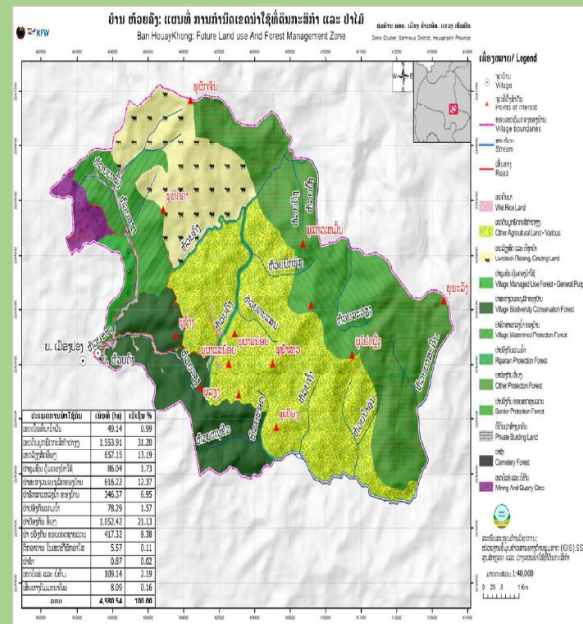
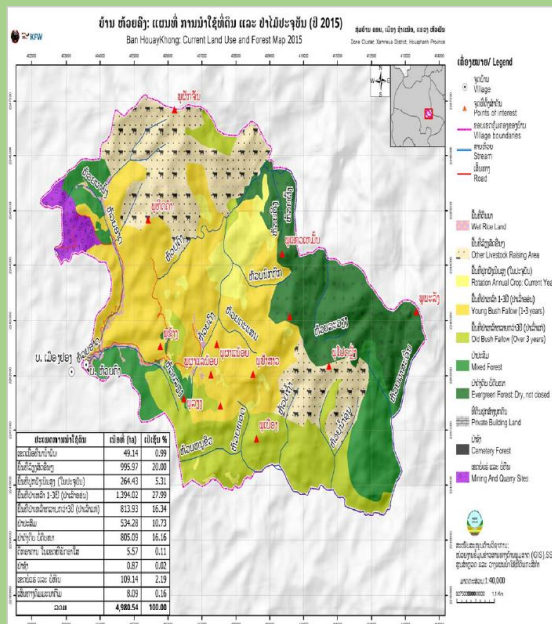


## PLUP 2.0

### New Guidelines on Participatory Land Use Planning



### Mainstreaming Forest Landscape Restoration (FLR) Guiding Principles into Land Use Planning (LUP) Guidelines

## Table of Content

1. Introduction .....	3
2. Comparison of Various Land Use Planning Methods in Lao PDR and Lessons Learnt...	4
3. Basic Elements of the new PLUP 2.0 Methodology .....	7
4. The Role of PLUP 2.0 within the Overall Approach of I-GFLL and CliPAD Projects.....	10
5. Stages and Working Steps of PLUP 2.0 .....	11
Stage 1: Preparation .....	11
Stage 2: Village Orientation Meetings .....	13
Stage 3: Socio-economic, Land and Forest Data Collection.....	18
Stage 4: Current Land Use and Forest Cover Mapping (CLUFC).....	23
Stage 5: Future Land Use Management Zones (FLUMZ) .....	24
Stage 6: Village Regulations .....	31
Stage 7: Final Meetings, Documentation, Approval and Data Storage .....	32
Stage 8: Link to Subsequent Activities of PSAP and VFMP .....	35
Stage 9: Monitoring and Evaluation .....	36
6. PLUP 2.0 in Special Areas .....	37
 Annex 1: The “Common Principles as a Guiding Framework for Land Use Planning at Village Level” which were published by NAFRI in June 2017 .....	39
Annex 2: What to look for in villages with existing PLUP, FALUPAM or similar!.....	43
Annex 3: Sample time schedule for 7 days of PLUP 2.0 activities .....	45
Annex 4: Form 1: General Village Data .....	46
Annex 5: The Village Land Use and Forest Management Committee (VLFMC).....	48
Annex 6: Village Boundary Agreement .....	50
Annex 7: Socio-economic, Land and Forest Data.....	52
Annex 8: Land Classes, Sub-Categories and Official Mapping Standards .....	57
Annex 9: Sample Village Regulations.....	69
Annex 10: Form to record villager approval of relevant PLUP 2.0 documents .....	76
Annex 11: Sample PLUP 2.0 Report .....	77
Annex 12: Quality Indicators for PLUP 2.0 Exercises .....	83
Annex 13: PLUP 2.0 Monitoring Report.....	84

## 1. Introduction

Secured access to land is one of the most basic human rights. In Lao PDR, as in many other countries around the world, competing claims on land for conservation, for securing livelihoods of the local population and for economic development purposes have created increasing tensions around resource tenure security. The diverse uses and functions of land and forests need to be recognized, maintained and improved.

At the centre of this are the local villagers who use and manage the land and forests on a daily basis. Therefore, bottom-up processes are necessary to ensure local needs and enable village-level planning and management. At the same time, there is a need to facilitate the negotiation between top-down and bottom-up planning processes. This happens when land use planning is conducted at village level and facilitated by a PLUP Team, essentially composed of District staff. They must make sure that land use planning is embedded in strategic planning matters.

It is very important that land use planning activities are people-centred. The process of planning must be truly participatory, primarily accountable to local resource users. Land use planning needs to be conducted at a larger scale and requires vertical integration, meaning that it should be conducted village by village in village clusters and eventually in all village clusters of a district. The interaction between villages is extremely important to clarify administrative boundaries and to manage land and resources at landscape levels.

Land use planning should be complemented by livelihood investments that build upon local resources, uses and potentials. As such, these plans serve not only as a basis for resource management but also as a platform on which to construct potential development interventions that are consistent with local aspirations.

Land use planning has a long tradition in Lao PDR, dating back to the 1990s. Several different approaches and methodologies have been applied over time with varying objectives and results. Overall, many land use planning exercises have remained one-time exercises without any monitoring, follow-up activities or local development effects. Since 2009, there have been several different and more sophisticated approaches to land use planning like PLUP, LUP by Eficas, PALM by DaLAM, ICBF for PLUP in NPAs and FALUPAM by the TABI Project and several others. Capacities to conduct land use planning according to these approaches has increased across all provinces and districts over the past decade.

In June 2020, the new I-GFLL (Implementation of Governance, Forest Landscapes and Livelihoods) Project funded by GCF and other donors as well as the CliPAD IV Project by GIZ started their activities in 3 Provinces and 15 Districts, namely in Houaphan, in Luang Prabang and in Sayaboury. The combined program will continue for 4 years until June 2024 and will then hopefully be extended by another 5,5 years in the same districts, but adding more villages. In parallel, a second sub-project will start working in Luang Namtha, Bokeo and Oudomxay by 2022 in another 12 Districts, but following the same work approach to REDD+ implementation.

In the context of this new program, one planned activity is to revise current land use planning practices and to adapt them to the specific needs of CliPAD/I-GFLL. The results of this review and adaptation is documented in these guidelines, which will be used by the project for training purposes and implementation of land use planning activities. As this revised approach is mainly based on elements previously included and extensively tested under PLUP and FALUPAM, the new approach will be internally referred to as PLUP 2.0.

PLUP 2.0 is specifically adapted to the needs of CliPAD/I-GFLL and based on lessons learnt from all major land use planning methods applied in the past. It adheres to general practices and national standards. This document does not present an additional manual for application

of land use planning in the whole country and does not serve as a generally applicable official document. It represents an internal working document for CliPAD/I-GFLL and tries to combine the most promising elements from various land use planning experiences. On the other hand, interested parties are welcome to apply this or similar approaches in their target areas.

## 2. Comparison of Various Land Use Planning Methods in Lao PDR and Lessons Learnt

The updated approach to land use planning for CliPAD/I-GFLL is based on a thorough review of all current methods prevailing in Lao PDR. Particular strengths and weaknesses of the various brands have been taken into account through a comprehensive review of manuals, studies, evaluations and critical reviews. The “Common Principles as a Guiding Framework for Land Use Planning at Village Level” which were published by NAFRI in June 2017 were fully incorporated into the development of this revised approach (see **Annex 1**).

**Table 1: Main stages and working steps of major land use planning methods in Lao PDR**

<b>PLUP 2010</b>	<b>Eficas PLUP</b>	<b>FALUPAM</b>	<b>PALM</b>	<b>ICBF</b>
1. Preparation	1. Village Meeting	1. Preparation	1. Preparation	1. Preparation
2. Socio-economic, Land and Forest Data Collection	2. Socio-economic Data Collection	2. Data Collection and Preparation of Village Base Map (Mission 1)	2. Survey and Participatory Discussions	2. Data, boundaries (village, corridors/NPA) land use and rules
3. Delineation of Village and Village Cluster Boundaries	3. Characterizing the Village Land Use System	3. Current Land Use and Forest Cover Mapping and Soil Fertility Analysis (Mission 2)	3. Assessment of Agricultural Land Use	3. Data analysis/ prepare village mission 2 (in the office)
4. Village and Village Cluster Forest and Agriculture Land Use Zoning	4. Engaging Local Communities in PLUP with “PLUP Fiction”	4. Develop the Forest and Land Use Management Zone (FLUMZ) (Mission 3)	4. Summarize the Results and Plan Future Use of Agricultural Land	4. Land zone options, rules, NPA and corridor boundaries
5. Village and Village Cluster Land Management Plans	5. 3D Model Construction	5. Follow-Up on the Implementation of the FLUMZ Plan (Mission 4)	5. Report Outline and Content	5. PLUP Agreement preparation (in the office)
6. Land Data Record Keeping and Digital Mapping	6. Village Boundary Delineation		6. Data Storage and Data Management	6. a) District tech. PLUP Agreement review b) Review and signing in the village
7. Land Registration and Titling in Rural Villages	7. Land Zoning			7. a) Final review and approval b) Handover of approved PLUP update/ maps
8. Village and Village Cluster	8. Village Action Plan			

Networks & Networking				
9. Monitoring and Evaluation	9. Preparation of the PLUP Agreement			
	10. Final Meeting			
	11. Data Compilation, Synthesis and Storage			
	12. Proposal for Communal Land Registration			
	13. PLUP Monitoring			

Brief assessment of advantages or disadvantages of the various approaches:

a) PLUP

At the time, the PLUP Manual of 2010 was jointly prepared by NAFRI, NAFES and DoF under MAF and the NLMA. The PLUP approach summarizes the practical experiences gained by various projects in the early years of 2000. It attempts to establish the link between land use planning and formal land registration and titling. The PLUP Manual remains the only document specifying land use planning methods for specific situations, such as in villages located within NPAs, in National Production Forest areas or in relocated and consolidated villages.

Today, the approach described in the PLUP Manual is partly outdated. The link between PLUP and land registration has not materialized. In many cases PLUP exercises were rushed, did not identify and secure sufficient land for stabilization of upland agricultural practices and mapping was incomplete or inappropriate. Several “quality control” surveys have documented the deficiencies of many PLUP exercises across several provinces.

b) Efficas PLUP

The Efficas PLUP approach was developed by NAFRI in cooperation with IRD and CIFOR and was mainly implemented in Viengkham District of Luang Prabang between 2010 and 2011. Although somehow linked to PLUP, this method focusses more on detailed and scientific data collection and testing of various tools such as 3D-Models for land use zoning or PLUP Fiction for planning purposes. The data collection and use of data for complicated modelling and statistical calculations is over-ambitious and not adapted to local capacities. Purely economic parameters are used for planning the future agricultural land use, while conservation, forest management and landscape aspects are largely overlooked. The Efficas example is more a joint learning exercise facilitated by scientists or academics, lacking standardized outputs for use by villagers and the local administration. This approach cannot be scaled up.

c) FALUPAM

The (Participatory) FALUPAM approach emerged from the practical experiences gained by TABI Project (2009-2020) which was mainly implemented in Luang Prabang, Houaphan and Xieng Khouang. The FALUPAM Manual is considered as replacing the PLUP Manual as a standard for nation-wide land use planning activities.

FALUPAM has indeed described new ways of conducting land use planning in villages and village clusters. FALUPAM is conducted cluster by cluster over a total of 4 missions to each village, so activities are spread out in intervals. The entire process can take up to two years. FALUPAM begins with a strategy to stabilize, not eradicate, shifting cultivation. A large focus

is placed on identifying suitable and sustainable upland rotation periods, description of land use in villagers' terms and eventually clustering upland fields for future annual rotations. The overall landscape planning aspect is stronger in FALUPAM than in other approaches. Through TABI new standards for mapping current and future land use have been elaborated and widely accepted.

With FALUPAM one of the aims is to provide additional tenure security through the land use planning process and there is no or only limited linkage with formal land registration/titling activities. Surveys have shown that virtually all villages have reduced their upland agriculture areas, increased their forest areas and increased permanent agriculture after FALUPAM. FALUPAM is undoubtedly a high quality, but also high cost approach. Its scalability is limited and there are limitations to a truly participatory approach in the stage of forest and land use management zoning. Some of the forms developed for data collection, reporting and approval are overly detailed and very demanding for district-level staff to use.

#### d) PALM

The PALM approach was developed by DALaM with GIZ support. PALM is described more as a specific sector plan for agriculture that is adding detail to PLUP. Nevertheless, the PALM Manual also includes many general land use planning activities. Pilot implementation has so far focussed on Sayabouri, Luang Namtha and Khammouane Provinces.

PALM focusses strongly on socio-economic data collection, survey and evaluation of soil qualities and revenues from crop production and livestock activities. It does not consider any conservation aspects, forest land use or sustainability factors for agricultural land use. Nor does it include any steps towards wider landscape management beyond village boundaries. In several steps the participatory aspects of joint learning and planning are very limited. Even the link to agricultural extension and extension methodologies for sustainable agricultural development is missing entirely. Upland systems and the role of innovations in agricultural practices are insufficiently considered. The PALM approach is mostly based on the priorities of central Government in this case represented by DALaM and the promotion of cash crops or land leasing.

#### e) ICBF

The ICBF approach to land use planning is applied in selected NPAs/PAs in Bokeo, Luang Namtha and Khammouane Provinces. It is particularly adapted towards effective management of target landscapes (comprising NPAs and corridors) and contributes to sustaining biodiversity in forest ecosystems. Therefore, all decisions and actions related to PLUP at the village level need to consider the effects on the larger PA and landscape levels. PLUP in ICBF includes data collection about village knowledge and views of PA boundaries and zones.

Overall, several deficiencies can still be observed after land use planning exercises were conducted in rural villages:

- Very often LUP activities are still seen as a one-off event
- Very little monitoring of LUPs takes place and even less enforcement or implementation based on the LUPs
- The link to agricultural extension activities after PLUP is missing virtually everywhere and specific implementation activities based on LUP are generally missing
- Many of the approaches are not very participatory, especially when elaborating the future land use zones
- Villagers who sometimes have gone through several LUP activities over the past 20 years are tired of taking part in such activities, which have generally failed to provide any meaningful changes to their livelihoods and are widely seen as an additional data

collection activity by local officials. Monitoring of social and economic benefits from LUP has mostly shown negative results.

### **3. Basic Elements of the new PLUP 2.0 Methodology**

The PLUP 2.0 approach of CliPAD/I-GFLL will mainly draw from the experiences gained from application of PLUP and FALUPAM and attempt to combine the most promising elements of both. In addition, PLUP 2.0 will also highlight and add a few working steps and methods not included in either of the two approaches, but which would make sense to complement the overall package.

Key requirements and design elements of PLUP 2.0 are:

- CliPAD/I-GFLL will select target village clusters in all 15 target districts in the provinces of Houaphan, Luang Prabang and Sayabouri. PLUP 2.0 will be therefore conducted in all villages of a target cluster and inter-village networking will be established at an early stage. It is planned to cover up to 240 target villages in the first phase.
- A broader landscape orientation and aspects of forest landscape restoration (FLR) with a focus on watershed functions, connectivity of protected areas, shared agricultural use areas etc. will be further emphasized in PLUP 2.0, although important elements are already included in PLUP and FALUPAM, yet not under these terms. Forest landscape restoration can only be achieved by working in an entire village cluster and eventually reaching all clusters of a district.
- PLUP 2.0 needs to be feasible within the allocated budget of 1400 EUR (approx. USD 1650) per village, excluding equipment and materials. An additional 400 EUR per village will be used for training of the VLFMC members, an incentive payment for finalizing the PLUP reports and mapping activities.
- PLUP 2.0 will be conducted in 7-8 days of fieldwork in every village and another 5-6 days for reporting and documentation in the office. If the target village is close to the district centre, fieldwork can be done in 2 separate stays.
- We need to understand and consider the time constraints faced by villagers who are generally busy securing their daily livelihoods. PLUP 2.0 has to adapt to their availability and willingness to cooperate. For example, this can include the need for evening meetings. The entire work process needs to be as participatory, lively and interesting for the villagers as possible.
- A team of 2-3 selected PAFO, PALaM and PoNRE staff will act as core trainers, supervisors and coaches for the District PLUP Teams. There is extensive experience on PLUP or FALUPAM implementation available in all 3 provinces. These core trainers will be familiarized with the new PLUP 2.0 approach in a training event, planned for December 2020. Central-level experts from DoF and DALaM will act as advisors and training facilitators.
- The team of provincial supervisors will report directly on PLUP activity progress to the PPMU and NPMU, will be directly responsible for an initial quality control of PLUP reports and will coordinate all monitoring activities. Additional quality control will be conducted by GIZ experts.

- Dedicated and fixed PLUP Teams will be set up in every target district, composed of trained DAFO and DoNRE technicians.
- District PLUP Teams will be trained by provincial level core trainers and GIZ experts in all 3 provinces.
- All GIS and mapping activities will be conducted as much as possible at provincial level. GIS and mapping refresher courses will be provided through GIZ. District PLUP Teams will also receive refresher courses in GIS procedures for PLUP 2.0.
- All PLUP maps and PLUP reports will go through a quality control system at provincial level (PAFO/PoNRE) and by CliPAD/I-GFLL. All PLUP maps must adhere to the standardized scheme of land classes and respective GIS data coding which has been set as national standard. The maps will later be included in the national LUIS system.
- Future land use zoning will have a time horizon of 5 to 10 years.
- Monitoring of PLUP implementation has been a very weak point in past land use planning exercises. Initially, there will be a PLUP 2.0 satisfaction survey during FPIC 2. Monitoring of PLUP 2.0 results needs to be conducted at least after two years and thereafter every year with sufficient budget set aside for these activities.
- One of the key objectives of PLUP 2.0 is to build up a sense of ownership of the PLUP results, more dialogue within the community on land issues, as well as increased responsibility and capacity to sustainably manage village land and forest resources. This cannot be established by PLUP 2.0 alone, but by a sequence of activities in the respective village and regular follow-up. This requires an iterative and participatory process.
- Men and women, better-off and poorer villagers, all ethnic groups living in the village area and residents from all sub-villages or hamlets need to be equally involved in the PLUP 2.0 work. In the case of ethnic minority villages or mixed villages it would be preferential for the PLUP Team to involve native speakers for translation and explanation.
- After FPIC 1, PLUP 2.0 is the starting point for CliPAD/I-GFLL technical activities to be conducted in each target village. Under the umbrella of CliPAD/I-GFLL, PLUP 2.0 results will be used for the subsequent activity of Promotion of Sustainable (and deforestation-free) Agricultural Practices and Value Chains (PSAP) (see separate guidelines) and Village Forest Management Planning (VFMP) according to the VFM Guidelines of 2016. The unique situation is that all these components for local livelihood development come from within one project.
- In the past, many different steps, very detailed data collection and statistics were included in the land use planning approaches. The process thereby often become overburdened and long. In the case of I-GFLL the activities under PLUP 2.0 will be reduced and simplified, while other activities or working steps will be conducted under PSAP e.g. on agricultural statistics or soil sampling, and others are moved to VFMP. This also means that PLUP 2.0 will be slimmed down to what really needs to be done during the land use planning stage.



