDR and possible development for NT2 downstream irrigation and other hydropower stations.</td>
</tr>
<tr>
<td>Outcome Indicators</td>
<td>Baseline</td>
<td>Yr1</td>
</tr>
<tr>
<td>--------------------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Primary Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• More equitable access to infrastructure and production and social services during the project implementation period.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Access to potable water</td>
<td>40 percent</td>
<td>40</td>
</tr>
<tr>
<td>o Access to secondary school</td>
<td>25 percent</td>
<td>25</td>
</tr>
<tr>
<td>o Access to health center</td>
<td>25 percent</td>
<td>25</td>
</tr>
<tr>
<td>• Adoption of the new budget procedures similar to DDF and PDF (X).</td>
<td>Not adopted</td>
<td></td>
</tr>
<tr>
<td>• Agreement between Government, NTPC and donors on sustainable approach to utilization of NT2 downstream water and irrigation rehabilitation along Xeibang Fei based on studies and results of pilots (X)</td>
<td>No Agreement</td>
<td>X</td>
</tr>
<tr>
<td>Outcome Indicators</td>
<td>Target Values</td>
<td>Data Collection and Reporting</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td><strong>Results Indicators for Each Component</strong></td>
<td><strong>Baseline</strong></td>
<td><strong>Yr1</strong></td>
</tr>
<tr>
<td><strong>Component 1-1 (District Development Fund):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Target villages represent areas relatively underserved in terms of public investment (Cumulative)</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>- Number of target villages with prepared intervention plans approved for funding</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>- Correlation between funded subprojects and village priorities (%)</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>- Cost savings (%) due to better targeted and transparent investment procedures compared to other projects involving similar infrastructure (annually)</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>- Number of agricultural production groups which achieve planned production goals (Cumulative)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Component 1-2-1 (Provincial Development Fund):</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- PDF investments reflect priorities expressed through consultation process (number of investment)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Public access of information on public investments approved at the provincial level (number of investment)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Recurrent costs of PDF investments identified and included in provincial budget (percentage of the estimated required funds)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Component 1-2-2 (Provincial Capacity Building):</strong></td>
<td>Not yet</td>
<td>P</td>
</tr>
<tr>
<td>- Updated PIP planning format used at</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outcome Indicators</td>
<td>Baseline</td>
<td>Yr1</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
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<td>-----</td>
</tr>
<tr>
<td>district (D) and provincial levels (P)</td>
<td>adopted</td>
<td></td>
</tr>
<tr>
<td>• Annual provincial budget plan aligned with priorities identified through participatory planning process and with capital and recurrent budgets clearly linked (X)</td>
<td>Not aligned</td>
<td></td>
</tr>
<tr>
<td>• Comprehensive and timely budget execution reports (X)</td>
<td>No report prepared</td>
<td></td>
</tr>
<tr>
<td>Component 2 (Downstream Irrigation):</td>
<td>Not developed</td>
<td>0</td>
</tr>
<tr>
<td>• Strategic plan for irrigation completed includes participation, environmental, social, economic and market analysis (X)</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>• Number of water user groups formed under project and proportion mobilizing O &amp; M requirements</td>
<td>Estimated 12%</td>
<td></td>
</tr>
<tr>
<td>• Economic rate of return on irrigation investments</td>
<td>No Assessment</td>
<td></td>
</tr>
<tr>
<td>• Assessment with stakeholders of pilot experience with use of downstream waters and rehabilitated pump facilities (Qualitative Assessment - X)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 4: Detailed Project Description

LAO PDR: Khammouane Development Project

Component 1 – Support for Local development and Provincial Capacity Building

1. The main objectives of this Component would be to support the province to: (i) adopt more transparent and participatory procedures for the planning and implementation of public investments to improve rural livelihoods; and (ii) strengthen the capacity of the three key provincial departments which are most directly involved in the improvement of rural livelihoods, namely, the Department of Finance (DOF), the Department of Planning and Investment (DPI), and the Provincial Agriculture and Forestry Office (PAFO) so that they would be able to implement the new procedures and approaches adopted by the central government. This component consists of two main sub-components respectively addressing the above-mentioned two objectives: (i) District Development Fund (DDF) and (ii) Provincial Capacity Development. The sub-components are summarily described below:

Sub-component 1. District Development Fund (DDF) (Total Estimated Cost: Approximately US$6.867 million)

2. This sub-component aims at assisting the province in developing a more transparent and participatory way to carry out investments in public infrastructure and service delivery. This sub-component would support the districts’ capacity for carrying out consultations with communities and develop and execute multi-sectoral investment plans for public infrastructure and service delivery. Through this component, the District Development Fund (DDF) will provide all nine districts of the province with access to Basic Block Grants (BBGs) and to Agriculture and Livelihoods Grants (ALGs).

3. This sub-component would support the GoL’s initiative to scale up the DDF facility that has been piloted in Saravane. The DDF is a financial facility that would initially allocate annual grants to the districts in order for the districts to finance a range of infrastructure and service delivery investments, and livelihoods support for poverty alleviation. The design of this component has been strongly influenced by the on-going pilot operation in Saravane province, supported by UNCDF and UNDP since 2005.

4. The main objective of the DDF is to develop the role of the district as the key budget planning and executing agency working closely with villages and kum banhs – or group of villages. While districts are in theory the lowest level of the local government for planning, budgeting and implementing service delivery and public investment, in practice provinces have been mainly in charge of planning and executing investments. In practice and for the most part, districts are only responsible for the management of recurrent costs – mostly personnel costs. As villages in Lao PDR are typically geographically dispersed, interaction between the villages and provincial government officials is limited, making it difficult to develop an investment plan that is fully responsive to the villages’ needs. In this context, the DDF intends to engage districts in
budget procedures, and give *kum banhs* a role of inter-village coordination in public investment planning so as to ensure the participation of direct stakeholders.

5. The DDF will finance pro-poor infrastructure and service delivery based on priorities identified through stakeholder consultations carried out with village and *kum banh* representatives. An inter-departmental team - the District Planning Team (DPT) - will carry out stakeholder consultations, appraise and prioritize proposed investments, and make a DDF investment plan for each year. The DDF will consist of the following three facilities: (i) the Basic Block Grant (BBG), to finance a range of public infrastructure and services, mainly at the *kum banh* and village levels; (ii) the Agriculture and Livelihood Grant (ALG) to support livelihoods improvement in the 27 poorest villages already identified by the province; and (iii) contingency funds for UXO clearance for infrastructure investment supported by the BBG. In addition, in order to cover costs associated with DDF planning and implementation, incremental operating costs and technical assistance will be provided to the districts.

6. Annual BBG allocations to districts will be determined by a simple formula which takes into account the population size and relative poverty of each district. Typically investments financed by the BBG would cost US$3,000 – 5,000 and cover the following sectors: transport (improvement in access roads), education (rehabilitation and upgrading of primary schools), health (upgrading local clinics), and water supply (basic water and sanitation improvements in the villages). ALGs will typically finance the purchase of community facilities (e.g. rice mills, equipment), and/or demonstration materials (seeds, livestock), which would cost up to US$10,000 per village.

7. *Eligible Investments.* BBG-funded investments would largely be targeted at poverty reduction. Districts will be expected to invest at least 70 percent of their BBG allocations on *kum banh* or village level sub-projects, which are likely to be of direct benefit to local communities. No more than 30 percent of BBG allocations can be used to finance district-level investments. BBGs can be used by districts to finance investments in a range of sectors such as education, health, agriculture, transport and water supply, depending on the needs and priorities of the local communities and *kum banhs*. The following table summarizes the indicative investments.
8. DDF/BBG allocations will not, however, be used to finance a range of items. In particular, districts will not be allowed to use their BBG allocations to finance the purchase of vehicles, construction of administrative facilities or salaries as such expenditures are not directly related to poverty reduction. In addition, BBG allocations will not be used to finance investments that would result in negative social and environmental impacts. A detailed list of non-eligible BBG investments is provided in the component operational manual.

9. **Financing.** In Lao PDR, it is a customary for the Bank to finance 100 percent of the costs of a project, due to the country’s severe financial constraints. Khammouane province, however, is one of the ‘surplus’ provinces, and in order to ensure ownership of the DDF, the province has agreed to finance 10 percent of the investment costs under the BBG. The Bank will finance 100 percent of other costs, such as technical assistance, ALG and related expenses (logistical support for agriculture extension services).

10. **Consultation Process.** To plan and budget for the use of their DDF/BBG allocations, districts will, engage in a highly participatory process of consultations, through which direct...
stakeholders to identify and prioritize investment. This would ensure genuine community-level input into the identification of priorities, as well as ensuring that local communities have a significant role in the finalization of any DDF investment plans and budgets. Table 2 below provides a summary of the overall institutional framework that will apply to district level planning and budgeting.

**Table 2: Institutional Framework for District Level Planning and Budgeting**

<table>
<thead>
<tr>
<th>Actors and levels</th>
<th>Composition</th>
<th>Role &amp; responsibility</th>
</tr>
</thead>
</table>
| Villagers                         | • Village units  
• Female focus group  
• Male focus group | • Identification of Village development priorities         |
| Village Office/Committee          | • Village chief  
• Village Office members | • Organization of Village Annual Planning Meeting  
• Facilitation of Village-level prioritization  
• Submission of Village priorities to Kum Ban level |
| Kum Ban                           | • Kum Ban Head  
• Kum Ban Committee  
• Village representatives:  
  - Chief of each Village  
  - 1-2 women from each Village | • Facilitation of Village-level prioritization  
• Screening of Village-level priorities  
• Organization of Kum Ban Annual Planning Workshop  
• Identification of Kum Ban priorities  
• Submission of Kum Ban priorities to DPT |
| District Line Departments         | • Education  
• Health  
• Agriculture  
• Transport | • Identification of sector priorities for District-level investments  
• Prioritization of sector level priorities for District-level investments  
• Submission of sector priorities to DPT |
| District Planning Team (DPT)      | • District Planning & Investment Department Head and staff  
• Sector technicians | • Facilitation of Kum Ban Annual Planning Workshops  
• Registration of Kum Ban and sector priorities  
• Verification, appraisal and preliminary design/costing of sub-projects  
• Preparation of listing and budgeting of prioritized projects  
• Presentation of DPT report and submission to DPC |
| District Planning Committee (DPC) | • Deputy Head of District  
• **Head of District Dept. of Finance**  
• Heads of main sector departments (Education, Health, Agriculture, Transport)  
• 3 representatives of each Kum Ban:  
  - Kum Ban Head  
  - 1 Village Chief from the Kum Ban  
  - 1 woman from the Kum Ban | • Endorsement of Draft District Annual Development Plan  
• Submission of Draft District Annual Development Plan to District Head  
• Oversight of plan implementation |
| District Integration Workshop (DIW)| • DPT  
• Provincial and district line | • Discuss DADP  
• **Ensure no duplication with other** |

48
11. Key aspects and dimensions of this institutional framework are as follows:

- It is intended to ensure that local communities are able to identify their own needs and propose their own solutions, firstly to their respective Kum Bans and then to the district;
- To the extent possible, the institutional arrangements seek to ensure that women have a reasonable chance of providing their input into the planning process, through their representation at various levels;
- The Kum Ban operates as an intermediary level between villages and the district, a level at which an initial screening and prioritization process takes place;
- At district level, line departments (headed by DPI) take the lead in carrying out the more technical activities linked to planning/budgeting – it is the District Planning Team (DPT) which is responsible for screening, appraisal, preliminary design and costing, and the preparation of an initial set of priority investments;
- Final approval of the draft district annual development plan and budget nonetheless rests with the District Planning Committee (DPC), which consists not only of representatives of line departments, but also – and very importantly – village representatives (both male and female) from each of the district’s Kum Bans;
- Draft district annual development plans are also submitted to a consultative forum, the District Integration Workshop (DIW), to which other actors (NGOs, donor-funded projects, etc.) are invited so as to avoid duplication and/or to obtain supplementary funding;
- Finally, at several stages in the planning and budgeting process, there are stringent public disclosure requirements (e.g. notification of BBG allocations, publishing of annual plans/budgets) which will enhance the extent to which the process is transparent.

12. DDF Planning and Budgeting Cycle. The district level planning and budgeting cycle will consist of a set of well-defined steps, during which key activities will take place. These are summarized in Table 3. It is important to note that the district planning and budgeting process is consistent with the overall planning process in Lao PDR and is based on the Lao FY.
Table 3: Steps in the District Planning and Budgeting Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Actors</th>
<th>Time-line</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Announcement of the BBG allocation</strong></td>
<td>MoF Provincial Governor District Head</td>
<td>November</td>
<td>To provide hard budget ceilings within which to meaningfully prioritize investments</td>
</tr>
<tr>
<td>2a. <strong>Village level identification and prioritization of sub-projects (Village Annual Planning Meeting)</strong></td>
<td>Villagers (women and men) Village Offices &amp; Chiefs Kum Ban facilitator</td>
<td>December-January</td>
<td>To establish 1 community-level priority per village</td>
</tr>
<tr>
<td>2b. <strong>Sector identification and prioritization of sub-projects</strong></td>
<td>Sector departments</td>
<td>December-January</td>
<td>To establish 2 priorities per sector</td>
</tr>
<tr>
<td>3. <strong>Kum Ban screening and prioritization of sub-projects (Kum Ban Annual Planning Workshop)</strong></td>
<td>Kum Ban Committee &amp; Head Village Chiefs Women Village representatives</td>
<td>January-February</td>
<td>To prioritize Village level submissions To identify 2 priorities for submission to DPT</td>
</tr>
<tr>
<td>4. <strong>DPT registration and initial sector appraisal</strong></td>
<td>DPT</td>
<td>February</td>
<td>To register all submissions and carry out initial sector screening</td>
</tr>
<tr>
<td>5. <strong>DPT verification and appraisal of sub-projects</strong></td>
<td>DPT</td>
<td>February-March</td>
<td>To collect technical &amp; other information on sub-project submissions To determine the feasibility of sub-projects</td>
</tr>
<tr>
<td>6. <strong>Preparation of DPT report and submission to DPC</strong></td>
<td>DPT</td>
<td>March-April</td>
<td>To undertake initial analysis and comparison of submissions To develop initial prioritization of all submissions</td>
</tr>
<tr>
<td>7. <strong>DPC discussion, prioritization and recommendation of Draft DAIP</strong></td>
<td>DPT DPC</td>
<td>April</td>
<td>To discuss DPT appraisals and recommendations To finalize prioritization of sub-projects for inclusion in Draft District Annual Investment Plan (DAIP)</td>
</tr>
<tr>
<td>8. <strong>District Integration Workshop and follow-up</strong></td>
<td>DPT Provincial and district line departments Donor-funded programmes NGOs</td>
<td>April/May</td>
<td>To discuss DAIP To ensure no duplication with other programmes To secure additional funding where possible for sub-projects</td>
</tr>
<tr>
<td>9. <strong>Submission of Draft DAIP to District Head for approval</strong></td>
<td>District Head</td>
<td>May</td>
<td>To approve District Annual Investment Plan</td>
</tr>
<tr>
<td>10. <strong>Submission of Draft DAIP to Provincial Governor for approval</strong></td>
<td>Provincial Governor</td>
<td>May-June</td>
<td>To approve District Annual Investment Plan</td>
</tr>
</tbody>
</table>

13. **DDF Allocations – BBG.** This core element of the DDF will operate on the basis of a maximum total annual funding pool for the province of about $675,000 per annum – calculated on the basis of a $2.00 annual per capita allocation for the province as a whole. BBG
allocations from the DDF facility will be made directly to districts and will be determined on the basis of the population size and relative poverty of each district. The poverty data which will be used in the allocation formula derive from official GoL statistics. Population-based allocations will account for two-thirds of the total funding pool, whilst poverty-based allocations will account for the remaining third of the total funding pool. BBG allocations will thus be formula-driven and transparent.

14. The following table provides a summary of the indicative BBG allocations to all districts and thus representing the total maximum BBG allocation.

Table 4: Indicative Annual BBG Allocations to All Districts (US$)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thakek</td>
<td>83,957</td>
<td>24.88</td>
<td>111,943</td>
<td>0.846</td>
<td>14,169</td>
<td>126,112</td>
</tr>
<tr>
<td>Mahaxay</td>
<td>30,919</td>
<td>9.16</td>
<td>41,225</td>
<td>1.613</td>
<td>27,012</td>
<td>68,237</td>
</tr>
<tr>
<td>Nongbok</td>
<td>41,243</td>
<td>12.22</td>
<td>54,991</td>
<td>0.623</td>
<td>10,441</td>
<td>65,432</td>
</tr>
<tr>
<td>Himboun</td>
<td>62,030</td>
<td>18.39</td>
<td>82,707</td>
<td>1.452</td>
<td>24,325</td>
<td>107,031</td>
</tr>
<tr>
<td>Gnomalat</td>
<td>27,699</td>
<td>8.21</td>
<td>36,932</td>
<td>1.872</td>
<td>31,348</td>
<td>68,280</td>
</tr>
<tr>
<td>Boulapha</td>
<td>25,089</td>
<td>7.44</td>
<td>33,452</td>
<td>2.380</td>
<td>39,852</td>
<td>73,304</td>
</tr>
<tr>
<td>Nakai</td>
<td>20,245</td>
<td>6.00</td>
<td>26,993</td>
<td>2.628</td>
<td>44,016</td>
<td>71,009</td>
</tr>
<tr>
<td>Xe Bang Fai</td>
<td>25,504</td>
<td>7.56</td>
<td>34,005</td>
<td>0.560</td>
<td>8,482</td>
<td>42,487</td>
</tr>
<tr>
<td>Xaibouathong</td>
<td>20,704</td>
<td>6.14</td>
<td>27,605</td>
<td>1.510</td>
<td>25,282</td>
<td>52,887</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>337,390</strong></td>
<td><strong>100</strong></td>
<td><strong>449,853</strong></td>
<td><strong>13.43</strong></td>
<td><strong>224,927</strong></td>
<td><strong>674,779</strong></td>
</tr>
</tbody>
</table>

15. Technical support services (TSS). Districts will be able to use up to 5 percent of their BBG allocations in order to finance costs related to planning, budgeting, implementation and supervision. This 5 percent sub-allocation (which should not be done on a sub-project by sub-project basis, but used a single composite item in the district's investment budget) will be referred to as the Technical Support Services (TSS) component. The following types of TSS expenditures would be eligible:

(a) consultancy fees for engineers involved in design/costing and supervision of works;

(b) Transportation costs (fuel) for district officials engaged in planning or supervision activities;

(c) Daily subsistence allowances (DSA) for district officials engaged in planning or supervision activities;

(d) Administrative expenses directly related to planning, budgeting and implementation (e.g. stationery, photocopying).

