



Nam Theun 2 Power Company Ltd.

Nam Theun 2 Hydroelectric Project

Resettlement Action Plan

Volume 1: General Information

October 2007

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LIST OF ACRONYMS

ADB	Asian Development Bank
CA	Concession Agreement
CDP	Construction Demobilisation Phase
CIC	Committee for Investment and Co-operation
COD	Commercial Operation Date
CRS	Compensation and Rehabilitation Scheme
CW	Construction Works
DAFO	District Agriculture and Forestry Office
DGC	District Grievance Committee
DJD	Districts Justice Department
DWGs	District Working Groups
EAMP	Environmental Assessment and Management Plan
EDL	Electricité du Laos
EGAT	Electricity Generating Authority of Thailand
EM	Ethnic Minorities
EMDP	Ethnic Minorities Development Plans
ESL	Earth Systems Lao
GDP	Gross Domestic Product
GOL	Government of Lao PDR
GPRLSP	Governance Reform and Livelihood Strengthening Program, Khammouane Province
GRM	Grievance Redress Mechanism
HC	Head Contractor
HH	Household
IDA	International Development Agency
IFC	International Finance Cooperation
IFI	International Finance Institutions
IMA	Independent Monitoring Agency
IPM	Integrated Pest management
KCCI	Khammouane Chamber of Commerce and Industry
LNFC	Lao National Front for Construction
LPA	Land Parcel Area
LPRP	Lao People's Revolutionary Party
LST	Livelihood Survey Teams
LWU	Lao Women's Union
LYO	Lao Youth Union
MAF	Ministry of Agriculture and Forestry
MU	Management Unit
MTDP	Mekong Tourism Development Project
NAFES	National Agriculture and Forestry Extension Service
NAFRI	National Agriculture and Forest Research Institute
NBCA	National Biodiversity Conservation Areas
NFEDC	Non-Formal Education Development Centre
NGO	Non-government Organisation
NT2	Nam Theun 2
NTFP	Non-Timber Forest Products
NTPC	Nam Theun 2 Power Company
NUL	National University of Laos

ODA	Official Development Assistance
PAFO	Provincial Agricultural and Forestry Office
PAH	Project Affected Household
PC	Provincial Courts
PCA	Preliminary Construction Agreement
PCPD	Public Consultation, Participation and Disclosure
PCPL	Preliminary Construction Phase Lease
PCR	Physical and Cultural Resources
PDR	People's Democratic Republic
PGC	Project Grievance Committee
PIP	Project Implementation Plan
POE	Panel of Social and Environmental Experts
PLRP	Project Land Resettlement Plan
PRF	Poverty Reduction Fund
PTO	Provincial Tourism Office
RAP	Resettlement Action Plan
RC	Resettlement Committee
RDC	Resettlement Development Committee
RMO	Resettlement Management Office
RMU	Resettlement Management Unit
RO	Resettlement Office
SDP	Social Development Plan
S-E Survey	Socio-economic Survey
SMEC	Snowy Mountain Engineering Company
SMMP	Social Management and Mitigation Plan
SNV	Netherlands-based NGO
STEa	Science, Technology and Environment Agency
TL	Term Lease
UXO	Unexploded Ordnance
VDC	Village Development Committee
VDP	Village Development Plans
VGC	Village Grievance Committee
VR	Village Resettlement
VRC	Village Resettlement Committee
VTE	Vientiane
VVW	Village Veterinary Worker
WB	World Bank
XBF	Xe Bang Fai

FOREWORD

The general requirement from IFIs in relation to the RAPs is to have a comprehensive planning document submitted for no objection prior to the beginning of the PL activities. The documentation prepared to comply with this requirement was featured in Volume 4 of the SDP and subsequently accepted by IFIs at appraisal and made available to the public via website and at the NTPC public offices in Thakek and Vientiane Laos PDR. However, ADB policy requires a definitive rather than programmatic resettlement plan and so further documentation of the resettlement process was needed to satisfy ADB needs.

The first draft of these additional planning documents was provided in June 2005 for review by IFI and other monitoring agencies. Since then, seven drafts have been produced reflecting the evolving implementation of the PL Programme and the useful comments and recommendations of IFIs during various missions and in between monitoring missions.

Despite the absence of non objected RAPs, most of the working components that generate outputs needed for implementation of the PL programme and that typically should be described in the RAPs (what we intend to do, how to do it, when it should be done etc...) have been operational since FC or soon after FC. Components of the RAP that relate to disclosure for example were already operational since FC and communities were consulted on their assets, the expected loss and agreement was reached on asset compensation as well as interim compensation. PL office has all the files and dated records with GOL, DWG, HH and NTPC signatures to show that adequate engagement was made with the impacted communities. Thus, only the documentation of the process has been missing rather than the activities themselves. Many activities have had to evolve due to community preferences gauged by consultations. This is also reflected in the various drafts of the RAPs.

This present document thus started as a detailed planning document but now serves also as an implementation record and reference document. It is therefore written mostly as a plan but it should be understood that in fact many of the “planned” activities are already well underway. It includes a general volume and five resettlement action plans (six volumes altogether) which are collectively intended to document the resettlement process which started in 2005 and is ongoing.

EXECUTIVE SUMMARY

The NT 2 Project has been designed and developed over a period of 10 years since 1995 with the active involvement of multi-lateral lenders, governments, NGOs and private companies. The Project's social, environmental and economic safeguards will ensure the minimization of construction and operation impacts on society and the environment and will ensure (among other things) the provision of adequate compensation for project affected households. Once in operation, the Project is expected to become by far the largest single source of foreign exchange income to Laos. To optimize the use of these revenues, the Government of Lao PDR has agreed with the World Bank to implement a Poverty Reduction Fund (PRF) that is being initially sourced from International Development Agency (IDA) funds, and then, on a later stage, from the Government's taxes, royalties and dividend revenues once the Project commences operation.

As seen in table 1, the total number of impacted households in Project Land is 2,738. A total of 394 households are affected by Nam Theun 2 construction work to more than 10 percent of their annual income. The current figure is considerably lower than the previously calculated 565. This is due to recalculations in civil works undertaken in an effort to reduce impacts and households affected by the project. As can be seen below, most of the impacted HHs reside in LPAs covered by RAP 3.

RAP	Impacted areas (District)	Land Parcel Area (LPA)	HH affected >10%	HH affected <10%	Total affected HH
1	Khamkeut District	1a 6a, 6b	10	14	24
2	Nakai District (Oudoumsouk, Phonphanpek, Nongbouakham and Thalang)	18, 20a, 20b, 21a, 21b, 26a, 26b	7	172	179
3	Gnommalath Mahaxai	33,34,35,36 38a, 38b, 38c, 38d Disposal Areas, Access Roads	377	142 10	529
4	Road 8B, 12 (Thakhek, Gnommalath, Mahaxai, Nakai, Khamkeut) Phou Phathoung Quarry and Access	37 51,56,57 40, 42	0	1368	1,368
5	Transmission Lines (Gnommalath, Mahaxai, Thakhek Districts and parts of Savannakhet Province)	52,53,54,55	0	638	638
Total			394	2344	2,738

Source: NTPC, Gnommalath Office, 2007

Table 1. RAP, impacted area, LPA and number of PAHs affected by the NT2 Project.

The acquisition and either temporary or permanent use of land for construction and operation has resulted in impacts including disturbance, and temporary or permanent loss of land and assets, all of which has required compensation to those PAHs who may be owners and/or users of the impacted land and assets. Compensation includes asset purchase or cash compensation, direct replacement of land or assets in another location, or short and long term measures to restore impacted livelihoods or incomes.

The Resettlement Action Plan (RAP) sets out the procedures and requirements for compensation for PAHs within Project Land and the actions that NTPC has taken and will continue to take to mitigate adverse effects, compensate for losses and provide development benefits to the PAHs affected by the project.

1 Introduction

1.1 The Nam Theun 2 Hydroelectric Power Project – its rationale, description and regional context

1.1.1 Rationale

The Nam Theun 2 project is widely considered as an outstanding example of how the Government of the Lao PDR is working with the private sector and multilateral organizations to develop a model of sustainable development from industrial projects with strong economic, social, and environment fundamentals. With the export of 995 MW of electricity to the Electricity Generating Authority of Thailand (EGAT) at a very competitive tariff and the supply of 75 MW of electricity to Electricité du Laos (EDL). The Project is forecasted to generate average annual revenues of US\$ 82 million to Laos (35% of its total revenue) in the form of taxes, royalty charges and dividends over the life of the 25 year concession. At the end of the concession, the Project will be transferred to the Government without cost and with all revenues thereafter accruing to the Government. The Project will be, by far, the largest single source of foreign exchange income to Laos, and its largest single contributor to the Gross Domestic Product (GDP) and fiscal revenues.

To optimize the use of these revenues, the World Bank, other multilateral institutions and the Lao Government are working together to establish and ensure that the Project's revenues will effectively serve the long-term development of the country. Thus, the Government of Lao PDR has agreed with the World Bank to implement a Poverty Reduction Fund that is being initially sourced from International Development Agency (IDA) funds, and then from the Government's taxes, royalties and dividend revenues once the Project commences operation. Special administrative units have been established to deal with both the implementation of the Project and the effective management and allocation of the financial resources gained from the Project.

1.1.2 Description

The Nam Theun 2 Project (NT2) involves the development of a hydroelectric scheme in the three provinces of Khammouane, Bolikhamxay and Savannakhet Provinces in Central Laos. It requires constructing a dam on the Nam Theun River, a tributary of the Mekong River, 250 km east of Vientiane. This will create a 450 square kilometre reservoir on the Nakai Plateau which will necessitate the relocation and rehabilitation of livelihoods of more than 1,000 households. Water from the Nam Theun reservoir will be diverted by an intake structure, located about 40 kilometres upstream from the dam into a diversion tunnel excavated in the Phu Ark escarpment. The water in this tunnel will then drop approximately 350 meters before entering the turbines in a powerhouse located at the foot of the escarpment.

The water discharged from the powerhouse will then flow to another river system, the Xe Bang Fai (XBF), which also flows into the Mekong River, through a purpose-built downstream channel. The additional water in the XBF will potentially impact paddy land, fisheries, riverside gardens and other livelihood activities. Restoration of pre project incomes in these so-called downstream areas are part of another programme called the Downstream Livelihood Restoration project. Transmission lines to the Thai border (via Savannakhet) and to Thakhek Province town, the construction or upgrade of some 150 kilometres of roads, quarries and soil deposit sites and other NT2 Project structures shall be built.

NT2 is owned by the Nam Theun 2 Power Company Limited (NTPC), a limited company registered under the laws of the Lao PDR, in which the GOL has a 25% equity stake. NTPC and the GOL are

committed to meeting the World Bank (WB)'s and Asian Development Bank (ADB)'s economic, social and environmental guidelines as outlined in the CA Schedule 11 Clause 48.1 which includes amongst others:

- Involuntary Resettlement (WB, OP 4.12),
- Cultural Property (WB, OP 4.11)
- Indigenous People (WB, OD 4.20);
- Policy on Indigenous Peoples (ADB; F3/BP and F3/OP),
- Policy on Involuntary Resettlement (ADB; F2/BP and F2/OP) and
- Policy on Gender and Development (ADB; C2/BP and C2/OP)
- Operations Manual Sections F1/BP and F1/OP, Environmental Considerations in ADB Operations

1.1.3 Regional context

The NT2 Project area is in central Lao PDR and straddles the provinces of Bolikhamxay, Khammouane and Savannakhet as seen in figure 1. The region is characterized by intensive rural development along the lowland flood-plains of the Mekong River and by sparsely populated mountains to the north and northwest. Nine districts are affected by NT2 Project activities, which are Khamkeut, Nakai, Gnommalat, Mahaxai, Xe Bangfai, Thakhek, Nong Bok, Xaibouly and Khanthabouly, with most activities taking place in the districts of Nakai, Gnommalath and Mahaxai.

The climate of the area is influenced by the southwest monsoon (wet season) which normally affects the area from May to October; and by the northwest monsoon (dry season) lasting from November until April. Average annual rainfall over the Plateau is approximately 2,600 mm per year and at the dam site approximately 2,800 mm per year. Rainfall distribution is markedly seasonal with over 88% falling between April and September during the southwest monsoon, and only 12% falling between October and March during the northwest monsoon. This causes substantially high flows in the Nam Theun in the months of July and August (SMEC March 2003). Land use is dominated by agriculture, predominantly rice (paddy) cultivation in the alluvial lowlands, whilst forestry and upland agriculture (swidden or 'slash-and-burn') agriculture occur on the Nakai Plateau. There are two National Biodiversity Conservation Areas (NBCA), the Phou Hin Poun and the Nakai – Nam Theun nearby, which are visited by an increasing number of tourists, although still on a small-scale.

In 1999, the total population in Khammouane Province was estimated to be 331,044, with a density of 20.3 persons/km², which is close to the average Lao PDR population density of 22.1 p/km². In terms of ethnicity, the region is populated by a wide range of ethnic groups, which could be divided into four main ethno-linguistic families: Tai-Lao, representing the majority population, and three ethnic minority groupings: Austro-Asiatic, Meo-Yao and Tibeto-Burman. The main groups in the lowland areas are Tai-Lao majority and some Austro-Asiatic groups. In the mountainous areas, numerous minority groups predominate as well as some upland Tai that have relocated from Vietnam.

Rice production, for both consumption and sale, is a major rural activity on the flood plains along the Mekong River and its major tributaries. In the foothills and mountains, paddy rice is grown on the valley floors and upland rice on the hillsides in swidden fields. Rice production on the Nakai Plateau is insufficient to meet the annual needs of the population. In 50% of the plateau communities, rice produced locally cannot satisfy the needs of the communities for at least six months of the year. To make up for the deficit, these communities traditionally depend on maize, starchy roots and gathering in the forest to supplement their food as well as the sale and barter of Non-Timber Forest Products

(NTFPs). In the context of the planned resettlement program, sustainable food production is a critical component to improved livelihood and well-being as well as to alleviate poverty.

The Downstream Areas along the XBF are typical of many lowland areas in Lao PDR with its dependency on paddy cultivation, fishing and some degree of non-agricultural income. Over 85% of the population derives some of its income from agriculture. Irrigated paddy and rain-fed paddy yields in the lowlands are more than double that of the Nakai Plateau although frequent flooding reduces average yields substantially quite frequently, especially in the lower DS areas. Dry-season riverbank gardens supply most of the vegetables for local consumption. Riverine forests and wetlands provide an additional but limited source of edible plants, aquatic animals, NTFPs and herbal medicines. The reliance on the XBF as a source of food is a central aspect of the lowland or “river-based” livelihoods. The seasonal changes in river flow and remaining fish migration patterns determines how communities harvest and manage the natural resources of the river. Although there are few full-time fishermen along the XBF, many riparian households, if not most, fish in the river at different times of the year. Fish is the main source of protein and most fish are consumed locally with only small surplus catches reaching local markets.

1.2 NT2 Project affected areas

The NT2 project affected areas use to be part of the Ho Chi Minh Trail and was heavily bombed during the Indo-China War therefore UXO clearance is required prior to construction. The construction and operation of NT2 will result in a range of impacts to the biophysical, socio-economic and cultural environments of the NT2 Project Area. The project is divided into three main areas which have been the subject of resettlement and/or compensation and livelihood restoration:

1. The Reservoir Area on the Nakai Plateau

All of these affected households are entitled to relocation to a preferred agreed location, new housing, physical and community infrastructure. In addition, an extensive range of livelihood restoration program activities will be offered.

2. The NT2 Project (construction) Lands

The acquisition of Project Land for the construction of NT2 Project components will result in impacts ranging from disturbance, temporary and permanent land and asset acquisition, and will require compensation to Project Affected Households (PAH) and restoration of their livelihoods.

3. Downstream (of the Power Station) and the XBF

Communities downstream of the power station, along the XBF, and, to a much lesser extent, along the Nam Kathang and Nam Gnom River, will experience varying degrees of impact on their livelihood and infrastructure resulting from changes in the hydrological regime, quality of the water and erosion patterns in the receiving water bodies.

Under the Project Land Resettlement Plan (PLRP) land use rights were transferred to the NTPC (and its contractors) for the construction and operation of the NT2 Project. Thus, 66 parcels of land have been leased to the NTPC on which to build project facilities (not including the reservoir which is covered by the Nakai programme), and such land has been termed "Project Land". However, not all Project Land have an impact on villagers or communities. Of the 66 parcels of Project Land, there are

38 which have PAH impacts, and 28 which have no impacts on PAH. This was assessed by the baseline studies.

The acquisition and either temporary or permanent use of land for construction and operation has resulted in impacts including disturbance and temporary or permanent loss of land and assets, all of which have required compensation to those PAHs who may be owners and/or users of the impacted land and assets. Compensation includes asset purchase or cash compensation, direct replacement of land or assets in another location, or restoration of impacted livelihood. A series of plans, which includes land acquisition and compensation agreements with PAHs has been developed for review by the NTPC and the GOL and submission to the IFIs, after which formal approval and payment of compensation or implementation of livelihood rehabilitation programs will be undertaken.

