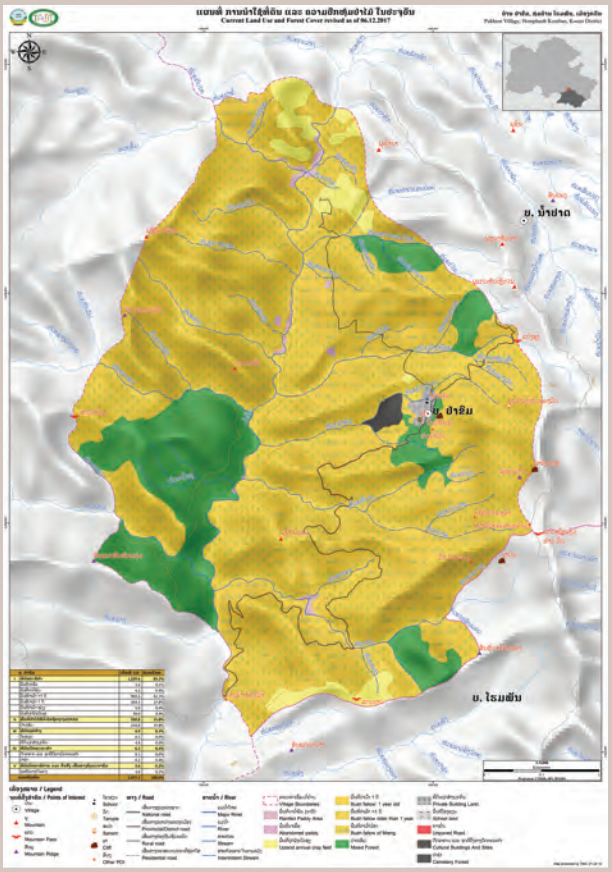
Manual

Participatory Forest and Agriculture Land Use Planning, Allocation and Management at Village Level



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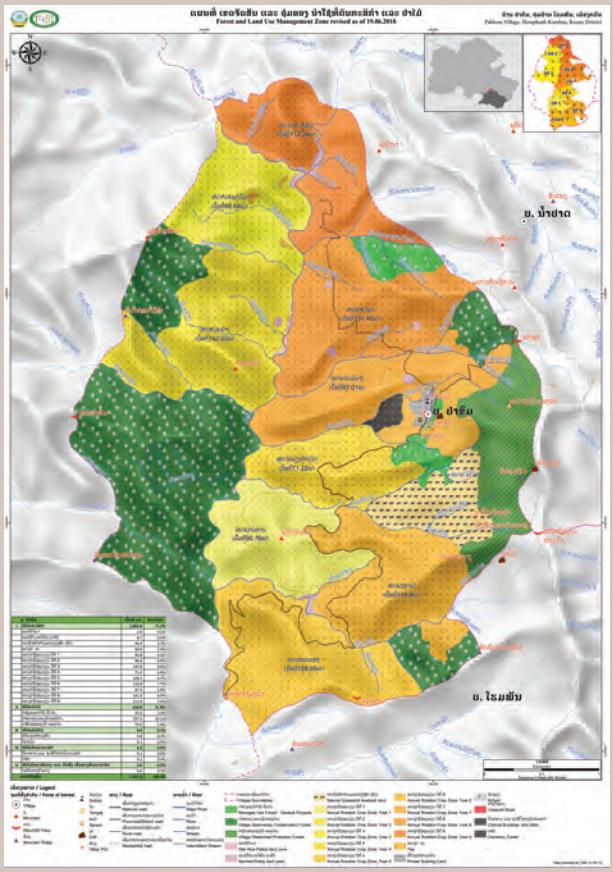

ແບບ FLUMZ

Vientiane Capital, June 2018

Schweizerische Eidgenossenschaft
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Swiss Agency for Development and Cooperation SDC

The Agro-Biodiversity Initiative (TABI)

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Foreword

The Participatory Forest and Agriculture Land Use Planning, Allocation and Management (P-FALUPAM) Manual was written pursuant to agreement No. 7838/MONRE, dated 09 November 2012, of the Ministry of Natural Resources and Environment on the revision of Participatory Agriculture and Forest Land Use Planning manual at Village and Village Cluster Levels, which has been accepted by Ministry of Agriculture and Forestry and National land Management Authority in 2010.