In the case of transportation and DSA payments, districts will be expected to use official Government norms.
16. **Conditions for Access to DDF Allocations.** In order to provide real incentives for districts to follow basic DDF/BBG procedures, their full access to annual block grant allocations will be conditional upon compliance with a set of Minimum Conditions (MCs). In the event that a district fails to demonstrate full compliance with a given set of MCs, its block grant allocation for the following year would be reduced by 50 percent. Thus a district that failed to comply with the full set of MCs applicable to BBGs would be sanctioned by a 50 percent reduction in its BBG allocation for the following year. Any district which is thus sanctioned can have its DDF allocation restored to 100 percent through demonstrating full compliance in the following year.

17. Minimum Conditions will refer to compliance with process (and not to outcomes), and are intended to ensure that districts abide by “the rules of the game”. The inset below, adopted from the pilot Saravane DDF, provides an indication of the kinds of MC that will be developed and applied in Khammouane.

<table>
<thead>
<tr>
<th>Minimum Conditions of Access to DDF allocations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts that will be eligible for DDF allocations will be expected to demonstrate compliance with the following Minimum Conditions in order to access their DDF allocations:</td>
</tr>
<tr>
<td>(i) The District Planning Committee (as defined by the DDF Planning Guidelines) met at least twice during the previous FY.</td>
</tr>
<tr>
<td>(ii) The District has a finalized and approved Annual Investment Plan for the coming FY by a majority vote with a quorum of two-thirds of its <em>kum banh</em> members present in the DPC meeting.</td>
</tr>
<tr>
<td>(iii) The provisions and spirit of this Instruction for the DDF to be issued by the province is respected in the formulation and implementation of the District’s Annual Investment Plan for the previous FY.</td>
</tr>
<tr>
<td>(iv) The provisions and spirit of the country’s laws and official regulations concerning public procurement of goods, works and services were respected during the implementation of the District’s Annual Investment Plan for the previous FY.</td>
</tr>
</tbody>
</table>

18. **Agriculture and Livelihood Grant.** While the DDF in Khammouane is largely modelled on the Saravane pilot, the Agriculture and Livelihood Grant (ALG) has been introduced as a pilot to test whether the district and agriculture extension services can jointly play an important role for poverty alleviation in severely poor villages. The ALG will consist of two basic sets of activities: (i) support for incremental operating costs to promote a livelihoods-based approach to extension; and (ii) providing financial resources to groups, rather than individuals, in the target villages in order to invest in community facilities and small inputs to apply the acquired knowledge and exploit economic opportunities. Further, under the project, a technical assistance program has been designed to provide training to the extension service staff regarding value chain activities, and to the targeted villages regarding revolving fund management. Under this project, the ALG would be piloted in the 27 poorest villages in Boulapha, Himboun and Mahaxay districts already identified by Khammouane province. These villages have a high proportion of poor households, but are not covered by any existing village support programs, whether funded by donors or the government.

19. The ALG is a part of the DDF and hence would be managed by the districts; however, the ALG would involve the Provincial Agriculture and Forestry Extension Center (PAFEC) as a
facilitator for the target villages to prepare a plan for the ALG. In particular, the following is the process to trigger the disbursement of the ALG (refer Figure 1 below)

Figure 1: Modality of the ALG

20. **Cycle 1. Funds Allocation.** The province will transfer the ALG funds to the district. The amount of the ALG would be US$10,000 per village. While PAFEC is expected to provide an office and appoint staff for this sub-component with its own budgetary resources, the project will cover incremental operating costs including: (i) office equipment; (ii) utility and operational costs; and (iii) per diems for the extension staff to visit the villages and monitor progress. The ALG will start from year 2 of the project; during the first year, extensive technical assistance will be provided to PAFEC and DAFO to ensure adequate capacity for implementation.

21. **Cycle 2. Preparation of an ALG Proposal.** Extension service staff assigned in the concerned kum banh will assist the target villages in developing an intervention plan based on the value chain analysis. An intervention plan would set out objectives (e.g. demonstration of new crops, start-up village based production group, etc.), implementation program (contact person, schedule, expected benefits (impacts on vulnerable people), and use of the resources (equipment, inputs)). The plan would then be reviewed and approved by the PAFEC for submission to the district.

22. **Cycle 3 Review of the ALG Proposal, Funds Release, and Monitoring.** Upon submission, the District Planning Team (DPT) would review the proposal. Once it is approved, the funds would be released to the villages, and the villages would provide equipment and goods according to the Bank’s community procurement guidelines. The concerned agriculture extension staff will facilitate the implementation of the intervention plan and monitoring. The outcome of the implementation would be reported to the DPT periodically.
Sub-component 1-2 – Provincial Capacity Development (Estimated Cost: US$3.096 million)

23. This sub-component would be complementary to sub-component 1; whilst sub-component 1 aims at strengthening the capacity of the district governments, this sub-component aims at strengthening the capacity of the provincial government in terms of public expenditure and budget planning. In particular, the following activities are planned under this subcomponent:

- Sub-component 1-2-1 - The Provincial Development Fund (PDF) - (approximately US$ 1.060 million, including the province’s contribution). As a complementary approach to DDF, the PDF would be introduced as a pilot to provide the province with the financial resources to carry out the strategic investments at the provincial level. The objectives of this subcomponent are twofold. First, this sub-component will provide the province with an opportunity to undertake provincial level strategic investments which are unlikely to be identified at the district level. Investments may include, for example, support for teacher training facilities and upgrading the provincial agriculture extension services center. Second, this sub-component will provide an opportunity for Khammouane province to adopt the new provincial planning procedures developed through the JICA-funded PCAP project. Planning for the implementation of the PDF will be based around the new procedures, and will include district level inputs, as well as inputs from provincial line departments; it will also involve an annual multi-stakeholder planning workshop, to which users of sector services, as well as concerned line ministries will be invited. Respective provincial line departments will be responsible for the implementation of PDF-financed investments.

- The PDF activity would start in the second project implementation year (FY2011-12) and make a modest allocation to the province, intended to finance provincial level investment expenditures in the following five key sectors: agriculture, education, health, transport and business development, which benefit all districts. Planning for the use of the PDF allocation will include district level inputs, as well as inputs from provincial line departments; it will also involve an annual multi-stakeholder planning workshop, to which users of sector services, as well as concerned line ministries will be invited. Respective provincial line departments will be responsible for the implementation of PDF-financed investments. Illustrative investments supported by the PDF would include: upgrading facilities in provincial agriculture extension services, expanding teacher training colleges, purchasing critical equipment and materials for key hospitals in the province, etc. As with the DDF/BBG facility, the province will provide 10 percent of the counterpart funds;

- Similar to the DDF, 2 percent of the PDF resources would be allocated to support the province to mobilize the technical expertise and finance incremental operating costs to implement the PDF;

- Sub-component 1-2-2 - Provincial Capacity Building - (Estimated Cost: US$ 0.643 million). Under this sub-component, the following four activities are planned:
Technical Assistance related to the DDF and the PDF. The DDF and PDF constitute a new approach to carrying out infrastructure planning, and it is expected that Khammouane Province will need extensive technical assistance, particularly during the early project implementation period. Given this, and as part of provincial capacity building, technical assistance will be provided. The technical assistance would particularly assist the province in the process of: stakeholder consultation, investment prioritization, monitoring, and fiduciary management. During the first two years of implementation, the technical assistance would also monitor the detailed implementation status of the project to review fiduciary aspects, such as effective and economic use of the funds, compliance with the Operational Manual, use of per diems and fuel allowance, and comparison of unit prices with other districts as well as other provinces. Considering its extensive expertise, and its unique prior experience in Lao PDR, this technical assistance will be provided by UNCDF on a sole source basis.

Technical Assistance for PFM (Support for DOF). Further technical assistance will be made available to the province in order to strengthen core public expenditure and public financial management (PEM/PFM). This will be linked to the DDF/PDF but will also go beyond project operations to include local PFM in general in support of the broader objectives of the project to strengthen provincial systems. The first technical assistance activity would be a participatory capacity needs assessment of the Department of Finance, which would provide the basis for a series of support and training activities addressing the institutional, organizational, and individual-level capacity gaps within the provincial PFM system. The needs assessment will be completed as part of the project rather than pre-appraisal in order to ensure continuity between the assessment and the coordination of technical assistance and training activities to meet the assessed needs – it is intended that the same consultants be responsible for coordinating the assessment and the response in order to avoid implementation problems. The needs assessment will address the current mandate of the department, the institutional, organizational and individual level gaps in capacity to fulfill this mandate, suggest a broad five year program of support to fill these gaps, and identify annual monitoring indicators against which progress will be judged. The needs assessment, and the annual programs and support and progress reports that will be based on it, will be discussed with the Ministry of Finance, as well as with the Provincial Government. Throughout the life of the project, funds will be available to finance support to and training of provincial and district officials, as well as kum banh representatives. Support will include both formal training, as well as on the job support for provincial and district level officials. For reasons of sustainability and language, much of the support will be through local consultants, who in turn will be supported by international technical assistance.

Technical Assistance for Strengthening Planning, Monitoring and Evaluation (Support for DPI). In close conjunction with the JICA-supported PCAP, the project will provide additional technical assistance and capacity building aimed at strengthening the core functions of DPI, in particular those focused on local level planning, monitoring and evaluation. This will explicitly seek to strengthen the province’s ability to align itself with NSEDP priorities and to monitor the outcomes of its investment planning process. Moreover, the project – through the hands-on
experience that will be gained from DDF activities – will actively work with national policy makers (in MPI and MoF) in developing a planning, monitoring and evaluation framework that is suitable for district level activities. This will involve interaction with JICA’s PCAP, as the latter moves into the domain of district level planning. The details of this assistance will follow a similar logic to the DOF capacity development approach above: a needs assessment (identifying the mandate, gaps, program of support, and indicators of progress) will be followed by a five-year program of support addressing not only the individual training needs of DPI staff, but also the organizational and institutional issues that are vital for improved government performance. As the support will be aligned around the formal mandates of DPI that come from MPI nationally, MPI will also play a role in discussing the assessment, annual work plans, as well as monitoring progress;

- Technical Support for Provincial Agriculture and Forestry Office (PAFO). As a way of addressing extreme rural poverty, the Government has recently adopted the Lao Extension Approach (LEA). Through the LEA, district extension staff would be assigned to kum banhs to assist villages in developing respective village production groups and to provide them with technical support. As a complementary action to the Agriculture and Livelihood Grant (ALG) proposed under Component 1-1, this component would provide PAFEC with technical assistance, logistical support, and small civil works such as construction of small demonstration facilities.

- Sub-component 1-2-3: Component Management (US$ 0.396 million in total). Project implementation will be supported by a small provincial coordination section (PCS) within the Department of Planning and Investment of Khammouane Province. Although key personnel and office space would be provided by the Province, this component would finance incremental operational costs, such as logistics, utilities, consumable items, personnel costs, and necessary technical assistance.

Component 2 – Support for Irrigation Development along NT2 Downstream Channel and Lower Xe Bang Fai - (Total Estimated Cost: US$3.55 million).

24. For the province, the water to be discharged by the NT2 hydropower station is an opportunity for increasing agricultural production during the dry season, but also poses a risk of increasing floods. Given this, the Government is very keen to develop so-called ‘downstream irrigation’, which utilizes discharge water from the NT2 hydropower station for irrigation development. Developing such downstream irrigation would make sound sense from a socio-economic point of view. Firstly, it would materialize positive externalities of the NT2 hydropower station’s operations. Secondly, it would bring about concrete benefits to riparian villages close to the downstream channel, which do not necessarily share the direct benefits of the NT2 hydropower station. Lastly, developing downstream irrigation would reduce the risk of floods and embankment erosion for villages located along lower Xe Bang Fai River. If successful, NT2 downstream irrigation would provide a replicable model for the country as a whole, where a number of hydropower stations are planned in the future.
25. The Government of Lao PDR and Khammouane Province have therefore been discussing NT2 downstream irrigation with the NTPC as well as major development partners. In October 2006, a committee was been established jointly by the Government of Lao PDR and Khammouane Province (chaired by the Governor) to promote downstream irrigation and flood mitigation in the lower Xe Bang Fai. In response, the NTPC has agreed to construct five outlets, including one siphon, along the downstream channel to enable irrigation development in the future. Further, the DoI has carried out a scoping study for downstream irrigation development with the assistance of the NTPC and AFD. The scoping study has confirmed the technical feasibility of developing 21,000 hectares of downstream irrigation; but it has also raised concerns about economic viability and institutional capacities for operation and management.

26. The objective of this component is to follow up on the recommendation of the scoping study and assist the GoL and Khammouane Province in developing a socially and economically feasible way to develop downstream irrigation. In addition, as an alternative to protecting livelihoods in the lower Xe Bang Fai from possible floods, this component would also support the rehabilitation of small pump-based irrigation facilities. The following sub-components constitute Component 2;

27. **Sub-component 2-1: Rehabilitation of the Existing Irrigation Facility in Tha Thot Village (Estimated Cost: US$0.884 million).** This sub-component would first support the long over due rehabilitation of the existing irrigation facility in Tha Thot village. The irrigation facility, comprising about 470 hectares, has deteriorated and the irrigation area has been reduced to one third of the original design. While rehabilitation of the scheme had originally been planned under the Bank-financed Agriculture Development Project (ADP), the plan was eventually cancelled as one of the main canals of the scheme and two of the secondary canals were to be cut by the NT2 downstream channel.

28. As part of impact mitigation, the NTPC plans to restore the connection of the main and a secondary canal through two siphons and the construction of a secondary canal. The rehabilitation of the facility has thus become a high priority. As the ADP is nearing completion, and the rehabilitation works need close coordination with the NTPC, it has been agreed that the rehabilitation would be carried out in the context of the downstream irrigation component of this project.

29. This sub-component will include the rehabilitation of the irrigation facilities (mainly re-sectioning and partial lining of the main and secondary canals) and repairs to the headworks (weir and gates). Capacity building activities for water user groups (WUGs) will strengthen local irrigation administration, as well as off-and on-farm water management, to ensure the sustainability of and adequate benefits from the rehabilitation works.

30. **Subcomponent 2-2: Development of Downstream Irrigation Facility in Tha Thot Area (Estimated Cost: US$0.989 million).** This sub-component would finance the feasibility study, detailed design, and construction of irrigation facilities utilizing discharge water from NT2 for about 730 hectares around the existing irrigation facility in Tha Thot Village. The above-mentioned scoping study has identified the area as the highest priority; the area, located immediately located under the regulating reservoir of the NT2, has been fully developed for rice
farming, and villages are keen to have irrigation to enable dry season crops. For the most part, the irrigation facilities would be gravity-based, and operations and maintenance costs would be reasonable.

31. NTPC plans to develop a pipeline from the regulating dam and an inverted siphon to cross the downstream channel to provide water to the area; this sub-component would support Khammouane province and the Government to take advantage of the NTPC's investment (see Attachment 1 for detailed information on the area).

32. Under this sub-component, the following activities would be financed: (i) a feasibility study and detailed design for 730 hectares, (ii) construction for subscheme 2 (about 130 hectares around Ban Village) and (iii) a capacity building program. Feasibility studies would be carried out during the first year of implementation, followed by detailed design during the second year. Civil works and capacity building would be started during the third year of implementation. Additional funding is being identified which would finance the construction of three sub-facilities (1, 4, and 5 – covering a total of 600 hectares), as described in the Attachment 1.

33. Subcomponent 2-3: Strategic Plan for Irrigation Development along Downstream Channel. (Estimated Cost US$0.500 million). The objective of this sub-component is to help the GoL to develop a strategic plan to utilize the NT2 hydropower station downstream channels further downstream of the Tha Thot area. The scoping study indicated that it would be technical feasible to develop four additional schemes (totaling approximately 20,000 hectares) along the downstream channel (see Table 1 below). However, the study also suggested that economic viability will need to be carefully examined on a scheme by scheme basis, with possible breakdown to the sub-scheme level, as the area in question is quite heterogeneous in terms of social, environmental, topographical (including soil) conditions, as well as in terms of access to the market. The plan would support the GoL to develop: (i) scheme level pre-feasibility studies to identify priority development areas with basic canal layout, (ii) recommendations on the institutional arrangements for operations and maintenance and capacity building programs for the WUGs, and (iii) technical scoping study for additional sites and modes of water storage to further utilize the discharge water. This sub-component would be financed by a co-financier to be identified.

Table 1: List of the Areas for Potential Downstream Irrigation

<table>
<thead>
<tr>
<th>Area</th>
<th>Location</th>
<th>Size (ha)</th>
<th>Discharge (m³/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nam Kathang &amp; Nam Gnom</td>
<td>7,500</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Tha Thot, */</td>
<td>1,200</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Nasok</td>
<td>3,400</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>Mahaxay (gravity &amp; pumping), **/</td>
<td>8,000</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Nam Phit East</td>
<td>1,100</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21,200</td>
<td>43</td>
</tr>
</tbody>
</table>

Notes:
*/ including the existing Tha Thot Scheme with a command area of 470 ha, which would not draw water from the downstream channel. Potential new area would be about 730 ha.
**/ approximately 3,000 ha to be irrigated through pumping.
34. **Subcomponent 2-4: Rehabilitation and Institutional Strengthening of Small Pump Irrigation Facilities along Lower Xe Bang Fai (Estimated Cost: US$0.591 million).** While the first three sub-components aim at supporting irrigation along the downstream channel of the NT2 hydropower station, this sub-component would support the communities along lower Xe Bang Fai downstream to the point where the downstream channel discharges water to the Xe Bang Fai. While the discharge from the NT2 hydropower station may affect the flood risk, predicting the possible floods is technically difficult and mitigating flood risks would be economically infeasible due to fact that the flood risks in the lower Xe Bang Fai involve backwater floods from the mainstream Mekong River. Given this, improving access to water during the dry season is a practical alternative to support livelihoods in the concerned communities (see Attachment 2 for details).

35. The GoL has developed about 30 small pump-based irrigation facilities in the lower Xe Bang Fai in Khammouane province. An additional 30 irrigation facilities are also located in Savannaketh Province (left bank of the Xe Bang Fai). Most of these pumps are still operating; farmers (water user groups, WUGs) are responsible for operations, including payment for the electricity and operational costs. However, most of these schemes have experienced serious performance problems due to poor maintenance as WUGs does not have proper technical knowledge. The discharge water from the NT2 hydropower will result in an improved economic outlook for these pumping stations, as it would increase the water level of the Xe Bang Fai River by one to two meters. This would certainly improve the economic viability of these pump facilities. This sub-component would finance the rehabilitation of pumping stations, including critical repairs (typically inexpensive deferred maintenance). In addition, technical training and institutional strengthening for WUGs and PAFO will be provided to restore the facilities’ irrigation capacity and to re-establish management in a sustainable way.