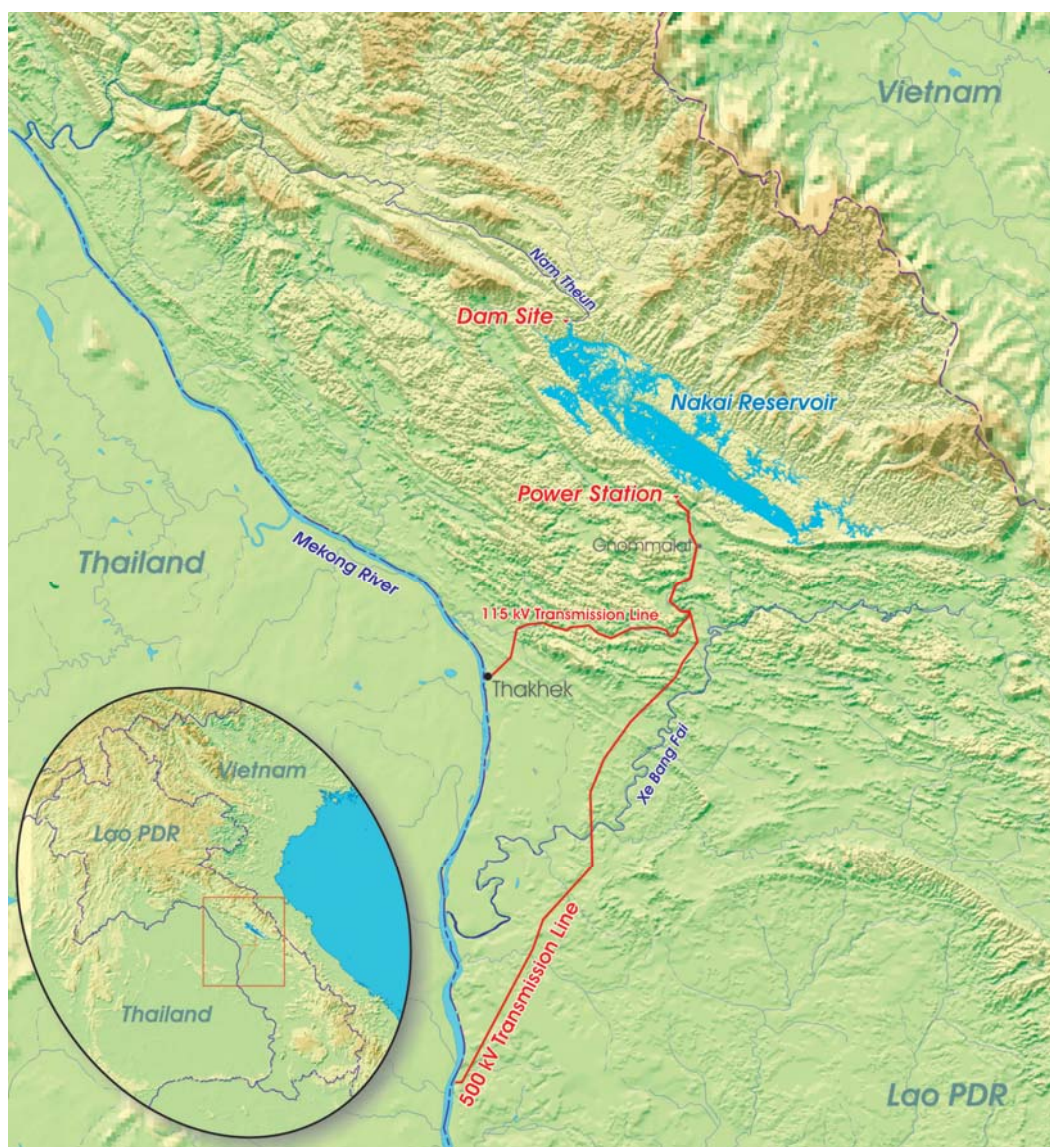


Figure 1. Project Location and Key Infrastructure

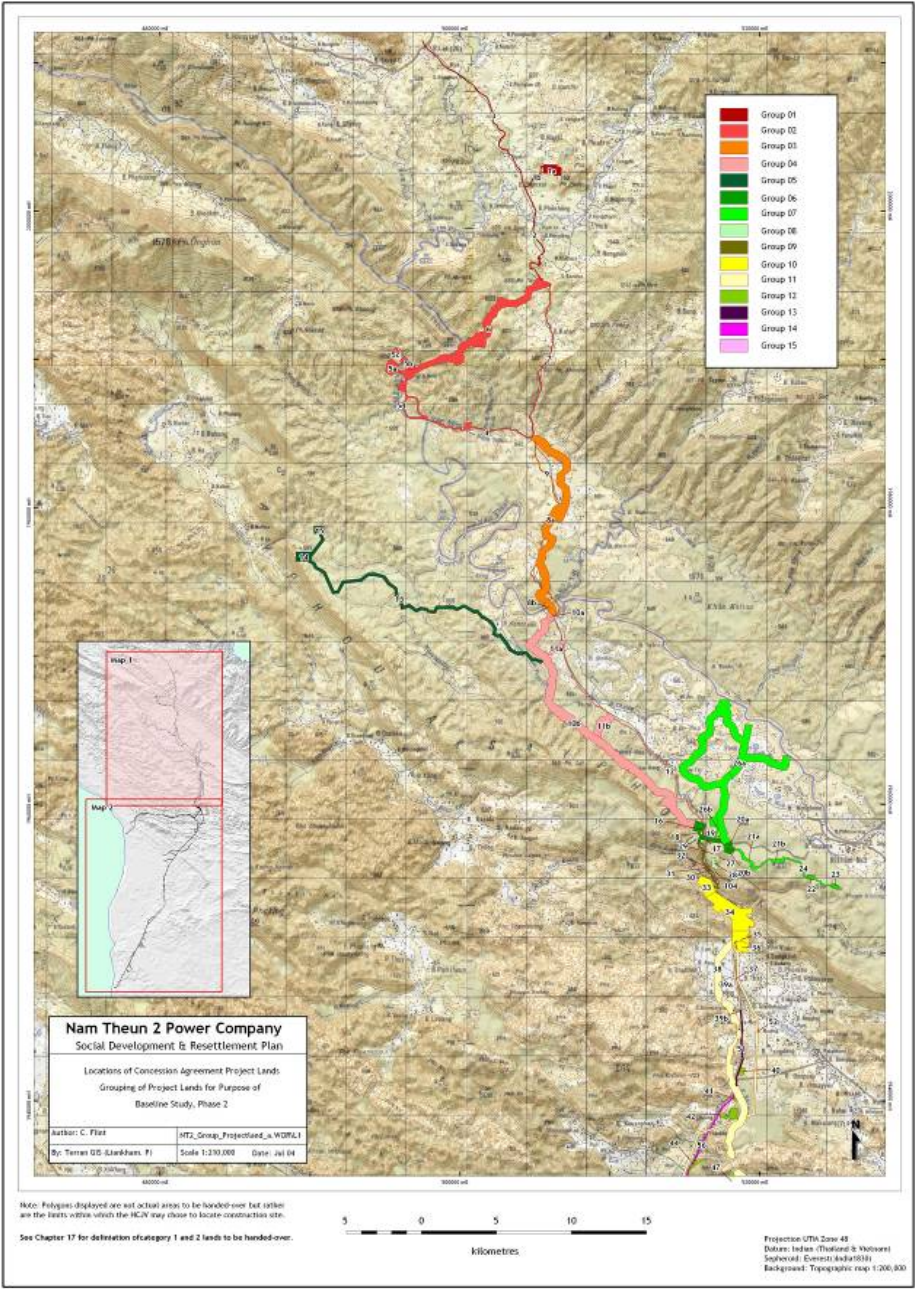


Figure 2. Project Land Area (not including transmission line)

Comment [m1]: What are the groups?

1.3 Efforts to minimize displacements and resettlement

Efforts have been made by the HC and CD of NTPC to minimize Nam Theun 2 Project land requirements by modifications in method of construction and construction design. Thus, the total number of impacted households has been minimized. Updates and modifications on PAH numbers, compensation payments and livelihood restoration program implementation will be presented in follow up plans and monthly reports as required.

1.4 Purpose and Objectives of the Resettlement Action Plan

The RAP has been developed under the following guiding assumptions and principles:

1. Funding is assured with all partners agreeing that the RAP is to be fully financed by the NT2 Project.
2. Resettlement planning is to be integrated with the general NT2 Project design from the earliest stages of NT2 Project preparation.
3. The GOL will develop and adopt the appropriate policies to ensure proper and just resettlement, including the development of an applicable Resettlement Policy for the NT2 Project.
4. Nakai Resettled people living standards and income earning capacity will improve to at least the national poverty level, and PAHs will be provided with adequate support during the transition period; resettlement is to be avoided or minimized wherever feasible.
5. Identified gender concerns and specific women's needs and perspectives are to be considered in all components, strategies and planned activities; women and men will have equal opportunity to participate in decision-making, training and the NT2 Project benefits.
6. People to be resettled or directly affected will play an active role in the design, planning, implementation and monitoring of the RAP.
7. Traditional organizational structures, religious beliefs and resource use will be taken into account during resettlement planning and implementation; appropriate consultation and participatory methods are to be used, utilizing local knowledge in developing production systems that suit the people's needs and the environment and which avoid dependency on NT2 Project or government agencies.
8. The planning, implementation and compensation processes will be open and transparent but follow prescriptive IFI guidelines.

2 NT2 Project impact

2.1 Socio-economic Survey

A census and inventory of assets were compiled and additional studies quantified the net returns from income streams and established replacement values for land and other assets. This information has been used by resettlement planners to enhance their understanding of household income and of how the income can be restored after resettlement is complete. It also provides a baseline for the identification of monitoring and evaluation indicators that will help to assess the success of livelihood restoration and other sustainable development programs. The above information can be found in the SDP Volume 4. An up-to-date data set is being maintained throughout the project period for monitoring and implementation.

2.1.1 Ethnic groups

Estimates of the ethnic distribution of significantly impacted households in all Project Land (of which 93% fall into LPA 33-38) are as follows:

Makong:	77.2%
Lao Loum:	22.3%
Hmong:	0.5%

Thus, as indicated above, the great majority of NT2 Project affected households belong to the ethnic minority groups of the *Brou* or *Makong*, an Austro-Asiatic / Mon-Khmer ethno-linguistic group (Chazée 1999, Schlesinger 2003). They exhibit a considerable degree of adaptation and assimilation in relation to the dominant lowland (Lao) culture but, nevertheless, have retained some minority characteristics, including less integration into market place economics and some degree of ethnic language and self-identity. The *Brou*'s subsistence-based economy relies on irrigated and rain-fed paddy cultivation, with only limited surplus for trading and barter (cash crops, livestock, fish). They have private ownership of paddy and riverside gardens, while grazing areas and forests are managed communally. Traditional institutions for the most part have merged with formal political institutions. *Brou* language is spoken at home and in villages, but today in many cases *Brou* is only practiced among the elders. The NT2 Project assists these potentially vulnerable PAHs by providing an ethnic specialist to bridge any language or cultural barriers and this individual aids in communication between the PAHs and NT2.

2.1.2 Gender

Women, whether ethnic minority or Lao Loum women, traditionally play a significant role in agriculture and thus hold a significant status within the household economy. Amongst the Lao Loum, land was traditionally inherited along matrilineal lines.

There are a number of affected households with a single head, male or female, which are expected to be particularly vulnerable because of a reduced household labour availability. The NT2 Project assists these potentially vulnerable PAHs through a family finance specialist.



Young women and children selling non-timber forest products (Mahaxai District)

3 Legal Framework of NT2 Compensation and Entitlements

3.1 Introduction

Involuntary resettlement is not new to the Lao people. Centuries of human and natural disasters have seen villages and groups of villages forced to relocate to survive. What is relatively new is the need for people to relocate in order to make way for development of projects considered to be in the national interest, such as hydroelectric schemes.

Due in part to the size of the NT2 Project and previous experience of other hydropower schemes, a number of legislations have been introduced to deal specifically with the NT2 Project. This legislation guarantee rights to those people who are to be resettled as a result of the NT2 Project including their rights to land and forest use. Furthermore, the Lao National Assembly has approved the agreement under which the concession for the NT2 Project is granted to NTPC detailing, *inter alia*, the obligations of both NTPC and the GOL to the resettlers. The Social Development Plan (Vol. 1, Chapter 3, Appendix C and D) provides details of the legal framework.

3.2 Legal framework

In the case of Project Land impacts, the NT 2 Project's Concession Agreement (revisions of March 2005), Schedule 4 Part 1 is the relevant policy document.

In the 'Nam Theun 2 Resettlement Policy' and the 'Concession Agreement', the NTPC and the GOL have developed compensation and livelihood restoration and improvement guidelines. These legal and policy documents were based on available GOL legislation and policies as well as on the World Bank safeguard policies. More recently, the Asian Development Bank (ADB) safeguard policies have become relevant, as have the draft 'National Policy and Guidelines on Resettlement'. The RAPs have been drafted and will be implemented in accordance with the revised 'Concession Agreement', World Bank and ADB safeguard policies, and the NT2 Resettlement Policy.

3.3 The Concession Agreement

The specific obligations of NTPC and the GOL to resettle PAHs are set out under the Concession Agreement ("CA") that was signed on 3 October 2002 between NTPC and the GOL, represented by the Committee for Investment and Co-operation and acting for and on behalf of the Lao PDR. This Concession Agreement was amended in March 2005.

Under this CA, the GOL grants NTPC the right to implement the Project on a build, own, operate and transfer basis for a period of 25 years (the "Concession Period") following the occurrence of the Commercial Operations Date, subject to any extensions for Force Majeure.

3.3.1 Compensation and Resettlement

There are two sections in the CA that deal with the resettlement of the population affected by Project Land acquisition and set out how the GOL and NTPC will comply with and implement the Nam Theun 2 Resettlement Policy in order to satisfy the Project's resettlement objectives. These are

- (i) Clause 30 of the CA, Environmental and Social issues; and
- (ii) Schedule 4, Part 1 (Social Component).

Part 1 of Schedule 4 provides details of the obligations of both NTPC and the GOL, the duration of these obligations and institutions within NTPC and the GOL who are responsible for the process. It

specifies that the monitoring of the resettlement process will be performed both internally by the Company and the GOL and also by independent parties. Specific compensation and livelihood restoration entitlements for Project Land impacts are presented in Schedule 4, Part 1, Clause 13 'Resettlement Activities in Project Land Areas', and in the Entitlement Matrix, clause 15.2.

3.4 Eligibility

All those peoples or communities who have land, assets or seek a livelihood from any Project Land area at the time that the Baseline Study Phase 2 is undertaken, are considered as eligible for compensation and rehabilitation.

3.4.1 PAH - Project Affected Households:

Project Affected Households (PAHs) are, according to the Concession Agreement, schedule 4, Part 1, Section 1.2, "... the Resettlers and persons residing on or in the vicinity of Project Land, who on account of the execution of the Project, had or would have their: (i) standard of living adversely affected; or (ii) right, title, or interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable asset acquired or possessed, temporarily or permanently; or (iii) access to productive assets adversely affected, temporarily or permanently; or (iv) business, occupation, work or place of residence or habitat adversely affected, temporarily or permanently"

By definition, it is these PAH who are entitled to any applicable compensation and rehabilitation. However, any particular land or assets may be related to more than one PAH. For example, when the land is owned by one PAH but used to gain a livelihood by another different PAH (who is usually paying some type of rent to the owner PAH) then there are two eligible PAHs for this one asset. Thus, eligibility is based on:

- (a) ownership; and
- (b) use.

Ownership may have various forms, from formal to informal. There are no formal "land titles" as such yet issued for land or assets in the Project Area. However, ownership is officially recognized in the Lao PDR by the registration of land and assets for the purposes of tax.

In the case where there are no tax registration certificates, customary use and ownership will be recognized, and this is usually well known in each village. However, in the case that there is a dispute as to the owner then it is up to the Village Grievance Committee, in the first instance, to decide or to resolve any issues relating to customary and traditional ownership and use right over a particular land or asset.

There may be cases where land or assets have recently been purchased for the specific intent of being applicable for compensation from the NT2 Project. Such cases are generally known by the community and reported to the NT2 Project. They will go before the Village or District Grievance committee for adjudication because the new owners are not registered in the baseline survey required under the CA for eligible PAHs.

3.5 PAH Entitlements

The general entitlements of people whose land, assets or livelihoods are affected by the Nam Theun 2 Project Land are detailed in the Entitlement Matrix Table 3 below. Both male and female PAHs are equally consulted and recognized, and negotiations and compensation payments and livelihood restoration program entitlements have been with both male and female head of each household.