- PLUP 2.0 will include the creation of a base map, collection of general data relevant to land use, the creation of a Village Land and Forest Management Committee (VLMC), village boundary delineation, mapping of current land use zones, planning of future land use zones, drafting of village regulations, decisions on communal and individual tenure issues.
- PLUP 2.0 will not include individual household interviews (moved to PSAP), detailed socio-economic data collection on agricultural production or income (moved to PSAP), no soil analysis (under PSAP), no GPS surveys of land use zones such as the forest zones (under VFMP), and no land allocation to individual households.
- PLUP 2.0, PSAP and VFMP will be conducted by different district teams with some overlap of staff, as the number of available technicians is limited. All 3 activities will be finalized in each village within a period of 6 months. PLUP 2.0 will require 7-8 days of fieldwork, PSAP 5-6 days by agricultural staff and VFMP 3-4 days by forestry staff.
- PLUP 2.0 outputs will be considered as preliminary or provisional until PSAP and VFMP have been successfully concluded. If any changes in the future land use zoning becomes necessary based on the more detailed delineation of agricultural and forest boundaries after PSAP and VFMP, these changes will be integrated into the final PLUP documents before submission for approval.
- PLUP 2.0 outputs including a PLUP agreement will be given final approval by the District Authorities.
- CliPAD/I-GFLL will need to start from the villages who have done PLUP/FALUPAM in the past. In these target villages it needs to be identified when PLUP/FALUPAM etc. has been conducted in the past, which documents are available, what is the quality of the results and whether they are still valid. All existing land use plans need to be systematically reviewed. These guidelines will include a checklist when and how existing land use plans need to be updated, completed or revised partially or entirely by a new PLUP 2.0 approach (see **Annex 2**).
- All finalized PLUP 2.0 maps will be uploaded to the Land Use Information System (LUIS). LUIS is a common platform, jointly managed by the Natural Resources and Environment Information Center (NREIC) and the Department of Land at MONRE and the Department of Agricultural Land Management (DALaM) at MAF, that is able to integrate and systematically store and present diverse local land use plans, regardless of the methodology used to develop them. Working on LUIS with all partners involved in LUP will support a harmonization of the different land use denominations and could provide a basis for future land registration/titling activities by DoL. If local land use plans are to be used as a basis for systematic land registration and titling, it is essential to ensure that plans meet the relevant criteria and contain appropriate information on land tenure issues.
- Although these guidelines will describe a standard process for PLUP 2.0, some flexibility will always need to be kept as land use situations in target villages will vary a lot and different ethnic groups have different land use patterns and priorities.

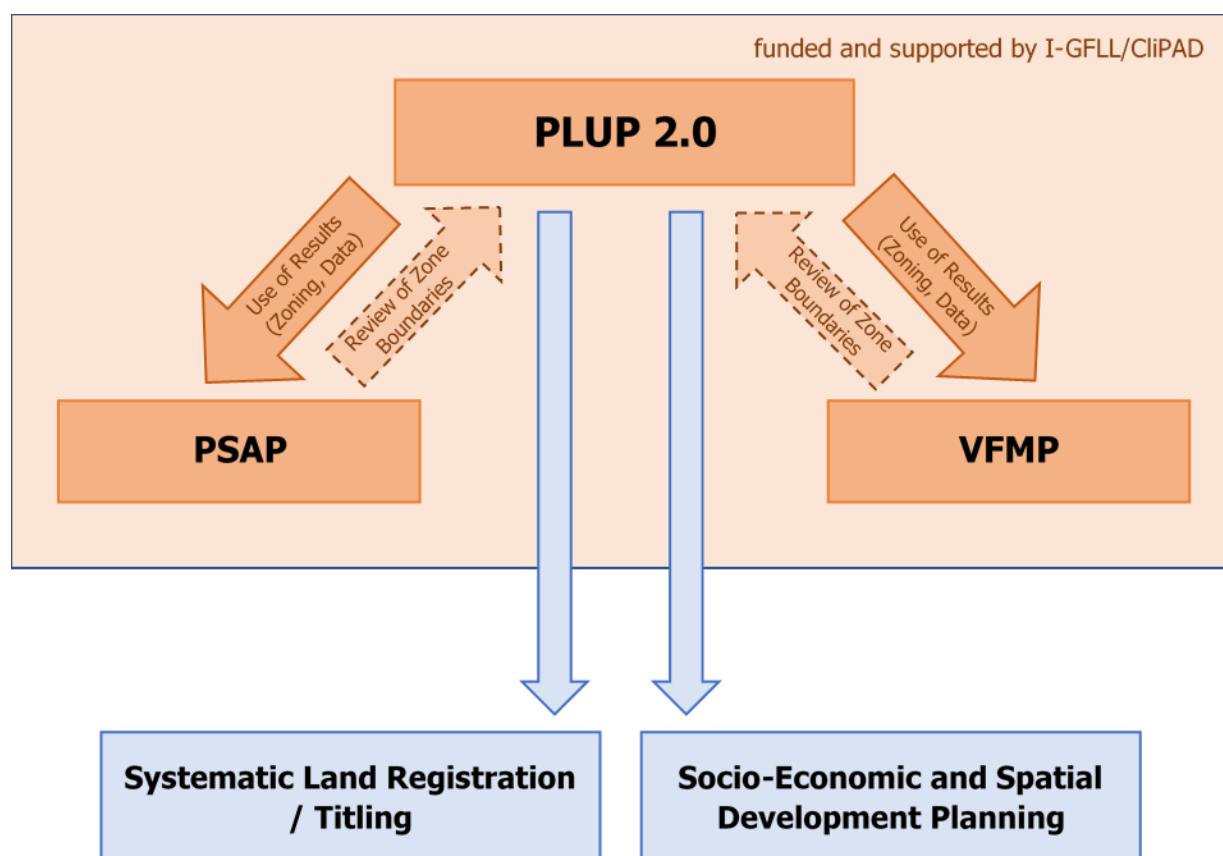
#### 4. The Role of PLUP 2.0 within the Overall Approach of I-GFLL and CliPAD Projects

Project activities of CliPAD/I-GFLL will start in every target village with a “Free Prior Informed Consent (FPIC)” exercise which will be conducted by trained staff of the Lao Womens’ Union (LWU) and the Lao National Front (LNF). This activity aims at general awareness raising and making sure that the sequence of project activities such as PLUP 2.0, PSAP and VFMP are in the interest of the village community, that they can provide comments and finally give or withhold their consent to working with the project.

The implementation of PLUP 2.0 is the next activity, followed by PSAP and VFMP within an overall timeframe of 6 months. Either PSAP or VFMP can be conducted first, as this will mainly depend on work planning and availability of trained staff in the districts. The overall objective is to promote diversified and sustainable smallholder production (deforestation-free agricultural practices) and village forest management. PLUP is just the first tool to reach this objective.

This staggered approach has worked very well in 70 target villages in Houaphan under the predecessor project CliPAD III, with FPIC and PLUP followed by VFMP. All 70 villages have now established a successful forest management system<sup>1</sup>, maintained or enlarged their village forest cover and have received their second results-based payment for REDD+ activities.

**Diagram 1: Use of PLUP 2.0 results and outputs for subsequent activities**



<sup>1</sup> Based on the “Village Forest Management Guidelines”, PAFO and PoNRE Houaphan, January 2016

PSAP is a new element in this approach. It will attempt to provide a direct link between land use planning for the entire village and a more detailed planning of sustainable agricultural practices and the agricultural extension activities needed for their realisation. PSAP will be guided by a so-called “White List”, a comprehensive list of all sustainable agricultural practices and crops to be promoted. A separate PSAP Manual will describe all the necessary working steps.

The FALUPAM approach to land use planning in the TABI Project consisted of 4 missions or main stages (Geo-mapping, current land use, future land use, monitoring) over a period of 1,5 to 2 years. In CliPAD/I-GFLL, the overall approach includes 3 separate missions, PLUP 2.0 (7-8 days), PSAP (5-6 days) and VFMP (3-4 days). At a later stage, the results of PLUP 2.0, PSAP and VFMP can also be directly used for systematic land registration/titling as well as 5-year District Development and Spatial Planning activities.

Eventually, after a project implementation period of approximately one year, a second FPIC exercise (FPIC 2) will be conducted in all target villages which will among other items provide some feedback by villagers on their satisfaction or dissatisfaction with the PLUP 2.0 implementation in their village.

## **5. Stages and Working Steps of PLUP 2.0**

### **Stage 1: Preparation**

#### **Step 1.1: Equipment and Materials**

Important equipment, materials and tools for PLUP 2.0 exercises in villages are:

- At least two laptop computers with accessories per PLUP team (one also used for VFMP)
- One external hard-disk per PLUP team
- One printer per PLUP team
- One extension socket per team
- One LCD projector per PLUP team for visualisation of maps in the villages
- Large white flipchart paper and markers for sketch-mapping
- One digital camera per PLUP team
- Two GPS receivers per PLUP team
- One portable generator per province
- Materials and paint for metal signboards
- One 4WD vehicle per province
- 3 motorbikes per district and 1 per province

High resolution satellite image printouts and/or aerial photography from 2014 at scales from 1: 5.000 to 1: 15.000 (according to the village area) will be used as a basis for discussion and area orientation with villagers and all mapping work. In addition, copies of topographic maps will also be used. At least 3 printouts of the satellite/aerial photo map per village are required for the village base map, the current land use (CLUFC) and future land use zoning (FLUMZ).

#### **Step 1.2: Staff Training**

An initial familiarization and refresher training for the 2-3 selected PLUP supervisors per province from PAFO and PoNRE will be provided by DoF and DaLAM representatives, GIZ staff and consultants. This training of trainers will include a detailed exchange of current experiences, training inputs on the revised PLUP 2.0 approach in CliPAD/I-GFLL and a first exercise of work planning for all 3 provinces.

Trained PAFO and PoNRE PLUP 2.0 supervisors will advise and liaise with the target districts on the selection of district PLUP team members. Ideally, each district PLUP team should consist of 6 technicians from either DAFO or DoNRE, have as many female team members as possible, include some ethnic minority staff and represent a wide range of technical expertise from forestry to crop production to livestock management etc.. These teams should be fixed teams, with as little staff fluctuation as possible.

Once all district teams have been selected by the District Authorities, the provincial supervisors will organise training courses for the district PLUP teams in their provinces. 4-5 district teams (24-30 people) will be trained together in one training course. One PLUP 2.0 training course will take 4-5 days, depending on the previous experience of the district staff. It will consist of technical elements and working steps of PLUP 2.0, as well as facilitation training on participatory working methods. GIZ experts will assist in the training of district staff. Separate GIS training will be organised for interested district staff by the supervisors and by experienced GIS experts in the province.

If required, special training for provincial GIS staff on map production for PLUP 2.0 by specialized GIS experts could be organised through GIZ.

### **Step 1.3: Preparations in the Office**

The provincial PLUP supervisors will prepare an overall PLUP 2.0 workplan for each target province. This plan will mainly show the sequencing of PLUP work in each district after consultation with the district level.

The district PLUP teams will prepare an overall activity plan, budget plan and time schedule as well as monthly work calendars. The budget planning will follow the per diem and accommodation rates shown in the Ministry of Finance Decree 2066 approved on June 25, 2015. These rates apply only to approved work areas and include all government staff and villagers from participating villages including surrounding villages. Budgets must include fuel, field equipment, and administrative costs.

Before starting field activities, the district PLUP team members will collect and familiarize themselves with existing documents, data and maps. First of all, they will determine whether existing PLUP documents from previous work, PALM or FALUPAM documents are available for the selected target villages. The team needs to familiarize themselves with all the previous plans. Field work will start in villages with existing plans.

Prior to start working at the target villages, the team should collect and study existing information such as Socio-economic Development Plans of the district, any statistics or other reports about any of the target villages. Finally, the team needs to make sure that all necessary equipment (laptop, printer, generator, LCD projector etc.) and materials (paper size A0, marker pens, pencils, tape, printing paper, notebook, chrono files, etc.) are ready. Any forms used for data collection need to be printed.

### **Step 1.4: Preparation of Field Work**

Before going to the target villages, the team must inform the village of their coming and make precise appointments. Village authorities must be informed about PLUP implementation well in advance to ensure that the introductory village meeting is well attended.

In addition, the team should send invitations to representatives of all neighbouring villages for a meeting on the village boundary delineation (Step 2.4). This should normally be planned for the second day of work in the village.

Important: neighbouring village representatives should not be invited for the first village meeting on the first day, as on this occasion the team, possibly accompanied by District Authorities and the villagers should first have the opportunity to discuss among themselves and to get a general overview.

## **Stage 2: Village Orientation Meetings**

### **Step 2.1: First Village Meeting**

General experience is that the first village meeting is extremely important, because this is the time to either gain or lose the interest of villagers! All villagers, men and women are invited to this meeting. It is important not to exclude any people living in sub-villages or hamlets. The first meeting should last approximately 2-3 hours.

During this first meeting:

- The PLUP team members introduce themselves
- The objectives and stages or activities of PLUP 2.0 are explained
- The teams mention that PLUP 2.0 is the first step of working together with the project and that PSAP and VFMP will follow, based on the results of PLUP 2.0
- The PLUP team starts to enter into some discussion with the villagers about topics relating to the village history and the current village situation
- In case the village has had PLUP, PALM or FALUPAM activities in the past, the PLUP teams ask about their experience with these previous land use planning activities

In case PLUP or FALUPAM have been conducted in the village in the past it is important to note:

- when LUP was implemented?
- who conducted LUP and who has the data/maps?
- is the LUP that was done still being used or no longer relevant?
- in case the old LUP is still relevant, this needs to be considered during future land use zoning (Stage 5)

As the first meeting should be attended by many villagers (men and women), this is a good opportunity to start discussing general issues or problems faced by the villagers. To enter into this dialogue and discussion it is good to ask open questions, such as:

Could you tell us the history of this village? When did the first people settle in this area? How did the village develop over time?

What is the population of this village today? Number of families, men/women, ethnic groups?

What is your main source of livelihood today? What are the particular strengths of this village? How many families have access to paddy? How many families rely on upland agriculture? How important is livestock production?

What are the main problems you face today? If the general atmosphere and attendance is good and sufficient time is available, the PLUP team can conduct a problem census exercise during the first village meeting. Key problems related to land, forests and agriculture are collected from the villagers and written down on a board or a A0 white paper. Later the key problems are ranked, their main causes are discussed as well as their impacts and possible solutions. All contributions are noted on the board or white paper and later copied by the team in the computer (see further details on how to prepare a problem census under Stage 3).

Before ending the first village meeting, the PLUP team will ask villagers about the time schedule for the next steps, inform them about the invitation to representatives of neighbouring villages to clarify the village boundary and make appointments for the next days. As much as possible the team needs to accommodate for the wishes and availabilities of the villagers. In some cases evening meetings are a good option if most villagers are too busy during the daytime. A sample time schedule for 7 days of PLUP 2.0 activities and a flow diagram of all PLUP 2.0 stages and working steps is shown in **Annex 3**.

After the meeting, the PLUP team enters this basic information into Form 1 (see **Annex 4**). This form should not be filled in front of the villagers during the meeting, as this would be seen as data collection by villagers and it could disturb the open discussion.

**At the end of Step 2.1:** the villagers have a first understanding about the PLUP 2.0 work to be conducted in their village and the PLUP team has a first idea about the history and the current situation in this village. They are aware of the results and the validity of any previous land use planning exercise and they understand key issues and problems faced by the villagers.

### **Step 2.2: Election of Village Land and Forest Management Committee (VLFMC)**

In most target villages of CliPAD/I-GFLL some kind of land use planning exercise will have taken place in the past. In this case an elected VLFMC should already exist. In this case the district PLUP team needs to confirm with the villagers and the village authorities whether:

- a) the committee members are still in their position and confirmed by the villagers
- b) whether some have left or withdrawn and need to be replaced
- c) whether an entirely new VLFMC needs to be elected.

This issue of whether the VLFMC is confirmed by the villagers and still active or needs to be re-elected should be discussed during the first village meeting. If the VLFMC must be newly elected, this should ideally take place on the first day in the village in the afternoon. An election of the VLFMC requires a general village meeting with representation of all households and needs to be called by the Village Administrative Committee. Latest, the election of the VLFMC should take place after the village boundary delineation.

A full Village Land and Forest Management Committee (VLFMC) should consist of 7-12 elected members (according to the size of the village). Special attention needs to be paid to the gender balance, ethnic groups, age groups and social status in the VLFMC membership. Ideally, there should be between 2 and 4 women in the VLFMC (see **Annex 5**).

Before the election of VLFMC members takes place, the district PLUP team explains about

- a) the objective and importance of the VLFMC
- b) their role and responsibilities
- c) the working procedures for this committee

To be eligible as a member of the VLFMC:

- 1) He/she must be from a family who has been part of the census and living in the village for more than 5 years;
- 2) He/she must be a healthy person and aged above 18 years old;
- 3) He/she must be a respected person without prior offences against the law;
- 4) He/she must have a good knowledge on the local land use and the village geography;
- 5) He/she must have a basic knowledge on agricultural production and forest development;

- 6) He/she needs to have basic reading and writing skills and should have the ability to read maps;
- 7) He/she must be interested in this work and volunteer to be a candidate for the VLFMC.

During the PLUP process, the VLFMC members will work very closely together with the district PLUP team and some decision-making powers will be delegated from the villagers to this committee. Villagers are putting their faith in their elected representatives. It is not possible to expect participation by all members of the community in each step of the land use planning process. Later, the VLFMC will also cooperate closely with the PSAP and the VFMP teams from DAFO.

The VLFMC is a sub-committee to the Village Administrative Committee and is usually headed by the village vice-chief. The VLFMC therefore does not have to be officially appointed by the District Authorities. Special responsibilities will be assigned to the VLFMC members, depending on their experience in agriculture or forestry. The VLFMC can also create sub-sub-committees or assign helpers to fulfil their responsibilities.

The elected members of the VLFMC are basically responsible for managing the forest and land use within the village boundaries. This also includes all the agricultural land. Once village land use regulations are agreed upon at the end of land use planning, the VLFMC is the body that makes sure that the regulations are followed and has the responsibility to sanction any violations.

Furthermore, the VLFMC will cooperate with PLUP, PSAP and VFMP teams on all aspects of planning, implementation of activities and monitoring/evaluation. During PLUP 2.0 they are responsible for:

- preparing the village base map,
- conducting village boundary delineation and finding agreements in the case of boundary conflicts,
- working together with the PLUP team on socio-economic, land and forest data collection,
- preparing the current land use and forest cover map (CLUFC),
- preparing the future land use management zones (FLUMZ),
- drafting the village regulations,
- calling village meetings in which the draft future land use management zones and the draft village regulations are presented, discussed, improved and finally approved by all households in the village.

One very important new role of the VLFMC is to organize and supervise land allocation either to new families or families in need of additional land, but only within the designated zones for agricultural land use, either for permanent or for rotational cultivation. The VLFMC is directly responsible for controlling the claiming of land (jap jong din) within the village area. Only if the VLFMC agrees to allocating land to a family in writing, a new family or a land poor family can receive new land for cultivation.

**At the end of Step 2.2:** each target village should have an elected and motivated Village Land and Forest Management Committee with 7 to 12 members, including 2 to 4 women.

### **Step 2.3: Village Base Map**

The purpose for creating the village base map is to produce a map which accurately depicts the village and the geographical features of the region (the agreed or disputed village boundary, the residential areas of the village including sub-villages and hamlets, rivers and streams, water springs, mountain chains and tops, caves, roads, dams and irrigation systems,

village water supply and any other specific features which villagers want to point out). It is required as a base to create other maps such as present and future land and forest use maps at a later stage.

Developing the village base map is a participatory exercise, either with the members of the VLFMC or a larger group of villagers. Elders are usually very knowledgeable about village boundaries and village features and should be encouraged to join in the mapping exercise. It is also important to have women participate, as they usually know other parts of the village area than men. At this step no field surveys of any of the mentioned features or the village boundary are necessary.

One very important aspect is often overlooked when preparing the base map: the map must also contain information on which areas within the village territory are used by outsiders from neighbouring villages and where the villagers use land outside their own boundaries. Any areas used by outsiders (e.g. upland plots used by other villagers), leased plots to outsiders or land concession by the Government need to be also mapped on the base map. The same applies to military areas or mining areas. This is specifically important to understand any existing or hidden land conflicts with outsiders. If this mapped land use by outsiders is seen as a problem or a conflict by some or all villagers, this should be marked on the base map with a tag.

For the preparation of the village base map, there are two options:

- a) the PLUP team asks the villagers to draw a sketch map of the village area on a large white sheet of paper (A0). Sketch maps are a very participatory tool as they must be drawn by the villagers themselves. They are particularly suited for village boundary description, identification of boundary and land use disputes, and identification of local names of rivers/streams and other features. On the other hand, the big disadvantage is that sketch maps, usually prepared on the floor, are not true to scale and cannot be digitized.
- b) the PLUP team uses a first printed satellite image map or rectified aerial photo map (size A0 or A1) and asks the villagers to draw on this print-out. Sometimes transparent overlays are used on the satellite image map, but this is usually not very practical and smaller features are difficult to identify through the transparent paper. If the satellite image or aerial photo map is used, this means the PLUP Team needs to prepare two copies of these maps before coming to the village, one for the base map and the current land use zones (Stage 4) and a second one for the future land use zoning (Stage 5). With the satellite image or aerial photo map, the PLUP team needs to show the orientation of the map (e.g. North direction), to explain carefully to the villagers some of the features, such as roads, the village and water streams in order to help them orient themselves and understand the image. Some villagers have shown difficulties in reading and interpreting satellite images or aerial photos. The advantage of the satellite images or aerial photo map is that it can be hung up on a suitable wall or shown on a large screen using a LCD projector for all villagers to see and point out specific features and areas. Any information drawn on the maps can be easily digitized at a later stage and shown to the general village meeting.