36. In addition to the above-mentioned four sub-components, a small sub-component would be included to support the Ministry of Agriculture and Food (MAF) to implement the component (Subcomponent 2-5, estimated cost US$0.591 million).
Annex 5: Project Costs

LAO PDR: Khammouanne Development Project

Table 1: Project Cost Summary

<table>
<thead>
<tr>
<th>Lao PDR</th>
<th>Cost Summary</th>
<th>Cost Including Contingencies</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khammouane Rural Livelihood Project</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### A. Local Development and Livelihoods Support

1. **District Development Fund**
   - Basic Block Grant
   - Agriculture and Livelihood Grant (ALG)

### B. Support for Provincial Capacity Building

2. **Provincial Development Fund**
   - Provincial Capacity Building

### C. Support for Component 1 Management

3. **Support for Irrigation Development for NT2 downstream and lower XBF**
   - Rehabilitation of That Thot Irrigation Scheme
   - Development of A Downstream Irrigation Scheme in That Thot Area
   - Rehabilitation of Small Pump Scheme in Lower XBG
   - Strategic Investment plan for Downstream Irrigation Development
   - Component 2 Management Support

### Total PROJECT COSTS

<table>
<thead>
<tr>
<th>Total</th>
<th>10,421.7</th>
<th>100.0</th>
</tr>
</thead>
</table>

### Notes

- LAO PDR: Lao People's Democratic Republic
- Khammouane: Province in Laos
- NT2: Nickthai River
- XBF: Xiang Khouang Province in Laos
- ALG: Agriculture and Livelihood Grant
- Contingencies: Additional funds for unforeseen expenses
### Table 2: Components by Year

Lao PDR  
Khammouane Rural Livelihood Project  
Project Components by Year – Totals Including Contingencies  
(US$)

<table>
<thead>
<tr>
<th>A. Local Development and Livelihoods Support</th>
<th>Totals Including Contingencies</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Basic Block Grant</td>
<td>286.0</td>
<td>475.0</td>
<td>601.0</td>
<td>748.0</td>
<td>747.9</td>
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<td>Agriculture and Livelihood Grant (ALG)</td>
<td>100.0</td>
<td>170.0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>270.0</td>
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<td><strong>575.0</strong></td>
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<td><strong>748.0</strong></td>
<td><strong>747.9</strong></td>
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<td><strong>655.9</strong></td>
<td><strong>531.7</strong></td>
<td><strong>438.9</strong></td>
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<td>3. Support for Component 1 Management</td>
<td>211.6</td>
<td>114.3</td>
<td>106.9</td>
<td>108.7</td>
<td>101.6</td>
<td>643.1</td>
</tr>
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<td><strong>Subtotal Local Development and Livelihoods Support</strong></td>
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<td><strong>1,563.6</strong></td>
<td><strong>1,533.8</strong></td>
<td><strong>1,388.3</strong></td>
<td><strong>1,288.4</strong></td>
<td><strong>6,866.8</strong></td>
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<td>B. Support for Irrigation Development for NT2 downstream and lower XBF</td>
<td>Rehabilitation of That Thot Irrigation Scheme</td>
<td>576.8</td>
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<td>31.1</td>
<td>31.5</td>
<td>32.0</td>
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<tr>
<td></td>
<td>Development of A Downstream Irrigation Scheme in That Thot Area</td>
<td>78.0</td>
<td>481.6</td>
<td>306.4</td>
<td>61.3</td>
<td>61.7</td>
<td>989.0</td>
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<td></td>
<td>Rehabilitation of Small Pump Scheme in Lower XBG</td>
<td>105.6</td>
<td>172.6</td>
<td>176.4</td>
<td>95.0</td>
<td>41.8</td>
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<td></td>
<td>Strategic Investment plan for Downstream Irrigation Development</td>
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<td>250.0</td>
<td>250.0</td>
<td>-</td>
<td>-</td>
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<td>Component 2 Management Support</td>
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<td>96.5</td>
<td>89.0</td>
<td>85.6</td>
<td>70.8</td>
<td>590.8</td>
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<tr>
<td></td>
<td><strong>Subtotal Support for Irrigation Development for NT2 downstream and lower XBF</strong></td>
<td><strong>1,009.3</strong></td>
<td><strong>1,213.2</strong></td>
<td><strong>852.9</strong></td>
<td><strong>273.3</strong></td>
<td><strong>206.2</strong></td>
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<td><strong>Total PROJECT COSTS</strong></td>
<td><strong>2,101.9</strong></td>
<td><strong>2,776.8</strong></td>
<td><strong>2,386.8</strong></td>
<td><strong>1,681.7</strong></td>
<td><strong>1,494.6</strong></td>
<td><strong>10,421.7</strong></td>
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61
### Table 3: Components by Financier

**Lao PDR**  
**Khammouane Rural Livelihood Project**  
**Components by Financiers (US$)**

<table>
<thead>
<tr>
<th></th>
<th>The Government</th>
<th>IDA</th>
<th>PHRD</th>
<th>Province</th>
<th>Total</th>
</tr>
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<td><strong>A. Local Development and Livelihoods Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. District Development Fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Block Grant</td>
<td>-0.0</td>
<td>-0.0</td>
<td>2,572.1</td>
<td>90.0</td>
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<td>Agriculture and Livelihood Grant (ALG)</td>
<td>-</td>
<td>-</td>
<td>270.0</td>
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<td><strong>Subtotal District Development Fund</strong></td>
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<td>-0.0</td>
<td>2,842.1</td>
<td>90.9</td>
<td>-</td>
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<td>2. Support for Provincial Capacity Building</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provincial Development Fund</td>
<td>-</td>
<td>-</td>
<td>964.0</td>
<td>90.9</td>
<td>-</td>
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<tr>
<td>Provincial Capacity Building</td>
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<td>-</td>
<td>1,050.8</td>
<td>51.6</td>
<td>985.0</td>
</tr>
<tr>
<td><strong>Subtotal Support for Provincial Capacity Building</strong></td>
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<td>-</td>
<td>2,014.8</td>
<td>65.1</td>
<td>985.0</td>
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<td>3. Support for Component 1 Management</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support for Component 1 Management</td>
<td>0.0</td>
<td>-</td>
<td>643.1</td>
<td>100.0</td>
<td>-</td>
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<tr>
<td><strong>Subtotal Local Development and Livelihoods Support</strong></td>
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<td>-0.0</td>
<td>5,500.0</td>
<td>80.1</td>
<td>985.0</td>
</tr>
<tr>
<td>B. Support for Irrigation Development for NT2 downstream and Lower XBF</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation of That Thot Irrigation Scheme</td>
<td>-</td>
<td>-</td>
<td>883.9</td>
<td>100.0</td>
<td>-</td>
</tr>
<tr>
<td>Development of A Downstream Irrigation Scheme in That Thot Area</td>
<td>55.0</td>
<td>5.6</td>
<td>934.0</td>
<td>94.4</td>
<td>-</td>
</tr>
<tr>
<td>Rehabilitation of Small Pump Scheme in Lower XBC</td>
<td>0.0</td>
<td>-</td>
<td>591.3</td>
<td>100.0</td>
<td>-</td>
</tr>
<tr>
<td>Strategic investment plan for Downstream Irrigation Development</td>
<td>-</td>
<td>-</td>
<td>500.0</td>
<td>100.0</td>
<td>-</td>
</tr>
<tr>
<td>Component 2 Management Support</td>
<td>0.0</td>
<td>-</td>
<td>590.8</td>
<td>100.0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Subtotal Support for Irrigation Development for NT2 downstream and Lower XBF</strong></td>
<td>55.0</td>
<td>1.5</td>
<td>3,500.0</td>
<td>98.5</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total PROJECT COSTS</strong></td>
<td>55.0</td>
<td>0.5</td>
<td>9,000.0</td>
<td>86.4</td>
<td>985.0</td>
</tr>
</tbody>
</table>
Annex 6: Implementation Arrangements

LAO PDR: Khammouane Development Project

A. Introduction

1. The main beneficiary of the proposed project is Khammouane province, and – given this – the province would be involved in implementation of overall project activities – including both Components 1 and 2. In this context, the province will assign the Director of the Department of Planning and Investment (DPI) a project director responsible for overall project implementation, including both Components 1 and 2. However, development of the NT2 downstream irrigation is a matter of national interest, and certain managerial responsibilities for implementing Component 2 would be entrusted to the Ministry of Agriculture and Forestry (MAF). This section describes in detail the implementation arrangements for each Component, including execution and oversight responsibilities.

B. Implementation Arrangements for Component 1.

2. Overview. In order to foster the integration of the project into the existing organizational structure of the province, the overall responsibility for managing this Component of the project would be delegated to a small section to be established within the provincial Department of Planning and Investment (DPI), named Project Coordination Section (PCS). In addition, the provincial Department of Finance (DoF) would be entrusted with the management of fund flows for the project. As project activities would include many sectors both at the province and district levels, the implementation of Component 1 would involve concerned districts and departments according to the following principles.

3. Subcomponent 1-1: District Development Fund. The province will establish the DDF, and assign DPI responsible for oversight. DPI will then delegate the implementation of the Basic Block Grant (BBG) and Agriculture and Livelihood Grant (ALG) under the DDF to the district. Both BBG and ALG will be managed by the District Planning Team (DPT). Line departments will assist villages to prepare proposals for DDG funded subprojects which will be assembled at the Kum Banh level committee and reviewed and priorities agreed by the representatives elected from each village (one man and one woman) with facilitation from DPT staff. Priority subproject proposals will be forwarded by the Kum Banh committees to the district where the DPT will review the proposals for eligibility and provide any comments on technical feasibility, estimated budget, or other technical issues and forward these with the proposals to the District Planning Committee (DPC which includes representatives of the Kum Banh selected from amongst the Kum Banh committees and district officials. The DPC reviews, discusses and agrees on the priority subprojects which constitute the District investment plan within the limits of the district BBG allocation and sends the proposed plan to DPI at the provincial level where the plans are reviewed and their eligibility and feasibility and compliance with safeguards and other provisions confirmed and recommended for approval or sent back to the DPC for revision with comments. Upon approval of the district investment plan by the Governor, BBG funds are transferred to the District account and the District is given approval to go ahead with any required procurement or contracting for subproject implementation. Procurement and
contracting are carried out by the District on behalf of the villages but the procurement committee includes members of the concerned village, and the contracts with winning bidders are signed between the contractor, the District and the village. Technical oversight of works, goods or services under BBG is carried out by the competent line agency at the district level, drawing upon provincial support as needed. BBG subproject proposals and funding can include specific allocations to support per diems, fuel costs and other incremental operating costs of line departments for technical oversight and support services to villages for BBG subproject implementation.

Table 1: Steps in District Development Budget Execution

<table>
<thead>
<tr>
<th>Step</th>
<th>Actors</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Finalizing preparations</td>
<td>DPT</td>
<td>• finalize tender documents</td>
</tr>
<tr>
<td>2. Procurement &amp; contracting</td>
<td>As per GoL regulations and District Procurement Manual</td>
<td>• select contractors for project implementation</td>
</tr>
<tr>
<td>3. Preparation of project</td>
<td>DPT</td>
<td>• ensure adequate organization of implementation</td>
</tr>
<tr>
<td>implementation plan</td>
<td>Technical units (technical departments, consultants) Local Oversight Committees (LOCs) Contractors</td>
<td></td>
</tr>
<tr>
<td>4. Technical and local oversight</td>
<td>DPT Technical units (technical departments, consultants) Local Oversight Committees (LOCs) Contractors</td>
<td>• ensure quality of works</td>
</tr>
<tr>
<td>5. Payments</td>
<td>District Head District Department of Finance Technical units Contractors</td>
<td>• disbursement of funds to contractors</td>
</tr>
<tr>
<td>6. Operations &amp; maintenance</td>
<td>DPT Local O&amp;M management</td>
<td>• ensure that investments are operated and maintained</td>
</tr>
</tbody>
</table>

4. There are several aspects of the BBG budget execution process that need to be underlined:

(a) Detailed design and costing of works will be the responsibility of the District Planning Team (DPT). Where works are very simple, the DPT may itself ensure detailed design and costing\(^3\). But in the case of more complex investments, the DPT will be expected to either call in technical support from the province or hire consultancy services;

(b) Procurement of goods, works and services will be governed by a set of district procurement regulations\(^4\), based upon national procurement procedures and subject to IDA approval. Procurement will be the responsibility of the district, with the DPT acting as procuring entity;

(c) Technical supervision of all works will be ensured either by line department staff (from either the district or province) or by private sector consultants. Technical

\(^3\) Design templates and typical costings for standard infrastructure items will be developed (using experience from PRF and Saravane) and made available to DPTs.

\(^4\) It is suggested that KDP use the District Procurement Manual (or a slightly revised version of it) that has already been developed and used in Saravane.
supervision will include oversight of any environmental and social issues and ensure that foreseen mitigating measures are being taken;

(d) Local monitoring of works will be ensured by community representatives, organized into Local Oversight Committees (LOCs). LOCs will have the day-to-day responsibility for overseeing the quality of contractors' work — and LOCs will be involved in certifying that works have been up to standard or that any goods delivered are of the right quality;

(e) Upon the completion of works or delivery of any goods, LOCs and technical supervisors will jointly ensure that environmental and social safeguards have been respected.

5. In addition to the regular BBG funding, additional contingencies are included in the DDF component budget to finance clearance of unexploded ordinance (UXO) as required for specific DDF subprojects. The UXO contingency funding is intended to ensure that villages which suffer from UXO are not discriminated against in the Kum Banh or District level prioritization due to the additional cost of implementing subprojects which require UXO clearance. Screening for UXO risk would be included as part of safeguard screening for subproject proposals and would be the responsibility of the DPT. Implementation of any DDF subproject would be subject to confirmation that UXO clearance had been completed and certification of clearance received and retained by the district.

6. Agriculture Extension Services. District Agriculture and Forestry Extension Offices (DAFOs) will be engaged in implementing Agriculture and Livelihood Grant (ALG) of the DDF. DAFO have already appointed a DAFO staff member for each of the 8 kum bans which cover the 27 target villages. These DAFO kum ban staff will act as facilitators for preparing a proposal for livelihood improvement in the respective villages. They will be responsible for identifying the potential products for the target villages, assisting these villages in developing groups, and prepare intervention plans. Then the DAFO staff will present the intervention plans to the DPT for approval. During the first year of implementation, livelihood extension training will be provided to these extension officers in order to equip them with knowledge and skills in conducting market and economic analysis and facilitating interventions. The project will provide per diem, basic buildings and equipment for DAFO staff to station themselves at kum ban level so that they can interact with the target villages.
Figure 1. Khammouane Development Project: Summary of Component One. Component 1 is designed as a package of investments and technical assistance that will develop provincial capacity to better plan, manage and monitor the use of public resources.
7. **Subcomponent 1-2-1: Provincial Development Fund.** The DPI will manage the PDF. Line departments will submit proposals for PDF subprojects to DPI. The PCS will be responsible for coordinating line departments in the province as well as district governor offices and preparing for a proposal for the PDF investment plan. The plan will processed and approved through the regular planning process of the province.

8. **Subcomponent 1-2-2: Provincial Capacity Building.** The DPI is responsible for overall management of this subcomponent; however, DPI will delegate implementation to the Department of Finance and PAFO for activities related to the public financial management and livelihood support respectively. Procurement of the consultants and civil works will be carried out jointly by a procurement committee, including the staff of the PCS and the representatives of the Department of Finance and the PAFO.

9. **Subcomponent 1-2-3: Component Management.** In order to facilitate the implementation of the project, a small team named project coordination section (PCS) would be established within the DPI to take care of day-to-day management of the project activities. The project director will then appoint a full time project manager, to lead the PCS and carry out routine management of the project. In order to assure the ownership and sustainability of the project, both the project director and the project manager are the staff of the province. PCS, led by the project manager, would have the following four contracted staff: (i) assistant coordinator to assist the project manager in facilitating the coordination among districts as well as other departments in the provincial government, (ii) an accountant and deputy to help manage the financial transactions, and (iii) an assistant. These staff would be on a contract-term and financed by the Bank. PCS’s main tasks would include the following:

C. **Implementation Arrangement for Component 2**

10. **Overview.** The Province will delegate the day-to-day management of this component to the Ministry of Agriculture and Forestry, which will assign the Department of Irrigation (DOI) and the Provincial Agriculture and Forestry Office (PAFO) as main entities to implement the component. Considering the fact that the project activities would largely take place in the province, a small unit named Downstream Irrigation Management Unit would be established within the Provincial Agriculture and Forestry Office (PAFO). The following is a summary of the implementation arrangements for this Component:

- DOI will assign a staff from the DOI as a Component Manager for Component 2. A financial assistant will also be recruited through the project, and posted in Thakek to maintain the financial records for the Component;

- A small unit named the Downstream Irrigation Management Unit (DIMU) would be established within PAFO to carry out day-to-day Component management. PAFO will appoint a Component Coordinator (PAFO staff) to assist the Component Manager and coordinate the DIMU and oversee project implementation under the supervision of the Component Manager in DOI. Under the Component Manager and the Component
Coordinator, the DIMU would also include the following staff in Thakhek: (a) Chief, Pump Scheme (PAFO staff); (b) Chief, Tha Thot Scheme (PAFO Staff); (c) WUG Support Staff (PAFO staff); and (d) assistant (contracted staff). DIMU will also include one staff member for each of the two districts (Gnomalat and Maxasay), assigned by DAFO to facilitate the implementation of the project.

11. **Procurement for Component 2.** A procurement committee would be established for Component 2 to carry out major procurement activities such as: selection of consultants for major studies, feasibility study and designs, and civil works contracts. The composition of the procurement committee for Component 2 would differ from that of Component 1, as the activities would be mainly regarding irrigation, and specific technical knowledge would be required for the committee member. The committee would be established by the Project Steering Committee.

12. **Financial Management for Component 2.** As stated above, two financial specialists (one in Vientiane and the other in Thakek) will be recruited to manage the Component. The specialist located in Vientiane will be responsible for overall financial management (record keeping, withdrawal request, preparation for audits), whereas the second assistant accountant located in Thakek will facilitate the transaction of an impress account to finance small amount of logistics costs (per diems, fuels, office supplies).

D. **Project Oversight**

13. **Project Oversight.** An oversight committee would be established to monitor the overall progress of the project across both components 1 and 2. The Committee, named Project Steering Committee (PSC) to be established in Thakek, would comprise the following members: (a) Deputy Governor of Khammouane Province (Chair), (b) Director General of the Department of Irrigation, Ministry of Agriculture and Forestry (Deputy Chair), (c) Director, DPI, Khammouane Province, (d) Director, Department of Finance, Khammouane Province, (e) Director, Department of Education, Khammouane Province (f) Director, Department of Personnel, Khammouane Province, (g) Director, Department of Health, Khammouane Province, (h) Director, Department of Tourism, Khammouane Province, (i) Director, Department of Water Resources and Environment, (j) Representative of Lao Women Union, Khammouane Province, (k) Director of Provincial Agriculture and Forestry Office, (l) a representatives of the MoF, and (m) two representatives of the MPI.