This manual introduces participatory approaches in implementation P-FALUPAM at village cluster and village levels, which divide into five steps including office work and fieldwork. The first step is preparation of work plan, personnel, budget, and equipment/tools. The second step is collection of village data and mapping of village baseline maps, including training of P-FALUPAM to district staff, having common understanding of related issues and establishment of P-FALUPAM responsible committee at village level (the first round of fieldwork). The third step is mapping current land use, collection of socio-economic data and assessment of soil fertility (the second round of fieldwork). The fourth step is defining and allocation of forest and agricultural land, this includes planning and establishment of village land use regulation (the third round of fieldwork). The fifth step is monitoring and evaluation of the implementation of forest and agricultural use planning and allocation, which can be used as reference for development of land registration book, land use certificate and land title (the fourth round of fieldwork).

In any cases, the organizations or users of this manual can revise, modify, and correct methods or the planning process of forest and agriculture land use planning, allocation and management, and adapt it based on local realities and development goals in each period of time.

Department of Agricultural Land Management (DALaM), Ministry of Agriculture and Forestry of Lao PDR would like to thank to the governmental organizations, development partners, especially the granted project supported by Government of Switzerland (representative by the Swiss Agency for Development and Cooperation (SDC)) and TABI project that provide technical and financial support for development of this manual. At the same time, DALaM sincerely accepted comments and suggestions to improve this manual to make it suitable and consistency with the actual situation in each period of time.

Vientiane Capital City, Date 04/08/20

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In addition to the Advisory Committee, Technical Committee and Technical Consultant, there are also central and local government agencies in particular responsible for P-FALUPAM work from the Departments of Agriculture and Forestry of Luang Prabang, Xiengkhouang and Houaphanh provinces, the P-FALUPAM responsible team of TABI Project, Center for Development and Environment, development projects and related domestic and international organizations.

List of Contents

COMMITTEE ..... **III**

PART I. INTRODUCTION **1**

1. OBJECTIVES 1
2. THE PRINCIPLE 1
3. STEPS AND PROCESS 2

PART II: CONTENT SECTION **5**

STEP 1: PREPARATION 5

Process 1: Preparation of work plan, budget, equipment / tools and team *5*

Process 2: Data collection forms and drafted documents *8*

STEP 2. COLLECTION OF BASIC VILLAGE LEVEL DATA AND BASELINE MAPPING (FIELDWORK ROUND1) 10

Process 1. Establish the team and provide training to technical staff from relevant district offices *10*

Process 2. Organize village level meetings *11*

Process 3. Establishment of P-FALUPAM Committee at village level *11*

Process 4. Participatory collection data on natural resources, Agro-Biodiversity and potential development of the village *12*

Process 5. Baseline village geographical mapping *12*

Process 6. Mapping of village management areas *13*

STEP 3. LAND USE MAPPING, COLLECTION OF SOCIO-ECONOMIC DATA, AND ASSESSMENT SOIL FERTILITY (FIELDWORK ROUND 2) 15

Process 1. Mapping Current Land Use and Forest Cover (CLUFC) *15*

Process 2. Collection of household level data *16*

Process 3. Survey and collect soil samples from village agricultural areas *17*

Process 4. Summary, socio-economic data analysis and mapping *17*

Process 5. Soil analysis and soil fertility assessment *17*

STEP 4. DEFINITION, ALLOCATION AND MANAGEMENT OF FOREST AND AGRICULTURAL LAND USE MANAGEMENT (FIELDWORK ROUND 3) 17

Process 1. Organize meeting for forest and agricultural land use planning and management zoning (FLUMZ) *17*

Process 2. FLUMZ allocation planning *18*

Process 3. Reviewing and revision of village regulation and FLUMZ allocation plan *20*

Process 4. Recommendation and promotion the implementation of FLUMZ Allocation plan *21*

STEP 5. MONITORING AND EVALUATION FLUMZ ALLOCATION PLAN IMPLEMENT (FIELDWORK ROUND 4) 21

Process 1. Preparation of teamwork, information, maps and equipment *21*

Process 2. Monitoring, evaluating and revision of FLUMZ allocation plan *22*

Process 3. Organize district meeting to approve village FLUMZ *23*

Process 4. Handover FLUMZ allocation planand post FLUMZ map at the village *24*

List of Tables

Table 1. Sample working calendar to define number of days and daily activities/works..... 6
Table 2. Equipment / Tools..... 6
Table 3. Responsibilities of the technical team..... 8
Table 4. P-FALUPAM activities at village level..... 11
Table 5. Data collection form forms..... 12
Table 6. Village basic geographic map drawing activities 13
Table 7. Activities of mapping village management area 14
Table 8. List of maps which will be used for monitoring and evaluating FLUMZ allocation plan implementation 21