Depending on the working methodology selected, the required materials are:

- a) A0 white paper sheets, permanent markers in different colours, possibly topographic maps for support, or
- b) A0 sized satellite image maps and/or rectified aerial photo maps at a scale of 1:5.000 up to 1:15.000, mapping markers (0.5-0.7 mm), possibly topographic maps for support, LCD projector, generator (if no electricity supply available in the village) and laptop computer.



**At the end of Step 2.3:** The villagers with support by the PLUP Team will have developed a village base map showing the tentative village boundary, all the main features of the village area and any land use conflict areas.

#### **Step 2.4: Village Boundary Delineation and Agreements**

The village boundary is the administrative line that defines the village management area. The village boundary is usually defined as a traditional boundary separating one village from all its neighbouring villages. Most commonly it follows streams, rivers, mountain ridges or roads. Under the administrative regulations in Lao PDR, each village boundary should separate two villages with no “no man’s land” in between the two. Boundary delineation must therefore result in boundaries between villages that are fully connected with no vacant or non-village areas in between, even if the boundary is located in larger forest areas. Ideally, these far away village boundaries can be identified on satellite images on the laptop computer to avoid long forest walks or facing inaccessible areas.

The process of village boundary delineation is actually started during the drawing of the village base map. During this activity, villagers will normally mention where and why they face boundary uncertainties or even boundary conflicts with their neighbours. The PLUP team should start by asking the VLFMC members whether any previous village boundary agreements have already been signed. If there are previous records or maps of the village boundary. If this is not the case, the VLFMC should develop a new description of the village boundary. Once again, it is important to involve village elders in the village boundary delineation, as they know the village history and traditional agreements. The responsible person for district home affairs should be specifically invited to attend the work on boundary delineation as he/she is in charge of administrative boundaries for the entire district.

Starting from the village base map, the village boundary is retraced directly on the topographic map, a satellite image or aerial photo map or any such images displayed on a screen. This identification of the village boundary should be conducted in the presence of representatives from neighbouring villages, except for those neighbours with whom valid boundary agreements have already been signed, even if these have not yet been approved by District Authorities. It is important to invite representatives from neighbouring villages to this meeting as early as possible (see Step 1.4: Preparation of Field Work). It should be emphasized that representatives from neighbouring villages should be only persons who have a decisive role and are fully aware of their own village boundary.

The aim is to identify in which parts of the boundary uncertainties or disputed areas remain. Only for these segments of the boundary, joint surveys with representatives from neighbouring villages must be organized. This can either be done in the presence of PLUP team members or after the PLUP 2.0 work in the village, as long as a written and signed boundary agreement is produced at the end of the surveying work. To ensure accurate data collection and mapping is performed, the villagers (five - ten people) who participate in this activity must have extensive knowledge of the village territory and the land uses within the territory. Surveying of disputed segments of the boundary must be conducted by collecting GPS points.

PLUP team members will play the role of facilitators in case of misunderstandings between two or several villages. For any existing village boundary conflict an attempt must be made to resolve it. If a compromise can be found, the agreed boundary line is marked by posts, signboards or painted trees and a village boundary agreement document is signed by all concerned parties.

If the boundary conflicts cannot be resolved, the PLUP team marks the results of the GPS-based field surveys on a map showing the conflict area. The PLUP team can try to organize one last village to village meeting with the involved parties and village authorities to resolve

the conflict. If this fails, the case will be explained and submitted to District Authorities for resolution at a later stage.

Past experience has shown that mediation and solving of such boundary conflicts is still very weak. Even after past PLUP or FALUPAM, several boundary conflicts remained unresolved. The overall objective must be that every village has signed and stamped boundary agreements with each of its neighbouring villages, so that the situation is conflict-free and each village can efficiently manage its village area. These village boundary agreements will later be approved and endorsed by the District Authorities together with the PLUP report and the FLUMZ map. Copies of the village boundary agreements are given to the neighbouring villages' authorities (see sample village boundary agreement in **Annex 6**)

In case there have been several boundary conflicts in a particular village cluster, it would be advisable to organise a final boundary agreement meeting at district level with all VLFMCs of the target villages invited to review, finalize and approve the issue of boundaries between the villages once and forever. This meeting must be chaired by the District Governor.

**At the end of Step 2.4:** a clear village boundary for the village has been delineated on a map (which will later be used for the identification of current land use zones) and boundary conflicts have been identified or already resolved.

### **Stage 3: Socio-economic, Land and Forest Data Collection**

Data collection for PLUP is needed to guide decision making and teams must ensure that the information collected is accurate and recorded properly. It is important to distinguish between data that will be used for future land use zoning during PLUP and data that will later be used for promotion of sustainable agriculture (PSAP) and village forest management planning (VFMP). Only appropriate data for zoning purposes is collected at this stage, and this can be done through the use of data forms, sketch maps, or a combination of both. Separate, and more detailed household agricultural production data, household socio-economic data or soil analysis data will be collected during the subsequent PSAP process. Detailed forest-related data on forest condition, forest bio-diversity etc. will be collected during VFMP.

The overall **objectives** for data collection during PLUP 2.0 are:

- To understand traditional land use patterns and how livelihoods systems function
- To facilitate agriculture and forest land use zoning
- To make predictions on future village forest and land use areas based on population change

For PLUP 2.0 purposes, all data collection is done through group interviews, not at household level. The groups need to be gender segregated. The PLUP team members need to split up in two sub-groups, one facilitating the men's and another the women's group. The VLFMC members also split up in the two groups, with all women of the VLFMC going to the women's group. All villagers who have time should be asked to join either group, based on their gender. These groups can be called "PRA focus groups" or 'key informants'. Each group will be asked the same questions and the same data form is filled twice.

The full data collection form is shown in **Annex 7**.

During the interview in the two groups, the following topics will be covered:

### 3.1 Problem Census

Group work starts by preparing a problem census, unless this has already been done during the first village meeting. The problem census is done on a large white paper on the wall or on a whiteboard. In their respective groups, men and women are asked to identify the main problems they face concerning land use in their village (agriculture, forests, NTFPs, livestock, land tenure, water). Try to establish a complete list of all land related problems. Then the facilitator asks the group to rank the problems in order of importance.

For each of the problems listed, the group is asked to provide information on the causes for this problem, the impacts and any proposed solutions.

Sample questions: What are the main problems you face concerning using your land in this village? What are the main problems in agriculture? What are the main problems concerning the forest areas? What about NTFP collection or wildlife? What are the problems in livestock keeping? Are there any problems concerning the right to use your land? What about water supply?

Which one is the most important problem? Which one comes second? Etc.

What are the main causes for these problems? What are the impacts or effects? Can you think of any solutions or possible ways to solve this problem?

#### Problem Census Form

Village:

Cluster:

District:

No. of People in the Group:

Male/Female Group:

Issue/Problem	Cause(s)	Impact(s)	Proposed Solutions

The problem census is a powerful tool to assess which changes in land use are necessary and within the priorities of the village. This information is later used, completed and applied during PSAP and VFMP.

### 3.2 Population Growth

Data on population development is of high importance for future land use and forest planning. It helps a) to predict future population growth, b) to estimate future rice and staple food needs and c) to evaluate future agricultural land requirements.

Population development in the village can be calculated based on the following information: annual number of births, deaths, immigrants, and emigrants over the last six years.

#### Population Development Form

Village:

Cluster:

District:

Year	Total Population	Born	Died	Moved In	Moved Away	Change in number of people	Increase in %
2021							
2020							
2019							
2018							
2017							
2016							
				Total increase in 5 years in %			
				Average increase per year in %			

Year	Population	Change
2022		
2023		
2024		
2025		
2026		

### 3.3 Upland Rotational Land Use (Shifting Cultivation)

This is one of the key topics for data collection and later land use zoning. The PLUP team should get a clear picture concerning the current practices in shifting cultivation. In order to get this necessary information, the PLUP team needs to tell the villagers that the PLUP exercise is not done to limit or eradicate shifting cultivation practices, but rather to help the villagers to diversify their production and to stabilize and concentrate upland land use in specific zones of the village area. These zones need to be large enough for all villagers who are dependent on upland rotational land use to have enough rice and other crops for consumption and marketing.

#### Sample questions:

- How many families in your village practice shifting cultivation? How many do only have upland fields? How many have upland fields and lowland paddy?
- How many families have too little land to be self-sufficient?
- How many families use land outside the village area? For upland cultivation? For paddy? Do they face any problems when using land outside their own village?
- When you cultivate one upland plot in your village area, how long do you have to wait until you can use it again? How many years does the land rest?
- On your upland plots: What do you normally plant in the first year? What in the second year? For how long you harvest crops from one plot?
- How much upland land in ha does one average family need to be able to be fully self-sufficient if they do not have any paddy?
- Do families have upland plots in various parts of the village area and each family works on her own or do you have the tradition to work together and all families use upland plots in one part of the village area together in one year?
- Do some families start shifting cultivation in old forest areas (more than 15 years of forest growth)?
- How do you claim new land in your village? Do many families claim new land each year? What happens if the family who claims new land does not use the land?
- Do villagers compete to claim new land or do they mostly use their own existing land?
- Do villagers feel safe about using their land? Are there sometimes conflicts between the families about land use rights?
- Do all villagers know where each family has her upland plots and land claims?

If villagers in the two groups want to show locations or point out specific areas in their answers to the questions above, they can make use of the village base map or draw a special sketch map.

The results of the discussion in each group is filled in the form in **Annex 7**. More detailed data and information concerning upland agriculture per household will be collected during PSAP.

### 3.4 Permanent Agriculture

This part will deal with all permanently used agricultural land, such as paddy, fruit tree plantations, gardens, tree plantations or private bamboo plantations.

#### Sample questions:

- How many families in your village have paddy? What is the total area? In how many different parts?
- Has the paddy area been expanded in the past five years?
- Is there an opportunity to expand the paddy area in future? If yes, where?
- How many families in your village have fruit tree gardens or plantations, big enough to sell fruits (not only a few trees for home consumption around the house)?
- How many families have permanent gardens for vegetable production? Do you sell any vegetables or other crops from these gardens?
- How many families have their own tree plantation (e.g. rubber, teak, coffee, tea)?
- Does any family have any other type of private plantation (e.g. bamboo plantation, fodder grass)?

If villagers in the two groups want to show locations or point out specific areas in their answers to the questions above, they can make use of the village base map or draw a special sketch map.

The results of the discussion in each group is filled in the form in **Annex 7**. More detailed data and information concerning permanent agriculture per household will be collected during PSAP.

### 3.5 Large Livestock

This part deals with large livestock, like buffaloes or cattle only. More detailed information on large and small livestock will be gathered during PSAP.

#### Sample questions:

- How many families in your village have large livestock?
- How many heads of cattle and buffaloes are there in your village?
- Do families keep them together in one livestock grazing area permanently or seasonally? How many families keep livestock together? Is this area fenced?
- Or, do families keep their own livestock separately on their own land or in the forest?

The results of the discussion in each group is filled in the form in **Annex 7**.

### 3.6 Forest Use

This part deals with forest use. More detailed information will be gathered during VFMP.

Sample questions:

- What is the general condition of your forest areas if you compare with the past 10 or 20 years?
- Do you have old undisturbed forest growth (never cleared for agricultural use)? If yes, how many areas? Please give the names.
- Do you have sacred forest areas, areas where nobody is allowed to use? Graveyard forests?
- Do you have forest areas you use for grazing large livestock?
- Where do you get timber for house construction? For fencing material? For poles? For firewood?
- Do you make charcoal? Where does the wood come from?
- Do families sell timber or other wood?
- Where do you harvest bamboo? Do families sell bamboo?

The results of the discussion in each group is filled in the form in **Annex 7**.

### 3.7 NTFP and Wildlife

This part deals with NTFP use and hunting activities. More detailed information will be gathered during VFMP.

Sample questions:

- Which NTFPs do you collect in the village area and in which season?
- Where do you find these NTFPs?
- Which NTFPs have become rare?
- Which NTFPs do you sell?
- How many families in the village go for hunting wildlife?
- Where do find most of this wildlife?

The results of the discussion in each group is filled in the form in **Annex 7**.

After the two parallel group sessions (men and women group), the PLUP Team members need to review and compare the collected information and data. The data is checked for correctness and copied into the form on the laptop computer, saved to an external hard-drive and analysed by the PLUP Team members. If large discrepancies exist between the results from the two groups, this data must be discussed and confirmed with the VLFMC members on the next day.

Finally, the PLUP Team members exchange their impressions and observations from the discussion with the two groups. How was the general atmosphere? Can we trust the information provided? What is the general situation in this village? Any special observations?

**At the end of Stage 3:** The PLUP Team has collected, saved and analysed relevant data from two gender segregated focus groups and have started to develop a basic understanding about the village situation.

## Stage 4: Current Land Use and Forest Cover Mapping (CLUFC)

The objective of the current land use and forest cover analysis is for the PLUP team to understand the customary and traditional land use patterns in the village area and to analyse the current use and tenure systems. Before starting any planning for the future, the actual land uses and the local knowledge and resource claims need to be understood in order to elaborate specific, locally-desired outcomes.

The aim is to produce a map showing the current use of forest and agricultural areas of the village. Agricultural and forest land use zoning means the identification and mapping of agricultural and forest land uses within village management areas after boundaries have been agreed and mapped.

The PLUP Team makes use of the village base map and the village boundary delineation results to start drawing this information on a printed satellite image or aerial photo map on paper size A0 or A1 at a scale of 1:5.000 to 1:15.000. Alternatively, the satellite image map can be used as a background with a transparency sheet overlaid on top of the image. In parallel the same image is shown on a screen by using a LCD projector and the laptop. This activity is conducted by the PLUP team members together with the VFLMC members. If other villagers are interested to join in this activity, they are welcome.

The mapping of the different current use zones is based on the traditional knowledge and understanding of the villagers. The result will vary depending on the ability of villagers to understand and translate satellite imagery or aerial photo maps.

The CLUFC map will show the following features:

- The village boundary (from village base map and boundary agreements)
- Rivers and streams, water bodies, roads, mountains (from village base map)
- Local place and area names (from village base map)
- Village residential area (from village base map)
- Cultural land, such as temples and spiritual areas
- Areas used by outsiders, such as other neighbouring villages, land concessions, village land leased to outsiders, military zones or mining areas (from village base map)
- Delineate all actual forests and their forest cover, starting first with dense old growth forest including spirit forests and sacred areas, the medium and slightly degraded forest and finally young forest or tree plantation; the villagers will then review the name and description of each forest land area; villagers are allowed to describe the various forest areas in their own words with their own local classification system, specify the use or protection of these areas, and it will be the role of the PLUP Team to then translate this into the standard classification of forest areas; this approach is valuable as it gives insight into the local forest tenure system and how villagers make decisions related to conservation of forest within their own territory.
- For each forest area, the PLUP Team collects information on tenure rights: who can access the forest and use what products? In which seasons?
- Map any important bamboo forests on the CLUFC map.
- Delineate all upland agriculture areas, including cultivated areas used in the year when the satellite image was taken and all new and old fallow forests used in other years; areas used for planting cash crops should be identified versus those mainly used for upland rice; take note of upland fields in mainly dense forested areas which can be seen on the satellite image and determine the cause of these; there is no need to mark individual plots, but rather show the use zones on the CLUFC map!!
- Map all permanently used agriculture land (repeatedly used and not left to fallow), such as paddy areas, annual cropping land, any perennial crops (e.g. cassava),

fruit tree plantations, rubber, paper mulberry or teak plantations, bamboo or other NTFP gardens; again no family plots are mapped, but only the overall zone of annually used agricultural land.

- Ask the villagers to show all grazing land areas used for large livestock; ask if there are any rules or regulations regarding cattle and buffaloes for the wet and the dry season.
- Ask the villagers to point out the main NTFP collection areas and mark them on the CLUFC map.
- Ask the villagers about any other land use areas which have been forgotten.

The PLUP team then needs to get a good understanding which current land use zones are considered as private land for the families in the village, what is seen as under communal ownership or under state ownership. This is important to gather first information on the tenure status of land use zones within the village boundaries. CLUFC also serves for documenting the current land use rights according to customary practice.

All the information on areas on the CLUFC map needs to be cross-checked with the data collected during the group interviews in the data form in **Annex 7**. In addition, the PLUP team should ask the villagers in which zones there have been recent changes, such as new upland fields for young families or families with insufficient land resources, expansion of paddy or other annual cropping or new house construction. Identify trends in the field distribution, and allocation of new plots needs to be discussed with the villagers in order to understand why the fields are distributed as they are.

Sometimes villagers will mark very large areas as area used for upland cultivation and rotational crops. The PLUP Team should not interfere at this point or try to decrease these areas on the map. These zones will and must include all fallows and even some small untouched forest areas. Do not forget that the CLUFC map is supposed to reflect the current land use patterns and any wanted and necessary changes will only be discussed in the next stage when the future land use management is discussed.

The preparation of the CLUFC map does not involve field surveys. Exact boundaries of agricultural and forest zones will later be confirmed by PSAP and VFMP activities.

Based on all the gathered information, the PLUP Team will finalize the CLUFC map. It will be later presented to all villagers in a plenary village meeting, together with the FLUMZ map and the draft village regulations. The CLUFC map will be digitized either at the provincial level by PAFO/PoNRE GIS specialists or at the DAFO office. They will apply the standard codes and mapping system as foreseen for all land use planning maps in the country. There is a separate legend available for the current land use (CLUFC) (see **Annex 8**).

**At the end of Stage 4:** a CLUFC map has been prepared, showing details of all forest cover and agricultural land use areas available in the village territory with some information on the land ownership.

## **Stage 5: Future Land Use Management Zones (FLUMZ)**

To jointly develop the idea of future land use management zones together with the villagers is undoubtedly the most challenging of all the stages in the land use planning process. This is the core and the biggest challenge of the whole exercise. At the same time, this is the stage in which very often the priorities and views of the PLUP Team are imposed on the villagers. Yet, it is absolutely crucial not to impose future land use zoning on the villagers, but to jointly develop scenarios, options and opportunities in order for villagers to decide what would suit their needs and priorities best. This has rarely been achieved in past land use planning



exercises. In many cases a FLUMZ map was developed at the district level and then presented to villagers for approval. This will not be acceptable for CliPAD/I-GFLL.

The starting point for any future land use zoning is the present land use. Therefore, the PLUP team must have the village base map, the CLUFC map and the results of the data collection finalized and at hand before starting the FLUMZ exercise. The future land use or land use plan is derived from the present use and describes the necessary changes, adaptations and compensation (with land) to get there. Present land use by villagers has evolved over several generations and reflects traditional knowledge and land tenure. It does not make sense to want to change these completely and impose a radical re-arrangement of the use of the village territory.

The overall objective of CliPAD/I-GFLL is to maintain and where possible increase forest cover to benefit from REDD+ mechanisms and fight against climate change. At the same time, this can only be achieved if rotational upland cultivation is stabilized in certain areas of the village territory, alternative and innovative annual or permanent cultivation practices are gradually upscaled and livelihoods of villagers are secured. This will happen if the future land use zones, the agricultural development and the improved forest management are in line with local needs and priorities. Villagers need to be given the choice for future land use zoning. Otherwise plans will be approved which will never be fully supported by the villagers. Also experience in Lao PDR has shown that providing insufficient land for agriculture within the land use planning may lead to increased forest destruction.

The future land use zoning should be conducted by the VLFMC members together with the PLUP Team members in a quiet location and a good working atmosphere. It will require mutual understanding and respect. VLFMC members have a good knowledge of their available land resources and villagers' needs, while the PLUP Team understand the development priorities of the CliPAD/I-GFLL project, the district, the province and the national Government. The challenge is to combine these perspectives, develop alternatives and to come to some consensus. Consensus-based decision making is essential for the FLUMZ stage and the drafting of the village regulations thereafter.

For the FLUMZ exercise, new satellite image or aerial photo maps at a scale of 1:5.000 up to 1:15.000 are used as printouts on A0 or A1 paper. In parallel, the satellite image in conjunction with CLUFC information is shown on a screen by using the LCD projector and the laptop computer. This will allow VLFMC members to easily point out areas and features on the screen. Only in exceptional cases the VLFMC and the PLUP will interrupt their discussion and mapping work in the village and conduct field surveys to areas which are unclear, special hotspots etc.. Normally, FLUMZ activities do not include field work.

Forest covered areas in the CLUFC should be mostly carried over to FLUMZ to avoid unnecessary allocation of current forests mapped in CLUFC as any other zone type in the future plan e.g. as an agricultural zone. Tools like multi-colour pins with nylon strings can be used to indicate the zones on the map during the discussion in a more interactive way.

For mapping, a set of standardized categories and a standardized legend are used. The legend offers the opportunity to do general land use mapping to categories (Cat) and more detailed mapping to subcategories (Sub\_Cat). There is a separate legend available for the future land use zoning (FLUMZ). Through its application in practice, the FALUPAM approach has elaborated 49 different land use categories, comprising more than 200 sub-categories, all of which aggregate up into the standard 9 land types utilized by state planners. The PLUP Team must have these standard land classes, sub-categories and mapping standards (see **Annex 8**) available in a printed form before starting the mapping work for FLUMZ.