Table 2. Entitlement Matrix from the Concession Agreement, Schedule 4, Part 1 Clause 15.2

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
1: Permanent loss of land		
1.1: Permanent loss of residential land (home lot)	Documented owners (validated by village authorities) or non-renting occupants identified during the Baseline Study)	<p>Project Affected Persons (PAHs) will be entitled to compensation in cash or the provision of replacement land, as below:</p> <ul style="list-style-type: none"> (i) If the PAH wants replacement house plot land then they will be provided with replacement land of <u>at least</u> equal size and amenity to the lost land in a location acceptable to PAH. In this case no cash will be paid. The land will be cleared and levelled at the expense of the Company. (ii) Such replacement land will be provided with access to a road, of at least equal amenity to the current access. If the current/lost land is also supporting a dwelling which has access to electricity, then the PAH will also be provided with access to electricity at the replacement land. (iii) Such replacement land will be provided with full land title in the name of both husband and wife. (iv) If the owner wants cash compensation then the Company will pay for the land at its replacement value as estimated by the local market value of the year in which compensation is paid in a similar situation of a non-affected village in the same District. (v) If the land is partially affected and the remaining landholding is sufficient to re-establish houses and structures, PAHs may opt to receive cash compensation for affected portion of land and structures. (vi) If the land is partially affected and the remaining landholding is not sufficient to rebuild affected houses and structures, the Company will acquire the entire landholding. (vii) Those receiving cash for land must undergo financial management training. (viii) Any registration and land transfer fees will be paid by the Company on behalf of the PAHs.
1.2: Permanent loss of business land	Documented owners or occupants identified during Baseline Study	<p>PAHs will be entitled to compensation in cash or the provision of replacement land, as below:</p> <ul style="list-style-type: none"> (i) If the PAH wants replacement business land then they will be provided with replacement land of at least equal size and amenity in a location with comparable commercial advantage. In this case no cash will be paid. (ii) Such replacement land will be provided with access to a road, of at least equal amenity to the current access. The PAH will also be provided with access to electricity (brought to the land lot) if they previously had access to electricity. (iii) Such replacement land will be provided with full land title in the name of both husband and wife. (iv) If the owner wants cash compensation then the Project will pay for the land at its replacement value as estimated by the local market value of the year in which compensation is paid in a similar situation of a non-affected village in the same District. (v) If the land is partially affected and the remaining landholding is not sufficient to rebuild affected houses and structures, the Company will acquire the entire landholding.

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
1.3: Permanent loss of agricultural land	Documented owners with or without certificate at the time of Baseline Study.	<p>Significantly affected farmers, i.e. who lose 10% or more of their productive (cash and imputed income generating) land assets, are entitled to replacement land and income rehabilitation measures, as follows:</p> <ul style="list-style-type: none"> (i) Land of the same type, and of a total annual productivity at least equal to the lost (average) annual productivity of the lost land; (ii) Production assistance for at least 2 years to ensure that the replacement land actually fully reaches the production targets. Production assistance to consist of fertilizer, seed, extension assistance; (iii) Where irrigated land is lost the replacement land must be irrigated; (iv) Where rainfed land is lost, the replacement land may be rainfed or irrigated; and (v) Such replacement land will be provided with full land title in the name of both husband and wife. <p>Where no replacement land is available, assistance to develop alternative forms of livelihood activity such as non-land-based opportunities which will generate at least as much 'income' as the lost land generated including, for example, training and access to credit.</p> <p>In cases where a significantly affected farmer's, i.e. who lose 10% or more of their productive (cash and imputed income generating) land assets, is entitled to replacement land, and income rehabilitation measures, but request a lump sum cash payout instead, then this case will be considered by the District Grievance Committee, whose decision will partly depend on:</p> <ul style="list-style-type: none"> (a) the PAH's ability to handle cash payment; and (b) the PAH's plan of what to do with the cash payment. <p>The cash payment in this case will be based on:</p> <ul style="list-style-type: none"> (c) the 'market value' of that lost land, as assessed at the actual time of land acquisition; or (d) the cash equivalent of seven (7) years' gross production from the lost land; or (e) the actual replacement cost of the land as assessed at the actual time of payment of compensation. <p>In cases where less than 10% of a PAH's productive (cash and imputed income generating) land assets are impacted then cash compensation is applicable. The amount payable will be based on:</p> <ul style="list-style-type: none"> (a) the 'market value' of that lost land, as assessed at the actual time of land acquisition; or (b) the cash equivalent of seven (7) years' gross production from the lost land; or (c) the actual replacement cost of the land as assessed at the actual time of payment of compensation. <p>Those receiving cash for land must undergo financial management training.</p> <p>Any taxes, registration and land transfer fees will be paid by the Company on behalf of the PAHs.</p> <p>Company will assist in clearing and preparing agricultural land as required</p>
2: Temporary loss of land		

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
2.1: Temporary impacts during construction	Owners or non-renting occupants whose land (but not structures) is affected by construction activities	<ul style="list-style-type: none"> ■ Extreme care shall be taken by contractors to avoid damaging properties. Where damages do occur, the Company shall pay compensation immediately to PAHs. Damaged assets will be restored to its former condition. ■ Any impacts on the usage of the land, or income or livelihood derived from the land that is impacted by the temporary loss of land will be compensated to the PAH, up to the value, or according to the utility, of that loss. ■ In addition, if crops or trees are lost, then a further cash compensation for loss of crops and trees at market values and compensation for loss of net income from subsequent crops that cannot be planted for the duration of the lease. ■ If the disruption continues for more than one year, PAHs have an option to (i) continue the temporary use arrangements or (ii) sell the affected land to the Company at full replacement cost at current market value. ■ Cash compensation for any damage to structures at replacement cost at current market value and for repairing structures.
3: Loss of house and other fixed structures		
3.1: Permanent loss of houses and other structures (rice stores, toilets, kitchens, etc.)	Owners/occupiers identified during Baseline Study	<p>The same standard as for Resettlers for housing and other structures applies, as follows:</p> <p>the labour cost associated with the dismantling of existing houses and other structures;</p> <p>transportation of dismantled housing and other materials to new house lot (which are not however considered as materials to make up the minimum house standard) or, if the PAH requests, transportation of the non-dismantled house or transportation of materials and reconstruction of the original house;</p> <p>the provision of new materials for construction of new house and other structures;</p> <p>the house materials are to be either:</p> <p>(a) the minimum standard of wood walls and floors, tin roof and cement house footings; or</p> <p>(b) to the standard of materials as used in the current/lost houses, depending on the choice of the PAH;</p> <p>construction of new house and other structures or equivalent labour cost paid;</p> <p>house design to be approved by the village and the PAH, but to be in general accordance with the design for the Resettlers;</p> <p>minimum housing area not less than current house area or 14m² of construction area per person of - whichever is greater, and depending on the choice of the PAH;</p> <p>households with 7 or more persons containing two families have the option to have two houses;</p> <p>sheds, other outbuildings and fencing to be provided, or if the PAH requests, transportation of the original shed, outbuilding or fence;</p> <p>if required by PAH, a toilet and bathroom to be provided (all PAHs are entitled, but some may not want);</p> <p>if the impacted houses had an electricity connection, then the house to be provided with electricity supply and electricity fittings (in accordance with standard which is the greater of the standard applicable for Resettlers and fittings in current house);</p>

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
		provision of domestic water supply to at least the standard of current water supply; for partially affected houses/structures, compensation will be paid equivalent to a) the replacement value of the affected portion based on current market value, or b) the costs of repairing the property to its original or better condition.
3.2: Permanent loss of shops, other businesses	Owners/occupiers identified during the Baseline Study.	Compensation at full replacement cost sufficient for PAHs to build a new structure of equivalent size and standard, with equivalent amenities, in a location with comparable commercial advantage. Compensation for lost income during the transition period as described below.
4: Loss of crops, trees, other productive assets		
4.1: Fruit trees	Owner or person with customary right to harvest (in cases where impact is only on crop production and not related to the land)	Compensation for fruit trees will be based on the type, age and productivity and the cost of production and rearing of trees. The following compensation will be payable: a) a lump-sum amount to cover the maintenance and rearing of trees. b) compensation equivalent to the annual productive value, as should be determined for the next seven (7) years. Two months notice will be given to PAHs to harvest crops before construction commences. Two months notice to PAHs to harvest crops before construction commences. Mass of fruit production depends on tree age as per IOL.
4.2: Timber trees	Owner or person with customary usage rights`	Compensation will be the NPV of the felled tree.
4.3: Fish ponds	Owner or person with customary usage rights	Either (a) Replacement fish pond of equal size and/or productivity and amenity, plus assistance to stock and feed fish for 6 months; or (b) lump sum cash payment equivalent to 7 years lost productivity of the fish pond. Two months notice to PAHs to collect fish.
4.4 Garden and field crops	Owner of the crops	Compensation for any crop unharvested at the time of relocation, or Project Impact, based on gross harvest income. Standing crops will be compensated at full replacement cost regardless of maturity of crops. Additional compensation for one year's agricultural production or more until replacement land is productive. Two months notice (before the Projects impacts is expected to be felt) will be given to PAHs to harvest crops.
5: Loss of other household income sources		

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
5.1 Wage labourers in relocating businesses or in businesses temporarily affected during construction (such as reduced access)	Wage labourers whose jobs have been lost or interrupted by, or as a result of, the Project	Cash compensation equivalent to the greater of their existing wage and minimum wage for up to six months, depending on the duration of interruption, paid on a monthly basis.
5.2 Agricultural wage labourers	Wage labourers whose jobs have been lost or interrupted by, or as a result of, the Project	Cash compensation equivalent to the greater of their existing wage and minimum wage for up to six months, depending on the duration of interruption, paid on a monthly basis.
6: Loss of common property structures		
6.1: Electricity and telecom lines	Community	Relocate or place underground to maintain service.
6.2: Road and tracks	Community	Full restoration, replacement by alternative route, or the new resettlement area fully serviced by road of at least equivalent standard and amenity.
6.3: Irrigation channels	Community	Full restoration, replacement, or the new resettlement area fully serviced by irrigation system and channel of at least equivalent standard and amenity.
6.4: Water source	Community	Full restoration, replacement by alternative water source, or the new resettlement area fully serviced by road of at least equivalent standard and amenity.
6.5 Schools, clinics, other government buildings, bridges	Community	Full restoration to original or better condition, or replacement if necessary at locations identified in consultation with affected communities and relevant authorities at no cost to the community.
6.6 Town	Oudomsouk town	The Company will undertake community and town planning and prepare and implement a design for a reorganized town, in consultation with local authorities and residents, to restore the impacted section of the town to its pre-Project conditions or better.
7: Loss of common property resources		
7.1: Loss of NTFP gathering areas	Villagers who have had customary rights to the common property resource	<p>In case where the loss of the NTFP gathering area represents more than 10 % of a village's NTFP gathering area, then a replacement NTFP area will be identified and allocated.</p> <p>In case where alternative NTFP gathering area cannot be identified, then, depending on the preference of the village, the Company will either:</p> <ul style="list-style-type: none"> (a) provide funds and TA for the domestication of NTFPs; or (b) provide a lump sum cash payment to the village development fund equivalent to 7 years of the value of impacted (lost) NTFPs. <p>In case the loss represents < 10 % of the village's NTFP gathering area, a lump sum cash payment will be made to the village development fund, equivalent to 7 years value of impacted (lost) NTFPs.</p> <p>If community income loss is expected (e.g. irrigation, community forest, community grazing land, income from fishpond), the relevant authority that owns the resource (village, commune or district authority) is entitled to compensation for the total production loss (over 7 years); this compensation</p>

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
		should be used collectively for income restoration measures and/or new infrastructure.
7.2: Loss of firewood and wood product gathering areas	Villagers who have had customary rights to the common property resource	<p>In cases where the loss of the firewood gathering area represents more than 10 % of a village's firewood gathering area, then a replacement firewood area will be identified and allocated.</p> <p>In cases where alternative firewood gathering areas cannot be identified, then, depending on the preference of the village the Company will provide funds and TA for the establishment of firewood plots over a 2 year implementation period.</p>
7.3 Loss of fish and aquatic products		<p>Either:</p> <ul style="list-style-type: none"> (a) cash compensation, based on the value of the annual loss of catch x 5 years; or (b) provision of replacement fish or protein production systems; or (c) provision of alternative livelihood enterprises which produce net income equivalent to that lost.
8: Allowances and Transitional Measures		
8.1 Disturbance allowance	Significantly impacted PAHs (those whose land or income is impacted by more than 10%) and PAHs relocating	USD 15 per person.
8.2 Materials transport allowance	All relocating PAHs with structures All relocating tenants	In kind assistance with vehicles and labourers. Preference to be given to local transportation and labourers, particularly PAHs.
8.3 Rental allowance	Tenants in rental properties adversely affected by Project Land.	Six months rent at prevailing market rate. Any penalties associated with ending lease early paid by government.
	Landlords whose rental property is adversely affected by Project Land.	Six months rent allowance will be provided, to allow for rebuilding and finding tenants. Payment of penalties for ending lease contract early.
8.4 Business transition allowance	Owners of small businesses and shops identified in the Baseline Study	An allowance equal to six months income (as assessed for each business during the Socio-Economic Survey referred to in clause 5.2).
8.5: Transitional Food Assistance	All relocating PAHs and PAHs severely affected by loss of productive (food generating) assets who are identified in the Implementation Plan, and whose livelihood restoration program has not yet been fully implemented or	<p>Rice and protein will be provided as required to Project Affected Persons to the extent that their rice and protein production and intake has been impacted by the Project and such rice and protein production and intake not yet restored. This will be assessed by the Village Development/Resettlement Committees, and confirmed by the District social welfare office, and reviewed from time to time by monitors. The rice and protein supplement shall be provided by the Company on a quarterly basis, or more regularly if required, according to needs.</p> <p>(Regular internal monitoring will be essential and prompt delivery of food security as soon as it is needed. A special fund will be available to enable quick response).</p>

TYPE OF LOSS	ENTITLED HH	COMPENSATION AND REHABILITATION MEASURES
	successful.	
8.6: Transitional Income Assistance	All relocating PAHs and PAHs severely affected by loss of productive (income generating) assets who are identified in the Implementation Plan, and whose livelihood restoration program has not yet been fully implemented or successful.	Cash will be provided as required to Project Affected Persons to the extent that their income has been impacted by the Project and such income not yet restored. This will be assessed by the Village Development/Resettlement Committees, and confirmed by the District social welfare office, and reviewed from time to time by monitors. The income assistance shall be provided by the Company on a quarterly basis, or more regularly, if required.
8.7 Special assistance	All relocating PAHs and PAHs significantly impacted (those whose land or income is impacted by more than 10%) and who are identified during the Baseline Survey as being below the Poverty Line.	300,000 kip for each family below the poverty line. (equivalent to one months salary for the head of household which is assumed to be the time taken for moving which a family with none or little assets or savings and may be required to pay out of pocket expenses)
	PAHs without adequate labour to assist with resettlement activities	300,000 kip for each family without sufficient labour resources to relocate. as decided by the Village Development/Resettlement Committee. Entitlement is additive, i.e. poor families without sufficient labour receives 600,000 kip.
	PAHs whose livelihood restoration program has not yet been fully implemented or successful	Food security (rice and protein supplement) as required until restoration of livelihood. Regular internal monitoring will be essential and prompt delivery of food security as soon as it is needed. A special fund will be available to enable quick response.
8.8 Grievance entitlements	All PAHs	Full access to the Grievance Procedure, if and when required.

3.5.1 Nam Theun 2 Resettlement Policy

The Nam Theun 2 Resettlement Policy outlines the basic principles and measures governing the resettlement of agricultural and forestry production areas and compensation to the population of the Nam Theun 2 Project zones, with the view of upgrading or ensuring sustainable livelihoods. It provides for the participation of the population in the consultation, planning and design process of their new settlement and production areas. It also provides for the application of special measures towards vulnerable groups such as ethnic minorities, women, the disabled, the elderly and the youth. All activities for vulnerable groups are aimed to assist as needed and foster self-reliance. Development of a resettlement policy specific to NT2 has taken place in parallel with the preparation of the draft national policy. Its process followed a number of steps which are documented in detail in the SDP Vol. 4, Chapter 5.

3.5.2 Resettlement Committee Regulations

While the NT2 Resettlement Policy and more recently the Concession Agreement (CA) of 2002 is the overarching framework describing the resettlement principles, the above documents stated that more specific regulations will be issued dealing with individual procedures for the successful implementation of the policy. Thus, as detailed planning and implementation proceeded, regulations were passed by the Resettlement Committee at the recommendation of the Resettlement Management Unit and NTPC. These regulations are executed by the Provincial Governor (also Chairman of RC) and have the authority of a Provincial Decree. These additional regulations were later added into the Concession Agreement and any future procedures will be added accordingly.

3.5.3 World Bank and Asian Development Bank Operational Procedures

The NT2 Resettlement Policy details guiding objectives, principles and provisions under which resettlement is carried out. It follows the principles of the three applicable World Bank Policies:

- Operational Policy 4.12: Involuntary Resettlement.
- Operational Directive 4.20: Indigenous People.
- Operational Policy 4.11: Cultural Property.

More recently, after the Asian Development Bank (ADB) has also become a partner in the NT2 Project, the ADB safeguards policies also became relevant to the social and resettlement program of the NT2 Project, including:

- ADB Policy On Involuntary Resettlement (1995) and Operations Manual(OM) F2
- ADB Policy on Indigenous Peoples(1998) and OM F3
- ADB Policy on Gender and Development (1998) and OM C2

Other NT2 applicable IFI Guidelines are shown in CA schedule 11 Clause 48.1. NTPC and GOL are fully committed to comply with these World Bank and Asian Development Bank requirements and policies for indigenous peoples, involuntary resettlement, cultural property and gender and development. These policies are set out in full in the SDP Vol. 1, Appendix B.

4 Institutional Arrangement

The institutional and organizational framework for the Nam Theun 2 Project, and the responsibilities of the parties involved are presented in detail in the Social Development Plan (Chapter 6 of Volume 1). The present chapter presents a detailed summary relating specifically to the Project Land program only.