14. Main task of the PSC would include the following: (a) review and approve six months progress report and project plan, (b) review and endorse the annual financial audit report, (c) review, advice and approve major implementation issues such as: revision in the operation manual, key personnel appointment, liaison with other government institutions on policy and implementation matters. The PSC would be established prior to the effectiveness of the proposed project.
Annex 7: Financial Management and Disbursement arrangements

Lao PDR: Khammouane Development Project

Summary of the Financial Management Assessment

1. A financial management capacity assessment of the Khammouane Department of Planning and Investment, Provincial Treasury, nine district treasuries and the Department of Irrigation (DOI) in the Ministry of Agriculture Forestry (MAF) was undertaken between August to October 2007 and updated during appraisal in March 2008 to determine whether the respective institutions have adequate financial management systems and related capacity in place which satisfy the World Bank’s Operational Policy/Bank Procedure 10.02 with respect to financial management. Under the policy, borrowers (recipients) and project implementation entities are supposed to have and maintain adequate financial management systems which include budgeting, accounting, internal controls, funds flow, financial reporting and auditing arrangements to ensure that they can readily provide accurate and timely information regarding project resources and expenditures. These arrangements are deemed acceptable if: (a) they are capable of correctly and completely recording all financial transactions and balances relating to the project resources; (b) if they can facilitate the preparation of regular, timely and reliable financial statements; (c) safeguard the project’s assets; and (d) are subject to auditing arrangements acceptable to IDA. The assessment was conducted through discussions with the staff of Department of Planning and Investment, Provincial Treasury director and staff, finance staff from district Treasuries, finance staff from Department of Irrigation and consultants from GPAR project financed by UNDP. The discussion was preceded by a financial management questionnaire which the respective parties filled in for discussion.

2. The Financial Management assessment indicates that the project will be implemented in an inherently high risk environment. The current financial management systems at provincial level do not comply with the Bank’s minimum requirements in their current status because they have inherent weaknesses in internal control systems, lack adequate staffing at provincial and district treasury levels to handle project financial management requirements. Such systems have not been audited by independent external auditors since their establishment except through provincial treasury officials and Ministry of Finance staff. The audit reports issued by ministry of finance on financial management systems of the Provincial Treasury and districts reveal unreconciled cash accounts, undocumented and unliquidated advances; unreconciled physical count of inventories and properties; unrecorded payables and in certain cases erroneous transaction entries. Some of the districts still have arrears on water and power owing to inadequate resources made available to them from Ministry of Finance through the National Treasury.

3. Inability to timely account for fuel advances and allowances also poses some risk to any resources made available to districts and province when it comes to timely reporting. With the annotated deficiencies in the provincial and district treasury financial management systems, weaknesses in capacity as well as increased perceived corruption in the country as discerned from the 2007 Transparency International Corruption Perception Index which ranks the country at 163 out of 174, there is possibility for abusing some part of the grant resources made available by IDA. In view of this, an action plan as outlined below has been designed to mitigate against
the envisaged risks. The action plan will be constantly updated during supervision missions to meet new perceived risks as the project is under implementation. The action plan includes development of clear accountability mechanism at each implementation level starting at provincial level whose measures will be included in the project financial management manual and the project manual of operations to ensure that the key risks are addressed during implementation. Once such measures are agreed upon, they will be implemented at district level. Systems audits will be undertaken for each district and province by the State Audit Organization (SAO) as part of their capacity building on an annual basis which will help to deal with some of the risks outlined in the report.

4. In conclusion, the proposed financial management arrangements put in place by the Khammouane Province and the DOI meet Bank’s minimum requirements for project financial management as per OP/BP10.02, including following actions;

Agreed Actions

Effectiveness

- Develop and adopt an operational manual which include: (a) financial management module to manage both Component 1 and 2, and (b) a devoted section for the DDF and the PDF to define detailed procedures.

After effectiveness

- Appoint an auditor of the project six months after project effectiveness;
- Purchase and installation of project accounting software, six months after project effectiveness

Country Issues

5. Since 2003, the Government of Lao PDR has been implementing robust Public Financial Management reforms financed by a number of donors. The IDA, through the Financial Management Capacity Building Project has been financing such reforms which encompass three components. Component 1 covers (a) financial sector reform which focuses on improving data management, on and off site examination of banking and other financial institutions. It also covers improvement of credit information bureau of Bank of Lao PDR. The second component covers core PFM reforms such as (a) stabilization of GFIS (b) strengthening of debt management (c) support to procurement monitoring office (c) curriculum strengthening at government three PFM regional schools and upgrading training institutions. The third component covers SOE reform and business development which focuses on (a) development of business strategy (b) SOE restructuring (c) monitoring and evaluation. Through the Additional Financing to the program, the following components have been included into the program which cover (a) developing a new inter-governmental fiscal framework (b) implementation of revised chart of accounts (c) providing support towards treasury centralization (d) strengthening external audit capacity. Such Public Financial Management reforms are anchored in the Public Expenditure Management Strengthening Program (PEMSP). This is a master document which guides key
PFM reforms in Lao PDR. It was adopted by the Government of Lao PDR in November 2005, by the approval of the Minister for Finance and the Prime Minister’s Office.

6. The PEMSP is a multi-year medium-to-long term program which aims to improve policy consistency, efficiency, transparency and accountability in public expenditure management by strengthening institutional systems and capacity and making progress towards appropriate international financial management standards. It provides a framework for implementing Government policies and strategies laid out in the “Policy Paper on Governance”, the National Growth and Poverty Eradication Strategy, and the National Socio Economic Guidelines 2006-2010. The document is a response to some of the key PFM weaknesses outlined in the Country Financial Accountability Assessment (CFAA) of 2002 which concluded that the overall fiduciary risk in Lao PDR was considered to be high, despite the fact that there are elaborate built-in controls within the government FM system.

7. The conclusions in the CFAA were anchored in insufficient transparency in public finances. The budget process was assessed as being not transparent and public access to government financial information as being limited. These weaknesses have been compounded by insufficient awareness of modern practices of internal control in the public sector and by the government’s ongoing decentralization initiative, which needs to be supported with a sufficiently robust institutional framework that clearly defines the new responsibilities at lower levels. Technical capacity of staff at these levels needs to be strengthened. The oversight functions and the State Audit Organization need enhanced capacity and improvement. Capacity at provincial and district level is weak. A recently completed Institutional Development Fund (IDF) grant to improve accountability in state owned enterprises and the private sector has helped develop the environment for the accounting and auditing professions and initiated amendments to accounting and auditing laws. An Integrated Fiduciary Assessment- Public Expenditure Review has been completed and disseminated whose findings go to support the weak accounting environment annotated above.

8. While the implementation of the actions above have started to improve specific fiduciary issues, the country FM environment for externally-funded projects still remains weak as the effects of some of the measures being implemented are yet to impact the respective ministries and departments.

9. A financial transactions review undertaken in 2007 as pointed out above revealed a number of project portfolio wide financial management weaknesses. A review of management letters issued on previous projects implemented by a number of project units in the province show a number of weaknesses in internal control.

10. Owing to the weaknesses outlined above, this project intends to deal with them by having a proposed financial management system which will have the following features:

- The project shall be implemented through the Project Coordination Section (PCS) to be established within the Department of Planning and Investment (DPI) for Component 1 and Downstream Irrigation Management Unit (DIMU) established within the PAFO and staffed jointly by PAFO and DOI for Component 2. The accounting for overall project implementation shall be done through the office of Department of Planning and
Investment where a senior project accountant will be recruited. The senior project accountant shall help with the accounting functions and consolidation of reports and withdrawal applications for both components. The PCS will have the responsibility to manage the funds of the project and be duly accountable on the same. The staff of PCS and the project accountant through the provincial Treasury shall be responsible for disbursing funds to activities taking place at district and community level in Component 1 of the project and ensure their accountability and reporting on a monthly basis. It shall also be responsible for consolidating the financial reports from DIMU for Component 2 with those of the PCS for Component 1. The PCS senior project accountant shall also be responsible for consolidating accounting information necessary for preparing withdrawal applications for submission to the World Bank through the Ministry of Finance;

- The province and all involved districts shall endeavor to have adequate numbers of staff in place through the life of the project. The same shall be the case at the DOI and PAFO in the Ministry of Agriculture and Forestry;

- The State Audit Organization shall be responsible for carrying out systems audits of the nine participating districts;

- Increased capacity building grant amount incentives shall also be given to each district to ensure that districts strive to keep their financial management in good shape;

- Simple financial guidelines shall be issued by the province for all districts involved in the project so that new staff can acquaint themselves of the project’s requirements;

- Clear accountability mechanisms for the DDF, PDF and BBG have been formulated in the Operational Manual and shall be disseminated prior to the effectiveness. The mechanisms include usage of community accountability mechanisms through CDD principles and publication of grant amounts allocated and disbursed which shall be posted on primary school notice boards;

- Training and related capacity building activities and launch workshops shall help bring all staff on the same page in terms of understanding project procedures;

- Performance of staff at the center and province shall be carefully monitored to check if they release funds on time and inform district staff of allocations through development of basic service standards;

- Technical consultants shall be hired through an additional 5 percent to be paid together with the BBG allocations to hire staff to supervise and build capacity at district level;

- An advert will be run in popular news paper in Lao informing the public that if anybody suspects corruption in the project, they should report to the State Inspection Authority (SIA) at district, provincial and national level for further action.
Risk Analysis

11. The detailed risks to project funds and related mitigating aspects are as analyzed and articulated in the following table:

<table>
<thead>
<tr>
<th>Inherent Risk</th>
<th>Risk Rating</th>
<th>Risk Mitigation measures incorporated into project design</th>
<th>Risk after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Country level Fiscal environment:</strong> There is weak control environment with weaknesses in National Treasury operations, especially in cash management. There are inadequacies in PFM accounting system, and weak internal and external auditing capacity.</td>
<td>High</td>
<td>The weaknesses of the national treasury and the generic PFM inadequacies are being addressed through the FMCBP. Some of the core aspects in PFM reform such as establishing provincial internal audit; bi-annual systems audits will be implemented. A total of five main PFM reform items will be piloted through the project at provincial level. These will include budgeting, accounting, application of Medium Expenditure Framework (MTEF) principles, internal audit and robust district and provincial audit by independent external audit; annual audits of districts through the State Audit Organization will help mitigate against some of the risks. Government wide, Treasury management, commitment control and debt management. Annual public expenditure reviews will be undertaken at provincial level to check on the weaknesses noted amongst other things. The FMCBP has clear achievement indicators in reforming and addressing the weaknesses noted. A provincial PEFA exercise will be undertaken when the project is three years old to check on the selected areas of Public Financial Management.</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

At provincial level, the financial management system will have mitigating financial management arrangements aimed at addressing some of the key weaknesses observed above. The provincial and district level planning, budgeting and reporting on financial performance, by staff appointed by the province and district whose skills will be further enhanced by training in project FM and government wide PFM; one designated account of the project finances will be opened in Bank of Laos. There will be annual external audits.
<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Rating</th>
<th>Risk Mitigation measures incorporated into project design</th>
<th>Risk after Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owing to low salary level within Public service, fuel, training /workshop costs /allowances and other soft expenditures have become a means of livelihood and are likely subject of abuse.</td>
<td>Substantial</td>
<td>Fuel and allowance rule compliance will be subject of review of every supervision mission and will also be checked upon by external auditors. Appropriate payment principles will be written in the project Financial Management Manual on soft expenditures. It is envisaged that FM guidelines will be issued to help staff working on the project understand what is required of them. Extensive training will be offered to accounting staff at DoI and Provincial Treasury.</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Inability to use funds efficiently and economically for purposes intended</strong></td>
<td>Substantial</td>
<td>There shall be enhanced accounting and reporting. Independent external auditors shall be engaged to conduct annual audits. The Provincial Steering Committee to be chaired by the deputy governor will oversee proper usage of funds. At DOI, the director general of Irrigation will review expenditures and fund usage every quarter upon production of the sub component FMR. Activities of each component shall be based on an agreed budget.</td>
<td>Moderate</td>
</tr>
<tr>
<td>Potential corruption arising from procurement</td>
<td>High</td>
<td>ICB shall apply for all contracts above a certain threshold and Bank procurement rules shall apply. Such contracts are expected to be few and insignificant. A review of indicative red flags for collusion will be periodically conducted. Advertisement of the phone number of the SAI shall be put in the paper every quarter in the first eighteen months of the project's effectiveness for people to call the unit for any suspected cases of corruption so that the unit can investigate and bring culprits to book upon obtaining evidence of malfeasance. Further, community accountability mechanisms will be established where the budget for each sub component during the year will be put on each school notice board and various committees responsible for holding the project accountable for proper utilization of the budget shall be established and demand accountability at the end of each month. District comparison of costs shall be done to detect any that will fall out of line so that further investigations on</td>
<td>Substantial</td>
</tr>
<tr>
<td>Risk</td>
<td>Risk Rating</td>
<td>Risk Mitigation measures incorporated into project design</td>
<td>Risk after Mitigation</td>
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<tr>
<td>Inability to properly account for grants at village level, advances, fuel and allowances</td>
<td>Substantial</td>
<td>The project shall maintain an advance register which shall be reviewed by external auditors. Log books and fuel registers shall also be maintained by the project. The respective books shall be reviewed each mission. Simple books adopting the CDD principles in card form shall be maintained at village level to allow for ease of recording of transactions and usage of funds advanced.</td>
<td>Moderate</td>
</tr>
<tr>
<td>Inability of the DPI, the Provincial Steering Committee to properly utilize the project resources and hold implementers accountable.</td>
<td>High</td>
<td>Each participating entity shall prepare an annual budget which shall be strictly followed. There will be a launch workshop for two days where all stakeholders will be invited to be taught about the project and how it ought to be managed. The first three supervision missions will have such capacity building ventures imbedded in them. The internal audit to be established at provincial level before the project becomes effective will bring any common weaknesses in controls to such workshops and ways of dealing with them and also share them with the Provincial Project Steering Committee.</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

**Overall inherent risk**

<table>
<thead>
<tr>
<th>Control risk</th>
<th>Substantial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeting</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

| Inability for the province to manage IDA provincial treasury project | High | The funds from IDA will flow directly to the designated account maintained at the Bank of Laos for both components and subsequently transferred to two respective |

75
<table>
<thead>
<tr>
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<th>Risk after Mitigation</th>
</tr>
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<tbody>
<tr>
<td>account. Further such funds may face bottlenecks to reach intended beneficiaries.</td>
<td></td>
<td>project accounts to be established at the province in a commercial bank of the projects choice and managed by the Provincial Treasury and another in a commercial bank in Vientiane managed by the DOI. Staff to manage such accounts will be exposed to foreign exchange management by attaching them to the Ministry of Finance for three months to see how external finance unit within the Ministry of Finance manages designated accounts.</td>
<td>Substantial</td>
</tr>
<tr>
<td>Misuse of Block Grants, Agriculture Livelihood Grants and UXO contingencies.</td>
<td><strong>High</strong></td>
<td>Clear rules of eligibility and accountability will be written in simple English and Lao language for use by recipients in the participating districts. Community Driven Driven (CDD) principles will be used for management of such funds with committees for the management of such funds put in place, monthly meetings held and simple books of accounting maintained where invoices for each expenditure will be attached for accountability and audit purposes.</td>
<td>Substantial</td>
</tr>
<tr>
<td>Staffing-weak capacity</td>
<td><strong>High</strong></td>
<td>Province staff will be trained in handling WB funds and also expose them to more training pertaining to government financial management. Attempt will be made to select such staff on meritocracy with experience and good qualifications. Similar principles will also be applicable in the DOI.</td>
<td><strong>Substantial</strong></td>
</tr>
<tr>
<td>Lack of experience in managing foreign exchange</td>
<td><strong>Substantial</strong></td>
<td>Project staff will be supported by a consultant on FM and other areas initially for a period of eighteen months. The provincial and district staff shall be attached to the Ministry of Finance for periods of three months each before the project starts and subsequently.</td>
<td><strong>Moderate</strong></td>
</tr>
<tr>
<td>Insecurity of cash transfers for project use</td>
<td><strong>High</strong></td>
<td>Since some districts don't have banks into which to deposit project funds, cash for implementation may be transported in bulk to the district for implementation. The governor shall establish a level (proposed $5,000-equivalent in Kip) at which any cash transfer ought to be accompanied by the police.</td>
<td><strong>Substantial</strong></td>
</tr>
<tr>
<td>External Audit</td>
<td><strong>Moderate</strong></td>
<td>Annual financial audit of the project’s financial statements by independent</td>
<td><strong>Low</strong></td>
</tr>
<tr>
<td>Risk</td>
<td>Risk Rating</td>
<td>Risk Mitigation measures incorporated into project design</td>
<td>Risk after Mitigation</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>-----------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Reporting and Monitoring</td>
<td>Substantial</td>
<td>Clear timelines for submitting reports for consolidation will be agreed upon. Failure to adhere to such timelines will lead to punitive measures. A consultant will be hired to work with provincial and district staff to design simple reporting formats. Such reports should make a serious attempt to link financial and physical progress reports wherever possible.</td>
<td>Moderate</td>
</tr>
<tr>
<td>Information Systems</td>
<td>Moderate</td>
<td>Attempts will be made to buy software for the project during project preparation. Once government has bought its own PFM software, has done the horizontal roll out of the FM information systems, such software will be piloted in Khammouane province into which project accounting will be subsumed and integrated.</td>
<td>Low</td>
</tr>
</tbody>
</table>

Overall control risk                      | Substantial |
Overall Project Risk Rating                  | Substantial |

**Financial Management staffing**

12. The Department of Planning and Investment (DPI) will hire one project accountant to be supplemented and assisted by DPI accounting staff. The nine participating districts within the province have varied numbers of staff whose capacity is also low. The DOI does have core staff to kick start the activities of the project although their financial management capacity is low. It was agreed during appraisal that one more finance assistant for the DOI will be hired and posted in Khammouane Province to help handling the financial management of the Component 2. The financial assistant staff shall have the requisite experience in managing foreign exchange and project related financing.