The key elements that enter into the transition from present land use to future land use zoning are:

- 1) Current use
- 2) Traditions/customs
- 3) Wishes/priorities of the villager
- 4) Topography and water supply (slopes, watersheds)
- 5) Natural and socio-economic potentials
- 6) Tenure rights

Various ethnic groups practice different land use systems and farming practices and this necessitates a flexible approach to FLUMZ with a high priority given to the current use, respect for their traditions and customs as well as their priorities. At the same time, the PLUP Team must work towards social justice at the local level through more equitable access of land for poorer households and women.

The first item to mark on the FLUMZ map are the settlement areas and their possible expansion zone. This can be copied from the CLUFC and only requires a short discussion with the VLFMC in which area new houses for young or new families in the village and its hamlets would be built in future.

### **5.1 Fixed Agriculture Zones (Annual and Permanent Agriculture)**

The zoning should start with the type of land that is easier to classify first, such as current fixed agricultural land, because this type of land is already defined in the current land use map, and simply needs to be included in the FLUMZ map. Once this is done, the PLUP team should ask the VLFMC if and where there are opportunities to expand the fixed agriculture, such as paddy, possibly including the construction of irrigation or fruit tree and other plantations.

### **5.2 Upland Agriculture Use Zones**

Before starting the delineation of future upland agriculture zones, the PLUP Team must once more review the current rotational production system using the CLUFC results and the data form in **Annex 7** to fully understand the present practices and the number of family involved in upland cultivation and the current payment of land taxes for upland areas.

Together, the VLFMC members and the PLUP Team will start by reviewing once more the current land use map (CLUFC), especially the location of upland fields in previous years and young fallows:

- Are there upland fields within or near old growth forests? If yes, who uses this land and where could these families be allocated other suitable land for production?
- Are the upland plots widely scattered across the village territory as individual households or concentrated in specific areas as one or several groups? Do villagers jointly rotate their upland cultivation in zones, year by year?
- Is there scarcity of suitable land for upland cultivation or are there parts of the village territory where additional land could be cultivated without destruction of old growth forests?
- Are there families in your village who have insufficient upland land resources and others who have too much land which they cannot cultivate? What is the situation concerning new land claims in upland areas? In many villages there are many individual land claims within communal areas, or *jap jong ti din*. Often, the process of *jap jong ti din* favours better-off and early-settler families who have the resources to

create and defend land claims. This topic must be discussed and later needs to lead to decisions on how to control and organize the claiming of land.

- What about permanent plantations and private ownership in upland areas?
- How are land tax payments for upland areas calculated? How about claimed plots in upland areas?

Based on this discussion, the PLUP Team explains about the two options for future upland agricultural use zones and presents some advantages and disadvantages of each option:

**Option A:** the villagers decide to keep the upland agricultural use zones based on the current traditional use. Each family has their plots which they use in a rotational system. The upland agricultural zones must be large enough to allow for sustainable rotation periods (normally 6-7 years, or 6-7 plots per family if they are entirely dependent on upland agriculture) and must accommodate for additional families who need to move their shifting cultivation out of old growth forest areas. In the end, the village could for example have one very large or 3-4 medium-sized areas earmarked for upland cultivation in which all the upland fields to be used in future would be located.

Advantages Option A:

- With this option, the majority of upland farmers do not lose their traditional plots, continue with their own rotations and only a few families will have to abandon their plots in the dense forest and relocate their activities to new land allocated to them within the upland agricultural use zones.
- Often less risk of soil erosion, compared to larger and clustered plots
- Easier to collect NTFPs on or near the upland plots
- Easier for villagers to buy and sell use rights for upland fields and bush fallows to other villagers

Disadvantages Option A:

- There is less mutual help and cooperation among villagers
- Maybe there is a need to use more labour for fencing etc.
- Less opportunity for joint fire control
- The overall situation is less transparent for village authorities and district staff.

**Option B:** the villagers decide to cluster upland fields together in six or seven separate zones and all together move from one zone to the other in each year. Under this option households who have acquired rights to use upland areas, fields or fallows as their own because of inheritance, purchase or opening of the agricultural land could lose their rights. They could resist being re-zoned into clustered annual upland use zones. If the village decides to adopt the “large group/whole village upland crop rotation zones” then these types of households would be affected, because they would have to forego their land claims, join the communal rotations, and their lands would also become part of the communal rotation. This clustering will mean that many villagers have to be allocated new plots within these new zones and this could lead to some new land disputes. As such, consolidated upland cultivation is sometimes in contradiction to respecting customary tenure schemes of the local population.

On the other hand, this clustering and co-location of upland plots also has many advantages such as much better opportunities for villagers and particularly women to work together in the upland areas, better protection of upland fields against any threats e.g. more fencing and better fire protection. It avoids landscape fragmentation. Knowing that all upland farmers can be found together in the same area in a specific year, makes it much easier for district staff to provide agricultural extension activities and for private companies to buy the produce destined for marketing.

#### Advantages Option B:

- It is easier to control forest/fallow fires, to maintain or restore landscape health
- Possibly less labour required for fencing
- Possibly easier to establish one access track and easier for transport of production
- Promotes community members working together and helping each other
- Easier for district staff to provide extension support and for private companies to buy produce.

#### Disadvantages Option B:

- Potential for increased soil erosion due to contiguous upland plots
- Many families need to give up their traditional rights to use their own parcels, which they could have inherited, purchased or developed in the traditional way
- Possibly new land conflicts could build up between villagers due to new allocation of upland plots within the clustered zones
- Less opportunity to collect NTFPs near the fields
- Possibly higher levels of biodiversity degradation due to clearing of larger contiguous zones in each cropping season

The PLUP team must make an effort to describe the two options neutrally and correctly. It is then up to the VLFMC members to make a first decision which one of the options they prefer for their own village. This choice will later be discussed once again when the FLUMZ map is presented and discussed with all the villagers.

Once, the VLFMC has taken a decision on the question of upland plot clustering or not, the zones designated for upland agricultural land use are identified one by one and marked on a new satellite image or aerial photo map. If any expansion or re-allocation of upland agricultural use zones is proposed by the villagers and really necessary based on the data collection on families dependent on upland systems, this should only be possible in degraded forest areas. Upland agricultural use zones in or near dense forest areas must be absolutely avoided.

The VLFMC and the PLUP Team must give attention to zoning rotational agriculture systems that meet the food security needs of present and future generations, but also keep in mind that some families will develop annual cropping and permanent plantations with the support of CliPAD/I-GFLL project and will thereby become less dependent on shifting cultivation. Nevertheless, the upland agricultural use zones must be designated large enough for food security and some commercial crops, focusing on self-sufficiency as a means towards poverty alleviation. Farmers often underreport their requirements in terms of agricultural land to avoid land taxes. This is especially so in upland communities, in which farmers require a larger land base to ensure their food security compared to lowland farmers.

In order to achieve sustainable upland rotations this can mean that between 15 and 25 ha of upland areas per family of upland farmers needs to be reserved (if this land is available), as this will include one cultivated plot per year and family, 5-6 additional plots under fallow, and in between other shrub land, young forests, streams etc.. For example, under existing FALUPAM plans, fallow lengths average 6.3 years, with a range (depending on local land availability and other conditions) from 3 to 9 years. This means that the VLFMC must decide on the maximum number of years of rotation necessary and feasible in the available upland crop/bush fallow area.

All designated rotational cultivation areas must avoid clearance of undisturbed forests, but include areas for future agriculture expansion based on calculated population increase for the coming 5-10 years. The objective is to clearly designate one or several sufficiently large areas as agricultural use zones for upland agriculture, but at the same time the PLUP team must

make it clear for villagers that in future no more shifting cultivation will be allowed outside these designated areas. The vision must be to develop the FLUMZ in a way that it belongs to the villagers, is truly owned by villagers and enables villagers to follow implementation.

At the end of these discussions, the VLFMC and the PLUP team decide on the boundaries of all designated upland agricultural use zones and mark them on the map, possibly by specifying a local name for each zone. There must be a clear understanding how families with plots in forest areas can be incorporated into newly zoned upland agriculture areas. Sometimes selected upland agricultural use zones can be specified as reserved areas (agricultural land not required currently) for future use by the villagers and or for investment opportunities.

### **5.3 Forest Zones**

In the next step, the VLFMC members and the PLUP Team will map the future forest zones. The aim is for villagers to report and delineate forest lands as they see them, without any policy or external filters, which is the only way to make it truly 'participatory'.

Based on the CLUFC, the villagers will first point out the dense old growth forest areas with high bio-diversity and define the boundaries of such areas. These zones will later be classified by the PLUP Team as conservation forest. These areas will often also be used for NTFP conservation and hunting restrictions. Then VLFMC members will then mark any spiritual or sacred forest zones as per CLUFC.

In a next step, the villagers will mark the boundaries of forest areas kept for the protection of watersheds, springs or to prevent land slides and to protect roads. This will include all areas with steep slopes, with fragile soils, areas near to major roads, any areas which can be regenerated to protection status and has the potential to revert naturally to a protection forest category.

If the village or any downstream village has an irrigation system, there is a need to classify the water source protection forest in the FLUMZ. This must also include all forests along rivers and streams (riparian forests) within the village territory to prevent soil erosion and silting. All these zones will later be classified by the PLUP Team as protection forest.

The main aim is to protect current forest land and its resources and wherever possible to enlarge the forest areas by identifying new forest land or areas for potential forest regeneration. Villagers who want to enlarge their forest area must consider some of the following issues:

- 1) Review whether the expansion of the forest land of this village is really possible? Are there no real land use activities in these areas? How many zones could there be with restoration potential.
- 2) Compile a list of families currently using land in forested areas designated for protection or future communal regeneration. There needs to be a discussion with these families and the VLFMC must have a plan for compensation of the affected families within the designated upland agriculture use zones. If the people using these forest areas are outsiders, this discussion must take place in the neighbouring village(s).
- 3) If possible, the VLFMC should try to join patches of protected forest in order to create ecological corridors and even small forest islands; to be considered as part of the forest zone under REDD+, any forest patch must at least have a size of 0.5 ha (5.000 sq.m.), trees must have a minimum DBH of 10 cm and a crown density of 20%.

Then the PLUP team asks the VLFMC which areas of existing forest or areas with regeneration potential the villagers consider as their village use forest. The village use forest category will be used for fuel wood collection, fencing material, NTFP collection, timber for house

construction and possibly roof thatching and sometimes for tree seed collection. This category is always considered as a communal area, as there cannot be individual use rights to natural forests according to the Forest Law. The boundaries of the village use forests are demarcated on the FLUMZ map.

The PLUP Team must then make it clear once more that after land use planning is finalized, no more shifting cultivation activities should continue in future in any of the designated forest areas! If this cannot be ensured, because of too little land for cultivation, then more land needs to be classified as upland agriculture use zone.

All designated boundaries of the future forest zones on the FLUMZ map will later be checked and reconfirmed during the detailed field survey of forest boundaries during the VFMP activities. For all forest zones detailed management activities will be elaborated during VFMP.

#### **5.4 Livestock Grazing Zones**

The livestock grazing areas need to be defined clearly. These zones should be of sufficient size to produce enough biomass to support the large livestock in the village and at the same time animals should not be forced to overgraze the area. If possible, livestock areas should be fenced to avoid that grazing animals use agricultural crops for feeding. The designated livestock grazing zones need to be compared with the numbers of cattle and buffaloes from the data collection form.

If the CLUFC shows a grazing area already, it needs to be decided whether this area is large enough or needs expansion. Under PSAP it is likely that intensive fodder production on private plots will be promoted in order to reduce pressure on grazing areas and forests.

#### **5.5 Aspects of Planning at Landscape Level**

The vast majority of the selected target villages for CliPAD/I-GFLL are located in critical watershed areas with downstream dams used for irrigation (with ADB-funded reconstruction or enlargement). At the same time entire village clusters are selected as target areas, in order to cover larger landscapes and not to leave out any village within a selected cluster.

Planning at landscape level means looking at a landscape as a whole and to look at the entire village area. Instead of focusing on the function of each individual land unit such as forest land, agricultural land, rivers and their banks, etc., landscape planning implies looking at the interactions between the different units to ensure the maximization of synergies by strategically placing them in the landscape context. Villagers identify sub-watersheds, continuous forest corridors, particularly sensitive areas and discuss continuity of land use zones beyond the boundaries with neighbouring villages. PLUP 2.0 which is done at the village level will include various land and forest types that cross village boundaries and are under different tenure and jurisdictional systems. Therefore, there is a need to establish connectivity beyond boundaries and inter-village networks.

The most important elements are: watershed protection, creation of corridors between the existing patches of forests, possibly aggregation of agricultural plots (if this is wanted by the villagers!) and creation of transport corridors for improved access to markets. More nuanced land use classes must reflect multiple uses of land, establishing multi-use zones and restoration areas is needed to increase the ecological, economic and social benefits.

When planning at a landscape level, and ensuring optimal use of each land unit, some land units will need to be restored to bring the landscape to its highest potential. In order to strategically target resources for enhancing landscape-scale benefits, Forest and Landscape Restoration (FLR) approaches could be applied. From the perspective of REDD+ and in support of the government's targets on forest cover, this is particularly important.

Finally, applying a landscape focus in planning will ensure that land use zoning methods result in an equitable balance between forests and agricultural land categories. Landscape-scale benefits with respect to forest connectivity and biodiversity corridors are highlighted, as are benefits with respect to the planning of rotational agriculture to enhance fallow length. They will lead to a stabilization (not reduction!) of shifting cultivation practices, while laying the foundation for the promotion of more sustainable fixed agriculture production under PSAP. Zoning adjacent agricultural land with dense forest areas across the boundary must be avoided.

## **5.6 Land Tenure Aspects**

For all future land use categories marked on the FLUMZ map, the land tenure aspects always need to be taken into consideration. Conservation, protection or state production forest areas are state land units according to the Land Law and the Forest Law. Village use forests, communal gardens or bamboo forests for village use are communal areas. For example, private tree planting (e.g. fruit trees) in village use forests, or worse even in protected forests should be absolutely discouraged due to tenure issues.

Livestock grazing land is mostly regarded as communal, but can exceptionally also be divided into family grazing plots. It must be the decision of the villagers whether grazing areas should remain under communal management or individualized. Paddy fields, fruit-tree plantations, commercial tree plantations or family gardens are mostly considered as private land.

The PLUP team should have a discussion with the VLFMC how the upland agriculture use zones in which rotational shifting cultivation is permitted are seen by the villagers. Is this communal land or a group of private fields and fallows? It is important to point out that often development into private plots for tree plantations, fodder plantations or permanent gardens will take place in exactly these upland agriculture zones. This means an increase in annual, permanent cultivation and an on-going privatization of land. The big challenge in future is that this process is controlled and managed by the VLFMC and regularly monitored by the village administrative committee. Any future land allocation by the VLFMC must be done in accordance with the FLUMZ map.

## **5.7 Final Steps**

Finally, the results on future land use management zone (FLUMZ) plan must be realistic and implementable by villagers, the CliPAD/I-GFLL Project and by GoL. The entire village territory needs to be zoned and classified in one way or the other. One important aspect when looking at the ambitiousness of any particular land-use planning exercise is to evaluate the relationship between the changes envisioned for future land use and the ability of the community to achieve the planned transition.

Land use plans must be seen as agreements or social contracts between the community and the government with explicit obligations for both parties. Land use plans should be accepted as legal documentation of local land and forest uses. Unfortunately, in the past land use maps and village land and forest management agreements were rarely used for planning investment activities in agriculture or forestry. The results of the joint planning and the agreement between the villagers and the district authorities should be binding for both sides.

## **Stage 6: Village Regulations**

The future land use and management zoning is a key stage of overall land use planning, but it remains incomplete if there are no clear rules and regulations on how these zones can be used or managed and what is not allowed in each zone. As every village is different, this requires

new regulations that are specific to this one village. In some villages there are traditional regulations in place based on customs and social practices of the ethnic group, some have even written them down. But with the new zoning during FLUMZ there is a definite need to review, adapt or newly develop land use regulations for each zone in the village territory.

For the reasons mentioned above, village regulations cannot be just a form which villagers fill in. Experience has shown that standard (generic) village regulations do not work. The PLUP team can provide a standard list of contents for the village regulations, but in every village these have to be developed separately and adapted to the local situation. In the end the draft village regulations which will be prepared by the VLFMC members with support by the PLUP team need to be fully approved by all villagers. The village regulations integrate local knowledge, must be in line with national laws and policies and must fit to the real situation of each target village.

Village regulations are developed for managing the use of agriculture land and forest resources according to the FLUMZ plan. Most of the uses of the various zones on the FLUMZ map will have been discussed during the FLUMZ stage already. Now the exact allowed uses and the forbidden uses for each zone need to be written down in a short document. This document will be the basis for the VLFMC to monitor the use of the zones, enforce regulations and to manage the village territory. This requires the cooperation and active participation by all villagers. It is important that this management and enforcement work is done by villagers themselves as district staff will not always be able to follow up and be present in the village.

A sample list of contents for the drafting of village regulations is shown in **Annex 9**.

The PLUP team can use this sample document to discuss the rules and regulations that should apply to each land use zone. For each zone the typical questions are:

What is allowed in this zone? What should be encouraged? And what is not allowed or forbidden in this zone?

What happens if somebody does an activity in this zone that is forbidden or illegal?

A first draft of the village regulations is prepared in this way by the VLFMC which specifies the conditions and rules for each of the agriculture land use zones, the various forest zones and other areas.

At the end of the document there are also possible rules for the rules and regulations concerning:

- Waterbodies
- NTFP collection and hunting
- Domestic Livestock (e.g. pigs, chicken, dogs)
- Any other village rules
- Details on what happens with collected fines

## **Stage 7: Final Meetings, Documentation, Approval and Data Storage**

### **Step 7.1: Final Meeting in the Village for Approval**

On the last day of stay of the PLUP team in the village, the village boundary agreements, the current land use map (CLUFC), the FLUMZ map and the draft village regulations will be presented in a general village meeting. The villagers are invited to attend the meeting prepared and organised by the VLFMC to hear, review, improve/adjust and finally agree on all the



conditions for each land use zone described in the village regulations and the location of the future use and management zones as presented in the FLUMZ map.

This plenary village meeting must be well prepared by the VLFMC with the support of the PLUP team. VLFMC members need to prepare themselves to present the preliminary results from all the mapping and drafting work done during the previous stages. The PLUP Team members need to assist them wherever necessary.

The VLFMC will present the following documents and give detailed explanations for all villagers, men and women, to understand the proposed changes in land use and management:

- 1) Village boundary and boundary agreements
- 2) Current agriculture and forestry land use zones as marked on the CLUFC map; the VLFMC needs to explain about the present use zones and their classification
- 3) The proposed future land use zones as per FLUMZ and the corresponding rules and regulations laid down in the draft village regulations

After each presentation, the villagers need to be given sufficient time for questions, to discuss any issues or complaints, to propose changes and to adjust the documents wherever necessary. It is important for the VLFMC to point out that once the documents are approved by the village and later by the district authorities, they become binding documents regulating their land use patterns and rights over the next 5-10 years. The agreements based on FLUMZ and the village regulations will be monitored, first of all by the VLFMC themselves, but also by DAFO staff who will return to the village in regular intervals in future.

One challenge is the presentation of the work results itself. At the end of the working period in the village, the various maps are not yet digitized and therefore can only be presented to the villagers as hardcopies. This makes it difficult to present them to a larger crowd. If the PLUP Team manages to copy the draft village regulations in a MS Word document, at least the new regulations can be presented on a larger screen by using the LCD projector.

During this final meeting in the village, the district PLUP team must record the number of households present, the number of women and men present, and the ethnic representation in an attendance table. The PLUP Team must also monitor the approval of the documents by the villagers by counting the votes and recording any opposition or criticism of the results (see Form in **Annex 10** to document approval by villagers).

### **Step 7.2: PLUP Report**

Once the district PLUP team returns to their office, it is important to finalize the village PLUP 2.0 report as soon as possible to avoid losing data or documents. 3-4 working days sitting together, immediately after fieldwork for report finalization is recommended. Additionally, essential information needs to be submitted to M&E cloud database for project implementation monitoring and reporting purposes.

The CLUFC and the FLUMZ maps must be digitized and finalized by the GIS staff at PAFO or PoNRE at provincial level.

The PLUP report needs to be put together and reviewed carefully by the PLUP team, before the final version is sent to the PLUP supervisors at provincial level and to CliPAD/I-GFLL for quality control. After successful completion of all documents and passing the quality control stage, the PLUP team members will receive an incentive payment of USD 180 for each finalized PLUP 2.0 report from CliPAD/I-GFLL funds.

The PLUP 2.0 report outline and contents are shown in **Annex 11**.