4.1 Overall Organization and Coordination of Responsibilities

In response to the Projects resettlement component, GOL has established specific resettlement organizational units. Collectively, these organizations, in cooperation with NTPC, form the GOL agencies responsible for implementing the NT2 Project's Social Development Plan (SDP) and RAPs. NTPC has, in turn, established a Social and Environment Division to manage and implement NTPC's responsibilities detailed in the SDP and the RAPs.

Detailed descriptions of these institutions, including their responsibilities and staffing, are presented in detail in the SDP (Vol. 4, Chapter 8) and various annual versions of the AIP provided to Interested Parties in June of every year. The relationship and coordination between the GOL and the NTPC, first outlined in the CA of 3/10/02, has been refined. Within this overall framework and through their parallel agencies, the GOL and the NTPC are jointly responsible for the planning, implementation and outcomes of the social and resettlement program of the NT2 Project. However, GOL or NTPC will take specific or primary responsibility for certain program components, or have equally shared responsibilities for other components, as summarized below:

1. NTPC and GOL share joint responsibility for the conduct of surveys, whereas NTPC takes the lead in data analysis;
2. NTPC has primary responsibility for infrastructure design and construction, with GOL support as required;
3. GOL has primary responsibility for consultations with villagers and community development, with NTPC support as required;
4. NTPC has primary responsibility for budget preparation, disbursements and acquittals;
5. NTPC and GOL share joint responsibility for program scheduling and monitoring;
6. GOL and NTPC share joint responsibility for development and support to livelihood restoration programs such as agriculture, livestock, forestry and fisheries; and
7. GOL has primary responsibility for disbursement of compensation to PAH, with NTPC support as required.
8. GOL has primary responsibility for grievance processes

The following mechanisms were put in place to ensure close coordination and cooperation between the GOL and NTPC:

1. NTPC, as Co-chairman, will become an official member of the Resettlement Committee (RC);
2. NTPC is the source of funding for the program and will act as procurement agent;
3. all plans and budgets are developed reviewed and approved by both the Resettlement Office (RO) and the Resettlement Management Unit (RMU);
4. the RC has the right to review and provide approval or no-objection to all plans; and

4.2 GOL Resettlement Organizations

Until recently, no formal administrative structure existed in Lao PDR to deal with involuntary resettlement caused by large development projects. For a small number of cases, which involved involuntary resettlement, *ad hoc* institutional arrangements had been made at the project level for resettlement implementation. The 2003 'Decree on Involuntary Resettlement and Compensation' designates the Water Resource Energy Agency (WREA) formerly the Science, Technology and Environment Agency (STEA) as the regulatory agency charged with the responsibility for policy oversight. Through this decree, WREA is authorised to:

1. Disseminate information,
2. review, evaluate and approve or otherwise Resettlement Plans,
3. review monitoring reports; and
4. provide technical guidelines to Implementing Agencies.

In the case of the Nam Theun 2 Project, the Government has established specific units (or committees) to work with the NTPC to plan and implement the Project, including:

- the Resettlement Committee (RC);
- the Resettlement Management Unit (RMU); and
- the District (Resettlement and Compensation) Working Groups (DWG).

These units or committees are staffed by current GOL staff that are seconded to work either full time or part time for the Nam Theun 2 Project. Further details on roles, functions, responsibility and staffing of the Resettlement Committee, the Resettlement Management Unit and the District Resettlement Working Groups can be accessed from the SDP (Vol 4, Chapter 8).

4.3 NTPC's Resettlement Organization

The NTPC, in close cooperation with the GOL's RC and RMU, has established a number of organizational units be specifically responsible for all social and resettlement activities of the NTPC, namely:

1. The Resettlement Office (Nakai)
2. Project Lands Office (Gnommalath)
3. Downstream Program Office (Thakek)

The NTPC's Project Land Office will be responsible for the following within PL jurisdiction:

1. providing sufficient human resources to ensure the objectives and targets of the SDP and RAPs are met by the engagement of national and international experts;
2. providing prompt and adequate compensation to the resettlers and the other PAH in accordance with the NT2 Resettlement Policy, with compensation being based on the principle of actual full replacement or the payment of full replacement cost;
3. providing for any other costs associated with mitigating the social effects of the Project on any PAH;
4. ensuring that appropriate consultation and participation methods are used, utilizing local knowledge in developing production systems that suit the resettlers' needs and environment, and which avoid dependency on the Project or any government authority; and
5. providing housing and community buildings at resettlement sites, reasonable access to all-weather roads provided where practical, plus water and electricity connections to all resettlers' houses.

Figure 3 shows the recently updated organizational chart for the Project Land program.

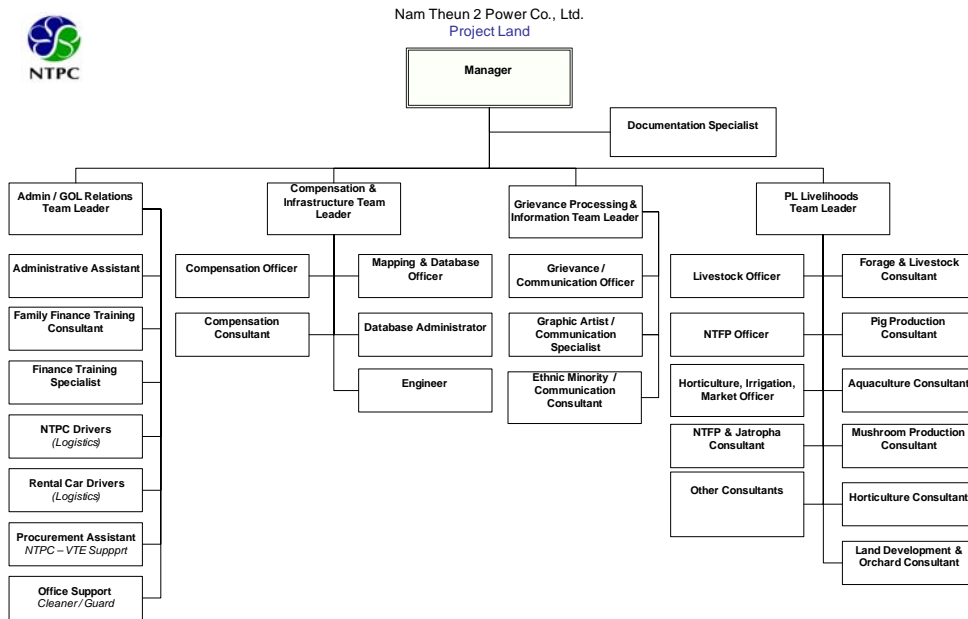


Figure 3. Project Land Organizational Chart

4.4 Grievance Committee

Regardless of how well conceived, planned and executed the resettlement program may be, individual or village complaints will occur. To ensure that the basic rights and interests of resettlers are protected, concerns adequately addressed and entitlements delivered, a grievance procedure has been designed for the NT2 Project. The procedure is presented in figure 4.

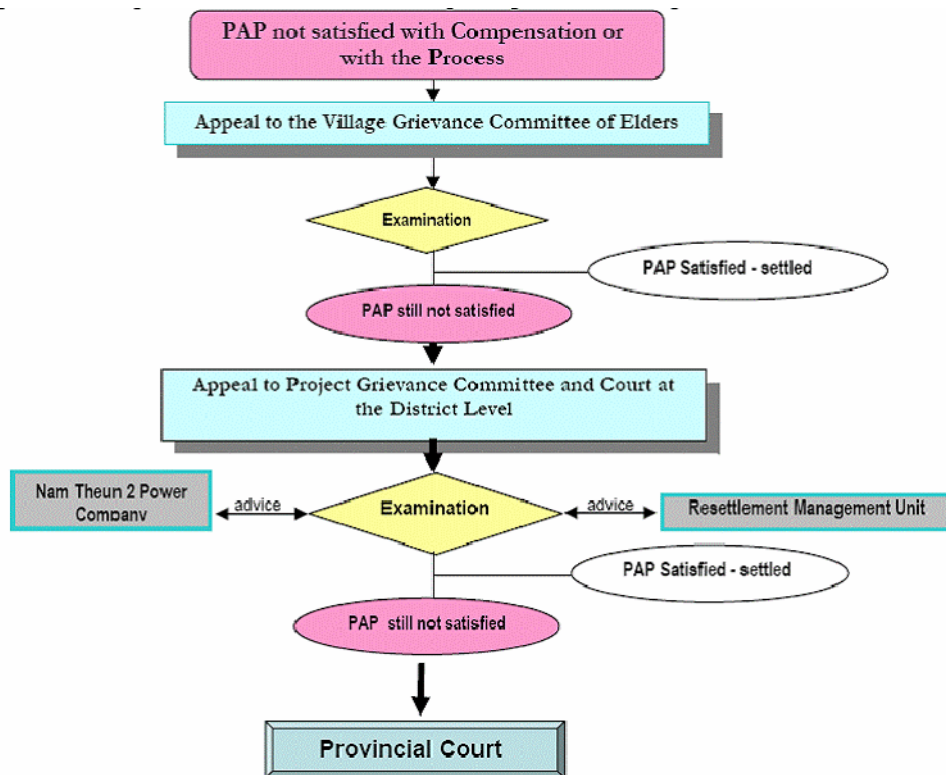


Figure 4. The Grievance Redress Mechanism

Capacity building and training will occur to provide the agencies with the knowledge and capacity to properly deal with PAH grievances.

The grievance procedure, and more particularly the agencies involved, have recently been reviewed in order to avoid lengthy procedures for addressing grievances. At present there are three agencies involved in reviewing and adjudicating on grievances brought forward by villagers, namely:

1. Village Grievance Committee, composed of an equal number of women and men elders and other identified individuals from the community, which will be strengthened by the NT2 Project; and
2. District Grievance Committee, whose representatives are from the Districts Justice Department, assisted by 3 people from (a) the District Cabinet, (b) the LWU, and (c) the LNFC to form a gender-balanced review process.
3. Provincial Working Group (PWG), whose representatives are members of the Provincial Court.

This Grievance Redress Mechanism (GRM) reviews and adjudicates upon grievances submitted by any persons, firstly at the village, then the District and finally the Provincial level (if the earlier step could not resolve the grievance) or RMU level. The GOLs RMU, the DWGs and the NTPC can be called in occasionally as technical specialists or witnesses to any grievance hearing.

4.5 Other Agencies and Organizations

4.5.1 Provincial Authorities

Khammouane, Savannakhet, and Bolikhamxay Provinces are represented on Resettlement Committee and in the Resettlement Management Unit. Many aspects of the resettlement implementation require the approval and support of the provincial governments including all land allocation activities for resettlement purposes. Similarly all changes in government service facilities, such as setting up new clinics and schools in the villages also require approval by different departments of the provincial governments. Allocating rights to existing forests to villages requires permission from the provincial government. These approvals will need to be either granted prior to construction commencing, as a fast track approval system or as authority delegated to the RMU, so that delays do not hamper Project implementation. It is important, therefore, that during the resettlement planning and implementation, the RMU work closely with concerned provincial governments and departments to keep them fully informed on progress.

The Provincial Office of technical line ministries will also play a crucial role in the Project Land programs, especially the Provincial Office of Agriculture and Forestry, who will, through the RMU provide technical support and coordination in the rehabilitation of livelihood of those whose productive lands are impacted by the NT 2 Project.

4.5.2 Lao Women's Union (LWU)

The LWU will play an important role in the implementation of the resettlement component of the Project. Representatives of provincial LWU and district level LWU will be staff members of the RMU, and the DWG. In other words, they will be an integral part of the management team that carries out resettlement activities for the Project.

However, the LWU should not be viewed as the only means of addressing gender concerns. As requested by the LWU and the participants of the Gender Workshop of December 2004, women technicians and leaders of relevant district and provincial departments will be involved in all aspects of NTPC work.

4.5.3 Consultants and Contractors

Many of the technical activities concerning relocation, infrastructure and livelihood can be carried out by private contractors and local or international consultants under specific contracts to the NTPC or the RMU. Some of these organizations will have technical capacity, extensive knowledge of local socio-economic conditions and experienced local staff, which will allow them to effectively carry out certain designated components of the program.

Consultants and contractors will provide excellent opportunities for skills and knowledge transfer to build the capacity of the local government. This implies that training (on-the-job) will be an important aspect of contracts. Also, the overall make-up of consultant selection will be gender-balanced to

promote women as role models for professional activities. Some examples of the types of contracts are found below:

1. Studies and surveys such as baseline studies and soil surveys within the identified agricultural land. Most socio-economic and other surveys will be undertaken jointly by NTPC and GOL, although some activities may be sub-contracted to GOL agencies.
2. Construction, including house construction by local/national contractors using the villagers as labourers, electricity installations by qualified contractors, irrigation infrastructure by regional/national contractors and road construction also by local contractors.

4.5.4 International programs

The NT2 Project will look out for establishing partnerships with other international or bilateral programs with a complementary focus and operating in the same areas, such as the UNDP/World Bank/SNV supported 'Governance Reform and Livelihood Strengthening Program, Khammouane Province' (GPARLSP). Their major outputs have been defined as to include:

1. Strengthening provincial governance through improved coordination, re-organisation, improved financial management and widened public awareness.
2. Enabling balanced development of a market economy that includes simplified regulations for businesses and enterprises, strengthening of the Governance Reform and Livelihood Strengthening Program, Khammouane Province' (GPARLSP).
3. Livelihood strengthening through opening of new market opportunities for rural producers, giving particular emphasis to the role of women in market-oriented activities, improved natural resource management, and developing methodologies for a District Development Fund.

Particular issues included in the GPARLSP Program and explicitly set to be carried out jointly with NTPC include mitigating measures for NT2 Project impact and capacity building activities measures for the RMU.

4.5.5 NGOs

NGOs have skills that may assist government organizations in carrying out specific tasks. Such tasks may include developing and implementing agricultural activities, organizing community-based development activities, aspects of the health program and adult education. These activities will not only help to develop village-based organizations and build capacity, but also provide excellent training opportunities for staff from provincial and district agencies. For example, an NGO was tasked to conduct the Social Impact Survey and Livelihood Baseline for Project Land. To strengthen the drive for transparency and public disclosure, NGOs are also invited to attend NTPC's public forum meetings.

5 Public Consultation, Participation, Disclosure (PCPD) And Grievance

5.1 Introduction

Information dissemination, consultation and participation with a wide range of stakeholders are crucial processes for planning and implementation of compensation, resettlement and livelihood restoration programs. Broadly defined, stakeholders include any individual or group affected or believed to be affected by the NT2 Project; and any individual or group that can play a significant role in shaping or affecting the NT2 Project, either positively or negatively, including the host community (IFC 2002). Early consultations and information sharing have helped to manage public expectations concerning the impact of the NT2 Project. Subsequent consultations provide opportunities for the NT2 Project and representatives of people affected by the Project to negotiate compensation packages and eligibility requirements, resettlement assistance, livelihood assistance and the timing of resettlement activities. NT2 Project has organized and facilitated a series of participatory workshops with NT2 Project stakeholders throughout the planning and implementation of its various activities. The purpose of these consultations is summarized as follows:

- Informing the stakeholders about the NT2 Project, its impact and measures to mitigate those impacts
- Provide opportunities for PAHs to voice their concerns and propose alternatives
- Negotiating compensation packages and eligibility for entitlements
- Identifying choices for resettlement sites and timing of relocation
- Agreeing on development initiatives and livelihood restoration programs
- Develop procedures for redressing grievance and resolving disputes
- Develop feedback mechanisms for effective monitoring and evaluation

Those consultations convened by the NT2 Project included Project representatives, relevant government authorities, representative of concerned ‘mass organizations’ and members of the affected communities. Poorer strata of the rural society, female-headed households and other members of vulnerable groups (minorities, elderly people, disabled persons, and youth) have been given particular attention as they may find it difficult to defend their interest in a public forum.

For example, PAHs who are impacted by the NT2 Project but were not included during initial impact assessments and asset registration or believe that they have not been adequately compensated may submit their complaint through the Village District Grievance Committee (DGC).

When cash compensation is necessary, rates for compensation are determined by DWG, based on prevailing local rates (for agricultural products) or replacement cost (for residential structures if NTPC does not build). In the event that the PAH is not satisfied with the compensation proposed, they have an opportunity to submit a complaint. The DGC adjudication may reject some applications or partially approve depending on the situation of each case and the rights of each PAH according to the CA.

The findings of the DGC and PGC are binding on the RMU and NTPC. The Committee maintains a public record showing all claims received and the decisions made, which must be taken within 30 days. The DGC & PGCs cannot award compensation that goes beyond what is established as a matter of practice or what would be outside the limits of the budgets agreed to by the NT2 project and Resettlement Committee. Beyond the DGC, access to the PGC, or the Court is a last resort.

5.2 Approach, objectives and components of Project Land Consultations

5.2.1 Approach and objectives

The objective of the Public Consultation, Participation and Disclosure (PCPD) process is to develop and maintain avenues of communication between the NT2 Project and stakeholders in order to ensure that their views and concerns are incorporated into Project designs and implementation arrangements. The feedback from consultation is an important component of the planning process leading to the formulation of mitigation measures (i.e. alternative livelihood options) and compensation plans for project affected communities.