13. The organizational structure of the finance function of the Provincial Treasury who will be responsible for disbursing funds to districts is as designed by government of Lao PDR. The old staff working in the unit has clear job titles and descriptions whilst those employed less than three years ago do not have fully written up job descriptions. In the DOI, job descriptions do exist for accounting staff though they do not include specific project related accounting functions. These have been clearly written out in the project financial management manual. The transfer rate of such staff out of the ministry and province is very minimal. Currently, there is no training policy for finance and accounting staff. It is hoped that accounting staff working on this project shall benefit from capacity building efforts and a resultant capacity building plan of the project to further their accounting skills.
Accounting Policies, systems and procedures

14. The project’s key accounting policies and procedures have been written in a financial management section of the operational manual. This manual will guide financial management staff working on the project in the province, districts and PAFO/DOI. This manual is part of the project’s operational manual. The DPI/provincial Treasury and DOI accounting systems are currently manual. Whilst they have been running well for the purposes for which they were set so far, it takes staff quite sometime to produce the monthly reports. Their computerization will help produce timely reports.

15. All accounting and supporting documentation will be retained by the finance unit of Khammouane Provincial Treasury department and the DOI on a permanent basis in a defined system that allows authorized users easy access and facilitate the conduct of annual audits.

Accountability for DDF and Improving Public Financial Management

16. Clear rules for access and participation into the DDF and PDF is being developed and written in a devoted section of the Operational Manual. At community level, clear rules for accounting, reporting and keeping cash have been documented following principles of Community Driven Development (CDD) and community reporting and accountability principles established by NAFES at community level. Communities will keep simple books of account which allow them to record the funds they have received, how much they have spent and attaching to their books the supporting documentation and the remaining funds on hand meant for further implementation. Such rules and requisite accountability mechanisms were discussed during appraisal and were found acceptable.

Budgeting.

17. The current government budgets as currently prepared do not lay down physical and financial targets. However, budgets are prepared for all significant activities in sufficient detail to provide a meaningful tool with which to monitor subsequent performance. Actual expenditures are normally compared to the budget every quarter and explanations obtained for significant variations from budget. Approvals for variations from budget are obtained in advance. Similar procedures will also be adopted for the project. The detailed budget procedures under this project will be as follows:

18. At the start of each fiscal year, districts participating in this project will have been informed of the amount of resources allocated for the various grants. Using a bottom up approach, the participating districts will develop and finalize their plans through District Planning Team articulating the activities they intend to implement in the fiscal year. All the detailed designs will be done through this DPI where the projects will be costed and prioritized. After prioritization, some projects will be dropped and others approved. Procurement for the approved subprojects will be governed by a set of district procurement regulations which are anchored in national procurement procedures and where some packages are above certain thresholds, they may be subject to IDA approval.
19. For PDF supported investments, each district will provide an indication of three priority proposals for provincial level investments. A decision to prioritize will be made through the district planning committee, the district planning team and the district head. The district planning and investment staff will register district level proposals so far submitted and circulate them to relevant sector departments. For Health, Education, Transport and Agriculture which are priority areas, the planning team will look at the proposals and consider appraising them and match them with sector priorities. The staff of the DPI will appraise sector development submissions and prepare a prioritized draft PDF plan. The draft PDF plan will be reviewed and finalized by the Project Steering Committee (PSC), and the finalized PDF plan will be fed into draft annual provincial investment plan and be integrated into an annual budget submission. The approved provincial budget will then be incorporated into the national budget.

20. Appraisal of subprojects or investments to be financed annually out of the PDF allocations of the project will be subject to a social and environment assessment. Thus provincial departments will be responsible for the implementation of sector investments funded out of the annual PDF allocation.

21. For component 2 activities, the DOI will formulate its project budget following government budget guidelines before discussing them with the Project Steering Committee for prioritization for inclusion in the annual budget.

Payments

22. Invoice processing was reviewed and considered less than adequate. This is because there is no comparison between actual goods received and the quantity for which an invoice has been issued by the supplier and the related order. In addition, there is no checking with warehouse or supplies on quantities received. For goods purchased, comparison of invoice quantities, prices and terms with those indicated on the purchase order and with records of goods actually received is not done. Checking of calculations on such invoices is done though not authenticated. Invoices are not stamped “PAID”, dated, reviewed and approved and clearly marked for account code assignment. These weaknesses have been addressed in the project financial management module of the operational manual. Clear rules for paying for services, goods and works under the project have been articulated in the financial management manual.

Policies and Procedures.

23. Preparation of financial statements is supposed to be guided by Lao accounting standards. Their applicability in government is very limited if not non existence. To ensure a sound financial management at district and provincial level, a set of financial management guidelines are contained in the project financial management manual to guide all stakeholders on financial management issues of the project. Key policy features in the draft financial management manual are:

- The districts are encouraged to use bank accounts at the nearest bank branch for receipts and for the bulk of expenditures. Currently, none of the districts in the province run and operate bank accounts;
• A distinction has been made between authorizing officer and payments officer such that there is no overlap of their functions as may have been the case previously;

• Purchase requisitions, payment authorizations and payment vouchers to track expenditures and ensure accountability have been embedded in the project financial management manual and policies for enforcing them have been included too;

• A simple computerized accounts journal and software will be bought for each unit-DOI and DPI to track and record all transactions;

• Regular and timely, quarterly and annual financial management reporting, which will include bank reconciliations; failure to comply with such financial management reporting requirements will result in the suspension of further transfers;

• Public disclosure of DDF-related accounts, with quarterly financial reports being posted on the district and school notice boards and annual financial reports being posted on all Kum Ban notice boards;

• Regular auditing by Independent external auditors.

24. Conflict of interest and related party transactions rules are not clearly catered for within the provincial guidelines and so are rules that provide safeguards to protect district and provincial assets. However, the projects project implementation manual of procedures will be distributed to appropriate personnel and clearly articulate the issues of conflict of interest and who is authorized to change codes and establish new accounting policy.

Cash and Bank

25. For the current projects financed by the UNDP and treasury funds, there are adequate controls that exist for the collection, timely deposit, and recording of receipts at each cash location. Cash and bank are reconciled on a monthly basis though not rigorously checked. There was no evidence to show that unusual items on the bank reconciliation are followed up after review and approval. A provincial project bank account with a float of $400,000 will be opened in Khammouane into which transfers from the DA will be made for activities under components 1. Another project bank account will be opened by DO1 in a commercial bank of its choice for activities under component 2. It will have a float amount of $50,000 as most of the payments will be made on direct payment to the suppliers and contractors.

Information systems

26. Whilst the project's financial management system is not yet in place, the existing Provincial Treasury does not have a computerized accounting system. As such, it is difficult to determine whether the processing system does help in safeguarding the confidentiality, integrity and availability of data. However, simple software will be installed to take care of transactions for this project at DPI in the province and at DOI in Vientiane. The system will be designed to give confidentiality and integrity of data.
Safeguard over Assets

27. There are no explicit policies and procedures to safeguard and protect assets from fraud and waste through recording them in a fixed asset register. Periodic physical verification of such assets is not regularly done. Assets are not insured. It will be necessary that the project maintains a fixed asset register and conducts period count of its physical inventory. This will be specified in the financial module of the operational manual.

Reporting and Monitoring

28. The project financial statements will be prepared and consolidated by a senior financial accountant assigned in the PCS to be hired by the project-with input from the DIMU for its component and will follow the Lao Accounting standards. Every quarter, such financial statements will be prepared. Such reports will have to be prepared in timely fashion-forty five days after the end of the quarter. The current system does not have the capacity to link the financial information with the project’s physical progress. A separate system will be developed to gather and compile physical data and establish controls to reduce the risk that physical data may not synchronize with financial data. In view of this suggestion, the draft financial management module will establish clear financial management responsibilities that specify what reports are to be produced, what they are supposed to contain and how they are to be used. The DPI and DOI staff will follow the manual and have to be inducted on how to use such reports. The reports to be produced will compare actual expenditures with budgeted and programmed allocations for the quarter, bi-annually and annually.

Internal control/Internal audit

29. There is no internal audit function within the Provincial Financial Management system as well as district treasury systems. MOF is planning to establish internal audit government wide soon. It has been agreed that it may benefit the province if as a pilot, an internal audit department was introduced at provincial level starting with Khammouane. The internal audit will therefore cover the review of provincial and district treasury internal controls as well as project internal controls within its work program once in place. The detailed terms of reference for the internal audit department would be developed in conjunction with the Technical Assistance for PFM under Subcomponent 1-2-2.

External Audit

30. All government ministries and departments are supposed to be audited by the Supreme Audit Office (SAO) by the new audit law. The SAO can only do compliance audits at the moment because its capacity is limited. As such, the project’s annual financial statements will be audited in accordance with International Standards on Auditing by independent external auditors based on acceptable terms of reference acceptable to IDA. The audited financial statements and audit reports will be submitted to the Bank six months after the end of each fiscal year, and after the closing date of the project.
31. There will be one audit report and one set of financial statements on which the auditors will issue a single opinion covering project accounts, the usage of funds, and the management of the project’s designated account. In addition, a management letter outlining any internal control weaknesses of the implementing office and other agencies at various implementation points will also be issued by the external auditor together with the audit reports. The DPI/Provincial Treasury will be responsible for engaging and managing the audit contract to cover the funds managed by Khammouane Province for component 1 and the DOI for component II. The auditor for the project will be appointed six months after effectiveness. The cost of the audit will be financed from project proceeds. Emphasis will be placed on assessment of proper use and accountability of funds, and procurement. Bi-annual systems audits will also be done for each and every participating district by the State Audit Organization (SAO).

Supervision Plan

32. As the Financial Management inherent risk is assessed as substantial, supervision of project financial management will be done at least twice a year. The supervision will review the project’s financial management systems including but not limited to operation of designated accounts, evaluating quality of budgets, project financial management reports, assessing relevance of financial management manual, statements of expenditures, internal controls, reporting and follow up of audit and mission findings. The review will also conduct random reviews of financial statements concentrating on per diems, training and workshop costs, fuel and accommodation expenses and compliance with covenants. It will also involve visits to various implementation sites and physical verification of assets bought and ones created by the project. The financial management supervision will be conducted by IDA’s financial management specialist staff and at times assisted by consultants. At each time of supervision, the project’s financial management risks of the project will be assessed and influence the frequency of supervision.

Funds flow and Disbursements Arrangements

33. The funds from the project will be drawn from the World Bank and be deposited in one Designated Account (DA) to be managed by the Ministry of Finance. The DA will therefore be opened by the Ministry of Finance at the Bank of Laos in Vientiane on behalf of both the DPI for Khammouane Province and the DOI. The Ministry of Finance will periodically make transfers to two respective component accounts- one for the DOI component 2 and another for the DPI at Khammouane for component 1 to be opened in a commercial bank of each implementing agent’s choice. The Ministry of Finance administers such a DA and has overall responsibility of signatories in conjunction with senior officials from the Khammouane Province. DA shall have signatories from Ministry of Finance and the Project Director (who is the Director of the DPI) in the province. Periodic transfers will be made from the Designated Account into the respective project accounts for implementation. The province will make its 10% matching contribution for DDF and PDF investment (civil works) in a separate account maintained at the provincial level.

34. Funds for Designated account will be used for implementing activities of the project. Whilst it will be managed by the Ministry of Finance, day to day management and submission of withdrawal applications will be done by the PCS including expenditures incurred by both Component 1 and 2.
35. In summary, IDA funds for the project will be deposited into one Designated Account at the Bank of Lao. Two respective project accounts will be opened for, the Khammouane province component 1 and for the DOI in Ministry of Agriculture, Forestry and Fisheries for component 2:

(a) The Designated Account (DA) will be used for disbursements related to Components 1 and 2 of the project, and will be managed by MOF whilst one of its operating accounts at provincial level will operated and managed by the PSC in Khammouane through the Provincial Treasury unit for DPI. Withdrawal applications for the project will be submitted to the World Bank by the PSC through the Ministry of Finance. This will incorporate transactions and documentation submitted by DIMU through the province. Direct payments for procurement pertaining to DIMU component will be done through the province who will eventually submit such requests to Ministry of Finance before sending such requests to the World Bank;

(b) DIMU will submit all its expenditure documentation to the PCS at the DPI of Khammouane province which shall be consolidated with expenditures incurred by the province before a withdrawal application can be submitted to the Ministry of Finance before finally sending them to the World Bank;

36. For both component 1 and 2, funds from DA will flow to the respective project treasury accounts in Khammouane and DOI in Vientiane. For Component 1, from the project Treasury account, the PSC will authorize the following set of disbursements:

(a) To the project’s own imprest account (to be opened in a commercial bank in Thakek of Khammouane province), the ceiling for which will be set at the Kip equivalent of US$ 5,000. The project’s imprest account will be used to handle small transactions for project implementation;

(b) In addition, the project imprest account will be used to make 15-day advances to PAFES/DAFO in order to cover costs associated with extension activities (per diems, fuel, sundries, etc.) linked to the ALG/DDF. Any such advances will be cleared within 15 days; failure to clear such advances within this period will result in the withholding of any further advances;

(c) Directly to any contractors/suppliers/consultants engaged in the provision of goods, works and services for Component 1 and to the bank accounts of village-based producer groups;

(d) To the province’s PDF Treasury account, which will be operated by DPI and used to make payments to any contractors/suppliers/consultants engaged in the provision of goods, works and services for provincial level investment expenditures financed out of annual PDF allocations? Transfers to the PDF Treasury account from the project’s main Treasury account will be made in two six-monthly installments;

(e) To the districts’ DDF Treasury accounts, which will be operated by district administrations and used to make payments to any contractors/suppliers/consultants
engaged in the provision of goods, works and services for district level investment expenditures financed out of annual DDF allocations. Transfers to the districts’ DDF Treasury accounts from the project’s main Treasury account will be made in two six-monthly installments;

37. For Component 2 of the project, funds from DA will be disbursed in accordance with DoI authorization to project account. Disbursements from the project account will take one of two forms:

(a) Directly to any contractors/suppliers/consultants engaged in the provision of goods, works and services for project’s irrigation activities;

(b) To the DIMU own project imprest account (to be opened in a commercial bank), the ceiling for which will be set at the Kip equivalent of US$ 5,000. The DIMU project imprest account will be used to handle small transactions and to make 15-day advances to PAFES for extension-related activities associated with Component 2. Any such advances will be cleared within 15 days; failure to clear such advances within this period will result in the withholding of any further advances.

**Disbursement Arrangements**

38. IDA will establish disbursement arrangements for the project in consultation with GOL—specifically Ministries of Finance, on the basis of a financial management capacity assessment of the projects financial management arrangements, and the projected cash flow needs of the project. The Bank’s LOA department will specify these arrangements in a Disbursement Letter to the Government of Lao PDR. The LOA may disburse proceeds from the grant account to designated account for the project using one or more of the following disbursement mechanisms:

- **Reimbursement**: GOL would be reimbursed for eligible expenditures pre-financed from their own resources;
- **Advance**: grant proceeds are advanced into designated accounts to finance eligible expenditures as they are incurred.

39. Prior to the withdrawal of any grant proceeds from the grant account, the GOL will furnish the World Bank’s Country lawyer for Lao PDR with the names of the officials authorized to sign applications for withdrawal applications and their authenticated specimen signatures.

40. Withdrawal applications must be:
- Authorized by a representative of the recipient;
- Accompanied with evidence in support of the application as the World Bank may reasonably request.
### Allocation of Project Proceeds

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Financing Allocated (expressed in SDR)</th>
<th>Percentage of Expenditures to be Financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Sub-grants under the District Development Fund:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Basic Block Grants</td>
<td>1,590,000</td>
<td>90%</td>
</tr>
<tr>
<td>(b) Agriculture and Livelihood Grants</td>
<td>170,000</td>
<td>100%</td>
</tr>
<tr>
<td>(2) Sub-grants under the Provincial Development Fund</td>
<td>600,000</td>
<td>90%</td>
</tr>
<tr>
<td>(3) Goods, works, consultants’ services and Incremental Operating Costs for Parts A.2 (a) and (b), and A.3, of the Project</td>
<td>1,040,000</td>
<td>100%</td>
</tr>
<tr>
<td>(4) Goods, works, consultants’ services and Incremental Operating Costs for Parts B.1, and B.2 of the Project</td>
<td>1,150,000</td>
<td>100%</td>
</tr>
<tr>
<td>(5) Goods, works, consultants’ services and Incremental Operating Costs for Parts B.3, B.4 and B.5 of the Project</td>
<td>1,050,000</td>
<td>100%</td>
</tr>
<tr>
<td><strong>TOTAL AMOUNT</strong></td>
<td><strong>5,600,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
Annex 8: Procurement Arrangements
Lao PDR: Khammouane Development Project

A. General

1. Procurement for the proposed project would be carried out in accordance with the World Bank’s “Guidelines: Procurement under IBRD Loans and IDA Credits” dated May 2004; and “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” dated May 2004, and the provisions stipulated in the Legal Agreements. For National Competitive Bidding (NCB), the Government’s procurement procedures as provided in Decree 03/PM dated January 9, 2004, and in the Implementing Rules and Regulations (IRR) dated March 12, 2004, will be followed subject to the improvements listed in the NCB-Annex to the legal agreement. The appropriate Standard Bidding Documents developed by the Procurement Monitoring Office, Ministry of Finance, will be used for procurement of goods and works under NCB and Shopping, subject to IDA’s prior concurrence. For International Competitive Bidding (ICB), IDA’s Standard Bidding Documents shall be used. The complaints handling mechanism specified in the government’s IRR will be followed and also incorporated in the bidding documents. Contract award information shall be made publicly available in accordance with IDA’s Procurement Guidelines in a format agreed with IDA. The general descriptions of various items under different expenditure category are described below. For each contract to be financed by the IDA Grant, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame are agreed between the Recipient and the Bank project team in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

Procurement of Works

2. Works procured under this project, would include: rehabilitation of irrigation system, development of additional irrigation system, rehabilitation and construction of small irrigation schemes, office renovation, small scale of infrastructure for District Development Fund (DDF) and Provincial Development Fund (PDF). Contracts for these works costing US$ 300,000 or more each would be procured through International Competitive Bidding (ICB) method. Works estimated to cost less than US$ 300,000 per contract may be procured through National Competitive Bidding (NCB) method. Works estimated to cost less than US$ 30,000 per contract may be procured through Shopping method.

3. Works under Activities for Agriculture and Livelihood Grant (ALG) for the DDF include small-value contracts for infrastructure and non-consulting services will be carried out through community participation in procurement method as stipulated in the Bank’s Procurement Guidelines. Such contracts estimated to cost less than US$ 5,000 per contract may be procured in accordance with the procurement procedures set forth in the Operation Manual.
Procurement of Goods

4. Goods procured under this project would include: pumps repairs, office equipment, vehicles, computer, furniture and some equipment/materials to support the service delivery investments of DDF and PDF. Goods estimated to cost less than US$ 100,000 per contract may be procured through NCB method. Goods estimated to cost less than US$ 30,000 per contract may be procured through Shopping method. Spare parts for repair of existing pumps may be procured through Direct Contracting method subject to IDA’s prior concurrence.