### **Step 7.3: Quality Control of PLUP 2.0 Results**

It is important to make sure that the report is of good quality and that all requirements are met. Only after the maps are available as printouts, they will be added to the PLUP 2.0 report before everything is submitted for final quality control at provincial level, by CliPAD experts and then for approval at district level. Indicators for quality assessment of PLUP 2.0 are listed in **Annex 12**.

### **Step 7.4: Approval of PLUP Documents**

All PLUP documents will remain provisional as long as PSAP and VFMP have not been completed in the target village. This must happen within 6 months from the PLUP 2.0 work. The reason for waiting up to 6 months is that the exact boundaries for agriculture and forest zones on the FLUMZ map could still change after the more detailed field surveys undertaken within PSAP and VFMP. After PSAP and VFMP, the FLUMZ map and the village regulations could require a final review and adaptation. Past CliPAD experiences from Houaphan have shown that this is often the case.

Eventually, the CLUFC map, the FLUMZ map and the PLUP 2.0 report are submitted to the District Authorities for official approval. Once the District Governor has signed the documents, copies of the 2 maps and the report are sent back to the village for signatures by the village authorities.

In case the head of DAFO or DoNRE or the District Governor request changes to be made to the FLUMZ map or the PLUP 2.0 report, the PLUP Team needs to discuss these proposed changes with the villagers and the VLFMC and try to reach an acceptable compromise for both parties.

Both, the District Authorities and the villagers need to respect the PLUP results and the agreement after approval. A well-developed PLUP 2.0 recognised by government should be considered to be a legal document, whereby village lands are allocated to the community for sustainable management and protection.

After a final approval has been reached, the VLFMC needs to receive printed and laminated copies of the CLUFC and the FLUMZ maps as well as typed village regulations. Based on these documents, the villages will prepare and erect a metal signboard at the village entrance or in front of any community hall that shows the FLUMZ results. The materials necessary for erecting the signboards will be provided by CliPAD/I-GFLL Project.

### **Step 7.5: Data Storage**

In the past, data storage of PLUP documents has been a major problem. For example in Houaphan the GIS files, maps and PLUP reports of approximately 20 villages out of 70 target villages for CliPAD can no longer be found. It is essential that PLUP 2.0 data and maps need to be stored securely in several copies at district and provincial level. Secure data storage involves softcopies as well as hard copies. The standard folder structure as described in the 2010 PLUP Manual or the FALUPAM Manual has to be followed.

On the computer at DAFO standard folders for PLUP 2.0 documents need to be established and copies of the same documents need to be transmitted to PAFO for permanent storage. In addition, all land use plans established under CliPAD/I-GFLL will also be forwarded to and integrated into the national Land Use Information System (LUIS) at NREIC.

As there will be preliminary versions of the FLUMZ map, which will be finalized only after the results from PSAP and VFMP are available, there needs to be a clear indication on each map whether this is a preliminary or the final version. All this will be a big task for safe storage and

data management by the District PLUP Team and this difficult task needs to be simplified as much as possible for them.

#### **Step 7.6: Harmonization of Land Use Plans at Landscape Level**

Once all the villages in one village cluster (Kum Ban) or group of villages have elaborated their land use plans, a meeting will be organised to present, review and harmonize the village boundaries and the FLUMZ maps on a larger landscape level. This meeting at cluster or group level will bring together the provincial PLUP 2.0 supervisors, the District Authorities including the District Governor or Vice-Governor, the responsible person for District Home Affairs, GIZ staff from CliPAD/I-GFLL, the district PLUP team and VLFMC members as well as village authorities (Nai Ban or Hong Nai Ban) from all villages within the cluster.

During this meeting, which is organized by DAFO, the district PLUP Team will present the village boundaries and FLUMZ maps of all villages. The objective of the meeting is to discuss the boundaries and future land use zones of all villages, to provide an opportunity to harmonise the zoning along the village boundaries and to encourage inter-village collaboration and networking.

For example, to achieve consistency of land use zones between villages within the village cluster, protection forest areas in one village should as much as possible adjoin protection forest areas in other villages or agricultural land use in one village should not be adjacent to protection or conservation forest in a neighbouring village. This meeting provides an opportunity to discuss joint management of contiguous protection or conservation forest zones among several villages, problems of water distribution to paddy fields in one or more villages, or outsiders encroaching on village land removing timber or NTFPs. Only when protection measures are scaled up to the landscape scale maximal benefits can be achieved, including the sustainable provision of key ecosystem services.

This kind of collaborative management is especially critical for the protection of upper watersheds providing services at the catchment level. Planning at the landscape scale allows for multi-level co-management of resources that span village boundaries and this kind of meeting at cluster level also provides an effective platform for negotiating potential resource-based conflicts.

Discussions and results of this meeting are documented by PLUP team members and will be used to adapt the FLUMZ maps once more where this is necessary and to actively encourage villagers to engage in cross village networking during monitoring and extension visits.

This joint management and harmonisation of land use plans on a higher level constitutes a first step towards Forest Landscape Restoration (FLR). FLR is the ongoing process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest and landscapes (as defined by the Global Partnership on Forest and Landscape Restoration). It starts a long-term transition towards sustainable landscape management.

The results of harmonized land use plans will be integrated into district development plans for better protection and better coordination of development activities.

#### **Stage 8: Link to Subsequent Activities of PSAP and VFMP**

Very often the results of land use planning exercises have been forgotten after PLUP and no monitoring or no development activities in agriculture or forestry have followed after the PLUP work. On the other hand, PLUP results (data and maps) can be used for many different purposes.

In CliPAD/I-GFLL Project a new attempt is made to directly make use of the PLUP 2.0 results. Within a time period of not more than 6 months, the data and maps prepared for land use planning will be used for two key subsequent activities a) agricultural land management and extension for sustainable agricultural practices (PSAP), and b) village forest management planning (VFMP). These activities will be directly funded and supported by CliPAD/I-GFLL.

The specialized agriculture and forestry teams in charge of PSAP and VFMP will specifically make use of the village base map, the data collection forms, the CLUFC, the FLUMZ and the village regulations. Their work will go deeper with additional socio-economic and agriculture data collection at household level, soil analysis and GPS field surveys/demarcation of zone boundaries. Finally, PSAP and VFMP will lead to annual activity plans for agricultural development and forest management. These activities will be funded through the project and technical or extension support will be provided by the relevant line agencies at district and provincial level, including where possible the private sector.

As mentioned already, any changes in land use zoning proposed as a result of the detailed surveys and field work will need to be taken up and adapted in the preliminary FLUMZ map of each village.

In the long run, the land use planning work also needs to form the basis for land registration activities and land titling in the target villages. This is essential to secure land tenure rights for villagers. Only with secure land use rights for their land will villagers sustainably reduce pressure on the forest areas.

## **Stage 9: Monitoring and Evaluation**

Regular monitoring of PLUP results has been the exception in the past. Only the FALUPAM approach under the TABI Project has systematically conducted monitoring missions after 1,5 to 2 years. It is very important to institutionalise monitoring activities under PLUP 2.0.

There are different levels and activities under the topic of monitoring and evaluation:

1) A very first monitoring activity consists of building in steps of quality control into the PLUP 2.0 process. This quality control is done at two levels, first by the trained provincial PLUP supervisors and secondly by the GIZ experts. Draft PLUP documents, like the CLUFC and FLUMZ maps and the PLUP report are submitted to them to check whether these are complete, of acceptable quality and have covered all steps and standards mentioned in these guidelines. This quality control exercise should also include an assessment of the overall participation of villagers (men and women) in the PLUP 2.0 process as reflected in the PLUP report and the decision making (see **Annex 10**). It is important to either implement PLUP 2.0 completely or not do it at all. If the FLUMZ map is to be integrated into the national LUIS certain standard criteria and mapping standards must also be met.

2) Approximately one year after the start of PLUP 2.0 in every village, Lao National Front and LWU staff will jointly conduct a FPIC 2 session in the village. While the objective of doing FPIC 2 is mainly related to checking the acceptance of VFMP activities, some questions asked will also refer to PLUP 2.0 activities. Through FPIC 2, neutral outsiders (LNF and LWU) will get a first-hand impression on whether the PLUP 2.0 and the VFMP activities supported by the project have been accepted or appreciated by the villagers. It is really a satisfaction survey. This also provides a first feedback on the performance of the PLUP team in their field activities.

3) Two years after the initial PLUP 2.0 exercise, the District PLUP Team should conduct a full monitoring and evaluation mission to the village and then step by step to all villages in the village cluster. During this monitoring and evaluation exercise, which will then be repeated

every year, the first objective is to assess together with the villagers and the VLFMC the compliance with the PLUP results. The impact of the various PLUP activities on the land and forest resources management will be evaluated. Ideally, the PLUP Team members will have access to new satellite images again (e.g. Sentinel satellite images, which are free of charge), in order to compare the original situation two years ago with the situation today. This will

Sample Questions:

- Have the villagers changed their land use and forest management according to the new land use zones? Have there been cases where this was not followed?
- Have there been any village boundary conflicts or land conflicts due to outsiders using land in the village territory?
- Have there been offences against the village regulations? What happened in these cases? Did the VLFMC fine people for misconduct or illegal activities?
- Have areas designated for forest conservation or natural forest regeneration been protected in practice?
- Are the land use zones as per FLUMZ map still relevant and adapted to the needs? Do there have to be changes anywhere and if so why?
- How has the tenure security of villagers changed after PLUP 2.0? Have there been any cases where private land or communal land was occupied and confiscated? If yes, what happened in these cases?
- Has the networking with neighbouring villages worked out to manage and restore larger landscapes? Are the land use plans harmonized at cluster level?
- Is a review of the FLUMZ map necessary and wanted? Is a review of the village regulations necessary and wanted?

provide the opportunity to assess all changes on recent satellite images together with the villagers.

Monitoring and evaluation visits by the PLUP Team must be conducted in every target village not only in selected sample villages. Separate funds will be made available under CliPAD/I-GFLL for such monitoring and evaluation visits. After the field work of 2-3 days, the PLUP team will prepare and submit a Village PLUP 2.0 Monitoring Report (see **Annex 13**).

In their report, the PLUP Team must also specify whether they classify the overall compliance with PLUP 2.0 as very high, high, mixed or poor, depending on the evaluation based on the satellite images or during field surveys and an assessment of contraventions against the village regulations. A protocol to determine the compliance is also presented in **Annex 13**.

Monitoring and evaluation visits provide the first real opportunity to revise the FLUMZ map and the village regulations. In this case the PLUP Team will hold some working sessions with the VLFMC and the entire villagers similar to Stage 5 and 6 described in these guidelines. The revised documents will be submitted for approval, same as the original documents.

## 6. PLUP 2.0 in Special Areas

There can be several situations where target villages for CliPAD/I-GFLL are located in special areas, such as:

1. Villages in National Production Forest Areas
2. Villages in National Protected Areas (NPAs)
3. Villages in National Protection Forests
4. Relocation Villages
5. Re-settlement Villages (or consolidated villages)

In each case, the PLUP Team must take these special situations and circumstances into consideration. Further details can be found in the original PLUP Manual of 2010.

These are just some examples:

- Land use zoning in villages within Production Forest Areas requires identifying suitable agricultural land areas to replace agricultural production land in declared production forest zones.
- Land use zoning in consolidated or relocation villages is particularly challenging because of the significant population increase which has often increased the area of the village agricultural land use zone and diminished the size of village forest zones. In these villages there is often scarcity of land resources for sustainable use and management.
- In National Protected Areas the collection of specific biodiversity data is required to facilitate the land use zoning activity. This includes an activity called Participatory Biodiversity Assessment.
- According to current legislation (Forest Law), no individual land registration and titling will be allowed in NPAs or National Protection Forests.

As many of the CliPAD/ I-GFLL target villages will be located within or near to NPAs, some special aspects for PLUP 2.0 in NPAs are listed below:

- During PLUP 2.0 there is a need to establish Buffer Zones, Total Protection Zone (TPZ) and Controlled Use Zone (CUZ) and Corridors to safeguard key biodiversity within NPAs.
- The NPA Management Unit (Land Management and Livelihoods Sub-units at district level) must participate in PLUP 2.0 by: providing information related to PA boundaries, attending PLUP village missions if PA boundaries are not clear and delineation of corridors, attending the provincial level training, attending the PLUP monitoring visits and review meetings and supporting any other technical issues as needed.
- Forest and land use patterns under a sustainable management system need to be stabilized, trying to limit rotational agriculture use in TPZ and CUZ as well as in corridors.
- Landscape scale connectivity that creates habitat and supports biodiversity needs to be established.
- Ensure equitable access to forest and land resources for all village members and formalizing land use rights within the existing legal framework.
- Approval of PLUP Agreements with local villages with territory in the CUZ, TPZ and Corridors that support Village Conservation Contracts (VCC). An approved PLUP Agreement and Village Conservation Planning Matrix (VCAP) is required for the LFNC to facilitate the signing of the VCC.
- Under CliPAD/I-GFLL villages in NPAs will not be supported with a VFMP approach, but will receive „Village Conversation Funds”.
- A partnership between villages and government for co-management of village development and conservation activities needs to be created.

## Annex 1: The “Common Principles as a Guiding Framework for Land Use Planning at Village Level” which were published by NAFRI in June 2017

Village Level Land Use Planning (LUP) in Laos shall adhere to the following common principles:

No.	Standard Description
1	<p><b>Consideration of higher level and other sector plans:</b></p> <p><i>The District Administration should convene special meetings with the concerned line agencies to prepare for the Village Land Use Planning activity. The District Administration must investigate if there are any higher level (District, Province, National) spatial plans, socio-economic plans and sector plans which may have relevance to the participatory village land use planning process. If yes, then these plans shall be considered in the Village LUP process, while ensuring and emphasizing a participatory, bottom-up, planning process essential to Village LUP.</i></p> <p><i>The LUP report shall describe aspects which have been taken into consideration from higher level or other sector plans.</i></p>
2	<p><b>Consideration of existing Land Use Plan:</b></p> <p><i>The District Administration should also investigate if previous Land Use Plans, or aspects thereof, which need to be considered in the Village LUP process, especially if these previous LUPs are adequately detailed, accurate and reflect the reality and potential of the village under consideration.</i></p> <p><i>The LUP report shall describe aspects which have been taken into consideration or changes from previous Land Use Plans.</i></p>
3	<p><b>Establishment of a LUP core team:</b></p> <p><i>The District Administration should establish a core LUP team comprising district representatives from the NRE sector, and the agriculture and forest sector, and in engagement with ethnic villages, the National Front for Construction to facilitate the undertaking of the land use planning activities.</i></p>
4	<p><b>Content of a LUP:</b></p> <p><i>A “complete LUP” must at least include inputs from the NRE sector and agriculture and forest sectors, preferably combined in one joint plan or as separate attachments.</i></p> <ol style="list-style-type: none"> <li><i>The NRE sector (Zoning) Plan must include comprehensive information according to the Standard Land Classes Scheme (see Principle 5 and Annex 2), at least Category I.</i></li> <li><i>The Agriculture and Forest plans must include comprehensive information according to the Standard Land Classes Scheme (see Principle 5 and Annex 2), at least Category II, but preferably Category III. This also applies if plans (1) and (2) are combined.</i></li> </ol>
5	<p><b>Land Classes and Codes:</b></p> <p><i>All village Land Use Maps, regardless of where they are generated, must adhere to a standardized Scheme of Land Classes and respective GIS data coding. This scheme can be found in Annex 1.</i></p>
6	<p><b>Data Collection by the LUP core team:</b></p> <ol style="list-style-type: none"> <li><i>A LUP planning process must include the collection of appropriate data for informed decision making. A list of the minimum data to be collected can be found in Annex 2.</i></li> <li><i>Data should be collected as primary data during the planning process. Secondary data can be used if verified by the village representatives and if not older than 12 months of the date of planning.</i></li> <li><i>An appropriate issue analysis must be carried out in the LUP planning process and documented. It shall address at least the following aspects:</i></li> </ol>

	<ol style="list-style-type: none"> <li>Problem census and basic analysis of issues regarding forest and agriculture and other livelihood issues</li> <li>Problem census and basic analysis regarding land use and management</li> <li>Development needs and potentials</li> </ol>
7	<p><b>Report format:</b></p> <p><i>A LUP must include a descriptive report, which adheres to a standardized format. The contents of this report include:</i></p> <ol style="list-style-type: none"> <li><i>Village boundary description and agreement(s),</i></li> <li><i>VLMC composition and responsibilities,</i></li> <li><i>History and socio-economic analysis of the village</i></li> <li><i>Description of aspects from higher level and other sector plans, as well as changes from previous LUPs (Principle Nr 2)</i></li> <li><i>Brief description of zoning/sector plans (Principle Nr 4),</i></li> <li><i>Description of current and future land use zones and associated management rules</i></li> <li><i>Table of collected data as per Principle Nr 6</i></li> </ol> <p><i>In line with the approval process (Principle Nr 13), the different sections must include signatures by responsible stakeholders: i.e. VLMC members, neighboring village authorities, head of relevant GoL agencies, district governor.</i></p>
8	<p><b>Minimum set of maps:</b></p> <p><i>A LUP must include the following maps:</i></p> <ol style="list-style-type: none"> <li><i>Geographical Map</i> <ol style="list-style-type: none"> <li><i>Topographic data</i></li> <li><i>Village boundary as approved (see Principle 13.2)</i></li> <li><i>Tagged natural features, such as mountain peaks, ridges, rivers, points of interest</i></li> </ol> </li> <li><i>Current Forest Cover Land Use Map, at least according to land classes category II, but best to category III, which reflects actual land use realities as closely as possible</i></li> <li><i>Future Land Use Map, at least according to land classes category II, but best category III, which reflects the realistic and feasible potential to enhance and improve land use, agriculture and forest land management.</i></li> <li><i>Land user and ownership map, displaying the land rights situation (private, communal (collective), state and enterprise)</i></li> </ol>
9	<p><b>Map contents:</b></p> <p><i>All LUP maps must adhere to the following format requirements, which include:</i></p> <ol style="list-style-type: none"> <li><i>Appropriate Title of the map</i></li> <li><i>Date of the map creation</i></li> <li><i>Display of map scale, bar or numeric</i></li> <li><i>North Orientation with display of north arrow on the map</i></li> <li><i>Legend explaining all content displayed and adhering to the standard classes scheme</i></li> <li><i>Responsible office for the map, including contact details</i></li> <li><i>All maps must be in a format easy to read and understand by villagers</i></li> </ol>
10	<p><b>Map precision:</b></p> <ol style="list-style-type: none"> <li><i>For all LUP maps, transparent information must be provided about the precision level (or technology) with which lines and shapes have been created (i.e. GPS field survey, drawing on Topo map, etc)</i></li> <li><i>Village boundaries shall be drawn to the highest possible precision, following natural features clearly visible on the base map, or through supporting GPS points taken in the field.</i></li> <li><i>If cadastral mapping data exists for a village, it shall be used in the base map for land use planning.</i></li> </ol>
11	<p><b>Time projection:</b></p> <p><i>A LUP shall be developed with a minimum targeted time projection of three (3) years. The time projection must be reflected in the planning description (report) and the future land use map.</i></p>



12	<p><b>Participation:</b></p> <p><i>The District Administration, in collaboration with the LUP core team, should ensure that all district line agencies are involved in the planning, updating and final review and approval of the village land use plans.</i></p> <p><i>At the village level, all land use planning must be done in a participatory manner. Minimum requirements for participation are:</i></p> <ol style="list-style-type: none"> <li><i>All affected neighboring villages are involved in village boundary demarcation exercises and decisions, through at least 2 official village representatives.</i></li> <li><i>If not existing, a Village Land Management Committee, consisting of at least nine (9) elected members of the village, shall be established.</i> <ol style="list-style-type: none"> <li><i>The VLMC composition must include:</i> <ol style="list-style-type: none"> <li><i>No fewer than 2 women</i></li> <li><i>Village chief &amp; deputy</i></li> <li><i>Representatives of relevant sections</i></li> </ol> </li> <li><i>Each member of the elected VLMC shall be given a clear set of responsibilities.</i></li> </ol> </li> <li><i>The entire village population must be informed and invited to a consultation at the beginning of the planning process.</i></li> <li><i>The entire village population must be informed and invited to a consultation at the end of the planning process. All planning decisions must be clearly and transparently explained to the attending villagers.</i> <ol style="list-style-type: none"> <li><i>Villagers must be given the opportunity to inquire, raise concerns or object to planning decisions, which must be taken into consideration before finalization of the plan.</i></li> </ol> </li> <li><i>Throughout the entire process of Land Use Planning it must be ensured that information is provided to affected and participating villagers in their respective ethnic languages. No individuals may be excluded from the planning process, physically or through Representatives of investors or companies with ongoing or planned investments in the village shall be included in the process</i></li> </ol>
13	<p><b>Approval Process:</b></p> <ol style="list-style-type: none"> <li><i>A Village Agreement shall be approved by the VLMC, but only based on a final draft being given to all signatories for review.</i></li> <li><i>A Village Boundary Agreement shall be approved by representatives (Village Chief or deputy) of all affected villages, but only based on a final draft being given to all signatories for review. In case of larger conflicts among neighboring villages which require an extended resolution and mediation process, the final approval can be postponed and “externalized”.</i></li> <li><i>The parts concerning agriculture and forestry in each LUP must be acknowledged by the Agriculture and Forestry sectors indicating their consent with the contents, before further processing by the NRE sector.</i></li> <li><i>The head of the NRE sector signs each plan for compliance with the technical standards stipulated above.</i></li> <li><i>The final approval of a “complete LUP” will be signed by the District Governor’s Office, only after all above requirements (principles and signatures) have been met.</i></li> </ol>
14	<p><b>Data Management:</b></p> <ol style="list-style-type: none"> <li><i>All offices which have produced LUPs or parts of LUPs must keep at least 2 hard copies and 2 soft copies in appropriate storage in their office.</i></li> <li><i>All sector plans must be forwarded from the respective sector to the NRE office, including at least one hard copy and one soft copy.</i></li> <li><i>The district NRE office must forward all finalized plans to the Province NRE office in a timely manner, which forwards them to national level and distributes the data to relevant sectors and on demand.</i></li> <li><i>Any LUP shall be uploaded to the National LUP Database no longer than 3 months after the date of approval by the District Governor’s Office.</i></li> <li><i>The content of the National LUP Database shall be shared and harmonized at all times between the MoNRE and MAF data servers.</i></li> </ol>
15	<p><b>Monitoring of Land Use Plans:</b></p> <ol style="list-style-type: none"> <li><i>Land Use Plans should be regularly monitored (at least once every 12 months) by the LUP core teams for plan implementation, compliance, support requirements and current validity.</i></li> </ol>

	<p>2. <i>Necessary changes to the LUP which are identified during monitoring missions should be noted and carried out as appropriate (see Principle No. 16)</i></p>
16	<p><b>Changes and revisions to an approved LUP:</b></p> <ol style="list-style-type: none"> <li>1. <i>An approved LUP may be modified through an appropriate process by adding approved (partial) changes as Annexes. These changes may derive from different sectors but must be provided to and acknowledged by the Natural Resource &amp; Environment Office.</i></li> <li>2. <i>A complete revision of a LUP may be done not earlier than 3 years of the last approved plans. All Annexes of changes must be taken into consideration for this complete revision.</i></li> </ol>

## Annex 2: What to look for in villages with existing PLUP, FALUPAM or similar!

When starting PLUP 2.0 activities in a target village, the PLUP team with support by CliPAD/I-GFLL needs to assess whether the past land use planning results (like PLUP, FALUPAM or other) can still be fully accepted as is, or needs to be completed or needs to be redone in full.