For Project Land, consultation was carried out in small group discussions with directly impacted households as opposed to village-level consultations as those carried out for the Nakai Plateau and the Xe Bang Fai Downstream areas. This method of consultation was more appropriate to address the needs of the PAHs in Project Land. Thus, in Project Land meetings consisted of smaller groups and were more focused in terms of information dissemination and discussion of compensation.

The NT2 Project's PCPD process carried out for Project Land had the following components:

1. Baseline Study Consultations
2. Village and District-level Recurrent Consultations
3. Consultations on the relocation of Physical and Cultural (Spiritual) Resources (PCR)
4. Setting up a grievance redress mechanism

5.2.2 General

Information on the impacts, entitlements, and compensation options has been, and will continue to be disclosed to the affected people. A Public Information Centre is located in the provincial capital, Thakek. Tools to disseminate information and seek feedback of the PAHs include:

- posters
- maps and satellite photo maps;
- poster size lists of affected households and their affected assets;
- poster size schedules of the actual resettlement (house relocation) tasks;
- town loud speaker broadcasts; and
- a wide range of consultative meetings and workshop (see below)
- poster size Entitlement Matrix;
- poster of the grievance mechanism

The main disclosure and consultation activities and their scheduling are presented in Table 3 below.

	Activity	Timing	Agencies
1	Population census	August 2003	GoL, NTPC
2	Rapid survey of assets and socio-economy	October 2004	NTPC, contractor
3	Construction and operation of Public Information Centre	December 2004	GoL
4	Urban planning consultations, phase 1	January 2005	contractor, GoL
5	Urban planning consultations, phase 2	March 2005	contractor, GoL

6	Baseline Study Phase 2 Consultation > assets registration > socio economic survey	Dec 2004 to March 2005	contractor, NTPC
7	Public Posting of (a) list of PAHs and impacted assets (b) maps of impacts (c) schedule of resettlement activities	May 2005	GoL, NTPC
8	Impacts review and land and fixed assets compensation consultations	May/June 2005	GoL, NTPC
9	Further consultations with borderline PAHs;	June 2005	GoL, NTPC
10	Consultations with existing owners in Resettlement Site	June 2005	GoL, NTPC
11	Occupation and Livelihoods Consultations	June-July 2005	NTPC, GoL
12	House design finalization consultations	June-July 2005	NTPC, GoL
13	Resettlement Site Layout and PAH plot selection (size and location) consultations	June-July 2005	NTPC, GoL
14	Wells and domestic water source	October 2005	NTPC, GoL
15	Outbuildings consultations	October 2005	NTPC, GoL
16	Consultations for drafting of Compensation Agreements	October - December 2005	NTPC, GoL
17	Consultations for compensation with PAHs	Ongoing	NTPC, GOL

Table 3. Main Disclosure and Consultation Activities

5.2.3 Baseline Study Consultations

The baseline study was carried out in 2003 and 2004 to obtain information regarding livelihoods, land and assets both in and outside Project Land of each potentially affected PAH using questionnaire forms, informal discussions and satellite photomaps. The information collected during the consultation has been used to estimate impacts and outline potential mitigation measures. Baseline studies were conducted according to RAP categorization.

Prior to the commencement of baseline/livelihood survey in each village, a meeting was arranged with the family heads in the village to provide a brief description of the NT2 Project and to explain the purpose of the survey. The structure of the survey was then described to the PAH. The PAHs were requested to prepare relevant documentation, e.g. Family Books, land certificates and tax receipts, prior to their survey appointment.

Village authorities, particularly the Village Chief and Deputy Village Chief, were also requested to provide ongoing assistance to the process of arranging survey appointments with each of the PAH. The survey was conducted by two Livelihood Survey Teams, each team consisted of a team leader, an enumerator and at least one representative from the district government. Where required, the government staff assisted in translation from Lao to Makong language during the survey. They also assisted families in identifying their land and assets on the satellite imagery based on their existing knowledge of the local area.

5.2.4 Village and District-level Recurrent Consultations

The development of a compensation and rehabilitation scheme for each group of PAH required the establishment of a feedback process, consisting of explanation, review, modification of proposals and further review by both the affected households, the NTPC and the GOL.

While the NT2 Project explained to each PAH the policy entitlements and the various livelihood restoration options that the Project considers as possible, appropriate and feasible, the PAHs were tasked to review and discuss these options amongst each other and present ideas and preferences.

Thus, village and PAH consultations have been undertaken in five steps:

1. An introductory workshop for Project staff, representatives and the villagers is conducted. This activity is one day training for village-based trainers. This is followed with a one or two day activity of consultations, depending on the size of the LPA and the population to be affected.
2. The establishment or strengthening of village organizations, including the setting up of a Grievance Committee and Village Compensation Committees is carried out.
3. Following participatory reviews of collected data on impacted assets, a draft Compensation and Rehabilitation Scheme is produced and is presented and discussed at either the village level or the Project Land level.
4. Problem analysis is carried out at village level with both men and women. During this activity, data on the NT2 Project impact on household levels are verified and PAH livelihood restoration preferences are identified.
5. The draft version of the preliminary Compensation and Rehabilitation Scheme forms the basis of the final Compensation and Rehabilitation Scheme document for public disclosure and discussion.

While the compensation scheme is developed primarily with the participation of affected villagers, the scheme must be approved by other key stakeholders, such as the NTPC, the DWG, the RMU (Resettlement Management Unit) and the RC (Resettlement Committee). These stakeholders will undertake a combined review of the proposed compensation scheme and options as proposed by villagers. Where possible, a consensus on a compensation scheme is reached and presented to the village for their acceptance or otherwise.

Final consultations will be carried out to ensure that each and every PAH is fully aware and informed about the impacts and their individual compensation and rehabilitation schemes.

5.2.5 Consultations on the relocation of Physical and Cultural Resources (PCR)

PCR consultations were carried out in three steps, namely:

1. Formal PCR survey,
2. Discussions regarding mitigation / relocation of PCR sites under Project Land, and;
3. Establishment of safeguards for PCRs adjacent to Project Land

Formal PCR survey

Formal PCR surveys were conducted in 2004 to cover all sites within the Project impacted area. Potential PCR sites were identified with site visits and verified with previous studies and discussions. Consultants and representatives from various government organizations undertook

consultations with villagers through focus group discussions. These focus group discussions were the primary key in identifying PCR objects and sites.

Discussion on PCR mitigation

The second phase in PCR consultations occurred in November-December 2004 in eight identified villages that have physical and cultural resources within or near their villages under Project Land. Discussions were carried out to identify mitigation measures and/or relocate resources in a manner acceptable to village elders and spiritual leaders as well as the general population. The focus was on practical arrangements involving the participation of villagers (SDP, Vol. 4, Chapter 6, Tab. 6-4 details PCR consultations and responses).

Members of all relevant ethnic groups participated in village level discussions. For example a PCR, the cemetery at Phonphanpek Village, was identified and as construction activities had commenced close by, village elders requested measures to appease the spirits there.

Safeguards for PCR adjacent to Project Land

In the Ethnic Minority Development Plan (EMDP) for Project Land, (SDP, Vol. 4, Chapter 4), measures are outlined for safeguarding PCRs adjacent to Project Land, including demarcation or active preservation measures. In order to identify sites and suitable measures, consultations have been carried out with affected villages and the results have been incorporated into plans allowing the Head Contractor to alert employees working within proximity of PCRs. Villagers are responsible for supervising and monitoring such sites.

5.2.6 Disclosure

Adhering to the Concession Agreement and the World Bank and ADB safeguards and policies, information, documents and reports are to be disclosed and available to the public. This action promotes better understanding and awareness not only to the stakeholders but most importantly to all concerned individuals and answers NTPC's responsibility for public accountability.

As previously discussed consultations have been carried out to inform all PAHs regarding entitlements and losses of land and assets. It is anticipated that changes will occur during project implementation which in turn will modify the number of PAHs affected and the corresponding losses. NTPC will implement an information, education and communications (IEC) strategy to disseminate information in 2007.

5.2.6.1 IEC strategy

To ensure that PAHs are fully aware of their rights to compensation and livelihood assistance, NTPC will conduct an IEC campaign that uses different mediums such as posters, leaflets and meetings to disseminate information regarding the following:

1. The Project Land Program
2. The NT2 project impacts
3. The Entitlement Matrix
4. Compensation strategy
5. Livelihood Strategy
6. The Grievance Redress Mechanism

These activities will be conducted in collaboration with the DWG and RMU.

5.2.6.2 Exit Strategy

The Project Land Program aims to provide all PAHs with their entitlements and provide livelihood assistance until the PAHs are capable of sustaining the livelihood starting from procurement of input to sale of products independently. The program intends to gradually reduce its intensity as pre-project level incomes are attained. Continuous monitoring and evaluation of performance of the PAH will occur to assess sustainability of the activities. The PAH will be provided with ongoing technical advice and training as required.

The Project Land Program aims to phase out and merge with the Downstream Program in 2008 as once the dam is in operation, all Project Land will be considered part of the Downstream Area. At this stage PAHs involved in the Project Land Program will be involved in the Downstream Program and specific issues can be raised through the GRM. By 2008, most, if not all, compensation activities will be completed and livelihood restoration will be focused on technical advice and training without substantial capital input. This strategy is in line with the community development approach of the Downstream Program.

During the implementation of the livelihood restoration program, NTPC staff and consultants will work closely with District Authorities to ensure local government support and follow through. Building the capacity of the local government will enable PAHs to seek advice from local authorities once the Project Land program has phased out.

5.2.7 Grievance Redress Mechanism (GRM)

The GRM reviews and adjudicates upon grievances submitted by any individual, firstly at the village, then at the district and finally at the provincial level, if each earlier step could not resolve the grievance. The GOL's RMU, the DWGs and the NTPC will provide technical specialists or witnesses to any grievance hearing.

The findings of the DGC and PGC are considered binding for the RMU and RO. The Committee must maintain a public record showing all claims received and the decisions made, which must be taken within 30 days. The DGC & PGCs cannot award compensation that goes beyond what is established as a matter of practice or what would be outside the limits of the budgets agreed to by the NT2 Project and Resettlement Committee. Beyond the DGC, access to the PGC or the Provincial Court is a last resort (for more details on this process SDP, Vol. 1, Chapter 6, Section 6-7, and Vol. 1, Chapter 8, Section

The basic steps to lodging grievances are as follows:

Step 1. Dissatisfied PAH:

The dissatisfied PAH prepares a Grievance Application to the VGC (Village Grievance Committee).

Step 2. VGC (Village Grievance Committee):

VGC receives the application and should complete the investigation within 15 days of receipt. After 15 days the PAH will meet with the VGC to be advised of the outcome. If the PAH is satisfied with the response the issue is closed, if not the issue will be transferred to the next level for further investigation.

Step 3. DGC (District Grievance Committee):

VGC sends PAH application to DGC, DGC collaborates with PL/NTPC and RMU for another 15 days of investigation after receipt. After 15 days DGC, PL/NTPC and RMU informs PAH of the outcome of the investigation and the decisions made. If the PAH is satisfied the issue is closed, if the arbitration is unsatisfactory to the PAH then the issue will be transferred to the next level.

Step 4. District People's Court & RC (Provincial Governor/ Chairman of the Resettlement Committee).

DWG will send the case file to the District People's Court & RC to investigate and make a decision. If the outcome still doesn't satisfy the PAH it will be handed over to the final level.

Step 5. Provincial Court

This is the last level of investigation. A Decision made by this court will be final and binding.

Most grievances are settled by step 3.

5.3 Special consideration of vulnerable groups

Vulnerable groups in this document are understood as people who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by resettlement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits.

Supplemental livelihood options have been understood as contributing to the alleviation of poverty, which is still widespread in all the villages affected by the NT2 Project. In recent years there has been growing acceptance in development practice that poverty reduction requires opportunities for the poor and organizations working on their behalf. It has been recognized that poverty is a complex and diverse phenomenon with quantitative (e.g. income, life expectancy) as well as qualitative (social capital, empowerment, ability and opportunity to exert influence on political and economic processes, etc.) components.

5.3.1 Gender action planning

In most countries women comprise a disproportionately large number of the poor (ADB, 2001; The World Bank, 2003). Gender discrimination limits women's access to resources, opportunities and public services necessary to improve the standard of living for themselves and their families. As a result, women are often the first to suffer when resettlement is planned or executed badly. Women tend to rely more heavily than men do on informal support networks, such as the help of friends, neighbors, or relatives for child care for example. Women with children also have less physical mobility to travel to find ways of earning a livelihood. For these reasons, efforts to maintain continuity of social ties and its intricacies affected by the NT2 Project - whether through the physical design of new sites, measures to prevent the disintegration of the community, or the provision of specialized social services at those sites - are of great importance.

A Gender Assessment revealed that within the NT2 Project there is evidence for varying degrees of positive and negative gender impacts. Key concerns focus largely on gender division of household labour and responsibility for food and livelihood security (farming, fishing, animal raising, foraging and hunting), health and social security. Therefore, gender impacts and gender-sensitive actions have been considered by the field survey team and incorporated directly into the RAP as mainstreamed gender actions. Compensation entitlements are issued in the name of both spouses.

New economic opportunities brought about by the NT2 Project's livelihood support program, improved road access and other development openings introduces risks such as a loss of status for women, particularly those from ethnic minorities. The following strategies have been adopted to ensure that gender issues are addressed:

1. The use of a CLO (Community Liaison Officer) will enable the project to better understand the particular situation and needs of Makong.
2. Project monitoring and real time evaluation should disaggregate data gathered by gender and be reported on in a similar fashion.
3. The livelihood restoration development process should ensure that women's perspectives are given equal weight in decision making and that women have the opportunity to fully engage in decision making.
4. Household livelihood restoration measures must be agreed upon by both the male and female heads of household.
5. Households with a single head, male or female, are expected to be particularly vulnerable because of reduced household labour availability. The Project should place particular emphasis on these households through establishing a 'vulnerable households' listing that detail those facing the greatest difficulties.

5.3.2 Ethnic minority development planning

It was acknowledged that ethnic minorities in the context of Lao society are a vulnerable group and that the planning process addresses this in the various programs and mitigation measures. It was also recognized that some ethnic minorities and communities are particularly vulnerable, in terms of livelihoods, economic well-being and power relations, and that additional measures are required. Measures adopted took into consideration the differences and inequalities between ethnic minorities/communities and how these may have adverse impacts on the more vulnerable groups unless additional measures are taken.

About 75% of the local population for Project Land are from various minority groups. Following the World Bank and ADB policy guidelines, groups with a distinct social and cultural identity from the dominant society may be classed as vulnerable or disadvantaged in the context of the development processes. Hence, the RAP emphasizes the necessity of identifying specific needs and aspirations through prior consultation in order to create conditions for participatory planning, implementation and monitoring, minimizing potentially adverse effects and encouraging developments that will lead to economic and social improvements. Consequently, relevant material and recommendations in the Ethnic Minority Development Plan (EMDP) have been incorporated fully into the RAP and mitigation plans. Note however, that while the majority of local people may be from ethnic minority origins, in the project affected areas, they are in fact the majority and so while they can remain vulnerable, some aspects of resettlement, such as preparation of the PAH for resettlement in "foreign" territory do not need extensive considerations since the few PAHs who did physically move, relocated within the same ethnic group.

6 Compensation, income and livelihood restoration

6.1 General principles of compensation and livelihood restoration

Every household or each community that utilizes or owns land or other assets or seek livelihood from any area defined for Project Land at the time that the Baseline Study Phase 2 was undertaken are considered eligible for compensation.

Ownership can be defined as either formal or informal. There are no formal land titles for land or assets in the project area though ownership is officially recognized in Lao PDR by the registration of land and assets for the purposes of tax. In some instances, impacted land and assets are not allocated to a particular PAH, but to members of a village or community. This is often the case for forests, grazing lands and fishing areas, which are considered community rather than private assets. In these cases the village is the eligible affected entity.

Activities aimed at capacity-building should attempt to strike a balance between capacity building of local government agencies (District-level) and community-based, local formal and informal institutions and leaders, with particular emphasis on PAHs, and amongst them, on women, the poor and other disadvantaged groups. Livelihood restoration and other development are designed to be carried out through District and Village Resettlement/Development Committees, which, with their personnel composition, mirrors the formal Party structure. In addition to those Committees, attention should be paid in future activities to the encouragement and strengthening of informal, self-help community-based PAH initiatives.

The underlying principle of the NT2 Project's Social program is that lost income is fully compensated. As a general rule, there are three main types of possible compensation:

1. Payment of cash compensation for lost production, income or fixed assets; or
2. Compensation by way of direct replacement, and/or
3. Rehabilitation or income restoration.