5. Goods under Activities for Agriculture and Livelihood Grant (ALG) for the DD will be carried out through community participation in procurement method as stipulated in the Bank’s Procurement Guidelines. Such contracts estimated to cost less than US$ 5,000 per contract may be procured in accordance with the procurement procedures set forth in the Operation Manual.

Selection of Consultants.

6. Consultant services are expected in the following areas: feasibility study, detailed design, design and supervision, financial audits, environment and social assessment and project staff support. These services would be procured mostly through various selection methods including Quality and Cost Based Selection, Least Cost Selection, Selection Based on Consultant Qualifications, Single Source Selection and Individual Consultant depending on the value, nature and complexity of the consultant assignments. The use of the method i.e. Single Source Selection for specific assignments would be subject to prior review and clearance with the Bank in the Procurement Plan. However, Quality and Cost Based Selection would generally be the applicable method for each contract estimated to cost more than USD 100,000 equivalent. For DDF and PDF sub-components, the United Nations Capital Development Fund (UNCDF) will provide the technical support for district/province implementation and training as consultant services.

7. Individual Consultants may be selected in accordance with the provisions of paragraphs 5.1 to 5.4 of the Consultants Guidelines. Under the circumstances described in paragraph 5.4 of the Consultant Guidelines, such contract may be awarded to individual consultant on a sole-source basis, subject to the prior approval of the Bank.

B. Assessment of the Agency’s Capacity to Implement Procurement

8. An IDA procurement accredited staff carried out a procurement capacity assessment during the project pre-appraisal in November, 2007, and follow-on discussion continued through appraisal. Assessment has been carried for the following project implementing agencies;

- A project preparation section for Component 1 established as a prelude to the Project Coordination Section (PCS) in the Department of Planning and Investment (DPI) to be established for Khammouane province for implementing Component 1;
- All 9 District Offices who will carry out the procurement for annual Basic Block Grants of District Development Fund (DDF) for Component 1;
A project preparation section for Component 2 established within the Provincial Agriculture and Forestry Office (PAFO) as a prelude to the Downstream Irrigation Management Unit (DIMU), which will conduct the procurement for Irrigation Rehabilitation and Development under Component 2.

9. The procurement issues and risks for implementation of the proposed project are mainly related to: (i) inadequate procurement knowledge and experience of the project implementing agencies; and (ii) the risks of weak governance, in the procurement process, due to the decentralized implementation.

10. An Action Plan for strengthening the procurement capacity of the project implementing agencies has been agreed. The following is the summary of the proposal;

- A qualified individual consultant would be engaged by PCS as part time Procurement Consultant for the project in ensuring the compliance in procurement process with the Bank's Guidelines and to serve as the focal point for coordination, consultation and follow-up of procurement activities between the districts, line provincial departments. PCS DIMU and the Bank;

- A detailed Procurement Plan for the first 18 months of project implementation to the Bank has been prepared and agreed with;

- For strengthening transparency and accountability in procurement process, the action plan for strengthening transparency for the project has been agreed. The action plan will include the following elements: (i) using the format of bidding document, request for quotations and evaluation report issued by Procurement Monitoring Office (PrMO), Ministry of Finance (MOF) for National Competitive Bidding (NCB) and Shopping procedures; (ii) enhanced disclosure of procurement information i.e. annual procurement plan and quarterly summary of the contract award information, advising the right of public to inspect all relevant documents free of charge; (iii) involvement of stakeholders in verifying service delivery upon completion of the contracts, (iv) establishing procurement complaint handling mechanism including integrity pacts based on the Government Procurement Rules & Regulations of PrMO, MOF;

- PCS will organize a procurement training workshop for the project implementing agencies with assistance from the Procurement Monitoring Office (PrMO), Ministry of Finance within one month after the project effectiveness, and periodically during the life of the project;

- PCS, District Offices and DIMU will adopt a project procurement record and filing system acceptable to IDA;

- It is proposed that the MOF procurement manual will be used for DDF and PDF.

11. Project operation manual will be prepared and finalized before project effectiveness. This manual will cover the procurement and contracting for goods and works less than USD 5,000 per contract under the Agriculture and Livelihood Grant (ALG) for DDF to be done
through Community Participation method and be provided the detailed procedures of community participation in procurement, subject to the Bank’s concurrence. In which it will describe steps for the village group to follow including the requirement for record keeping for the Bank’s post reviews and audit.

12. With incorporation of the capacity strengthening measures and extensive requirements for improving governance and increasing transparency and accountability in the procurement process, the residual procurement risk under the Project is Moderate.

C. Procurement Plan

13. For project implementation, a detailed procurement plan has been prepared for the first 18 months, which is going to provide the basis for the selected procurement procedures. The Procurement Plan will be updated in agreement with the Task Team (at least annually) as required to reflect the actual project implementation needs and improvement.

D. The Bank’s Procurement Review Requirements

14. The following contracts shall be subject to the World Bank’s prior review in accordance with the Guidelines or Consultant Guidelines.

- The first NCB and first Shopping contract for procurement of goods by each implementing agency in each year and all subsequent contracts exceeding US$ 100,000 equivalent per contract;

- The first NCB and Shopping contract for procurement of works by each implementing agency in each year and all subsequent contracts exceeding US$ 300,000 equivalent per contract;

- All contracts for goods and works procured through direct contracting;

- The first contract for hiring of consulting firms and the first contract for hiring of individuals from each implementing agency regardless of value, and all subsequent consulting services contracts exceeding US$100,000 equivalent for firms and US$$50,000 equivalent for individuals per contract respectively;

- All contracts for hiring of firms and individuals procured through single source selection;

- All other contracts shall be subject to ex-post review by IDA, and will also include checks for transparency in the procurement process and verification of end-use deliveries, in addition to verification of compliance with the agreed procurement procedures. The percentage to apply to the sample for ex-post review will be 30%.
E. Frequency of Supervision.

15. In addition to the prior review, the assessment of the capacity of the Project Implementing Agencies recommended, that procurement supervision mission including post review will be conducted at least twice per year.

F. Details of the Procurement Arrangement Financed by IDA during the first 18 months

Works & Goods

List of ICB contract Package which will be procured during the first 18 months of the project. - None

Consulting Services

(a) List of Consulting Assignments with short-list of international firms;

<table>
<thead>
<tr>
<th>Contract Package No.</th>
<th>Description of Contract Package</th>
<th>Total Estimated Cost (USD)</th>
<th>Selection Method</th>
<th>Review by Bank (Prior/Post)</th>
<th>Estimated Date of Invitation for Proposal/CVs</th>
<th>Procuring Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Selection for Consultant for Master Plan</td>
<td>500,000</td>
<td>QCBS</td>
<td>Yes</td>
<td>April, 2009</td>
<td>DIMU</td>
</tr>
</tbody>
</table>

(b) Consultancy services estimated to cost above $100,000 for firms and $50,000 for individuals per contract, and all Single Source Selection of consultants (firms and individuals) will be subject to prior review by the Bank;

(c) Short lists composed entirely of national consultants: short lists of consultants for services estimated to cost less than $100,000 equivalent per contract may be composed entirely of national consultants in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines.
Annex 9: Economic and Financial Analysis

LAO PDR: Khammouane Rural Livelihoods Project

Economic and financial analysis has been carried out for investment proposed under the project. In particular, under Component 1 *Local Development and Provincial Capacity Development*, investment for small scale infrastructure and service delivery is planned, whereas Component 2 would support the various irrigation activities.

A. Public investments funded through DDF/BBG and PDF under Component 1

1. It is not possible to calculate *ex ante* Economic Rates of Return for the public investments to be financed through the DDF/BBG and PDF facilities, largely because the project will be providing discretionary annual allocations to the province and districts, which would then prioritize investments through consultations with and participation of local stakeholders. It is thus not possible, in advance, to know exactly what kinds of investment will be financed out of DDF/BBG and PDF allocations. However, the investments are likely to be relatively small scale, each costing less than US$ 50,000. Judging from the experience of a similar project in Saravane Province (funded by UNDP, UNCDF, and the EC), Most of the BBG-funded, district-level, investments would cost between US$ 5,000 and US$ 20,000. As in Saravane, the investments are also likely to cover a wide range of sectors (education, health, water and sanitation, roads, etc.).

2. In general, BBG-funded, district-level, investments will probably be economically sensible, mainly because they would be determined through consultations with the concerned stakeholders at the local and community levels. Although there is no immediately comparable data from Lao PDR itself to assess how such efficiencies resulting from better resource allocation translate into economic rates of return, evidence from a similar Bank-funded project in Bangladesh suggests that public investments made by local governments (following a participatory planning process) achieve productive efficiency gains ranging from 23 to 37 percent in terms of better utilization of resources measured by economic rate of return of the investment compared to investment funded by the conventional process. Assuming these savings accrue at a similar rate for the DDF block grants that will be allocated by the proposed project then the project can expect to yield absolute gains in productive efficiency in an amount ranging from about USD $ 0.6 million to $ 1.2 million over the project implementation period alone. DDF proposed under the project is thus expected to generate substantial benefits in terms of allocative and productive efficiency, as well as a large number of infrastructure-related but unquantifiable benefits.

3. Evidence from the PRF also confirms that where investments in local public goods and services are made on the basis of significant levels of participation and community engagement, then costs are likely to be lower than those incurred through other mechanisms. Table 1 below indicates unit costs for typical PRF-financed investments and shows that they are commonly lower than those incurred by other types of project. Although the PRF approach is not identical
to DDF/BBG, the similarities are considerable – and thus PRF cost outcomes are likely to be partly reproduced by the DDF/BBG approach. In addition, it should also be noted that under the DDF/BBG, the incremental operation cost would be lower than the PRF, because the DDF/BBG relies on the existing administration structure unlike PRF, which includes substantial project facilitation and management costs.

4. Similar to DDF, economic analysis for the PDF-financed investments cannot be carried out ex-ante, as the investment would be identified through stakeholder consultation. However, the consultative process through which such investments will be decided upon would imply that they are likely to be real priorities. Robust scrutiny and appraisal process required for PDF will ensure that design and costing of PDF investments are appropriate. There is every reason to suppose that PDF-financed investments will be more cost-effective than similar public investments – and little reason to expect them to be any less cost-effective.

B. Irrigation Development proposed under Component 2

5. Under Component 2, three types of irrigation activities are planned: (a) rehabilitation of the Tha Thot Irrigation Scheme, (b) new construction of a downstream irrigation scheme, and (c) rehabilitation of small pump schemes in lower XBF. Economic Analysis has been carried out for these three activities. This annex sets out of the summary of the analysis, and detailed results are available in the project file.

6. General Assumptions. The following assumptions have been used:

- Commodity prices are derived through the World Bank publication;
- Standard conversion factor of 0.9 has been applied to estimate the economic cost;
- In estimating the benefits of the investment, it is assumed: (a) full benefits would be reached in 5 years, and (b) economic life of the project is 20 years.

Economic Cost

- Economic farmgate prices of rice and imported chemical fertilizers such as urea, triple super phosphate and muriate of potash were calculated as summarized in Table 1 below.

Table 1: Farmgate Prices of Rice and Fertilizer

<table>
<thead>
<tr>
<th>Items</th>
<th>Farmgate Price (Kip/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Economic</td>
</tr>
<tr>
<td>1. Rice (un-milled)</td>
<td>2,167</td>
</tr>
<tr>
<td>2. Fertilizer, 1/</td>
<td></td>
</tr>
<tr>
<td>- Urea</td>
<td>7,205</td>
</tr>
<tr>
<td>- Triple Superphosphate</td>
<td>5,409</td>
</tr>
<tr>
<td>- Muriate of Potash</td>
<td>4,562</td>
</tr>
</tbody>
</table>

Note: 1/ nutrient

- Rehabilitation of the Existing Irrigation Facility in Tha Thot Village (Sub-Component 2-1). The feasibility study was conducted during the pre-appraisal of the Project in order to
update and increase the scope of the detailed design carried out in 2004. Table 2 presents the summary of investment cost and O&M cost (Financial and Economic) for the proposed rehabilitation works.

Table 2: Summary of Total Cost for Sub-component 2-1

<table>
<thead>
<tr>
<th></th>
<th>Financial ($)</th>
<th>Economic ($)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Investment Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Headworks</td>
<td>76,725</td>
<td>64,553</td>
<td></td>
</tr>
<tr>
<td>2) Canals and Related Structures</td>
<td>438,814</td>
<td>394,933</td>
<td></td>
</tr>
<tr>
<td>3) Village Access Road</td>
<td>9,894</td>
<td>8,905</td>
<td></td>
</tr>
<tr>
<td>4) Additional Works for Siphon-2, etc.</td>
<td>87,740</td>
<td>0</td>
<td>Responsible of NTPC, 2/</td>
</tr>
<tr>
<td>5) Physical Contingency (10%)</td>
<td>60,817</td>
<td>0</td>
<td>2/</td>
</tr>
<tr>
<td>Sub-total of (I)</td>
<td>668,990</td>
<td>468,391</td>
<td></td>
</tr>
<tr>
<td>II. Annual O&amp;M Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1% of Investment Cost)</td>
<td>6,690</td>
<td>4,684</td>
<td></td>
</tr>
<tr>
<td>III. Replacement Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Gates of canals</td>
<td>45,830</td>
<td>41,247</td>
<td>Every 15 years</td>
</tr>
<tr>
<td>2) Pumps and Gates (additional works)</td>
<td>60,000</td>
<td>0</td>
<td>Every 15 years by NTPC, 2/</td>
</tr>
<tr>
<td>Sub-total of (III)</td>
<td>105,830</td>
<td>41,247</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1/ Financial price multiplied by SCF (0.9)
2/ not included in the cost for economic analysis, as it could be considered to be sunk cost.

- **Pilot Downstream Irrigation Development in Tha Thot Area (Sub-component 2-2).** A pre-feasibility study has been prepared by a team of French consultants hired by the NTPC, and a preliminary economic rate of return for the entire downstream area (approximately 15,400 hectares) has been estimated at 11.9 percent, based on the assumption of US$4,166 per hectare investment cost. During the preparation, more detailed assessment has been carried out for the areas to be covered under Sub-component 2-2. It has been found that per hectare investment cost would be reduced to US$2,200, considering that the area does not need extensive network of distribution canals. Further, the scenarios on the crop production in the pre-feasibility study have been revised so as to be more conservative. Table 3 presents the summary of investment cost and O&M cost (Financial and Economic) for Sub-component 2-2. However, it should be noted that detailed feasibility study and economic analysis would be conducted during project implementation.
Table 3: Summary of Total Cost for Sub-component 2-2

<table>
<thead>
<tr>
<th>I. Investment Cost</th>
<th>Financial ($)</th>
<th>Economic ($)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Civil works (130 ha)</td>
<td>286,000</td>
<td>257,400</td>
<td>$2,200/ha, 1/</td>
</tr>
<tr>
<td>2) Land acquisition (10 ha,1/)</td>
<td>36,190</td>
<td>33,390</td>
<td>3/</td>
</tr>
<tr>
<td>3) Physical Contingency (10%)</td>
<td>32,219</td>
<td>0</td>
<td>4/</td>
</tr>
<tr>
<td>Sub-total of (I)</td>
<td><strong>354,409</strong></td>
<td><strong>290,790</strong></td>
<td></td>
</tr>
<tr>
<td>II. Annual O&amp;M Cost</td>
<td><strong>3,544</strong></td>
<td><strong>2,908</strong></td>
<td></td>
</tr>
<tr>
<td>III. Replacement Cost</td>
<td><strong>35,441</strong></td>
<td><strong>29,079</strong></td>
<td>Gates of canals, Every 15 years 10% of Investment Cost</td>
</tr>
</tbody>
</table>

Note: 1/ Estimated by the appraisal team  
2/ Pre-feasibility Study Report by NT2, November 2007  
3/ Economic opportunity cost = 4,531,597 Kip/ha / 95,00 Kip/$ x 10 ha x 7 years = $33,390  
4/ Excluding physical contingency for economic cost

- Rehabilitation and Institutional Strengthening of Small Pump Irrigation Facilities along Lower XBF (Sub-component 2-4). In order to estimate the costs for Sub-component 2-4, the inventory survey for selected eight (8) sample small irrigation scheme was conducted, the results of the survey of which are summarized in Table 4 below.

Table 4: Summary of Inventory Survey of Selected 8 Small Pump Schemes

<table>
<thead>
<tr>
<th>No.</th>
<th>Location (Village)</th>
<th>Area Covered (ha)</th>
<th>Current Irrigated Area (ha)</th>
<th>Problems</th>
<th>With Project (Additional Irrigated Area)</th>
<th>Without Project</th>
<th>Estimated Repair Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phakseintoo</td>
<td>50</td>
<td>20</td>
<td>Bearings, Lantern rope, Coupling bolts</td>
<td>7 ha</td>
<td>One of pumps bearing is hardly damaged. After 1 year, next pump will have the same problem.</td>
<td>$2,500</td>
</tr>
<tr>
<td>2</td>
<td>Hadsayphong</td>
<td>120</td>
<td>40</td>
<td>Bearings, Lantern rope, Cavitation plianxenzua</td>
<td>20 ha</td>
<td>Both pumps have damaged the lantern rope. In 2 years, pumps will need new impeller.</td>
<td>$3,360</td>
</tr>
<tr>
<td>3</td>
<td>Nang Bone</td>
<td>80</td>
<td>30</td>
<td>Bearings Lantern rope</td>
<td>12 ha</td>
<td>One of pumps, bearings is damaged. After 1 year, next pump will have the same problem</td>
<td>$3,440</td>
</tr>
<tr>
<td>4</td>
<td>Somseit</td>
<td>120</td>
<td>0</td>
<td>Electrical panel Electromotor damaged Bearings</td>
<td>30 ha</td>
<td>Out of functioning. During the dry season no irrigation could be provided.</td>
<td>$2,520</td>
</tr>
<tr>
<td>5</td>
<td>Hadkhahieng</td>
<td>130</td>
<td>80</td>
<td>Bearings Electromotor</td>
<td>13 ha</td>
<td>One pump is already not working. Another pump cannot last more than 1 year.</td>
<td>$4,200</td>
</tr>
<tr>
<td>6</td>
<td>Nathan</td>
<td>100</td>
<td>0</td>
<td>Section valve Electromotor</td>
<td>25 ha</td>
<td>One pump could function if the section valve is not repaired. Next pump cannot work.</td>
<td>$2,500</td>
</tr>
<tr>
<td>7</td>
<td>Phovathai</td>
<td>76</td>
<td>20</td>
<td>Electrical panel Bearings</td>
<td>10 ha</td>
<td>One pump is not working because the electrical panel is damaged. Due to bearing problems both pumps cannot work more than 2-3 years.</td>
<td>$2,600</td>
</tr>
<tr>
<td>8</td>
<td>Phovanua</td>
<td>85</td>
<td>20</td>
<td>Electrical panel Painting</td>
<td>15 ha</td>
<td>Pumps are recently repaired by PAFO. Electrical panel is missing.</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

| Total | 761 | 210 (27%) | 132 ha (17%) | $24,120 |
7. As for the annual operation and maintenance cost for sub-component 2-4, a 3% of the total investment cost is applied including minor repairing costs of pump facilities. In addition, a $20/ha of pump operation cost is applied based on the feasibility study on the rehabilitation of Tha Thot irrigation scheme. Further, the same amount of the rehabilitation cost of $24,120 is considered to be allocated in every 10 years as a periodical rehabilitation cost. The estimated total cost for sub-component 2-4 is summarized in Table 5 below.