The following guideline will help in this assessment: (start with **Nr. 1** and work your way through from left to right)

<b>Nr.</b>	<b>Criteria</b>	<b>Question</b>	<b>Answer Yes</b>	<b>Answer No</b>
<b>1</b>	Date of the old LUP implementation	Is the past LUP exercise younger than 5 years or 60 months old?	Continue with <b>Nr. 2</b>	New PLUP 2.0 has to be done from scratch! Continue with <b>Nr. 8</b>
<b>2</b>	Completeness of the old LUP documents	Do the LUP documents contain: <ul style="list-style-type: none"> <li>• a document showing an elected VLFMC of 7-12 people?</li> <li>• a clear village boundary without conflict and with boundary agreements?</li> <li>• land use related data collection?</li> <li>• a future land use zoning map?</li> <li>• approved village regulations?</li> <li>• a LUP report by LUP team?</li> </ul>	If <b>all</b> is complete, the new District PLUP 2.0 team will conduct a monitoring visit to the target village to check whether the documents are still relevant and accepted or require any updating; for checking the FLUMZ map continue with <b>Nr. 3</b>	If some documents are missing, continue with <b>Nr. 7</b>
<b>3</b>	Participatory approach to LUP	Was the VLFMC elected by a large majority of villagers or only appointed? Is there documented attendance by villagers? Does the future land use zoning really reflect the needs and priorities of the villagers? Are the village regulations specific to this village or are they the standard (generic) regulations only?	If <b>all</b> was done in a participatory way and reflects the villagers' views, continue with <b>Nr. 4</b>	If some documents are clearly imposed on villagers, continue with <b>Nr. 7</b>
<b>4</b>	Mapping standards and map contents on the LUP maps	Do the contents, classes, sub-categories and mapping standards of the future land use zoning map (FLUMZ) fulfil the new standard criteria?	Accept the map as it is and integrate it into LUIS, if there are no changes after the monitoring visit by PLUP 2.0 team Continue with <b>Nr. 5</b>	FLUMZ Map needs to be redone by the PLUP 2.0 team, continue with <b>Nr. 7</b>
<b>5</b>	Approval of old LUP results	Were the LUP documents ever officially approved by District Authorities	If <b>all</b> questions above were answered with YES, accept the LUP documents as they are and continue with <b>Nr. 6</b>	Submit the LUP documents for official approval after <b>Nr. 6</b> was conducted by the PLUP team.

<b>6</b>	<b>→ Conduct a monitoring visit to the target village to check whether the villagers confirm that all the LUP documents are still valid without any changes. If selected documents are no longer valid and need to be updated, continue with Nr. 7; if all documents need to be changed, continue with Nr. 8</b>
<b>7</b>	<b>→ The district PLUP team revises all incomplete or outdated documents together with the villagers according to these PLUP 2.0 guidelines</b>
<b>8</b>	<b>→ The district PLUP team starts the PLUP 2.0 from scratch according to these newly adapted guidelines by CliPAD/I-GFLL</b>

### Annex 3: Sample time schedule for 7 days of PLUP 2.0 activities

Sample timeline for 7 days of PLUP 2.0 in a target village (morning and afternoon sessions), partly in sub-teams

Please note: the PLUP 2.0 activities in one target village can be done in one longer stay of 7 days e.g. if the village is remote or difficult to access, or it can be split into two separate missions, one mission of 4 days up to concluding CLUFC and a second mission of 3 days for FLUMZ, village regulations and the final village meeting

#### Morning

Sub-Team	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	First village meeting: Introduction to PLUP team and PLUP process	a) Finish Village Base Map	Data collection men's group	CLUFC Mapping with VLFMC	FLUMZ Mapping with VLFMC	a) Finalize FLUMZ Map	Final village meeting: review and approval of PLUP documents
2		b) Village boundary delineation and agreements	Data collection women's group			b) Draft village regulations	

#### Afternoon

Sub-Team	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	a) Election of the VLFMC b) Prepare Village Base Map	Data collection men's group	Analyze data, enter into the computer, check accuracy	Finalize CLUFC Mapping with VLFMC	FLUMZ Mapping with VLFMC	Finalize drafting village regulations	
2		Data collection women's group					

#### Flow Diagram

##### **First village meeting:**

- Introduction of PLUP team members
- Explanation on objectives and working steps of PLUP 2.0
- PLUP 2.0 is the first step before PSAP and VFMP
- Discuss village history, current population, main sources of livelihood and possibly conduct problem census
- In case of past LUP activities, discuss the experiences made and whether the documents are still relevant

##### **Election of Village Land and Forest Management Committee (VLFMC):**

- Explain objective and importance of the VLFMC
- Explain role and responsibilities
- Explain working procedures for this committee
- Prepare and facilitate election of VLFMC

**Village Base Map:**

- Main geographic features of the village area (village boundary, residential areas, rivers and streams, water springs, mountain chains and tops, caves, roads, dams and irrigation systems, village water supply and any other specific features)
- Areas used by outsiders (e.g. upland plots used by other villagers), leased plots to outsiders or land concessions, also military areas or mining areas.
- Land conflict zones

**Village Boundary Delineation and Agreements:**

- Tracing of village boundary
- Field surveys to boundary conflict areas
- Boundary conflict resolution
- Signing of village boundary agreements

**Socio-economic, Land and Forest Data Collection:**

(in two gender-segregated sub-groups)

- Problem Census
- Population Growth
- Upland Rotational Land Use (Shifting Cultivation)
- Permanent Agriculture
- Large Livestock
- Forest Use
- NTFP and Wildlife

**Current Land Use and Forest Cover Mapping (CLUFC):**

- Copy key elements from village base map
- Forest zones
- Bamboo forests
- Upland agriculture zones
- Permanent agriculture zones
- Grazing land areas
- NTFP collection zones

**Future Land Use Management Zones (FLUMZ):**

- Residential areas
- Fixed Agriculture Zones (Annual and Permanent Agriculture)
- Upland Agriculture Use Zones
- Forest Zones
- Livestock Grazing Zones
- Aspects of Planning at Landscape Level
- Land Tenure Aspects

**Village Regulations:**

- Allowed and forbidden activities for all future land use and management zones
- Rules and regulations
- Sanctioning and fines

**Final Meeting in the Village for Approval:**

- Present all PLUP documents
- Discuss and review
- Approval by villagers

## Annex 4: Form 1: General Village Data

**Form 1: General village data collection on village history, population, infrastructure, and previous land use planning activities.**

Village: Kum Ban: District

Interviewers:

Date:

1. Village History:		
2. Population	No. of Households:	
	Total Population:	
	Men:	Women:
	Ethnic groups:	
3. Livelihood	Main sources of livelihood:	1.
		2.
		3.
		4.
4. Strong points of the village:		1.
		2.
		3.
5. No. of families with paddy fields:		
6. No. of families who rely only on upland agriculture (shifting cultivation):		
7. No. of families who have large livestock (cattle, buffaloes):		
8. Past LUP exercises		
	When:	
	By whom:	
	Data/Maps available in the village:	
	Still being used or no longer relevant?	

## **Annex 5: The Village Land Use and Forest Management Committee (VLPMC)**

### **Agreement regarding Appointment of the Village Land Use and Forest Management Committee (VLPMC)**

Lao People's Democratic Republic

Peace, Independence, Democracy, Unity, Prosperity

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Province: ..... No. ....

District : ..... Date: .....

#### **Agreement**

The Governor of..... District has issued a Decision

Regarding the Appointment of the Village Land Use and Forest Management Committee (VLPMC)

of ..... Village

- Pursuant to the District Agreement No. .... /, dated: .....

- Pursuant to the agreement on the implementation of land and forest use planning, dated: .....

- Pursuant to the election and agreement reached between the village authority, the village front, village elders, and all villagers of .....village who have contributed to the protection of forest and watersheds.

Article 1: To assign the persons whose names are listed below:

1. Mr. .... Head of VLPMC, Deputy Village Chief
2. Mr/Ms. .... Vice Head of VLPMC
3. Mr/Ms. .... Village Land Use Member
4. Mr/Ms. .... Village Land Use and Security Member
5. Mr/Ms. .... Village Agriculture Member
6. Mr/Ms. .... Village Agriculture Member
7. Ms..... LWU Member
8. Mr/Ms.....Village Forestry Member
9. Mr/Ms. .... Village Forestry Member
10. Mr/Ms .....Village Forestry Member

The VLPMC can have between 7 to 12 elected members of which 2 to 4 should be female.

Article 2: The Rights and Functions of the Village Land Use and Forest Management Committee

1. Coordinate with concerned line agencies to facilitate the development of village land use and village forest management.



2. Guide agriculture by households or production groups in planning for activities to improve agricultural production in the accepted land use zones for agricultural use.
3. Build up relationship with neighbouring villages and within village cluster to facilitate village networking and cooperation with neighbours.
4. Mediate various conflicts within the village and misunderstanding concerning land use and the management of the village boundary.
5. Plan and organise village forest management activities according to the Village Forest Management Plan and annual activity plan for forest protection and regeneration.
5. Monitor and support agricultural activities of households and production groups and prepare reports on the progress of village activities to district level.

Article 3: All parties concerned must provide support to those assigned to facilitate effective implementation.

Article 4: This Agreement shall be used as a reference document and will become effective from the date it is signed.

Acknowledged by the .....District Governor

## Annex 6: Village Boundary Agreement

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

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Province ..... No. ....

District ..... Date: .....

Village .....

# Agreement Form

### Inter-Village Boundary

- Pursuant to the Forestry Law No. ../NA, dated 21/01/2019
- Pursuant to the Land Law No. 70/NA, dated 21/06/2019
- Pursuant to the Law on Water and Water Resources No. 04/NA, dated 11/10/96

In order to improve the management of land, forest, and water resources and other natural resources in each village so that management can be implemented in accordance with the government and party policy and guidelines, and with clarity between villages in the village cluster, and to ensure the guidelines are effective for traditional protection, management and use of the resources in accordance with the laws and regulations.

The relevant village authorities have therefore agreed to delineate the village boundary between

..... village and ..... village by unanimous discussion and decision

made on (date)....., and in accord with the ground survey as described below.

[illegible]

.....

.....

.....

.....

.....

Sketch Map of Village Management Area Boundary:

Therefore the village authority and the village authorities of the adjacent village have prepared this agreement as a reference document certifying the boundary location between the two villages.

Village Representatives: Village Representatives:

1 .....	1 .....
2 .....	2 .....
3 .....	3 .....

Certified by Village Head

Certified by Village Head

Certified by DoNRE

Certified by DAFO

Certified by District Governor

## Annex 7: Socio-economic, Land and Forest Data

### Form 2: Socio-economic, Land and Forest Data Collection

#### 1. Problem Census

Problem Census Form

Village:

Cluster:

District:

No. of People in the Group:

Male/Female Group:

Issue/Problem	Cause(s)	Impact(s)	Proposed Solutions

#### 2. Population Growth

Population Development Form

Village:

Cluster:

District:

Year	Total Population	Born	Died	Moved In	Moved Away	Change in number of people	Increase in %
2021							
2020							
2019							
2018							
2017							
2016							
				Total increase in 5 years in %			
				Average increase per year in %			

Year	Population	Change
2022		
2023		
2024		
2025		
2026		

#### 3. Upland Rotational Land Use (Shifting Cultivation)

Number of families practicing shifting cultivation:	
Number of families totally dependent on shifting cultivation:	
Number of families with upland plots and lowland paddy:	
Number of families who are not self-sufficient in rice:	
Number of families with land outside the village territory:	Upland: Lowland:

Any problems concerning use of land outside the village territory?		
How long do you rest an upland plot until you can use it again (fallow period)?	years	
Normal crops for first year of cultivation after slashing and burning:		
Number of families who can cultivate for 2 years in a row:		
Normal crops in the second year of cultivation:		
Number of years you can harvest crops from upland plots:	years	
Average area per family needed per family to be self-sufficient (if they have no paddy!):	ha	
Do families have upland plots in various parts of the village area and each family works on her own?	Yes:	No:
Do you have the tradition to work together and all families use upland plots in one part of the village area together in one year?	Yes:	No:
How many families start shifting cultivation in old forest areas (more than 15 years of forest growth) per year?		
How many families claim new land each year?		
How do you claim new land in your village? Describe the process!		
What happens if the family who claims new land does not use the land later?		
Do villagers compete to claim new land or do they mostly use their own existing land?		
Do all or most villagers know where each family has her upland plots and land claims?	Yes:	No:
Do villagers feel secure about their right to use the land?	Yes:	No:
Are there sometimes conflicts between the families about land use rights?	Yes:	No:

#### 4. Permanent Agriculture

Number of families in your village with paddy:	
Number of different paddy areas in the village territory:	
Total area of paddy in the village:	ha
How much was the paddy area been expanded in the past five years?	ha

Is there an opportunity to expand the paddy area in future?	Yes:	No:
If yes, where? (name of local area?)		
Number of families who have fruit tree gardens big enough to sell fruits (not only a few trees for home consumption around the house):		
Number of families who have commercial tree plantations (e.g. rubber, teak, paper mulberry, coffee):		
Number of families who have permanent gardens for vegetable production?		
Number of families who sell any vegetables or other crops from these gardens?		
Number of families who have any other type of private plantation (e.g. bamboo plantation, fodder grass):		

## 5. Large Livestock

Number of families who have large livestock (cattle, buffaloes):		
Total number of cattle and buffaloes in the village:		
Do families keep them together in one livestock grazing area permanently or seasonally?	Yes:	No:
Is this area fenced?	Yes:	No:
Number of families keeping livestock together in one area:		
Number of families keeping their own livestock separately on their own land or in the forest:		

## 6. Forest Use

What is the general condition of your forest areas if you compare with 10 years ago?	Better:	Same:	Worse:
Do you have old undisturbed forest growth (never cleared for agricultural use)?	Yes:	No:	
If yes, how many areas? Please give the local names			
Do you have sacred forest areas, areas which nobody is allowed to use? Graveyard forests?	Yes:	No:	
If yes, how many areas? Please give the local names			

Do you have forest areas you use for grazing large livestock?	Yes:	No:
If yes, how many areas? Please give the local names		
Where do you get timber for house construction? (local names of areas)		
Where do you get fencing material? Or poles? (local names of areas)		
Where do you collect firewood? (local names of areas)		
Do you make charcoal?	Yes:	No:
If yes, where does the wood come from? (local names of areas)		
Number of families selling timber or other wood to outsiders:		
Number of families selling charcoal to outsiders:		
Where do you harvest bamboo? (local names of areas)		
Number of families selling bamboo to outsiders:		

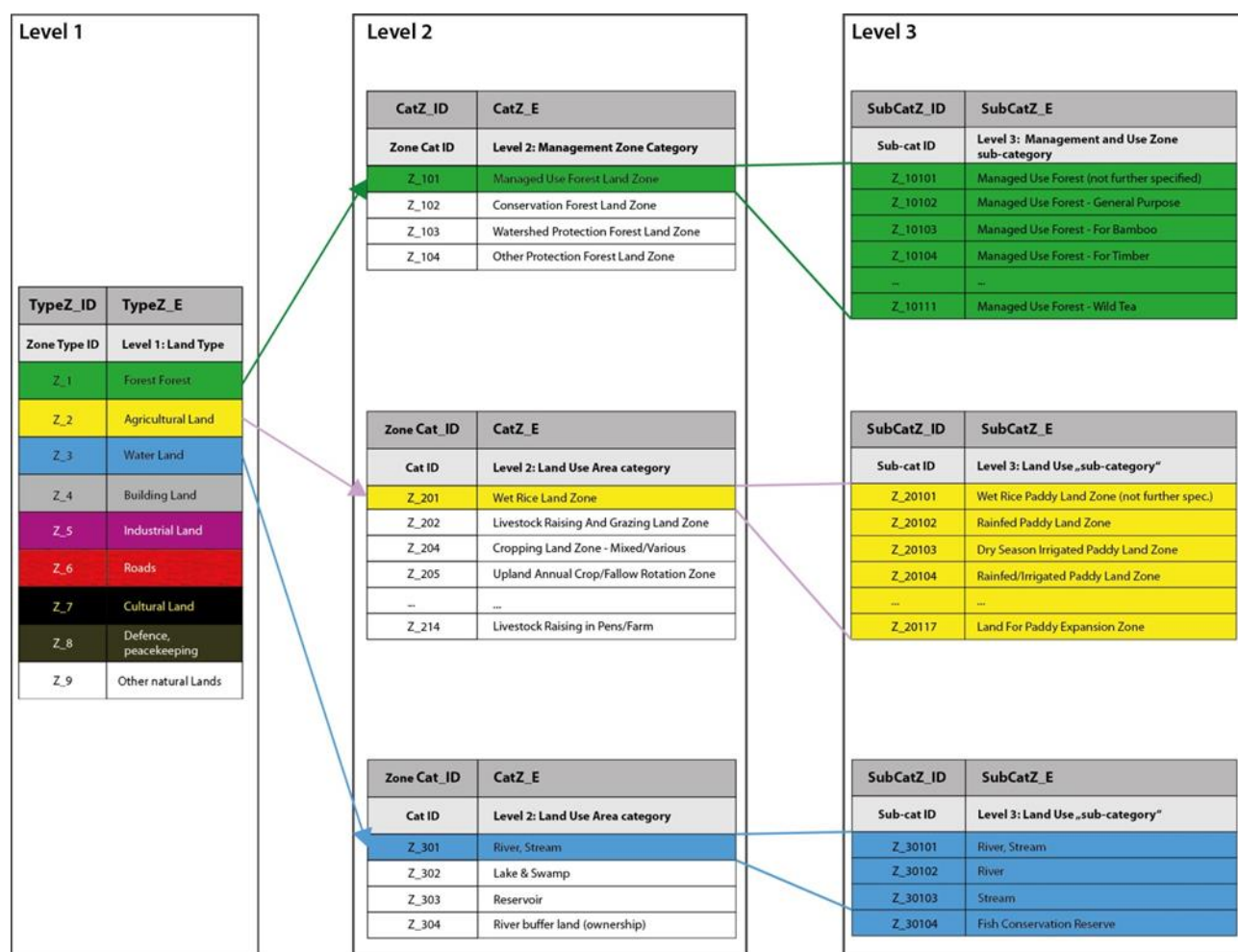
## 7. NTFP and Wildlife

Which NTFPs do you collect in the village area? (names)	1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	Months of the year:
Where do you find these NTFPs? (local names of areas)		



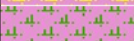
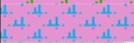