Compensation schemes have been developed based on entitlements as per the CA Entitlement Matrix. Table 2 below, based on the CA Entitlement Matrix, lists the loss of land, assets and livelihoods that is eligible for compensation

1. Land (permanent/ temporary loss)	<ul style="list-style-type: none"> • Agricultural land • Business land • Residential land (home lot)
2. Houses and other fixed structures	<ul style="list-style-type: none"> • Houses • Farm buildings (e.g. rice huts, rice barns, storage facilities) • Other buildings (shops)
3. Crops, trees and other productive assets	<ul style="list-style-type: none"> • Fruit trees • Timber trees • Fish ponds • Garden crops • Field crops
4. Other household income sources	<ul style="list-style-type: none"> • Agricultural wage labour • Non-agricultural wage labour
5. Community property structures	<ul style="list-style-type: none"> • Irrigation channels • Water sources

	<ul style="list-style-type: none"> • Schools, clinics, government buildings • Electricity • Roads, tracks and bridges • Town (planning)
6. Community property resources	<ul style="list-style-type: none"> • NTFP areas • Firewood and other wood product gathering areas • Fish and other aquatic products
7. Allowances and transitional measures	<ul style="list-style-type: none"> • Disturbance allowance • Transport allowance • Rental allowance • Business transition allowance • Transitional food/income assistance • Other special assistance • Grievance entitlements

Table 4. Asset type and classification

Source: CA Entitlement Matrix for People affected by NT2 Project Construction Activities

Compensation entitlements are reviewed with each PAH for verification and finalization. Compensation is based on three main factors:

1. Significance of impact:

Cash compensation is provided for PAHs who are not significantly affected by the project. This applies to PAHs whose livelihoods are less than 10%¹ affected by the project.

Instances where PAHs are significantly impacted (e.g. loss of more than 10 % of the families land and/or livelihood), direct land replacement or development of alternative livelihoods is promoted.

2. Requirements of PAHs:

Compensation type provided also depends on the concerns and proposals of the PAHs. For example, PAHs impacted greater than 10% can request for final cash compensation. The CA requires financial planning assistance be provided by NTPC. Such a request requires the approval of the DWG and RMU. Some vulnerable groups such as the elderly or widowed who cannot take up the livelihood options may also opt for final cash compensation. Also PAHs who would like to purchase land or assets elsewhere may also opt for final cash compensation. These PAHs are required to present business plans for approval to ensure responsible financial investments.

3. Legal/physical barrier to replacement:

In cases where there is a legal or physical barrier to replacement, rehabilitation or relocation of land or assets or alternative income producing opportunities, cash compensation may be considered as the remaining viable option for compensation. The DWG and RMU will determine if this option is applicable and if the PAH is capable of properly administering the cash compensation properly.

¹ Note that for ADB the threshold figure is 10% while for WB it is 25%.

6.1.1 Compensation entitlement

As described above, entitlements depend on particular aspects that classify households or the community as eligible for compensation. The above activities delineated compensation into 4 main classifications:

1. Project Affected Households (PAH)

PAHs are divided into two main classes:

i. PAH impact of less than 10%:

Household income is not significantly affected. Productive (cash and imputed income generating) land assets are impacted at a value less than 10% of the total amount.

ii. PAH impact of more than 10%:

PAHs whose income and assets are significantly affected by the activities of NT2. Productive (cash and imputed income generating) land assets are impacted at a value more than 10% of the total amount.

Within these classes are special groups such as those classified as vulnerable from the baseline survey. Compensation provided requires both spouses to sign the compensation forms to ensure transparency and disclosure.

2. Infrastructure replacement and improvement

Infrastructure replacement is applied for community structures such as schools and water points where NTPC replaces the affected structure.

Infrastructure improvement is related to community level improvements such as bore hole drilling and hand pump provision for health and sanitation purposes placed throughout the village.

3. Community Resources

Resources that are not assigned or owned by a PAH but are utilized by a number of individuals from a village are classified as a community resource. For example, fishing areas in waterways are considered as a community resource and compensation must be provided to the impacted group. A village fund is allocated for each affected community and the utilization of these funds are determined by the village in consultation with NTPC and the District.

4. Allowances and transitional measures

As stipulated in the CA, allowances and transitional assistance will be provided on a case to case basis as the need arises. For example, interim compensation could be provided to PAHs who have not been severely impacted, or those who are considered affected less than 10% if final cash compensation has not been provided at the time of land acquisition. In situations such as these allowances and transitional measures can apply.

6.2 PAH impacted less than 10%

In cases where less than 10% of a PAH's productive (cash and imputed income generating) land assets are impacted, cash compensation is applicable. The amount payable will be based on:

1. the market value of that lost land, as assessed at the actual time of land acquisition; or

2. the cash equivalent of seven (7) years gross production from the lost land; or
3. the actual replacement cost of the land as assessed at the actual time of payment of compensation.

Compensation is provided under the following categories:

1. Interim compensation
It has been decided that due to delays in the availability of baseline data (in relation to pre FC start date of construction) and asset appraisal values in RAP 3, PAHs will receive interim compensation until final compensation is provided for.
2. Final cash compensation
Final cash compensation is the one-time payment for loss of fixed assets, such as land or common property resources.

The flowchart (fig 6) depicts the process involved and the outcomes of each step as explained in each section below.

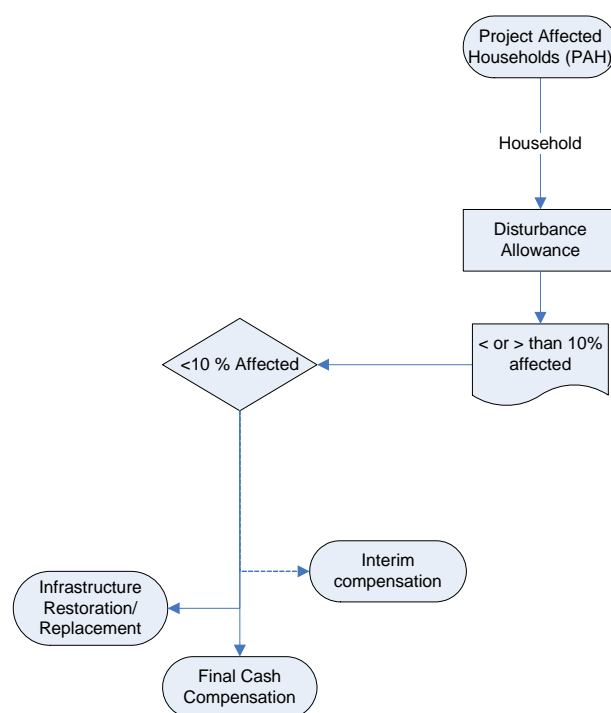


Figure 5. Compensation flowchart for PAHs affected <10%

6.3 PAH impacted More than 10%

In cases where more than 10% of a PAH's productive (cash and imputed income generating) land assets are impacted, the PAHs are eligible for a multitude of compensation types to restore pre-project level income and assets where available. It is anticipated that despite the availability of numerous livelihood restoration measures offered to the PAHs, there will be some who will request cash compensation.

PAHs who wish to obtain final cash compensation as opposed to livelihood restoration measures, will be assisted in developing business plans for the cash compensations that they opt to receive. The Project Land office, together with RMU and DWG will provide expert assistance so that the cash compensation received will be used for appropriate productive enterprises.

If the PAH cannot prove to DWG's satisfaction that they will utilize the cash for livelihood, then they will be required to continue with livelihood restoration measures to restore pre-project level income.

During the initial implementation stage of the Project Land Program PAHs are provided with the opportunity to be involved in livelihood restoration measures as endorsers and pioneers. This will encourage other PAHs to be involved as examples of success will be available.

The flowchart (fig 7) depicts the process involved and the outcomes of each step as explained in each section below.

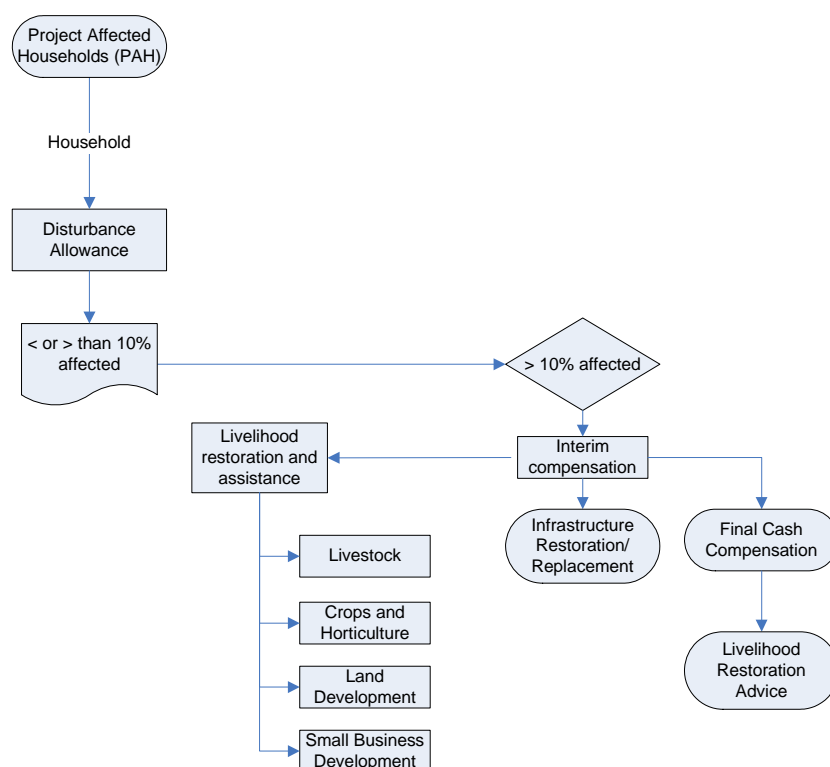


Figure 6. Compensation flowchart for PAHs affected >10% of their income

6.3.1 Interim and final compensation

Compensation is provided under the following categories:

1. Interim compensation
Interim compensation is based on production losses and is paid on an annual basis until household income has reached pre-Project level. Production losses are based on an approved estimate submitted by the villagers and verified by the Village Head and the District Working Group. Value of interim compensation paid is not deducted from capital investment made for livelihood programme development.
2. Final compensation
Final compensation is the one-time payment for loss of fixed assets, such as land or the equivalent of 7 years gross production of the land.

6.3.2 Land

Significantly affected farmers are in principle entitled to replacement land; of the same type, with productivity equal or greater than that of the lost land.

Though it would provide optimum benefits for the project and the PAHs if the 'Land for Land' scheme were implemented for the relevant PAHs, PAHs in Project Land who have lost part, or all of their land cannot be guaranteed to receive new land.

To address the loss of land, and in turn livelihood, two approaches are being utilized (consistent with CA):

1. New land development
Unproductive land is identified and negotiation occurs between NTPC and the land owner. In exchange for land clearing and UXO clearance of the entire plot, NTPC receives 50% of the total land area to redistribute to PAHs. It is anticipated that such land will be provided to PAHs who reside within a close proximity to the newly developed land.
As this new land is not suitable for rice cultivation, alternative livelihood activities are identified. These land parcels are developed into highly productive perennial gardens.

PAHs will be provided with infrastructural improvements and agricultural development assistance to develop the land. Livelihood assistance is provided to the PAH under the crops and horticulture livelihood strategy of the project.

2. Reclamation of land

Areas of land were acquired by NTPC for use as sources of material (borrow pits) or soil disposal areas to support construction of the NT2 facility. These lands are classified as Category 1 land (for exclusive use of NTPC) and were acquired in a similar way as the land on which NT2 facilities are to be built (e.g. channel, transmission line, etc.). NTPC is entitled to use these areas for the entire concession period.

As per the construction contract, the HC has been granted the exclusive use of these areas until construction is complete which is at the end of 2009.

Initial assessments have identified potential uses for around 85 Ha of the area in Gnommalath for livelihood restoration activities. Borrow pits have potential as fish ponds whereas spoil areas can be converted into upland gardens. A detailed assessment will be carried out once the HC has completed the work in the area. NTPC will negotiate with the HC regarding the earlier return of land to be utilized for livelihood activities.

Compensations for other fixed structures, such as rice huts, storage room, pigpens, etc. are determined on a case by case basis as this is dependent on size, roofing, wall, and flooring materials previously used.

6.3.3 Crops, trees, fish ponds and other productive assets

Compensation is provided for crops not yet harvested at the time of relocation based on gross harvest income. Standing crops are compensated at full replacement cost regardless of maturity of crops. Compensations for trees are based on the type, age and productivity and the cost of production and rearing of trees. With respect to fish ponds, a lump sum cash payment will be made equivalent to 7 years lost productivity of the fish pond as part of the final payment.

6.3.4 Project Land Livelihood Restoration Strategy

6.3.4.1 Introduction

The impacts of construction activities on the livelihood of the local population have to be seen in different perspectives and time frames.

PAHs who live on the Nakai Plateau (outside of the Nakai Reservoir inundation area) as well as people in Gnommalath, Mahaxai, Xe Bang Fai, Xaibouly, and Kaysone Phomvihane Districts who are significantly affected by construction activities, including road and transmission line construction are considered as PAHs of Project Land.

The Project Land Livelihood Restoration Strategy is mainly concerned with PAHs whose livelihoods are severely impacted by construction activities. Within numerous Project Land areas, basic sources of food supply and income have been irreversibly damaged by construction activities.

In general, primary income of local people in the affected areas is derived from land-based agriculture, NTFPs, livestock and fishery yet rice production still plays a key role with regard to food security. It is anticipated that the affected population will now be increasingly exposed to market logic and rules, and do not have the skills and knowledge to take advantage of better income opportunities. NTPC will provide guidance and training to ensure that PAHs are well equipped to take advantage of the new opportunities, many of which will be non land based.

It is important to have intensive training and supervision programs for the various options that the project provides to the PAHs. It is logical that a change of land use and production systems from low value commodities to higher value commodities like fruits, vegetables or ornamentals requires a proportional input in training and supervision as well as new skills in management and organization.

6.3.4.2 Development of irrigation – a misconception

The development of irrigation in the Gnommalath Plain through the use of water from the future Downstream Channel described in the SDP as a key element for agricultural development and livelihood restoration has essentially become an obsolete option due to the following:

- 1) The Downstream channel as currently designed is not a multi-purpose channel and is not suitable for irrigation due to its hydraulic properties (elevation in relation to surrounding land) and the fact that releases cannot be guaranteed to be timed with agricultural requirements in mind.
- 2) Water in the Downstream Channel will only be available after COD in December 2009. The water quality in the Downstream Channel will most likely be unsuitable for domestic or agricultural use for several years after 2009.

Additionally, development of irrigation for the sole purpose of rice production during the dry season on sandy soils with medium fertility is unlikely to provide yield levels which could provide a substantial income improvement for the local population.

6.3.4.3 Farmers' preferences

In order to create a successful livelihood strategy, a participatory approach was utilized. Involving the farmers in deciding on the types of viable livelihood options encourages program ownership which in turn promotes success.

Initial consultations were conducted with the full list of PAHs according to the baseline survey. When asked about their priorities for livelihood restoration measures, a total of 412 households of significantly impacted PAH from 16 villages in Gnommalath and Mahaxai District, representing 93 percent of the total number of affected households in Project Land, gave highest priority to rice paddies and the raising of large animals, in particular, cattle. Data shows that they also showed preference for vegetable gardens, small livestock (pigs, goats, poultry), fish farming and mushroom growing as shown in the table 3 below.

Livelihood options chosen		
1 st choice	2 nd choice	3 rd choice
Rice paddy	Large livestock	Vegetable garden

Table 5. PAH priorities for supplemental livelihood options (Gnommalath and Mahaxai District)

There are considerable variations among PAHs with respect to their preferred options; details are available in RAP 3. In addition, the request by the research team to identify at least three most favored choices provided some valuable insight into farmer preferences.

6.3.4.4 Integrated strategy for livelihood restoration

Livelihood restoration activities are mainly aimed at assisting PAHs to restore secure living conditions that are comparable or better than pre-project conditions. Compensation payments in cash for lost assets and production may offset the losses, but livelihood restoration activities provide new opportunities enabling the PAH to increase income and living standards.

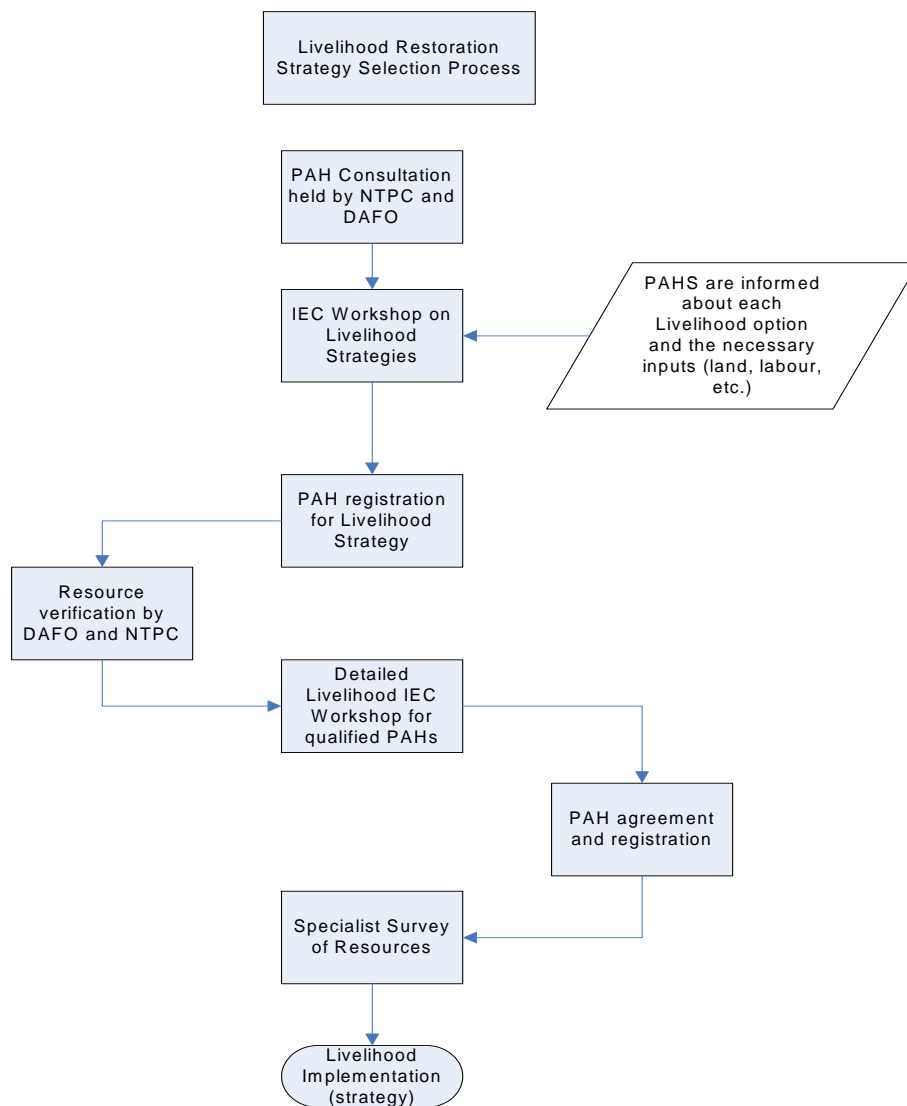
The expected loss of productive land and income on Project Land Areas due to construction activities require an immediate response regarding livelihood restoration. Out of the group of severely impacted

PAHs around 30 % have lost more than 90 % of their income. They are considered to constitute a priority group for livelihood restoration measures.