<table>
<thead>
<tr>
<th>Table 5: Summary of Total Cost for Sub-component 2-4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Investment Cost for 342 ha</strong></td>
</tr>
<tr>
<td>Financial ($)</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>1) Rehabilitation of Pump Facilities</td>
</tr>
<tr>
<td>3) Physical Contingency (10%)</td>
</tr>
<tr>
<td><strong>Sub-total of (I)</strong></td>
</tr>
<tr>
<td><strong>II. Annual O&amp;M Cost</strong></td>
</tr>
<tr>
<td>1) Annual Maintenance</td>
</tr>
<tr>
<td>2) Pump Operation Cost</td>
</tr>
<tr>
<td><strong>Sub-total of (II)</strong></td>
</tr>
<tr>
<td><strong>III Periodical Maintenance</strong></td>
</tr>
</tbody>
</table>

Note: 1/ Inventory survey by the pre-appraisal mission
2/ Excluding physical contingency for economic cost
3/ Estimated by the pre-appraisal mission (3% of investment cost)
4/ Estimated based on the feasibility report on Tha Thot rehabilitation works

**Derivation of Benefits**

8. In this economic analysis, only the direct and quantifiable benefits are considered. These benefits were taken from the difference between the "without project" condition and the "with the project" condition. The derivation of incremental benefits was calculated based on the crop budget of dry season rice. The crop budget of dry season rice (Economic) per Ha is presented in Table 6.

| Table 6: Crop Budget of Dry Season Rice per Ha – (Economic at constant 2007 Prices) |

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Without Project</th>
<th>With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Income</td>
<td>Kip/ha</td>
<td>457,430</td>
<td>1,244,530</td>
</tr>
<tr>
<td>- Gross Product</td>
<td>Kip/ha</td>
<td>2,167</td>
<td>2,200</td>
</tr>
<tr>
<td>- Yield</td>
<td>t/ha</td>
<td>4,767,400</td>
<td>4,500</td>
</tr>
<tr>
<td>- Production</td>
<td>ton</td>
<td>9,751,500</td>
<td></td>
</tr>
<tr>
<td>Production Cost</td>
<td>Kip/ha</td>
<td>1,142,388</td>
<td></td>
</tr>
<tr>
<td>- Materials</td>
<td>Kip/ha</td>
<td>788,501</td>
<td>1,890,000</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>1,142,388</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>1,890,000</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>557,919</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>4,844,837</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,954,837</td>
<td></td>
</tr>
<tr>
<td>Subtotal of II</td>
<td></td>
<td>4,321,456</td>
<td></td>
</tr>
<tr>
<td>(B) Subtotal of II (ex. Family labor)</td>
<td></td>
<td>3,131,456</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,954,837</td>
<td></td>
</tr>
<tr>
<td>Gross Margin per Ha (I-B)</td>
<td>Kip/ha</td>
<td>3,455,944</td>
<td>6,796,663</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64,730</td>
<td></td>
</tr>
<tr>
<td>Net Profit per Ha (I-A)</td>
<td>Kip/ha</td>
<td>1,745,944</td>
<td>4,906,663</td>
</tr>
</tbody>
</table>

Source: Modified by the FS team based on the recommended crop budget by DAFO, Gnommalai, Khammouane province.
Note: 1/ World Bank Estimate as of April 21, 2007
Agriculture Development Scenario and Derivation of Incremental Benefit

- **Rehabilitation of Irrigation Scheme in Tha Thot.** Based on a monthly water balance assessment for Nam Gnom Tha Thot weir, the out flow is enough to provide sufficient irrigation water for 250 ha (57% of entire command area) dry season rice cultivation. For practical considerations, given labor availability and present farming and cultural practices, it is recommended that a total of 250 ha should be cultivated in the dry season with a cropping intensity of 157%.

Rice would be cultivated during the wet season primarily to satisfy the consumption requirement of the villagers as well as during the dry season; some of surplus would be sold as one of cash crops. Modest area would be cultivated with soybean/peanut, yellow corn and cabbage/watermelon during the dry season to increase the income of the farmers. These crops are expected to be cultivated once the farmers acquire the basic technologies that would be introduced through the agricultural extension activities by the Project. Therefore, the dry season crops in the 250 ha of the development plan should be stage-wised, namely 250 ha of rice in the first stage followed by the 2nd stage with 200 ha of rice, and 50 ha of some diversified crops accordingly.

However, as many irrigation projects have been experienced, it would take some time to newly introduce such diversified crops, and proper technical extension support by DAFO/PAFO is also needed. Therefore, in this economic evaluation, the annual project benefit for sub-component 2-1 was calculated based on the net income with and without project conditions in the dry season only. Since the full agricultural development is assumed to be reached on the 6th year, the incremental benefit of $94,724 will be derived in Year 6 as presented in Table 7 below.

<table>
<thead>
<tr>
<th>Year 6</th>
<th>Full Development</th>
<th>Net Income (Kip/ha)</th>
<th>Without Project</th>
<th>Net Income (Kip/ha)</th>
<th>With Project</th>
<th>Net Income (Kip/ha)</th>
<th>With Project</th>
<th>Incremental Benefit (Kip)</th>
<th>Incremental Benefit (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,745,944</td>
<td>150</td>
<td>261,891,600</td>
<td>4,906,663</td>
<td>250</td>
<td>1,226,665,750</td>
<td>964,774,150</td>
<td>101,555</td>
</tr>
</tbody>
</table>

- **Development of Downstream Irrigation.** It is assumed that a total of 104 ha should be cultivated in the dry season with a cropping intensity of 180%. Annual project benefit for sub-component 2-2 was also calculated based on the net income with and without project conditions in the dry season only. The incremental benefit of $54,519 will be derived in Year 6 as presented in Table 8 below.

<table>
<thead>
<tr>
<th>Year 6</th>
<th>Full Development</th>
<th>Net Income (Kip/ha)</th>
<th>Without Project</th>
<th>Net Income (Kip/ha)</th>
<th>With Project</th>
<th>Net Income (Kip/ha)</th>
<th>With Project</th>
<th>Incremental Benefit (Kip)</th>
<th>Incremental Benefit (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,745,944</td>
<td>0</td>
<td>0</td>
<td>4,906,663</td>
<td>104</td>
<td>510,292,952</td>
<td>510,292,952</td>
<td>53,715</td>
</tr>
</tbody>
</table>
Rehabilitation of Small Pump Schemes. Table 9 below summarizes the estimated benefits resulting from the pump irrigation schemes. It has been assumed that the agricultural benefits would be materialized after one year of rehabilitation.

<table>
<thead>
<tr>
<th>Sub-component 2-4</th>
<th>Year 6</th>
<th>Net Income (Kip/ha)</th>
<th>Planted Area (ha)</th>
<th>Total Net Income (Kip)</th>
<th>Net Income (Kip/ha)</th>
<th>Planted Area (ha)</th>
<th>Total Net Income (Kip)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,745,944</td>
<td>210</td>
<td>366,648,240</td>
<td>4,906,663</td>
<td>342</td>
<td>1,678,078,746</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,311,430,506</td>
<td>138,045</td>
<td></td>
<td></td>
<td></td>
<td>138,045</td>
</tr>
</tbody>
</table>

Economic Internal Rate of Return and Sensitivity Analysis

Benefits stream was compared to the costs stream to determine their economic viability using the Economic internal Rate of Return. The resulting EIRR is 12.56% for Rehabilitation of Tha Thot Scheme, 12.71% for new construction of downstream irrigation, and 88.37% for rehabilitation of pump schemes respectively, thus confirming the economic viability of the proposed irrigation activities under Component 2. Very high EIRR of pump rehabilitation is due to the nature of the repair works, which is rather very small deferred maintenance. Sensitivity analysis was further carried out to determine at what assumptions or conditions should be satisfied in order to achieve or surpass the 12% hurdle rate. For this purpose, the following sensitivity tests were made.

- **Case 1:** increase investment cost by 10%, benefit constant
- **Case 2:** reduce benefit by 10%, investment cost constant
- **Case 3:** one (1) year delay of benefits in agricultural production

The results of the sensitivity test are summarized in Table 10 below. It has been revealed that the EIRR is relatively insensitive to either increase in increased investment cost or reduced benefit; however, the sensitive analysis showed that the delay in agriculture, implying that capacity building program planned under Component 2 would provide the farmers with technical guidance to ensure proper operation immediately after irrigation works and enable quick benefits from resumed irrigation.

<table>
<thead>
<tr>
<th>Sub-component 2-1</th>
<th>Base Case</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12.56</td>
<td>11.07</td>
<td>10.85</td>
<td>10.56</td>
</tr>
<tr>
<td>Sub-component 2-2</td>
<td>12.71</td>
<td>11.23</td>
<td>11.04</td>
<td>10.74</td>
</tr>
<tr>
<td>Sub-component 2-4</td>
<td>88.37</td>
<td>84.81</td>
<td>82.30</td>
<td>62.47</td>
</tr>
</tbody>
</table>

Farm Model

To quantify the impact of the Project from the farmer’s viewpoint, a typical farm model was developed for the three activities. Typical farm sizes of which range from 1.2 per household to 2.0 hectare.

For the small pump irrigation schemes along lower Xe Bang Fai, it is estimated that a 50% of the paddy fields would be damaged by flood in the wet season based on the information
obtained from PAFO. Through the rapid appraisal with the beneficiary farmers of eight (8) pump schemes, it was also confirmed that the current irrigated area was only about 30% of the planned irrigation command area. For the project impact analysis, it is estimated that the irrigation area will be increased by 60% by rehabilitation of pump facilities by the Project.

13. The annual farm income in rice production is calculated as presented in Table 11. The table clearly indicates the substantial farming income to be accrued from the rehabilitation/repair or newly development of irrigation facilities. With-project net income takes account of payment for nominal water payment (200 kg paddy/ha, equivalent to 427,400 Kip/ha) per WUG member per hectare, which should be more than able for the farmers to fully share the contribution to the provision of irrigation water. The return to labor is more than 50,000 kip per day, which is almost double to the typical daily wage of unskilled labor (about 100 Thai Baht or 28,000 Kip).

Table 11: Summary of Annual Farm Income in Rice Production

<table>
<thead>
<tr>
<th>Sub-component</th>
<th>Season</th>
<th>Without Project</th>
<th>With Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gross</td>
<td>Net</td>
<td>Labor</td>
</tr>
<tr>
<td></td>
<td>Margin,  /</td>
<td>Profit,  /</td>
<td>Use</td>
</tr>
<tr>
<td></td>
<td>(days)</td>
<td>(Kip/ha)</td>
<td>(days)</td>
</tr>
<tr>
<td>Rehabilitation of Existing Tha Thot Irrigation Facility (farm size 1.2 ha)</td>
<td>Wet Season</td>
<td>3,656,682</td>
<td>1,376,682</td>
</tr>
<tr>
<td></td>
<td>Dry Season</td>
<td>1,300,718</td>
<td>521,718</td>
</tr>
<tr>
<td></td>
<td>(Total)</td>
<td>4,957,400</td>
<td>1,898,400</td>
</tr>
<tr>
<td>Pilot Irrigation Development in Tha Thot Area (farm size 1.2 ha)</td>
<td>Wet Season</td>
<td>3,047,235</td>
<td>1,147,235</td>
</tr>
<tr>
<td></td>
<td>Dry Season</td>
<td>1,078,644</td>
<td>432,644</td>
</tr>
<tr>
<td></td>
<td>(Total)</td>
<td>4,125,879</td>
<td>1,579,879</td>
</tr>
<tr>
<td>along L. XBF (farm size 2.0 ha)</td>
<td>Annual (Total)</td>
<td>4,950,724</td>
<td>1,910,724</td>
</tr>
</tbody>
</table>

14. The table above indicates that the rehabilitation of irrigation facilities would modestly increase the field work requirement. However, the with-project situation requires less than 240 person days per year at the maximum (for sub-component 2-4), which is well within the working capacity of an average family (450 person days = 1.5 person/available labor per household x 25 days/month x 12 months).
Annex 10: Safeguard Policy Issues

LAO PDR: Khammouane Development Project

A. Environment and Social Background

1. Khammouane Province (16,315 km²) is located in the central part of Loa PDR and the area can be divided into mountainous zone (35%), plateau zone (19%), and flat area (46%) of which the latter has fertile soils and good for agriculture production. The area is under the influence of a tropical monsoon with distinct wet and dry seasons and with an average rainfall of about 2,600 mm/year. The province is also rich in biodiversity and consists of 3 National Biodiversity Conservation Areas: Nakai-Nam-Theun, Hin Nam No and Phon Hin Poune NBCAs. The Prime Ministerial Decree 193 of 1993 established a series of corridors to connect these three protected areas to enable wildlife migration between them. The forested area is 812,600 hectares (ha), covering 47% of the total area of the Province. Shifting cultivation is the main issue that decreases forest and soil fertility as rotations occur frequently. Apart from that, there are other constraints such as weeds, pests, animals and drought that force people to expand their shifting cultivation areas to meet their demand. Nam Thuen and Xe Bang Fai are the two major river systems flowing from the rugged Annamite Mountain Range along the Lao-Vietnamese border to the Mekong River. The Annamite Mountains that form the border between Lao PDR and Vietnam are recognized as an area of global significance in terms of biodiversity. The Nam Theun 2 (NT2) power station is located at the base of the escarpment beneath the Nakai Plateau while the downstream channel (27 km long) cut across the flat plain of the Gnomalath District.

2. The Province consists of 804 villages, 57,012 families; its total population is about 313,917 persons (of whom 159,873 are women). Population is increasing at a rate of about 2.0% per year. There are 7 ethnic groups: Lao Loum, Phou Thai, Broo, Krie, Saek, Ngouam, and Hmong. Population density is about 19 persons/sq km. The total number of poor families is reported to be about 11,185 or about 19.50%. If compared with the data surveyed according to order number 010/PM of the Prime Minister, the number of poor families has decreased by 1,920. There are 353 villages considered to be poor or about 43.91% of the Province’s total villages. In general, the investments in the Province that generate most income rely on exploitation of natural resources. The growth of the economy is steady, although Khammouane remains a poor province. Major economic sectors are crops, animal husbandry, fishery, forestry and hydropower.

3. The population of Khammouane Province is ethnically heterogeneous, with almost 40% of the total population being made up of ethnic minorities. For the most part, ethnic minority populations inhabit the upland and eastern parts of the province, whilst the Lao Loum population is generally located in the Mekong valley and immediately adjacent areas. Ethnic minority groups live in Boulapha, Gnomalath, and along some stretches of the Xe Bang Fai River.

4. The proposed project (Project) activities will take place in a variety of agro-ecological settings - ranging from riverside areas of the Mekong valley (Gnomalath and Xe Bang Fai) to
uplands in the mountains bordering Vietnam (Boulapha). The major form of land use in Gnomalath is paddy field and town development (including NT2 major camps) while that along Xe Bang Fai is paddy field and villages, including Buddhist temples. A small Tha Thot reservoir provides water to the existing Tha Thot irrigation scheme (470 ha). The area is divided into two parts by the NT2 downstream channel and 4-5 water outlets for irrigation have been included in the design of the downstream channel. It is anticipated that more water supply from the NT2 operations will be available for construction of new irrigation schemes around the existing Tha Thot, as well as increasing the water quantity for the Tha Thot scheme itself.

**B. Project Description** (see Details in Annex 4)

5. Project activities related to safeguard are highlighted as follows:

- Small civil works (roads, water supply, schools, etc.) undertaken under the District Development Fund (DDF) and the Provincial Development Fund (PDF) of the Component 1 (Support for Local Development and Provincial Capacity Building), and:
- Rehabilitation of existing Tha Thot irrigation system (470 ha); Development of small new irrigation areas (710 ha) in Gnomalath, including construction of a small area (130 ha) and training on operation and maintenance; Development of a strategic plan for irrigation development along downstream channel; and Rehabilitation and institutional strengthening of small pump irrigation schemes along lower Xe Bang Fai of the Component 2 – Support for Irrigation Development along NT2 Downstream Channel and Lower Xe Bang Fai.

**C. Social Issues and Proposed Mitigations**

6. **Social study:** Socio-economic surveys, interviews and social analyses were carried out to identify both possible beneficial and adverse impacts of the Project in three districts, namely: Gnommalat; Mahaxay and Bhoulapha. The surveys included obtaining information on, household incomes and expenditures, ownership of assets, education, health conditions, housing conditions, sanitation, migration and other livelihood related issues. Among others, methods involve the conduct of focus groups or semi-structured interviews with village leaders, committee members and target beneficiaries. The study concluded that implementation of the Project will result in overall social benefit to local people both in short and medium term. Provision of community roads, water supply, and small infrastructure to be carried out under the DDF and PDF subcomponents will enhance social conditions and improve access to markets as well as health and education services. Rehabilitation of the Tha Thot irrigation and the irrigation schemes downstream of Xe Bang Fai will provide opportunity for livelihoods development. The interventions being proposed in the target areas are expected to impact on the agricultural practices of the community. For instance, irrigation may lead to increased crop production, which would ultimately lead to increases in the income of farmers. This intervention and process will ultimately lead to improved livelihoods of the rural communities in Khammouane.

7. **Potential negative impacts:** Construction of infrastructure to be funded by the Project may require small land acquisition and/or create negative impacts to ethnic minority groups however adverse negative impacts are not anticipated. As a preventive measure, a safeguard framework (see ESSF below) and the policy frameworks on land acquisition and indigenous
peoples have been developed and they will be applied to all the project activities involve civil works. Land acquisition experience in the Gnomalath District for NT2 project suggests that (a) effective communication and meaningful consultation with the affected population will have to be conducted as soon as possible and (b) details on the compensation policy and procedures, including payment method and schedule, have to be provided and explained to ensure common understanding among the project staff and the affected population. A technical guideline for consultation has been included in the Safeguard Manual. This is to ensure that their voices and concerns are listened to and incorporated into the project development and that the beneficiaries especially the vulnerable groups are actively engaged in implementing and sustaining the project.

D. Environmental Issues and Proposed Mitigations

8. **GOL approval.** Discussion with DOE suggested that an EIA certificate will be required therefore the IEE was prepared in line with GoL’s requirements for an IEE format. The study was carried out through meetings with concerned agencies, field visit to the potential project sites, and review of the concerned studies carried out under NT2 project, especially those related to pest management policy and the proposed pest management plan.