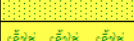

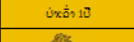
Which NTFPs have become rare?	1. 2. 3. 4. 5.
Which NTFPs do you sell?	1. 2. 3. 4. 5. 6.
Number of families in the village going for hunting wildlife:	
Where do they find most of this wildlife? (local names of areas)	






























































## Annex 8: Land Classes, Sub-Categories and Official Mapping Standards


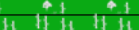














TypeID	Type_E	CatID	Cat_E		SubCat_ID	SubCat_E	
DEML	Level 1: Land Type:		Level 2: Land Use Area category	Color		Level 3: Land Use "sub-category"	Color/symbol
1	Current Forest	101	Mixed Forest	10.135.20	10101	Mixed Forest - not further specified	
					10102	Mixed Forest: Evergreen - Deciduous	
					10103	Mixed Forest: Evergreen - Deciduous - Bamboo	
					10104	Mixed Forest: Deciduous - Bamboo	
					10105	Mixed Forest: Broad leaf - Coniferous	
					10106	Riparian forest	
					10107	Mixed Forest with rattan	
					10108	Mixed Forest with Cardamom	
					10109	Mixed Forest with Kisi	
					10110	Mixed Forest with BongBark trees	
					10111	Mixed Forest with Medicinal Plant	
					10112	Mixed Forest with Cattle grazing	
					10113	Mixed Forest with wild tea	
					....add more as required		
		102	Evergreen Forest	0.95.5	10201	Evergreen Forest - not further specified	
					10202	Evergreen Forest: Moist, closed	
					10203	Evergreen Forest: Dry, not closed	
					10204	Evergreen Forest with rattan	
					10205	Evergreen Forest with Mak Jong	
					10206	Evergreen Forest with Wild Tea	
					10207	Evergreen Forest with Cattle grazing	
					....add more as required		
		103	Deciduous Forest	10.170.20	10301	Deciduous Forest - not further specified	
					10302	Dry Deciduous Forest	
					10303	Bamboo Forest	
					10304	Deciduous mixed with stone/rock	
					10305	Deciduous underlain by grass	
					10306	Savannah	
					10307	Deciduous Forest with stones	
					10308	Deciduous Forest with sand	
					10309	Deciduous Forest with flat rock	
					10310	Deciduous Forest with Cattle grazing	
					10311	Dry Deciduous Forest with Cattle grazing	
					....add more as required		
		104	Coniferous Forest	130.170.100	10401	Coniferous Forest - not further specified	
					10402	Closed Coniferous Forest	
					10403	Coniferous Forest underlain by grass	
					10404	Coniferous Forest with Cattle grazing	
					....add more as required		
		109	Timber Tree Plantation	153.185.90	10901	Timber Tree Plantation - not further specified	
					10902	Timber Tree Plantation: Teak	
					10903	Timber Tree Plantation: Hardwoods	
					10904	Timber Tree Plantation: Eucalyptus	
					10905	Timber Tree Plantation: Softwood	
					10906	Timber Tree Plantation: Acacia aurcaliformis\mangium	
					10907	Timber Tree Plantation: Cratogeomys sp (Mai Dtiw)	
					....add more as required		


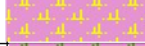










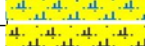


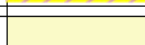

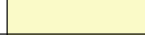








TypeID	Type_E	CatID	Cat_E		SubCat_ID	SubCat_E	
DEML	Level 1: Land Type:		Level 2: Land Use Area category	Color		Level 3: Land Use "sub-category"	Color/symbol
2	Agriculture Land	201	Wet Rice field (paddy)		20101	Wet Rice Land - not further specified	
					20102	Rainfed Paddy Area	
					20103	Rainfed/Irrigated Paddy Area	
					20104	Dry season Irrigated Paddy	
					20105	Draw down paddy	
					20106	Land reserved for new paddy	
					20107	Abandoned paddy	
					20108	Wet season rice/ dry season crop	
						.....add more as required	
						For villages without upland farming	
					20111	Wet Rice Land - not further specified	
					20112	Rainfed Paddy Area	
					20113	Rainfed/Irrigated Paddy Area	
					20114	Dry season Irrigated Paddy	
					20115	Draw down paddy	
					20116	Land reserved for new paddy	
					20117	Abandoned paddy	
					20118	Wet season rice/ dry season crop	
						.....add more as required	
		202	Upland annual crop - bush fallow rotation	255 255 75	20201	Upland annual crop field (year of image) - not further specified	
					20202	Upland rice field (year of image)	ເຂົ້າໄຮ່ ເຂົ້າໄຮ່ ເຂົ້າໄຮ່
					20203	Upland maize field (year of image)	ໄຂ່ຂາວີ ໄຂ່ຂາວີ ໄຂ່ຂາວີ
					20204	Upland cassava field (year of image)	ມັນເກັບ ມັນເກັບ ມັນເກັບ
					20205	Upland Job's tears field (year of image)	ໝາກເປືອຍ ໝາກເປືອຍ
					20206	Upland Sesame field (year of image)	ໝາກງາ ໝາກງາ ໝາກງາ
					20207	Other upland crop field (year of image)	ພືດອື່ນໆ ພືດອື່ນໆ
						.....add more as required	
					20210	Bush fallow - not further specified	
					20211	Bush fallow: 1 year old (year of image -1)	ປ່າເຮົາ 1ປີ
					20212	Bush fallow older than 1 year (year of image ->1)	
					20221	Bush fallow of Yarn	ປ່າເຮົາ ມີຍາມ
					20222	Bush fallow of Bamboo	ປ່າເຮົາ ໄມ້ປອງ
					20223	Bush fallow of Mieng	ປ່າເຮົາ ມີຊາ
					20224	Bush fallow of Bong	ປ່າເຮົາ ມີຢາງບັງ
						.....add more as required	
		204	Annual Crops on permanent land	A A A A	20401	Annual Crop Permanent Land - not further specified	A A A A A A
					20402	Maize	AMZ AMZ AMZ
					20403	Sesame	ASS ASS ASS
					20404	Job's tears	AJT AJT AJT
					20405	Potato	APT APT APT
					20406	Soy Bean	ASB ASB ASB
					20407	Mungbean	AMB AMB AMB
					20408	Vegetable	AVT AVT AVT
					20409	Sweet Potato	ASP ASP ASP
					20410	Ground nut	AGN AGN AGN
					20411	Tobacco	ATB ATB ATB
					20412	Cotton	ACT ACT ACT
						.....add more as required	

TypeID	Type_E	CatID	Cat_E		SubCat_ID	SubCat_E	
DEML	Level 1: Land Type:		Level 2: Land Use Area category	Color		Level 3: Land Use "sub-category"	Color/symbol
		205	Biennial Crops on Permanent Land		20501	Biennial Crops on Permanent Land - not further specified	
					20502	Cassava	
					20503	Sugarcane	
					20504	Papaya	
					20505	Banana	
					20506	Pineapple	
					20507	Roselle	
						....add more as required	
		206	Fruit- and nut tree and Perennial Crops		20601	Fruit- and nut tree and perennial Crops - not further specified	
					20602	Fruit tree	
					20603	Citrus	
					20604	Mango	
					20605	Lychee	
					20606	Longan	
					20607	Sapodilla	
					20608	Chestnut	
					20609	Coconut	
					20610	Cashew	
						....add more as required	
					20651	Rattan	
					20652	Bamboo	
					20653	Coffee	
					20654	Tea	
					20655	Jatropha	
					20656	Mulberry	
					20657	Inca Bean	
					20658	Bastard Cardamon	
						....add more as required	
		207	Agro-Forestry		20701	Agro-Forestry - not further specified	
					20702	Agro-Forestry - Coffee under Forest	
					20703	Agro-Forestry - Cardamom under Forest	
					20704	Agro-Forestry - Tea under Forest	
						....add more as required	
					20751	Agro-Forestry Tree Plantation: Rubber	
					20752	Agro-Forestry Tree Plantation: Eaglewood (Aquilaria)	
					20753	Agro-Forestry Tree Plantation: BongBark Trees	
					20754	Agro-Forestry Tree Plantation: Oil palm	
					20755	Agro-Forestry Tree Plantation: Tung oil tree	
						....add more as required	
		209	Other Crop Land: various		20901	Other/mixed Agricultural Land	
		210	Livestock raising and grazing land		21001	Livestock Raising, Grazing Land - not further specified	
					21002	Pasture Livestock Area	
					21003	Natural Grassland Livestock Area	
		211	Livestock raising in pens/farm		21101	Livestock raising in pens/farm - not further specified	
					21102	Livestock raising in pens/farm: Pigs	
					21103	Livestock raising in pens/farm: Chicken	
					21104	Livestock raising in pens/farm: Pigs over fishpond	
					21105	Livestock raising in pens/farm: Cattle	
		212	Fish and shrimp pond		21201	Fish and shrimp Pond - not further specified	
					21202	Fish Pond	
					21203	Shrimp Pond	
					21204	Fish Pond with Fruit tree	
		220	Irrigation Infrastructure land		22001	Irrigation Infrastructure Land - not further specified	
					22002	Weir	
					22003	Main canal	
					22004	Secondary canal	

TypeID	Type_E	CatID	Cat_E		SubCat_ID	SubCat_E	
DEML	Level 1: Land Type:		Level 2: Land Use Area category	Color		Level 3: Land Use "sub-category"	Color/symbol
3	Water Land	301	Lake & swamp		30101	Lake & Swamp - not further specified	
					30102	Lake	
					30103	Swamp	
		302	River, stream		30201	River, Stream	
					30202	River	
					30203	Stream	
					30204	Fish Conservation Reserve	
					30205	Sacred Swamp/Lake	
		303	Reservoir		30301	Reservoir	
		304	River buffer land (ownership)		30401	Riverside Reserve Land (Ownership)	
4	Building Land	401	Built Up Area		40101	Built Up Area - not further specified	
		402	Private building land		40201	Private Building Land	
		403	State building land		40301	State Building Land	
		404	Reserve building land		40401	Reserve Building Land	
		405	Buildings in Settlement Zones		40501	Buildings in Settlement Zones	
					40502	School land	
					40503	Market land	
					40504	Hospital & Health Care Center land	
					40505	Commercial land	
		501	Mining and quarry sites		40506	Hotel, Guesthouse land	
40507	Rubbish Tip/Landfill						
40508	Sports Fields						
5	Industrial Land	501	Mining and quarry sites		50101	Mining and Quarry Site	
					50102	Salt Mine	
					50103	Stone Quarry	
					50104	Sand Quarry	
		502	Industrial Land		50201	Industrial Land	
		503	Hydropower dam and land		50301	Hydropower dam and land	
		504	Electricity Generating Station		50401	Electricity Generating Station	
					50402	Solar power site	
					50403	Wind power site	
		505	Electricity Transmission/Managemement Land		50501	High Voltage Transmission Line	
506	Telecommunication Land	50601	Telecommunication Land				
			50602	Telecommunication Antenna			
6	Roads	601	Paved road		60101	Paved Road	
		602	Unpaved road		60201	Unpaved Road	
		603	Reserve for new road		60301	Reserve For New Road	
		604	Railway alignment		60401	Railway Alignment	
		605	Transportation station land		60501	Transportation Station Land	
		606	Source of soil/gravel for road construction		60601	Source Of Soil/Gravel For Road Construction	
		7	Cultural Land	701	Temple etc (place of worship)		70101
702	Spiritial areas				70201	Sacred Forest	
					70202	Cemetery Forest	
703	Historic & Historic tourist sites				70301	Historic or Religious Tourist Sites	
					70302	Nature/Eco Tourist Sites	
					70303	Public Recreation/Rest Site	
8	Defence, peacekeeping	801	Defence and security facilities		80101	Military Facility	
		802	Military and police strategy land		80102	Police Facility	
9	Other Natural Lands	901	Other Natural vegetation		90101	Other Vegetated Land	
					90102	Natural Savanna/Grassland	
					90103	Natural Shrublands	
		902	Unvegetated Lands		90201	Unvegetated Lands	
					90202	Barren Land (natural)	
					90203	Barren Land (human made)	
					90204	Rock Landscapes	








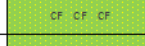
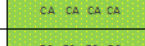

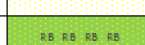
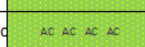
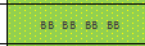
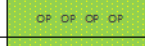
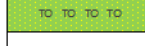










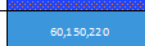
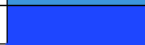



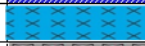








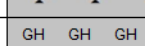






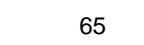





Zone Type ID	Type	Zone Cat ID	Management Zone Category	ဧရိယာ		Management and Use Zone sub-category	Color
Z_1	Forest Land	Z_101	Managed Use Forest Land Zone	10,170.20	Z_10101	Managed Use Forest - not further specified	10,170.20
					Z_10102	Managed Use Forest - General Purpose	
					Z_10103	Managed Use Forest - For Bamboo	
					Z_10104	Managed Use Forest - For Timber	
					Z_10105	Managed Use Forest - For Livestock	
					Z_10106	Managed Use Forest - Rattan	~ ~ ~ ~ ~
					Z_10107	Managed Use Forest - Cardamom	CA CA CA CA CA
					Z_10108	Managed Use Forest - Kisi	KS KS KS KS KS
					Z_10109	Managed Use Forest - Bong Bark trees	BB BB BB BB BB
					Z_10110	Managed Use Forest - Medicinal Plant	MP MP MP MP MP
					Z_10111	Managed Use Forest - wild tea	ဒုၵ ဒုၵ ဒုၵ
						...add as required	
		Z_102	Conservation Forest Land Zone	0.69.0	Z_10201	Village Biodiversity Conservation Forest	
					Z_10202	Conservation and NTFP forest	
					Z_10203	Conservation Forest - wild tea	ဒုၵ ဒုၵ ဒုၵ
						...add as required	
		Z_103	Watershed Protection Forest Land Zone		Z_10301	Village Watershed Protection Forest	
					Z_10302	Riparian Protection Forest	
					Z_10303	Controlled use zone in Protection Forest - general	
					Z_10304	Controlled use zone in Protection Forest - cardamom	
					Z_10305	State Watershed Protection Forest	
						...add as required	
		Z_104	Other Protection Forest Land Zone		Z_10401	Protection Forest - not further specified	
					Z_10402	Roadside Protection Forest	
					Z_10403	Border Protection Forest	
						...add as required	
		Z_109	Timber Tree Plantation Land Zone	155,185.90	Z_10901	Timber Tree Plantation - not further specified	155,185.90
					Z_10902	Timber Tree Plantation: Teak	TE TE TE TE
					Z_10903	Timber Tree Plantation: Hardwoods	HW HW HW
					Z_10904	Timber Tree Plantation: Eucalyptus	EC EC EC EC
					Z_10905	Timber Tree Plantation: Softwood	SW SW SW
					Z_10906	Timber Tree Plantation: Acacia aurcaliformis\mangiu	AA AA AA AA
					Z_10907	Timber Tree Plantation: Cratoxylum sp (Mai Dtiaw )	MD MD MD MD
						...add as required	

































Zone Type ID	Type	Zone Cat ID	Management Zone Category	Icon		Management and Use Zone sub-category	Color
Z_2	Agriculture Land	Z_201	Wet Rice Land Zone		Z_20101	Wet Rice Paddy land zone - not further specified	
					Z_20102	Rainfed Paddy land zone	
					Z_20103	Dry season Irrigated Paddy land zone	
					Z_20104	Rainfed/Irrigated Paddy land zone	
					Z_20105	Draw down paddy land zone	
					Z_20106	Wet season Paddy and dry season crop zone	
					Z_20107	Land For Paddy Expansion zone	
						For villages without upland farming	
					Z_20111	Wet Rice Paddy land zone - not further specified	
					Z_20112	Rainfed Paddy land zone	
					Z_20113	Dry season Irrigated Paddy land zone	
					Z_20114	Rainfed/Irrigated Paddy land zone	
					Z_20115	Draw down paddy land zone	
					Z_20116	Wet season Paddy and dry season crop zone	
					Z_20117	Land For Paddy Expansion zone	
		Z_202	Livestock raising and grazing land Zone		Z_20201	Livestock Raising, Grazing land	
					Z_20202	Pasture Livestock land	
					Z_20203	Natural Grassland livestock land	
					Z_20204	Other Livestock Raising land	
		Z_203	Irrigation Infrastructure land zone		Z_20301	Irrigation Infrastructure land	
		Z_204	Cropping land zone - mixed/various	193,91,7	Z_20401	Cropping land Zone - mixed: uplands and fallow	193,91,7
					Z_20402	Cropping land Zone - mixed: fixed or lowland	180,80,5
					Z_20403	Cropping land Zone - mixed annual/bienial	180,70,5
					Z_20420	Crop land zone: mixed annual/bienial/perennial	145,80,5
		Z_205	Upland annual crop/fallow rotation Zone (1yr planting phase)		Z_20501	Annual Rotation Crop Zone: Year 1 (specify year)	001_1
					Z_20502	Annual Rotation Crop Zone: Year 2 (specify year)	001_2
					Z_20503	Annual Rotation Crop Zone: Year 3 (specify year)	001_3
					Z_20504	Annual Rotation Crop Zone: Year 4 (specify year)	001_4
					Z_20505	Annual Rotation Crop Zone: Year 5 (specify year)	001_5
					Z_20506	Annual Rotation Crop Zone: Year 6 (specify year)	001_6
					Z_20507	Annual Rotation Crop Zone: Year 7 (specify year)	001_7
					Z_20508	Annual Rotation Crop Zone: Year 8 (specify year)	001_8
					Z_20509	Annual Rotation Crop Zone: Year 9 (specify year)	001_9
		Z_206	Upland annual crop/fallow rotation Zone (2yr planting phase)		Z_20601	Annual Rotation Crop Zone: Yr 1 + 2 (specify years)	001_1 - 001_2
					Z_20602	Annual Rotation Crop Zone: Yr 3 + 4 (specify years)	001_3 - 001_4
					Z_20603	Annual Rotation Crop Zone: Yr 5 + 6 (specify years)	001_5 - 001_6
					Z_20604	Annual Rotation Crop Zone: Yr 7 + 8 (specify years)	001_7 - 001_8
					Z_20605	Annual Rotation Crop Zone: Yr 9 + 10 (specify years)	001_9 - 001_10
					Z_20606	Annual Rotation Crop Zone: Yr 11 + 12 (specify years)	001_11 - 001_12
		Z_215	Upland annual crop/fallow rotation Zone (1-2yr planting phase)		Z_21501	Annual Rotation Crop Zone: Yr 1 + 2 (specify years)	001_1 - 001_2
					Z_21502	Annual Rotation Crop Zone: Yr 2 + 3 (specify years)	001_2 - 001_3
					Z_21503	Annual Rotation Crop Zone: Yr 3 + 4 (specify years)	001_3 - 001_4
					Z_21504	Annual Rotation Crop Zone: Yr 4 + 5 (specify years)	001_4 - 001_5
					Z_21505	Annual Rotation Crop Zone: Yr 5 + 6 (specify years)	001_5 - 001_6
					Z_21506	Annual Rotation Crop Zone: Yr 6 + 7 (specify years)	001_6 - 001_7

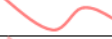
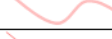
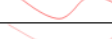
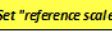