Irrigation development, as discussed earlier, will not provide new or better income opportunities for those PAHs who have lost more than 90 % of their land and other income sources. At present, the implementation strategy is to apply an integrated approach for livelihood restoration and general agricultural development.

(a) PAH selection criteria for livelihood activities

The flowchart for selection criteria for livelihood activities is as follows:



This process allows for the identification of labour needs and capacity of the PAH to implement the livelihood restoration activity chosen. As each option requires certain inputs, variable land allocation and labour force, the PAHs are provided with a variety of activities and decides based on the requirements for each activity and his/her level of interest in the activity.

The selection criteria are utilized for all livelihood activities though PAHs are provided the opportunity to choose more than one activity to be involved in should they have the capacity to do so.

6.3.4.5 Rice production improvement (wet season)

The importance of rice production for the local population is evident and well documented. Improvements through a range of interventions for PAHs who lost substantial parts of their rice land in order to recover their lost production to a maximum degree have been included in the livelihood replacement strategy. During the dry season the soil in the Gnommalath Plain is well suited for field crops, vegetables and forage crops. The residual effect of nutrients in the topsoil will be beneficial for the following wet season production of rice.

Goals for the rice improvement strategy are closely related to other livelihood restoration activities, and can be summarized as follows:

- a) overall improvement of food security for all households and communities;
- b) promotion of crop diversification during the dry season;
- c) promotion of land use for forage production in the dry season; and,
- d) Livestock improvement.

Rice improvement is achieved by providing the following:

1. Improved rice varieties
Improved rice varieties are provided to the PAHs for planting. These varieties perform better than local variety
2. New planting techniques
Technology provides better planting techniques and the knowledge is given to the PAHs to increase their yield.
3. Fertilizer
The PAHs are provided with chemical and organic fertilizer
4. Pest control
Pests have been identified as a serious problem for wet season rice production and NTPC will provide training and materials to protect and reduce the incidence of losses. The main cause of losses is gall midge, an insect that can destroy crops on a large scale. Chemical means of pest control will be avoided and focus will be placed on natural means.
5. Training
Training will be provided for all PAHs involved in rice production to increase their yield for their rice paddies for all the above items.

Improvement of the present rice production system is a key element for further changes in the land-based production system. Rice production has to be increased mainly during the wet season by improvements of varieties, cultivation methods and post-harvest operations.

Rice production during the dry season is mainly practiced due to the lack of other opportunities, lack of knowledge on alternatives and/or the need to grow rice to substitute crop damages during the wet

season. An increase in wet season rice production allows for other options to be considered as alternative crops during the dry season.

Improvements in rice production is not considered as the main means of livelihood restoration and improvement, but as a key element in providing opportunity and confidence building by improving food security.



Rice fields in the Gnommalath Plain (Photo: H.-D.B)

6.3.4.6 Cash Crops and Horticulture

Seasonal and Perennial Horticulture production has been identified as one strategy to replace lost production areas along river banks and other locations permanently used for project infrastructure.

Two types of cash crops and horticulture production methods are to be implemented:

1. The cultivation of perennial gardens with a variety of fruit trees combined with annual vegetables under non-irrigated conditions or partially irrigated conditions, and
2. The cultivation of seasonal gardens during the dry season in former rice fields using existing irrigation facilities and promoting the use of more efficient irrigation methodologies. This production can play a bigger role in providing more income for PAHs which lost a substantial portion of their productive land.

The production of bigger volumes and better quality fruit and vegetables will require additional efforts for market development beyond the present local market structure.

The following are the strategies that are provided for the cash crop and horticulture livelihood restoration.

Mushroom production

The mushroom species, *Pleurotus ostreatus* and *P. sajor-caju* are naturally growing species of mushroom in the Mekong region. It is an edible, fast growing fungus that is resilient and has high market value. These species of mushroom are usually harvested from the forest for personal consumption. The potential of growing and selling mushrooms has been identified and is one of the livelihood strategies implemented by the project.

NTPC, together with the DWG and DAFO assist the PAHs in producing mushrooms. This strategy will be carried out as follows:

The PAHs are provided with a mushroom house, inputs and training by NTPC. Continuous technical knowledge and marketing training will be provided for the PAHs to promote sustainable livelihood as after one cycle of implementation PAHs are projected to provide their own inputs from profits.

This strategy provides an opportunity for other PAHs to gain an understanding of how to cultivate mushrooms in a controlled setting and the mechanisms involved in the process, from inception to sale. It also provides information to all PAHs involved on the costs and required labour input and effort required to maintain this activity.

PAHs will also be trained in each step in the life cycle of mushrooms as the initial stages of producing spawn is a necessary step in ensuring local availability of inputs.

Vegetable production

PAHs who decide to produce vegetables will be provided with assistance from NTPC, DWG and DAFO. This assistance will be based on the recommended crops from the horticultural market survey. This strategy will be carried out as follows:

The PAHs are provided with fencing material, inputs and training by NTPC. Vegetable gardens are prepared for cultivation either in upland gardens or in rice paddies during the dry season. Seeds and fertilizer are provided to the PAH to plant within the garden.

Continuous technical and marketing training will be provided for the PAHs to promote sustainable livelihood as after one cycle of implementation PAHs will be required to provide their own inputs from profits.

This strategy provides an opportunity for other PAHs to gain an understanding of how to cultivate vegetable crops and the mechanisms involved in the process, from planting to sale.

Cash Crops

NTPC, together with the DWG and DAFO provide assistance and inputs to PAHs that opt to produce cash crops such as cassava, maize and peanuts during the dry season. This will be carried out as follows:

The PAHs are provided with fencing material, inputs and training by NTPC. Continuous technical knowledge and marketing training will be provided for the PAHs to promote sustainable livelihood as after one cycle of implementation PAHs will be required to provide their own inputs from profits.

Assistance with setting up upland gardens and dry season rice paddy cultivation is given to the PAH. Seedlings, fencing and fertilizer are provided and PAHs are given training from the onset of the activity to ensure program follow through from production to sale.

Non timber forest product restoration

The various construction activities at the Power House, Switch Yard, Regulating Pond, Regulating Dam, Downstream Channel and Transmission Line have resulted in destruction of forest areas and natural resources, which were previously used by the local population for activities related to timber and non-timber forest products (NTFPs). As NTFPs play an important role in rural communities as a food and income source, the destruction of forest areas has had a direct impact on the livelihood situation of the local communities. A major source of food and a substantial share of family income is derived from NTFPs, which are still harvested in a traditional way, and which are limited to a specific range of products.

Perennial crops for which there is an existing market, such as *Jatropha curcas* known in Laos as ‘Mak Nhiau’ will be introduced. This perennial crop will be well-suited for the re-vegetation of spoil areas, channel embankments and upland gardens. *Jatropha* is also well known as the oil extracted from its seeds are used for making biodiesel fuel.

The farmers will be encouraged to maintain a mixed plantation of *Jatropha*, a mixture of Eagle wood/fruit trees, pigeon pea for wax (strick lack), pineapple, rice and other vegetable in the low lying central part of the land and rattan, berberlin, eagle wood and other natural trees on higher land under natural forest.

The NTFP strategy is implemented as follows:

NTPC will provide fencing, and inputs, such as *Jatropha* seedlings and fruit tree seedlings, for PAHs and provide assistance in preparing the soil for cultivation, at least for the first year, providing the PAH with capital for the succeeding year.

Continuous technical training will be provided for the PAHs to promote sustainable livelihood and follow through marketing techniques. This strategy provides an opportunity for other PAHs to gain an understanding of how to grow mixed crops and its benefits.

6.3.4.7 Livestock production improvement

Livestock plays an important role in the household economy either as cattle, small livestock or fish. Traditionally, livestock is perceived as an asset. Raising livestock is not labour intensive and local species are resilient to disease. Crops have set seasons and harvest periods whereas livestock can be kept for longer periods of time and can be sold at times of need and emergency. Therefore, enhancing the present system is the key strategy in livestock production improvement which will require a substantial learning process, especially with regards to care of livestock. Successful livestock production and income generation is closely related to the conditions under which livestock is raised with regards to shelter, feeding and veterinary services.

Assistance for the increase of the production of small livestock and fish is an important substitute for natural resources lost or damaged due to the NT2 Project, as well as a way to provide additional food

security and cash income. For PAHs who have lost a major share of their land, an expansion of small livestock production under improved conditions can substantially compensate for lost income.

Livestock

Sale of livestock account for more than 50 percent of cash income in many upland areas and over 95 percent of livestock is produced by smallholders, with only a small number of commercial pig and poultry enterprises near major cities. Thus, as the survey on PAH priorities for livelihood alternative shows, PAHs primary interest rests with large animals.

The potential for expansion is related to the availability of sufficient grassland and grazing areas, which will be difficult to identify or to develop in the area. Non-land dependent livestock like pigs are encouraged due to the unavailability of land. For all types of animals raised, emphasis will be focused on improvements of raising conditions, feeding, hygiene, veterinary service and market conditions.

The raising of small livestock like pigs, and the improvement of feeding conditions can be combined with the enhancement of upland gardens by including cassava, corn and sweet potatoes into the cropping pattern. The best economic benefits with this kind of livestock can only be obtained, if farmers are able to produce their own feed material. With diminishing grazing lands for large animal's alternative ways of feeding, such as the cut and carry system, is promoted as a means to produce fodder crops in gardens close to the animal pen.

As raising small livestock is the responsibility of the rural women, who have to carry a substantial workload already, attention should be given to the gender aspects of related activities. Given the recent spread of the bird-flu epidemic, traditional methods of chicken raising must change. The combined raising of ducks and chicken must be stopped, as ducks are the main transmitters of H5N1.

The livestock raising strategy is implemented as follows:

The PAHs are provided with cattle pens, inputs for forage material and training by NTPC. For PAHs who raise cows and other types of larger livestock, pens are constructed. For pig raising, PAHs are provided with piglets and grass roofing for existing pens.

Forage type plant seed material (i.e. stylos grass, sorghum) is provided to the PAH for planting. PAHs are also provided with rice bran and feed for pigs.

Continuous technical and marketing training will be provided for the PAHs to promote sustainable livelihood as after one cycle of implementation PAHs will be required to provide their own inputs from profits.

This strategy provides an opportunity for other PAHs to gain an understanding of how to cultivate forage material and maintain livestock.

The cut and carry system will also promote livestock to be confined to the PAHs home plot as they are fed within the pens and do not have the need to graze far from home.

Frog raising

In the past frogs have been caught from the wild at the beginning of the rainy season for personal consumption. From past studies, market analyses and community perception, it appears that there is a

market for frogs (Ranidae) and frog raising. The project has focused on the potential market for frog raising and will provide the opportunity for interested PAHs to raise frogs for sale and consumption.

The frog raising strategy is implemented as follows:

NTPC provides frog tanks, juvenile frogs and feed. NTPC supports the PAH through training and advice of a frog consultant until the frogs are sold. A limited number of PAHs are trained by the consultant for worm raising. Breeding training to produce tadpoles is provided to a limited number of PAHs complete the production cycle at the local level to ensure local availability of juvenile frogs.

The first cycle of juvenile frogs will be raised by the selected PAHs and bought by NTPC to distribute to involved PAHs to begin the market cycle.

Continuous technical knowledge and marketing training will be provided for the PAHs to promote sustainable livelihood as after one year of implementation PAHs are required to provide their own inputs from profits.

This strategy provides an opportunity for other PAHs to gain an understanding of how to maintain frog pens and raise frogs for consumption and sale.

Aquaculture

Aquatic resources are an integral component of most upland Lao people's livelihoods providing food, employment and income, and thus play a dominant role in many poverty reduction programs. The wild fish population is under serious threat due to over-fishing, and the flow regime change in the Xe Bang Fai River after COD together with the subsequent change of water quality will have an additional impact on the fishery. The demand for raised fish will increase substantially over the next few years. This provides a good opportunity for PAHs to be involved in aquaculture and take advantage of the demand market.

NT2 Project affected farmers are supported in the establishment of fish ponds as well as raising fish in rice fields.

Initially existing ponds will be improved by:

1. Emptying existing ponds and extracting all fish to ensure that predatory species have been removed,
2. Disinfecting the ponds by liming; and,
3. Providing fencing material to protect the pond from predators.

The project will also support PAHs involved in the aquaculture strategy to dig new ponds. All PAHs involved will be provided with training, fingerlings and food.

The aquaculture strategy is implemented as follows:

Five different types of fish will be introduced. *Clarias gariepinus* (African catfish), *Hypophthalmichthys molitrix* (Silver carp), *Aristichthys nobilis* (Bighead carp), *Ctenopharyngodon idellus* (Grass carp) and Tilapia. Also two additional systems of production (Breeding and fingerling raising) will be carried out. Breeding aims to supply fingerlings to farmers for raising and the latter raises fingerlings for fish meat.

NTPC will provide fingerlings and inputs for PAHs until they sell fish, at least for the first cycle, providing the PAH with capital for the succeeding cycle.

Continuous technical and marketing training will be provided for the PAHs to promote sustainable livelihood and disease free fish stock.

6.3.4.8 Non-agriculture based skills and small scale business

Due to the limited land availability, non-agricultural livelihood restoration options are explored and also developed.

Construction of Nam Theun 2 hydroelectric facilities will require a substantial number of skilled and unskilled labourers. This demand for labour will diminish prior to COD as major civil works are completed, with very little demand for labour during the operational phase. During the construction phase it is important for local people in general and PAHs in particular to prepare for the post-construction period by seeking means to maintain their non-agricultural income through other employment or investment in small scale businesses.

Non-formal training in non-agricultural based trades provides necessary skills and knowledge to help in this process, and additional support mechanisms for the initial start-up of household businesses can be implemented. The actual conditions in affected communities are faced with additional challenges related to ethnicity and educational background. Around 75% of the PAHs are of the Makong ethnic group. The literacy rate, especially among the female Makong population is low and presents a serious constraint to their access to formal or education. The operation of small-scale businesses is traditionally the domain of the female members of a household.

Non-agricultural based options

In line with PAH priorities, non-agricultural livelihood options will focus on training for:

1. small-scale business and trade,
2. handicraft (weaving, basket making, etc.) and,
3. trade skills development (construction, plumber, electrician, carpenter, mechanic, beautician, etc.).

The Khammouane Vocational Centre in Thakhek is a well equipped and staffed training center for craft skills where PAHs could obtain skills training such as sewing, hairdressing, basket weaving and food preparation among others.

NTPC will provide repeated training and the necessary equipment for starting new businesses. This activity is focused more for women or disadvantaged PAHs unable to work the field the other options that have been provided by the general livelihood strategy.

6.3.4.9 Financial Analysis

Based on a number of factors, the projected income for the above activities are found in table 6 below.

Activities		Cost production Kip	Yield	Unit sale price	Total gross income LAK	Net income LAK
Fish	Cat fish 2500pcs	2 690 000	3864kg	16 000	6182400	2 910 000 (x2)
	Carp 1500pcs	1 975 000	2625kg	16 000	4200000	2 225000
Frog 2500 pcs		2 055 000	134kg+sm	12000+	4 612 800	2 557 800 (x2)
Forage		1575000	4 calves	1500000	6000000	4 425000:2
Pig 2 animals		1 900 000	10pig1+2A	120000+	3600 000	1 700 000
Mushroom 1500 bags		471 500	231 kg	15 000	3 465 000	2 993 500 (x2)
Rice		2600000	2500kg	2000	5 000000	2 400 000*
Cash crops in dry season /Vegetable		170 000	280kg	4667	1 200 000	1 030 000
Land Development		188 000	mixed	mixed	3 262 000	3 074 000
Mixed garden /NTFP/jatrofa		695 500	mixed	mixed	8 684 000	7 988 500 (max in year 5)
Vocational training		2 427 000	mixed	mixed	4 250 000	1 873 000

Table 6. Livelihood Activity Financial Projections

It is projected that taking into account each PAHs income lost and the number of activities they are involved in, the PAHs are able to maintain pre-project level income, and in some cases, exceed this.