9. **Potential impacts (construction and operation):** The IEE study concluded that construction of small civil works and rehabilitation and development of the proposed irrigation schemes will not create adverse impacts on the local environment and local people. However, good engineering practices will have to be applied during the execution of the works with close supervision and monitoring of contractor performance. This will include proper treatment and/or disposal of dredging of spoil from Tha Thot reservoir in close consultation with local communities. The impact during operation will be limited to the potential increase on chemicals and pesticide uses. Review of the baseline study and the pest management plan prepared for NT2 (in 2004) suggested that the proposed pest management plan can also be applied to this project if needed. However, given the small scale of the project, the potential for increased use of pesticides and fertilizers by the project would be small and mitigation would take place through applying a “chemical prohibition list” and training/increasing knowledge of local officials and farmers on pesticides, Integrated Pest Management (IPM) and organic farming are considered adequate. The IPM program developed for the NT2 project will be used as a starting point for development of the training materials. The project will not procure any pesticides, and this condition has been included in the Safeguard Manual. The Safeguard Manual also provides the technical guidelines on Code of Practice and other aspects for mitigation of potential environmental impacts. For the new irrigation development in Tha Thot and nearby area, the ESSF and Safeguard Manual will be considered during the feasibility study and detailed designed.
E. ESSF

10. To mitigate the potential negative impacts due to unidentified activities, an Environment and Social Safeguard Framework (ESSF) has been developed and details are given in the Safeguard Manual. The ESSF is designed to provide the overall procedures and technical guidelines during the planning and implementation of the Project activities. The ESSF’s key procedures include (a) conducting an initial eligibility screening using a ‘negative list’; (b) conducting the technical safeguard screening to identify potential safeguard issues, including the required mitigation measures and the need for preparation of safeguard documents (IEE, EMP); and (c) preparation of the required safeguard documents and secure approval and/or clearances as required by the Government and/or World Bank. The technical guidelines include (a) List of Prohibited Activities, (b) EA Policy Framework, (c) Policy Framework for Integrated Pest Management (IPM), (d) Ethnic Group Policy Framework --Indigenous Peoples Development Framework (IPDF), and (e) Compensation and Resettlement Policy Framework (CRPF). The ESSF will be applied to all Project activities that have not been identified. The activities require full EIA will not be eligible for funding under the Project.

F. Implementation Arrangement and Capacity

11. Environmental Management Plan (EMP): An EMP has been developed comprising mitigation measures to be carried out by the implementing agencies during the planning, construction, and operation phases as follows:

(a) Planning and design stage:

- For each proposed subprojects involve civil works, carry out ESSF in line with the safeguard manual, including submit the report into the project progress report and/or the annual work plan report;
- For Tha Thot rehabilitation, include (a) the Code of Practice into the bidding document, including ensuring that the potential contractors are well aware of this obligation and (b) the responsibility for safeguard supervision and monitoring into the TOR of the supervision engineer;
- For the new irrigation development in Tha Thot, during the feasibility study, conduct as quick assessment and/or checklist in line with the guidelines provided in the Safeguard Manual;
- For Xe Bang Fai irrigation, ensure that the design of irrigation gates will not affect fish migration and cause adverse impacts on the natural habitats.

(b) Construction stage:

- Supervision, monitoring, and reporting: The implementing agency through its field engineers or, if needed, to-be-hired independent consultant(s) will closely supervise and monitor the contractor’s performance with respect to safeguards in consultation with local communities. Monitoring results and/or actions taken should be properly recorded and summarized in the project progress report. World Bank supervision
will review and supervise implementation, including providing training to key staff as needed.

(c) Operation phase:

- Training and knowledge sharing on various options to avoid using chemical and pesticides will be provided as part of the Extension Service Training program. This would enhance capacity of the agencies and the farmers to address the issue related to chemical uses. Given that there are other planned activities on developing Lao-Thai partnership, the effort to promote cross border organic farming and self sufficiency agriculture will be considered separately.

12. **Implementation arrangement:** The Project will be implemented by two agencies. The Khammouane Province through the Department of Planning and Investment (DPI) will be responsible for Component 1. A Provincial Coordination Section (PCS) will be established (headed by its director as the provincial program director) to be responsible for the overall implementation while the day-to-day management of activities will be assigned to relevant provincial line departments and to districts – particularly with regard to DDF/PDF-related activities. The Ministry of Agriculture and Forestry (MAF) through the Department of Irrigation (DoI) and the Provincial Agriculture and Forestry Office (PAFO) will be responsible for Component 2. DoI will be responsible for the overall implementation while the day-to-day management of all activities would be delegated to PAFO. PAFO will establish a small ‘Downstream Irrigation Management Unit’ to manage the following activities: the preparation of technical reports (feasibility, detailed design), procurement of civil works, carrying out capacity building, as well as developing a master plan. The PCS and DoI will assign Safeguards Coordinators, who will be the central resource person for all safeguards issues.

13. **Implementation capacity:** During the planning and implementation of the NT2 project, MAF, the Khammouane Province, and the local offices/communities directly affected by the NT2 project have some experience with the planning and implementation of the safeguard measures to mitigate the potential negative impacts on the local environment and local people. However, DoI, DPI, PAFO, and the local offices to be responsible for the Project are new to the World Bank operations. Therefore a series of safeguard training to the Project staff will be necessary to build their capacity to carry out the proposed mitigation measures (safeguard screening, mitigation of impacts, supervision, monitoring, and reporting). Special training to PAFO staff on IPM, safe use of chemicals, and organic farming will also be conducted. Safeguard training will be provided at least one time per year.

14. **Training:** A budget of US$50,000 has been allocated for safeguard trainings and a TOR for the training program will be prepared in consultation with the Bank. The World Bank will provide the first training (Train-The-Trainer) to (a) ensure that the project staff has a clear understanding on the World Bank’s safeguard policy and operation procedures and (b) assist them in the translation of the proposed measures into actions. It is anticipated that through the Train-the-Trainer program, PCS and DoI could create a safeguard team (2-3 staff) who could provide safeguard training to other Project staff and farmers and ensure safeguard compliance. A tentative action plan is provided below.
<table>
<thead>
<tr>
<th>Schedule</th>
<th>Objectives</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) July-August 2008</td>
<td>Train-The-Trainer by WB safeguard team</td>
<td>Participants are key staff from the provinces and DOI who are willing to be the safeguard trainers</td>
</tr>
<tr>
<td>(2) Q1-Q2 2009</td>
<td>Ensure clear understanding of the safeguard measures and process</td>
<td>The Project safeguard trainer will provide training. Participants are key staff, farmers, and other stakeholders.</td>
</tr>
<tr>
<td>(3) Q3-Q4 2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Q3-Q4 2010</td>
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<tr>
<td>(5) Q3-Q4 2011</td>
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<tr>
<td>(6) Q3-Q4 2012</td>
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Annex 11: Project Preparation and Supervision

LAO PDR: Khammouane Development Project

<table>
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<th>PCN Review</th>
<th>Planned</th>
<th>Actual</th>
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<td>Planned Date for Effectiveness</td>
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<td>Planned Date of Mid-Term Review</td>
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</tr>
<tr>
<td>Planned Closing Date</td>
<td>03/31/2014</td>
<td></td>
</tr>
</tbody>
</table>

Key Institutions responsible for preparation of the project include:

- Khammouane Province
- Ministry of Agriculture and Forestry (Department of Irrigation, Provincial Agriculture and Forestry Office, Khammouane Province), GOL
- Ministry of Finance, GOL

Bank staff and consultants who worked on the project included

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Specialist</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Delvoie</td>
<td>Sector Director</td>
<td>EASSD</td>
</tr>
<tr>
<td>Rahul Raturi</td>
<td>Sector Manager</td>
<td>EASRE</td>
</tr>
<tr>
<td>Masood Ahmed</td>
<td>Peer Reviewer</td>
<td>SASDE</td>
</tr>
<tr>
<td>Denis Robitaille</td>
<td>Peer Reviewer</td>
<td>LASDE</td>
</tr>
<tr>
<td>Steven Schonberger</td>
<td>Co-Team Leader</td>
<td>EASRE</td>
</tr>
<tr>
<td>Toru Konishi</td>
<td>Co-Team Leader</td>
<td>EASRE</td>
</tr>
<tr>
<td>Viengkeo Petnavongxay</td>
<td>Natural Resources Specialist</td>
<td>EASRE</td>
</tr>
<tr>
<td>Syboun Phandanouvong</td>
<td>Social Development Specialist</td>
<td>EASSO</td>
</tr>
<tr>
<td>Manida Unkulvasapa</td>
<td>Environmental Specialist</td>
<td>EASRE</td>
</tr>
<tr>
<td>Vilavanh Phonepraseuth</td>
<td>Program Assistant</td>
<td>EACLFI</td>
</tr>
<tr>
<td>Olga Hoxon-Rizo</td>
<td>Program Assistant</td>
<td>EASRE</td>
</tr>
<tr>
<td>Kazuyuki Shimazaki</td>
<td>Irrigation Specialist</td>
<td>Consultant</td>
</tr>
<tr>
<td>William Rex</td>
<td>Lead Country Officer</td>
<td>EACLFI</td>
</tr>
<tr>
<td>Juliane Ineichen</td>
<td>Operation Officer</td>
<td>EACLFI</td>
</tr>
<tr>
<td>Ylli Dedja</td>
<td>Irrigation Specialist</td>
<td>Consultant</td>
</tr>
<tr>
<td>Mike Winter</td>
<td>DDF Specialist</td>
<td>Consultant</td>
</tr>
<tr>
<td>Chinnakorn Chantra</td>
<td>Procurement Specialist</td>
<td>EAPCO</td>
</tr>
<tr>
<td>Doland Mphande</td>
<td>Financial Management Specialist</td>
<td>EAPCO</td>
</tr>
</tbody>
</table>
Bank funds extended to date on project preparation: Note that preparation costs included assistance for development of the Khammouane Development Report and Strategy as the basic document to inform project design and focus but which has a broader use in guiding overall provincial investment planning.

1. Bank Resources US$ 461,974
2. Trust Funds (PHRD and Japan CTF) US$ 614,000
3. FAO/CP Resources US$ 53,900
Total US$1,129,874

Estimated Supervision Costs: US$75,000 per year
Annex 12: Documents in the Project File

LAO PDR: Khammouane Development Project

Recipient Documentation

   (a) Component 1
   (b) Component 2
   (c) Financial Management Manual

2. Environmental and Social Safeguards Framework dated

3. Khammouane Development Report draft dated 7 December

4. Khammouane Development Strategy draft dated 7 December

5. Feasibility Study on Rehabilitation Works of Existing ThaThot Irrigation Scheme (December 2007)

Bank Staff Assessment


## Annex 13: Statement of Loans and Credit

### LAO PDR: Khammouane Development Project

<table>
<thead>
<tr>
<th>Project ID</th>
<th>FY</th>
<th>Purpose</th>
<th>IBRD</th>
<th>IDA</th>
<th>SF</th>
<th>GEF</th>
<th>Cancel</th>
<th>Undisb.</th>
<th>Ong. Frm.</th>
<th>Rev'd</th>
<th>Difference between expected and actual disbursements</th>
</tr>
</thead>
<tbody>
<tr>
<td>P105331</td>
<td>2007</td>
<td>LA - GMS Power Trade Project</td>
<td>0.00</td>
<td>15.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>15.67</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>P100081</td>
<td>2006</td>
<td>LA-Avian and Human Influenza Control</td>
<td>0.00</td>
<td>4.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.28</td>
<td>0.42</td>
<td>0.00</td>
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<tr>
<td>P075531</td>
<td>2006</td>
<td>LA-Rural Electrification Phase I</td>
<td>0.00</td>
<td>10.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>4.61</td>
<td>-2.45</td>
<td>-4.97</td>
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<tr>
<td>P074027</td>
<td>2006</td>
<td>LA-Health Services Improvement Project</td>
<td>0.00</td>
<td>15.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12.94</td>
<td>2.83</td>
<td>0.00</td>
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<td>P090693</td>
<td>2005</td>
<td>Lao Environment and Social Project</td>
<td>0.00</td>
<td>4.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.12</td>
<td>0.70</td>
<td>0.00</td>
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<tr>
<td>P078113</td>
<td>2004</td>
<td>LA-Second Education Development</td>
<td>0.00</td>
<td>13.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>5.68</td>
<td>-0.01</td>
<td>0.00</td>
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<tr>
<td>P083543</td>
<td>2004</td>
<td>LA-ROAD MAINT APL2</td>
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<td>22.65</td>
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<td>P075006</td>
<td>2003</td>
<td>LA - Second Land Titling Project</td>
<td>0.00</td>
<td>14.82</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>5.25</td>
<td>1.58</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>P064886</td>
<td>2003</td>
<td>LA-SUSTAINABLE FORESTRY FOR RURAL DEV.</td>
<td>0.00</td>
<td>9.90</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.05</td>
<td>0.68</td>
<td>0.00</td>
<td>0.00</td>
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<tr>
<td>P077620</td>
<td>2002</td>
<td>LA-Fin. Management Capacity Building Cr.</td>
<td>0.00</td>
<td>8.50</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>9.64</td>
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<td>P077326</td>
<td>2002</td>
<td>LA-Poverty Reduction Fund Project</td>
<td>0.00</td>
<td>19.34</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.46</td>
<td>-2.71</td>
<td>0.00</td>
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<td>P065973</td>
<td>2001</td>
<td>LA-Agricultural Development Project</td>
<td>0.00</td>
<td>16.69</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.32</td>
<td>-2.53</td>
<td>-2.53</td>
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<tr>
<td></td>
<td></td>
<td>Total:</td>
<td>0.00</td>
<td>152.90</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>65.58</td>
<td>-2.40</td>
<td>-8.18</td>
<td>0.00</td>
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### STATEMENT OF IFC's Held and Disbursed Portfolio

**In Millions of US Dollars**

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>IFC</th>
<th>Disbursed</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Committed</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IFC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Loan</td>
<td>Equity</td>
</tr>
<tr>
<td>2005</td>
<td>Millicom Lao</td>
<td>4.00</td>
<td>0.00</td>
</tr>
<tr>
<td>1998</td>
<td>SEF Setha</td>
<td>0.47</td>
<td>0.00</td>
</tr>
<tr>
<td>2000</td>
<td>SEF Setha</td>
<td>0.09</td>
<td>0.00</td>
</tr>
<tr>
<td>2001</td>
<td>SEF Villa Santi</td>
<td>1.06</td>
<td>0.00</td>
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</tbody>
</table>

### Approvals Pending Commitment

<table>
<thead>
<tr>
<th>FY Approval</th>
<th>Company</th>
<th>Loan</th>
<th>Equity</th>
<th>Quasi</th>
<th>Partic.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Total pending commitment:** 0.00 0.00 0.00 0.00
## Annex 14: Country at a Glance
### LAO PDR: Khammouane Development Project

### POVERTY and SOCIAL

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Lao PDR</th>
<th>East Asia &amp; Pacific</th>
<th>Low-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, mid-year (millions)</td>
<td>5.8</td>
<td>1500</td>
<td>2,409</td>
</tr>
<tr>
<td>GNI per capita (Atlas method, US$)</td>
<td>500</td>
<td>1,063</td>
<td>550</td>
</tr>
<tr>
<td>GNI (Atlas method, US$ billions)</td>
<td>2.9</td>
<td>3,539</td>
<td>1,562</td>
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</tbody>
</table>

### Average annual growth, 2000-08

<table>
<thead>
<tr>
<th>Indicator</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (%)</td>
<td>2.2</td>
</tr>
<tr>
<td>Labor force (%)</td>
<td>2.3</td>
</tr>
</tbody>
</table>

### Most recent estimate (latest year available, 2000-06)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty (% of population below national poverty line)</td>
<td>21</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>66</td>
</tr>
<tr>
<td>Infant mortality (per 1000 live births)</td>
<td>62</td>
</tr>
<tr>
<td>Child malnutrition (% of children under 5)</td>
<td>40</td>
</tr>
<tr>
<td>Access to an improved water source (% of population)</td>
<td>51</td>
</tr>
<tr>
<td>Literacy (% of population age 15+)</td>
<td>69</td>
</tr>
<tr>
<td>Primary enrollment (% of school-age population)</td>
<td>116</td>
</tr>
</tbody>
</table>

### Key Economic Ratios and Long-term Trends

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (US$ billions)</td>
<td>18</td>
<td>19</td>
<td>2.9</td>
<td>3.4</td>
</tr>
<tr>
<td>Gross capital formation/GDP</td>
<td>6.9</td>
<td>...</td>
<td>32.8</td>
<td>32.5</td>
</tr>
<tr>
<td>Exports of goods and services/GDP</td>
<td>3.6</td>
<td>22.7</td>
<td>27.1</td>
<td>36.0</td>
</tr>
<tr>
<td>Gross domestic savings/GDP</td>
<td>2.9</td>
<td>...</td>
<td>16.8</td>
<td>26.3</td>
</tr>
<tr>
<td>Gross national savings/GDP</td>
<td>3.1</td>
<td>16.9</td>
<td>2.4</td>
<td>13.2</td>
</tr>
<tr>
<td>Current account balance/GDP</td>
<td>-4.3</td>
<td>-12.0</td>
<td>-20.2</td>
<td>-13.3</td>
</tr>
<tr>
<td>Interest payments/GDP</td>
<td>0.1</td>
<td>0.3</td>
<td>3.1</td>
<td>...</td>
</tr>
<tr>
<td>Total debt/GDP</td>
<td>48.9</td>
<td>50.8</td>
<td>93.2</td>
<td>...</td>
</tr>
<tr>
<td>Total debt service/exports</td>
<td>13.1</td>
<td>6.7</td>
<td>13.4</td>
<td>...</td>
</tr>
<tr>
<td>Present value of debt/GDP</td>
<td>...</td>
<td>...</td>
<td>50.8</td>
<td>...</td>
</tr>
<tr>
<td>Present value of debt/exports</td>
<td>...</td>
<td>...</td>
<td>165.7</td>
<td>...</td>
</tr>
</tbody>
</table>

### Structure of the Economy
PI RCE S and GOV E RNM E NT F INAN C E

(average annual growth)
Agriculture 4.2 3.9 16 2.0
Industry 12.5 19.9 16.5 16.5
Manufacturing 14.1 9.8 8.8 9.2
Services 5.4 6.4 6.9 8.8
Household final consumption expenditure
General govt. final consumption expenditure
Gross capital formation
Imports of goods and services

Note: 2006 data are preliminary estimates.
This table was produced from the Development Economics LDB database.
* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

Lao PDR
Annex 15: Maps
LAO PDR: Khammouane Development Project