Zone Type ID	Type	Zone Cat ID	Management Zone Category	Icon		Management and Use Zone sub-category	Color
		Z_207	Fixed Annual Cropland Zone		Z_20701	Annual Crop Zone - permanent land	250,150,70
					Z_20702	Maize	AMZ AMZ AMZ
					Z_20703	Sesame	ASS ASS ASS
					Z_20704	Job's tears	AJT AJT AJT
					Z_20705	Potato	APT APT APT
					Z_20706	Soy Bean	ASB ASB ASB
					Z_20707	Mungbean	AMB AMB AMB
					Z_20708	Vegetable	AVT AVT AVT
					Z_20709	Sweet Potato	ASP ASP ASP
					Z_20710	Ground nut	AGN AGN AGN
					Z_20711	Tobacco	ATB ATB ATB
					Z_20712	Cotton	ACT ACT ACT
					Z_20751	Annual crop zone with SALT (Sloping Agricu. land technlev)	250,150,70
					Z_20752	Annual crop zone with SALT: Maize	AMZ AMZ AMZ
					Z_20753	Annual crop zone with SALT: Sesame	ASS ASS ASS
					Z_20754	Annual crop zone with SALT: Job's tears	AJT AJT AJT
					Z_20755	Annual crop zone with SALT: Potato	APT APT APT
					Z_20756	Annual crop zone with SALT: Soy Bean	ASB ASB ASB
					Z_20757	Annual crop zone with SALT: Mungbean	AMB AMB AMB
					Z_20758	Annual crop zone with SALT: Vegetable	AVT AVT AVT
					Z_20759	Annual crop zone with SALT: Sweet Potato	ASP ASP ASP
					Z_20760	Annual crop zone with SALT: Ground nut	AGN AGN AGN
					Z_20761	Annual crop zone with SALT: Tobacco	ATB ATB ATB
					Z_20762	Annual crop zone with SALT: Cotton	ACT ACT ACT
		Z_208	Biennial fixed Cropland Zone		Z_20801	Biennial Crop Permanent Land (1-3 years)	B B B B B
					Z_20802	Cassava	BCV BCV BCV
					Z_20803	Sugarcane	BSC BSC BSC
					Z_20804	Papaya	BPP BPP BPP
					Z_20805	Banana	BBN BBN BBN
					Z_20806	Pineapple	BPA BPA BPA
					Z_20807	Roselle	BRS BRS BRS
		Z_209	Fruit- and nut tree and Perennial Crops		Z_20901	Fruit- and nut tree and perennial crops - not further specified	
					Z_20902	Fruit tree	FT FT FT FT
					Z_20903	Citrus	CT CT CT CT
					Z_20904	Mango	MG MG MG MG
					Z_20905	Lychee	LY LY LY LY
					Z_20906	Longan	LO LO LO LO
					Z_20907	Sapodilla	SO SO SO SO
					Z_20908	Chestnut	ON ON ON ON
					Z_20909	Coconut	CC CC CC CC
					Z_20910	Cashew	CN CN CN CN
					Z_20951	Rattan	~ ~ ~ ~ ~
					Z_20952	Bamboo	BB BB BB BB
					Z_20953	Coffee	CF CF CF CF
					Z_20954	Tea	TEA TEA TEA
					Z_20955	Jatropha	JT JT JT JT
					Z_20956	Mulberry	MB MB MB MB
					Z_20957	Inca Bean	IB IB IB IB
					Z_20958	Bastard Cardamon	CA CA CA CA



Zone Type ID	Type	Zone Cat ID	Management Zone Category	Icon		Management and Use Zone sub-category	Color
		Z_211	Fish and shrimp ponds Zone		Z_21101	Fish And Shrimp Ponds	
					Z_21102	Fish Ponds	
					Z_21103	Shrimp Ponds	
		Z_212	Land Reserved for extending productio		Z_21201	Land Reserved For Extending Production	
		Z_213	Agro-Forestry Zone		Z_21301	Agro-forestry zone - not further specified	
					Z_21302	Agro-forestry zone - Coffee under Forest	
					Z_21303	Agro-forestry zone - Cardamom under Forest	
					Z_21304	Agro-forestry zone - Tea under Forest	
						...add as required	
					Z_21351	Agro-forestry Tree Planation: Rubber	
					Z_21352	Agro-forestry Tree Planation: Eaglewood (Aquilaria c	
					Z_21353	Agro-forestry Tree Planation: BongBark Trees	
					Z_21354	Agro-forestry Tree Planation: Oil palm	
					Z_21355	Agro-forestry Tree Planation: Tung oil tree	
						...add as required	
		Z_214	Livestock raising in pens/farm		Z_21401	Livestock raising in pens/farm - pecified	
					Z_21402	Livestock raising in pens/farm: Pigs	
					Z_21403	Livestock raising in pens/farm: Chicken	
					Z_21404	Livestock raising in pens/farm: Pigs over fishpond	
					Z_21405	Livestock raising in pens/farm: Cattle	
Z_3	Water Land	Z_301	River, stream		Z_30101	River, Stream	
					Z_30102	River	
					Z_30103	Stream	
					Z_30104	Fish Conservation Reserve	
		Z_302	Lake & swamp		Z_30201	Lake & Swamp	
					Z_30202	Lake	
					Z_30203	Swamp	
					Z_30204	Sacred Swamp/Lake	
		Z_303	Reservoir		Z_30301	Reservoir	
		Z_304	River buffer land (ownership)		Z_30401	River Buffer Land (Ownership)	
Z_4	Building Land	Z_401	Private building land		Z_40101	Private Building Land	
		Z_402	State building land		Z_40201	State Building Land	
		Z_403	Reserve building land		Z_40301	Reserve Building Land	
		Z_404	Buildings in Settlement Zones		Z_40401	Buildings In Settlement Areas	
					Z_40402	School	
					Z_40403	Market	
					Z_40404	Hospital & Health Care Center	
					Z_40405	Commercial	
					Z_40406	Hotel, Guesthouse	
		Z_405	Rubbish Tip/Landfill		Z_40501	Rubbish Tip/Landfill	
		Z_406	Sports Fields		Z_40601	Sports Fields	

Zone Type ID	Type	Zone Cat ID	Management Zone Category	Icon		Management and Use Zone sub-category	Color
Z_5	Industrial Land		Mining and quarry sites	Q MQ M	Z_50101	Mining And Quarry Sites	MQ MQ MQ
					Z_50102	Salt Mine	SM SM SM
					Z_50103	Stone Quarry	SQ SQ SQ
					Z_50104	Sand Quarry	SY SY SY
		Z_502	Industrial Land/Zone	Y FY F	Z_50201	Industrial Land/Zone	FY FY FY
		Z_503	Hydropower dam	HP HP	Z_50301	Hydropower	HP HP HP
		Z_504	Electricity Generating Station	EG EG E	Z_50401	Electricity Generating Station	EG EG EG
				***	Z_50402	Solar power site	***
				***	Z_50403	Wind power site	***
		Z_505	Electricity Transmission/Management	EL EL EL	Z_50501	Power transmission line/tower footings	TL TL TL
					Z_50502	Electricity Sub-Station	ES ES ES
		Z_506	Telecommunication Land/Zone	TZ TZ TZ	Z_50601	Telecommunication Land/Zone	TZ TZ TZ
					Z_50602	Telecommunication Antenna	TA TA TA
		Z_520	Land Reserved for industrial land		Z_52001	Land Reserved for industrial land	
Z_6	Roads	Z_601	Paved road		Z_60101	Paved Road	
		Z_602	Unpaved road		Z_60201	Unpaved Road	
		Z_603	Reserve for new road		Z_60301	Reserve For New Road	
		Z_604	Railway alignment		Z_60401	Railway Alignment	
		Z_605	Transportation station land		Z_60501	Transportation Station Land	
		Z_606	Source of soil/gravel for road construction		Z_60601	Source Of Soil/Gravel For Road Construction	
Z_7	Cultural land	Z_701	Temple etc (place of worship)	CR C	Z_70101	Cultural Buildings And Sites	CR C
		Z_702	Spiritual areas	SF S	Z_70201	Sacred Forest	SF S
				CF CF CF	Z_70202	Cemetery Forest	CF CF CF
		Z_703	Historic & Historic tourist sites	NI NI NI	Z_70301	Historic Or Religious Tourist Sites	
Z_8	Defence, peacekeeping	Z_801	Defence and security facilities		Z_80101	Military Facility	
		Z_802	Military and police strategy land		Z_80201	Police Facility	
Z_9	Other Natural Lands	Z_901	Unvegetated Lands	90,90,90	Z_90101	Unvegetated Lands	90,90,90
				75,75,75	Z_90102	Barren Land (natural)	75,75,75
				65,65,65	Z_90103	Barren Land (human made)	65,65,65
				50,50,50	Z_90104	Rock Landscapes	50,50,50
		Z_902	Other Natural vegetation		Z_90201	Other Vegetated Land	
					Z_90202	Natural Savanna/Grassland	
					Z_90203	Natural Shrublands	

<b>3: Points of Interest Symbols</b>					
Name English	Symbol color	Symbol	Symbol size	Dataset TABI_GIS	GIS Attrib
<b>1 Current Uplandfields</b>					
Field as Point, Upland rice (year B)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Upland rice (year C)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Maize (year B)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Maize (year C)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Cassava (year B)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Cassava (year C)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Other upland crops (year B)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
Field as Point, Other upland crops (year C)			18	PP_DD_KK_Village_Ray_YYYY.shp or PP_DD_KK_Kum_Ray_YYYY.shp	
<b>2 Village Locations</b>					
Village			22	Village_05032013.shp	
<b>3 Points of interest</b>					
Mountain	255,0,0		20	PP_DD_KK_Village_mnt_DDMMYY.shp or PP_DD_KK_Kum_mnt_DDMMYY.shp	1
Mountain Pass	255,0,0		30	PP_DD_KK_Village_mnt_DDMMYY.shp or PP_DD_KK_Kum_mnt_DDMMYY.shp	2
Mountain Ridge	170,0,230		20		3
Provincial Office			22	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	4
District Office			20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	5
Village Cluster office	0,0,0		20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	6
School	0,0,0		20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	7
Market			20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	8
Hospital & health care center			20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	9
Hotel, Guesthouse			20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	10
Water Source	0,90,230		22	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	11
Waterfall	0,90,230		25	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	12
Cave	115,40,0		30	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	13
Temple	230,150,0		20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	14
Stupa	230,150,0		20	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	15
Bridge			22	PP_DD_KK_Village_POI_DDMMYY.shp or PP_DD_KK_Kum_POI_DDMMYY.shp	16
Culvert	255,0,0		20		17
Irrigation Weir	0,90,230		22		18
Spring	0,90,230		22		19
Khum			22	PP_DD_KK_Village_Khum&Sanam.shp	20
Sanam			22	PP_DD_KK_Village_Khum&Sanam.shp	21
Other POI	255,0,0		20		99

	Name English	Symbol color	Symbol	Symbol size	Dataset TABI_GIS	GIS Attrib
4	<b>Crops</b>					Code
	Maize with name of owner		M	20		1
	Rubber with name of owner		R	20		2
	Cardamom with name of owner		C	20		3
	Rice (Paddy) with name of owner		P	20		4
	Mungbean with name of owner		MB	20		5
	Teak with name of owner		T	20		6
	Banana with name of owner		B	20		7
	Job's tears with name of owner		J	20		8
						99
<b>Line Symbols</b>						
5	<b>Roads</b>					
	Road bigger 8m paved surface	255,127,127		1.5	roads_nov_2013.shp	
	Road bigger 8m unpaved surface	255,190,190		1.5	roads_nov_2013.shp	
	Road smaller 8m paved surface	255,127,127		1	roads_nov_2013.shp	
	Road smaller 8m unpaved surface	255,190,190		1	roads_nov_2013.shp	
	Foot Path	0,0,0		1	roads_nov_2013.shp	
	Track	0,0,0		1	roads_nov_2013.shp	
6	<b>River and stream</b>		Set "reference scale" to 1:15,000			
	Rivers	10,150,250		1.5	TABI_riv.shp	100
	Stream	10,150,250		1.2	TABI_riv.shp	200, 300
	Intermittant stream	10,150,250		1.2	TABI_riv.shp	400

## **Annex 9: Sample Village Regulations**

Sample Contents of

*(this is only an example, non-applicable parts can be deleted)*

### **Village Regulations**

(sometimes also referred to as: Village Land Use and Forest Management Agreement or Village Land Use and Forest Use Regulations)

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

Province:

District:

Name of Village:

#### **Preamble**

These village regulations describe the rules and regulations applied to the use of all land and forest areas within the boundaries of .....village. These regulations have been drafted and approved by the villagers themselves with support by the PLUP district team of .....District.

The objective of these regulations is to manage the village forest and other land use areas in line with the laws and regulations of Lao PDR in order to achieve better land use management and forest protection and management as well as a reduction of poverty, peace and stability.

The Village Administrative Committee assisted by the Village Land Use and Forest Management Committee will control the enforcement of these regulations and can charge fines and impose sanctions in line with the set rules in this document.

#### **1 Location of the Village**

The village is located in the Kum Ban of..... and shares its village boundaries with the following villages:

To the North:

To the East:

To the South:

To the West:

## 2 Village statistics

Number of households? Number of families? Men, women? Etc.

## 3 Short description how these regulations have been written and approved

By whom? When? Did they take existing traditional rules and regulations into account? Who approved the regulations? When?

## 4 Overview of land use and forest zones according to the FLUMZ map

Land Use or Forest Zone in ha	No. of areas	Ha (total)
Paddy land		
Fruit tree plantations		
Commercial tree plantations (teak, rubber etc.)		
Vegetable gardens		
Upland Agriculture Use Zones		
Village Conservation Forest		
Cemetery or Spirit Forest		
Village Protection Forest		
Village Use Forest		
Livestock Grazing Zone		
Reserved land for future allocation		

## 5 Paddy Areas

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **6 Fruit Tree Plantations**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **7 Commercial Tree Plantations**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **8 Vegetable Gardens**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **9 Upland Agriculture Use Zones**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **10 Village Conservation Forest**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **11 Cemetery or Spirit Forest**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **12 Village Protection Forest**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)



b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

### **13 Village Use Forest**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

### **14 Livestock Grazing Zone**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

### **15 Reserved Land for Future Allocation**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **16 Management of Water Bodies (Ponds, Rivers, Streams, Wells)**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **17 Management of NTFP Collection and Hunting**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

## **18 Management of Domestic Livestock**

a) Rules and regulations (How can this area be used? What is allowed and what is not allowed)

b) Fines/Sanctions (What happens if someone does something that is not allowed or illegal)

**18 Any other village rules?**

**19 What happens with the fines collected? How was the collected money used?**

**20 Is there a reward system for those who detect violations and those who took part in the arrests of violators?**

**21 Modifications or Additions to these Village Regulations (Under what circumstances can the regulations be modified? By whom? Who approves the changes?)**

**22 Approval of these Village Regulations**

Date of effectiveness? How where these regulations approved by villagers?

**Signatures:**

Head of Village:

Representative of the Village Land and Forest Management Committee:

District Governor:

Representative of DAFO:

Representative of DoNRE:

**Annex 10: Form to record villager approval of relevant PLUP 2.0 documents**

Village:

Kum Ban:

District:

Documents to be approved by the villagers:

Date:

1. the village boundary agreements
2. the current land use map (CLUFC)
3. the FLUMZ map
4. the village regulations

**This form needs to be signed by one person from each household (husband or wife)!**

Name of Household Representative	I fully approve	I do not approve the documents	What is your complaint?

## Annex 11: Sample PLUP 2.0 Report

### PLUP 2.0 Report

Date:

By: PLUP District Team of.....

Members:

---

Name of Village:

Kum Ban:

Dates of conducting PLUP 2.0 in the field:

From:

To:

Was PLUP 2.0 conducted completely:

Yes:

No:

If PLUP 2.0 was conducted only partly:

Why:

Which stages/steps were done?

---

**1. Introduction:** (Give a short overview how you conducted PLUP 2.0 in the village, describe the first village meeting, the working atmosphere, participation by villagers, any problems you face during PLUP 2.0)

2. Short description of the village: (describe the village in your own words, what is the general situation in the village, any special features)

3. General Village Data

Enter Form 1 here:

4. Description of any previous land use planning work in the village:

5. Village Land and Forest Management Committee (VLPMC)

Describe the election process:

Members of the VLPMC: (show copy of agreement of VLPMC members)

6. Copy or Photo of Village Base Map

7. Village Boundary Delineation and Boundary Agreements

8. Socio-economic, Land and Forest Data Collection

Enter Form 2:

9. Current Land Use and Forest Cover Mapping (CLUFC)

Enter map:

Describe the current land zones:

10. Future Land Use Management Zones (FLUMZ)

Enter map:



Describe the future land use:

1. Fixed Agriculture Zones

2. Upland Agriculture Zones

3. Forest Zones

4. Livestock Grazing Zones

5. Planning at Landscape Level

5. Land Tenure Aspects

#### 11. Village Regulations

Annex the Village Regulations document

Describe the main aspects of the village regulations and the approval process:

#### 12. Final Meeting at the Village for Approval

Describe the presentation, review and approval process for the key PLUP 2.0 documents.

Annex the form to record villagers' approval (Annex 9).

#### 13. Final Observations and Conclusions by the PLUP Team

## **Annex 12: Quality Indicators for PLUP 2.0 Exercises**

The main indicators to be assessed are:

- Form 1 and Form 2 have been properly and completely filled with relevant data using the prescribed methods and the PLUP team has analysed the data
- Competent VFLMC was either elected or existing committee was confirmed with at least 2-4 female members
- A comprehensive village base map was prepared, which reflects areas used by outsiders and areas of land conflict
- The village boundary delineation is completed, conflicts resolved and village boundary agreements have been signed with all neighbours
- The current land use was mapped completely and according to official classes and sub-categories; all mapping standards have been observed
- The FLUMZ map shows realistic future land use zoning, shows an appropriate area to be used as upland agriculture zone and well-defined forest zones in sensitive upstream or riparian areas
- Landscape aspects have been fully included in watersheds, forest corridors and along the village boundaries
- The village regulations are complete, reflect the specific situation of this village and have been prepared by the VLFMC
- The great majority of villagers have approved the PLUP 2.0 documents
- The PLUP team has prepared a comprehensive PLUP report for the target village in accordance with the draft contents (Annex10)

If the district PLUP team has fulfilled all the indicators mentioned above, the incentive payment for acceptance of the PLUP report of US\$ 180 per village will be paid.

Later stage:

- After the completion of PLUP 2.0 work in all villages of one village cluster, a harmonisation and village networking meeting was organized and attended by all concerned parties. Villagers have agreed to cross-village boundary collaboration
- A Monitoring system using the appropriate form and methods has been established and is operational.

### Annex 13: PLUP 2.0 Monitoring Report

The monitoring and evaluation visit will be conducted by discussion or interview of villagers in groups or individual household. The people who can provide the information as stated in this form include: the Village Administrative Committee, the VLFMC and other groups (including all ethnic groups, the poor, women, men, elders or the elite / senior) and the general population within the village.

Before starting work with villagers, the team members should review the PLUP report for this village and record all existing data. This will be used to compare with the data gained from villagers (new information) to help observe the answers / information and reliability of the data.

Record the answer or the information collected using the instrument (√) as the answer: clear, yes / yes or decrease, and use the instrument (□) as the answer: not clear, no / no or not reduced and record the answer (detail) of the people to explain the cause or reason in the box: Explain.

Note: The users of the table below need to understand the purpose of each data collection and be able to create their own questions. Example 2 of Question I asks about the clarity of the village management area. The registrar must compare the answers and the information in the plan as a basis for recording on the table whether the people know the area allocated as an agricultural area or not. In case of interviewing several with some people who understand and a number of those who do not understand the area designated as a farming area should write a description in the field for descriptions.

Protocol to determine compliance with FLUMZ and the village regulations:

<b>Infringements against FLUMZ</b>	<b>Contraventions against Village Regulations</b>	<b>Compliance</b>
Involve less than 5% of the forest zones	None to very rare; no sanctions	<b>Very high</b>
Involve less than 10% of the forest zones	Rare; very few sanctions	<b>High</b>
Involve less than 25% of the forest zones	Some; several sanctions	<b>Mixed</b>
Involve more than 25% of the forest zones	Quite common; numerous sanctions	<b>Poor</b>

Monitor: ..... Date:.....

Province District, Cluster village, Village: .....

Total number of population in Village (present): .....(female) .... (ethnic.....)

Period of implementing PFALUPAM (month/year): round 1: ..... round 2: ..... round 3: .....

I. Clearly defined the Village land border lines	Clear	Unclear	Explain
1. inter-village boundary lines			
2. Production land border lines			
3. Forest land bordering			
II. Organization, right and capability	Yes	No	Explain
4. Has the village PFALUPAM committee			
5. Does female and ekder are member of village PFALUPAM committee			
6. village PFALUPAM committee understood their role			
7. village PFALUPAM committee implemented their role			
8. Knowledge and capability of villagers to manage the forest and agricultural land increased			
9. Villagers can implement well the FLUMZ plan			
III. Protection and development of forest and upland agriculture land	Yes	No	Explain
10. Village ariculture land decreased (compared to CLUFC)			
11. Village ariculture land sufficient to villager's demand			
12. Villagers practiced upland cultivation inside the FLUMZ			
13. Villagers practiced upland cultivation correctly to FLUMZ			
14. Villagers practiced upland cultivation in group			
15. Villagers grow other crops instead of rice in upland			
16. Villagers also grow trees (specie, type of land)			
IV. Eco-agriculture situation	Yes	No	Explain
17. Forest area increased			
18. Water quantity in rivers increased			
19. Wild life number increased			
20. Number of aquatic animal increased			
21. NTFP (in forest) increased			
22. NTFP (in fallow) increased			
23. Average yield of upland rice (rotation) increased			
24. Averde yield of paddy rice increased			
25. Socio-economic grow well			
V. Participatory	Yes	No	Explain
26. Village PFALUPAM committee consisted female and etnic involed			
27. All key villagers involved in PFALUPAM process			
28. Villagersss provided comments and ask question to clarify PFALUPAM process			
29. The implementation of PFALUPAM was divided in group work for discussion and information contribuion			
30. All issues and questions from villagrs were solved			
VI. Issue and constraint	Decreased	Not Decreased	Explain
31. Forest fire decreased			
32. Crop disease decreased			
33. Conflict on village boundary decreased			
34. Constraint on land use decreased			
35. Conflict on land tenure decreased			
36. Conflict on NTFP decreased			
37. Conflict on livestock management decreased			
38. Othe constraint			

Signature of Monitor