6.3.4.10 Final Cash Compensation

As previously discussed, significantly affected PAHs are also able to request for final cash compensation in lieu of livelihood restoration activities. In order to avail of this option, the PAH must exhibit that they will utilize the compensation provided for livelihood related activities sustainably.

The process for PAHs affected more than 10%, requesting cash compensation for assets lost follows a 5 step approach:

1. PAH requests for cash compensation
2. DWG and RMU assesses if the PAH is eligible for Final Cash Compensation according to 5 criteria established by DWG and RMU
3. If eligible, the PAH, with help from PL staff and DWG, will make a Family Livelihood Restoration Proposal that needs to be approved by DWG/RMU/NTPC
4. Payment of proposed activities
5. Monitoring

PAH request

A PAH impacted more than 10% that wants cash compensation in stead of participation into the livelihood program should submit a request to the DWG.

Government of Laos Selection Criteria

DWG and RMU have established 5 selection criteria determining if a PAH affected more than 10% are eligible for Cash compensation:

1. No labor for activities (small family or government worker)
2. Living outside of the area
3. Heritage land (many users)
4. No production on the land
5. Still have a lot of land at other places

If the PAH fall under the above criteria, he/she will be granted the opportunity to avail of final cash compensation assuming that the family livelihood restoration plan is approved.

Family Livelihood Restoration Plan (FLRP)

Each PAH will be required to plan for a way to restore their own livelihood. The expected annual income of the activity should be at least equal to the annual income lost.

The PAH will be assisted by a team composed of DWG and NTPC on how to prepare the plan, but the PAH is required to formulate their own ideas.

If more funds are required for the planned activity than the total cash compensation value for lost assets, then the PAH should present a financing plan.

If not all funds are required for restoring lost annual income, additional funds can be spend as the PAH wishes on other activities.

Motorbike and Mobile phone can be considered an investment expenses if market access / information is required for a small enterprise.

The FLRP will be tested on internal consistency, practicality of implementation, estimated success rate of the business and level of livelihood restoration by a committee comprising DWG, RMU and NTPC.

Planning will be done in 3 successive steps. First, after attending the initial consultation meeting, each PAH will be requested to make an initial plan of how they intend to restore their livelihood. Following the initial plan, more discussions will take place with each individual PAH, to fill in a form which looks into the income generated from the LR plan. In the third round of consultation, a final form will be used to summarize the LR plan.

Consultation with PAH will be performed by a team consisting of the following 4 people:

1. District Finance Department
2. District Agriculture and Forestry Office (DAFO)
3. District Lao Women's Union (LWU)
4. NTPC Project Lands family finance consultant.

Payment

RMU will make full compensation payment into a personal bank account (BCEL - GML branch) in the name of the PAH. Signatures of both partners will be required to make cash withdrawals.

Monitoring

Regular monitoring, monthly for the first 6 months, thereafter quarterly, will be conducted by the family finance trainer and the DWG, to assess the progress of livelihood restoration by the PAH. If required, advice or additional training will be provided to facilitate livelihood restoration.

If the PAH cannot prove to DWG's satisfaction that they will utilize the cash for livelihood, then they will be required to continue with livelihood restoration measures to restore pre-project level income.

6.3.4.11 Social support measures

The CA stipulates that special attention be given to vulnerable groups within the PAHs such as those severely affected by the project or were identified as PAHs below the poverty line during the baseline survey prior to implementation.

The creation of employment opportunities and consequently income for poor and marginalized people is closely related to their access to education and training and can not be done as a short-term intervention measure by the Project.

Livelihood restoration measures that focuses on women and vulnerable groups

For adjusting existing or establish new livelihoods alternatives, there is a need to ensure that these activities are suitable for rural women and sensitive to the division of labour. Rural women in Laos like elsewhere in South East Asia are the backbone of agricultural production, processing and marketing, of domestic work and household economy. They are responsible for health, nutrition, water supply and feeding of their families. With more and younger men migrating to town and city centres seeking more profitable employment opportunities, women become increasingly involved in work which was traditionally men's work, such as land preparation, irrigation, planting and harvesting.

Separate meetings with female PAHs revealed that major interests regarding livelihood alternatives rests with rice production, small livestock raising (poultry), mushroom growing, vegetable production, weaving and collection of NTFP.

6.4 Infrastructure Replacement and improvement

6.4.1 Houses and other fixed structures

PAHs that lose their house plots are entitled to receive a new house or to rebuild their existing houses on a new plot with the support of NTPC. PAHs that lose fixed structures will also receive a new structure or be compensated in cash for the loss. Cost for material, labour, transportation and other directly related cost for either the new house or the dismantling and rebuilding of the existing houses and other structures is paid for by NTPC. The minimum housing area has been set at not less than the current house area or 14m² of housing area per person.

Impacted houses and fixed structures that have electricity connections, electricity supply and electricity fittings will have the same fittings restored as well as domestic water supply to at least the standard of current water supply.

6.4.2 Water supply

Wells that are affected by the NT2 Project-related construction work are to be replaced and restored to at least pre-project levels.

Due to unquantifiable potential impacts within RAP 3, improvements in water supply will be carried out to ensure availability of water for PAHs and other community members.

6.5 Common Resources

Common resources utilized by communities that have been affected by the NT2 construction project activities are to be replaced or restored. The flowchart below presents the process involved in compensation:

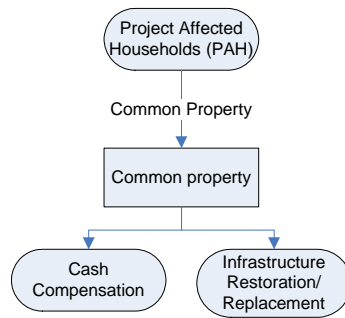


Figure 7. Compensation flowchart for impacted common property

6.5.1 Common property structures

Irrigation structures, electricity lines, roads, tracks and bridges, government buildings (schools, health centres, temples) that are affected by NT2 Project-related construction work are to be fully restored or replaced to at least pre-project levels.

6.5.2 Common property resources

In case where villages have lost more than 10 percent of their NTFP gathering area, a lump sum cash payment equivalent to 7 years of the value of impacted (lost) NTFPs is deposited into the village development fund. Domestication of some NTFPs can be found within the framework of the livelihood restoration program.

6.6 Allowances and Transitional Measures

All impacted PAHs receive a one-time paid Disturbance Allowance of Kip 150,000 per household, including those living along the road.

RAPs 1, 2, 3 and 5 allocate 150,000 Kip per person within the project affected household whereas in RAP 4, disturbance allowance provided is 150,000 Kip per Project Affected Household.

7 Monitoring and Evaluation

7.1 Introduction

Monitoring and evaluation is an important and integral part of any project or program carried out. Its role is to provide information that allows for successful adaptive management and is a tool to disseminate information.

Information is usually collected in different forms and formats depending on the need of the user of the data, which in turn can possibly create inconsistencies regarding data compatibility and relevance. Construction related data serves different purposes to Social and Environmental related collected data. Also, expected changes and modification during project implementation with regards to utilized Land Parcel Areas (LPAs) and the number of affected assets will need to be well documented for monitoring purposes. Maintaining a database and recording the changes will prove to be beneficial for long term monitoring and evaluation.

To ensure that the Project Land program is implemented successfully and that the villagers materially improve their livelihood after resettlement, a monitoring program will be implemented consisting of two components, internal and external:

Internal monitoring will be conducted by the GOL/RMU and the NTPC/RO as a tool to assist in tracking progress and identifying problems during implementation and making necessary adjustments.

External monitoring will be conducted by teams of independent monitors, who will use the internal monitoring data and possibly gather primary data to assess whether resettlement objectives have been met, such as assess resettlement efficiency, effectiveness, impact and sustainability, and whether resettlement entitlements and procedures were appropriate for meeting the objectives, and provide recommendations on necessary changes to the plans.

The details of the overall monitoring approach is described in a document on the monitoring framework of NTPC. A summary of specific aspects for PL is provided below.

7.2 Internal monitoring

7.2.1 Monitoring activities

The main monitoring activities will include:

1. Monitoring of detailed planning:
Tracking the progress of the inventory of losses, registration of these losses and PAH (the Baseline Study), consultations with PAH, the preparation and disclosure of updated Resettlement Action Plans and their approval by GOL/NTPC/IFIs.
2. Day to day monitoring of the physical progress (reported monthly):
Project implementation progress against the planned schedule in each approved Resettlement Action Plan, including compensation payments, infrastructure development, house construction and relocation, delivery of replacement land, irrigation development, replacement of social services and delivery of agricultural extension assistance.
3. Process monitoring:

Process monitoring is conducted to ensure that the consultation activities are being implemented, with due regard to gender and ethnic differences; and to ensure and record the effective implementation of the grievance mechanism.

The main aim of the internal monitoring is to identify any problems with implementation and report those back to management for corrective action if needed. While outcome process monitoring will be the primary responsibility of the External and Independent Monitoring Agency, the internal monitoring teams will be required to obtain the socio economic data to measure the progress being made towards restoring land-based productivity and/or income levels. This is done via a Living Standard Monitoring type survey.

The survey focuses on the impacts brought about by the NT2 project, the compensation packages that the PAHs have or will receive and the processes in which the PAHs were informed about the project. This is captured through a random sampling survey of PAHs affected less than ten percent and a census of those affected more than ten percent. Questions asked are focused on the following topics:

1. Household information- Queries on the status of the household and other general information.
2. Infrastructure Replacement/Impact- Queries regarding replaced infrastructure and project impacts.
3. Grievance- Queries regarding the grievance procedure.
4. Consultation- Queries regarding the consultations held and the information disseminated to the PAHs.
5. Livelihood Restoration- Queries regarding the livelihood restoration activities provided and the results of these. This section also inquires about the satisfaction of the PAHs involved in these activities.
6. Compensation- This section tackles the different types of compensation PAHs have received.
7. Expenditure and Consumption- Queries to obtain purchase trends and changes in expenditure.
8. Subjective Wellbeing- Queries regarding PAHs present situation.

The survey aims to assess PAHs situations and obtain feedback regarding the strategy implemented by the Project Land Office. The survey will also provide guidance on components that are still being implemented by the Project Land Office.

7.2.2 Gender and ethnicity related monitoring

Monitoring will include the collection of data based on ethnicity indicators. This involves disaggregating information based on the different ethnic groups to ensure that smaller and more vulnerable minorities, especially in villages of mixed ethnic identity, are monitored. Likewise, all data collection will be gender disaggregated, and gender specific monitoring will involve an ongoing evaluation of gender roles and the division of labour at the level of the household in order to ensure that either men or women are not overburdened by new tasks in relation to previous labour practices.

7.2.3 Monitoring of construction phase social impacts

The 4 to 5 years construction period of the NT2 Dam and its hydropower facilities presents a number of particular threats and risks to the local populations. A construction workforce of over 8,000 has been employed, and it has been estimated that up a large number of 'camp followers' may immigrate to the areas, including family, traders, merchants and service providers included. This large and diverse population will be living and working in close proximity to local communities and is likely to have a number of both social and economic impacts.

A transitional monitoring system to be implemented during the construction period has been designed and is already in operation for some components such as the UXO Survey and Clearance Program, which has already begun. Information will be collected on the numbers and types of in and out-migrants during this period. Special attention will be placed on identifying the types and motives of camp followers in order to identify any potential socially-unacceptable activities which may develop. District authorities will be responsible for monitoring in and out-migration throughout the extensive construction areas. Training and capacity development is already being provided to district authorities by the RMU in preparation for their monitoring role.

7.3 External monitoring

The Concession Agreement requires an independent assessment of whether the specific objectives for Project Affected Household have or will be met, and whether actions taken adequately address the mitigation and compensation requirements. These assessments will be made by two independent monitoring and evaluation bodies:

- An Independent Monitoring Agency (IMA) consisting of a team of individuals with extensive experience in resettlement planning, implementation and monitoring, socio-economic survey and analysis, rural development and environmental impact assessment, composed of both Lao national and international experts, and
- a Panel of Social and Environmental Experts (POE), who will act independently of both GOL and NTPC and in accordance with relevant World Bank guidelines, assessing whether mitigation measures and resettlement procedures adequately protect both the environment and the interests of those affected by the Project².

8 Project Land Budget

The budget for all activities within Project Land is as follows:

Particulars	Project Land Budget 2004- COD
Project Land (Camp follower and PCR not included)	
TOTAL Resettlement for Project Land [Compensation Program]	6,188,337
RAP 1 – Khamkeut District	66,769
RAP 2 – Oudomsouk	1,292,560

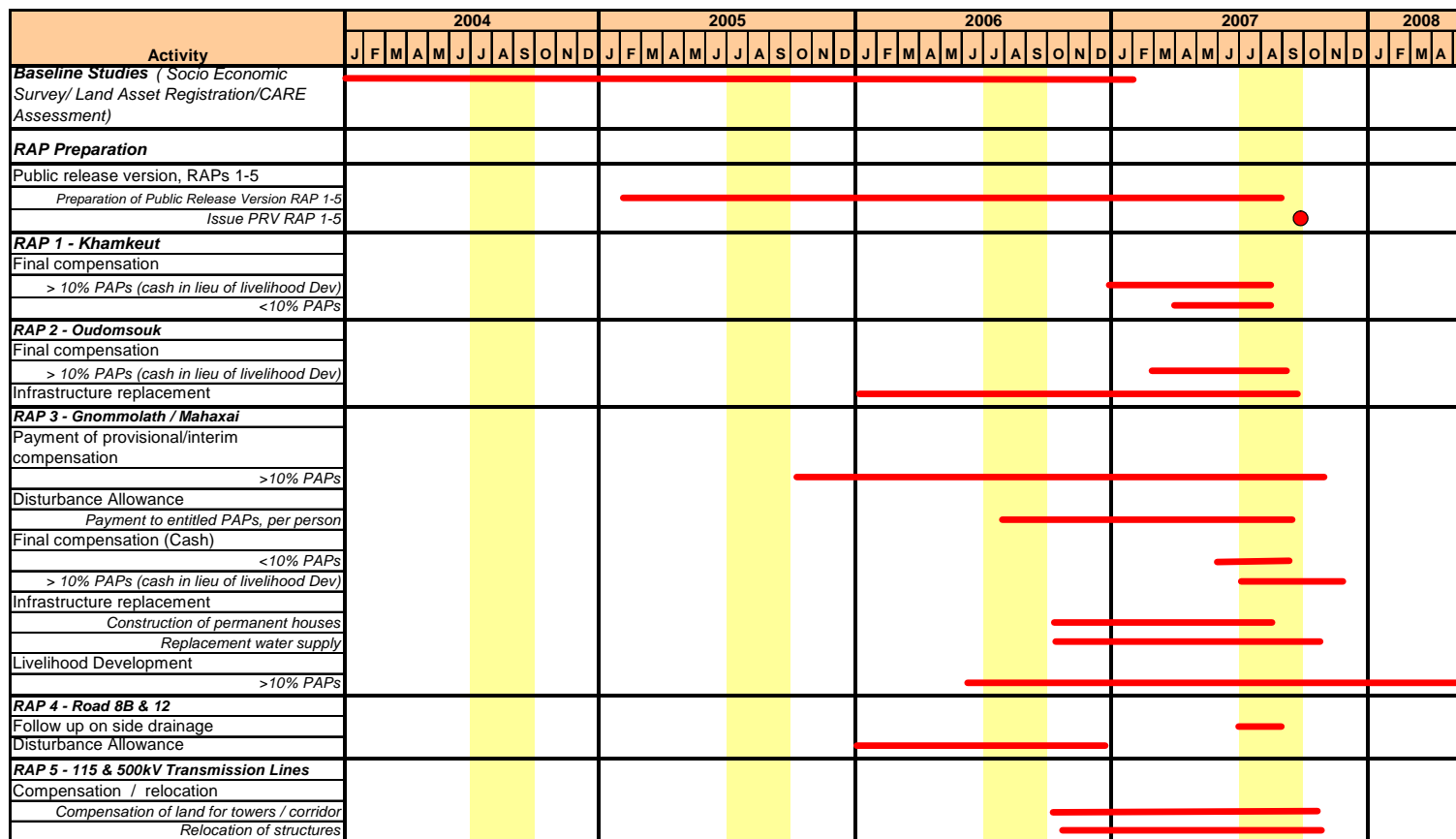
² For more details on the Independent Monitoring Agency, a summary TOR and the identification of the 3 member Panel of Experts and its responsibilities, see NT2 Monitoring and Management Framework as well as SDP, Vol. 4, Chapter 9 which contains some pre FC information.

RAP 3 – GML & MHX (w/o roads & TLs)	2,684,530
RAP 4 – Road 8 & 12 (GML & MHX Districts)	381,200
RAP 5 – 115kV & 500kV transmission lines	384,459
Program Management	1,378,820

Table 7. Project Land budget

9 Implementation Schedule

The implementation schedule depicts the activities that will occur for the Project Land Program from 2004 to 2008.



Wet Season