List of Diagram

Diagram 1. Steps and process of P-FALUPAM implementation 3
Diagram 2. Implementation of P-FALUPAM at village level 5

Reference

Reference 1 Criteria for Forest and Agriculture Land use Zoning 25

List of Maps

Map 1 2.5 Topographic and Village Boundary 28
Map 2 Setellite Image-NGO Ortho Photo-2014/2015 and Village Boundary 29
Map 3 Current Land Use and Forest Cover Revised as of 06.12.2017 30
Map 4 Forest and Land Use Management Zone Revised as of 19.06.2018 31
Map 5 Forest and Land Use Management Zone Revised as of 19.06.2018-Sentinel-June 2017 32
Map 6 Forest and Land Use Management Zone Revised as of 19.06.2018-Skysat-November 2018 33

Part I. Introduction

1. Objectives

The objectives of the Participatory Forest and agricultural Land Use Planning, Allocation and Management Manual (P-FALUPAM) are as follows:

1) To promote participatory and responsible management of forest resources and agricultural land use, which will produce the great benefits to development local villagers' livelihood and create stable employment for local villagers;
2) To facilitate the technical staff at all levels, especially for the local level (province, district and village) and village authority, including all villagers in the village shall have responsibilities and agree on methodological approaches in implementation of P-FALUPAM, which will help development of livelihoods and socio-economic at village level in consistency with environmental protection based on local geographical conditions;
3) To establish databases, maps, and accurate and correct planning and allocation of forest and agricultural land based on local realities, which can be used as official reference to development of policies, strategies, investment planning, and program, and socio-economic development plans.

2. Principles

The Implementation of activities of forest and agricultural land use planning, allocation and management at village cluster and village levels that participated by relevant stakeholders at all levels (central and local levels), including village level authorities, target ethnic groups, and surrounding villages must be particularly responsible and pay attention to some principles, as follows:

1) Establishment of the village level responsible committee of P-FALUPAM, and define its roles and responsibilities in detail, report the results to the district authority (district governor) in order issue approval agreement;
2) Avoid or prevent conflicts;
3) Implement fieldwork activities in many villagers in the same village cluster based steps of P-FALUPAM, starting from one village to other villages, but not all steps will be completed in one time implement of fieldwork in one village, which means that the technical staff will work 4 times in a target village to complete all activities (For details, see the steps and processes section);
4) Appropriately allocate time to carry out each step and process, and make sure the establishment of a good relationship, data exchange, and mutual trust between the technicians and farmers, at the same time, accept the important opinions and suggestions for the implementation the work of P-FALUPAM.
5) Existing data analysis, image interpretation and land use map drawing are the basic and important for the map drawing work, which is related to A) The history of agricultural land use in the upland or mountainous areas, the land that used by farmers in the past to the present. B) The forest areas that include undeveloped forest areas, which are (production forests, protection forests, and conservation forests), and land that farmers want to restore into the forest. In order to ensure to draw the map of existing forests and agricultural land correctly, and to ensure that farmers understand the three types of forests, it should not be recommended to classify land use before the third time technicians work in the village.
6) The definition, allocation and management of forest and agricultural land use conform to the actual situation of potential geographic resources, and ensure that farmers are responsible for

implementation, especially management and the use of land for agricultural produce in the highland, maintaining the original size of the fallow fields (not expanding the production area in the forest).

7) In 2011, P-FALUPAM was started using for trial implementation in the mountainous areas of the northern provinces, such as Luang Prabang, Xiengkhouang and Houaphanh province. Until 2018, the above work was piloted in 13 provinces across the country, covering 315 villages, with forest and agricultural land use allocation plan (FLUMZ) of 800,000 hectares. The implementation results of P-FALUPAM are used to promote the development of many aspects of the project area with successful results, including the following aspects:

- Clearly define forest and agricultural land areas: protection forests, conservation forests and land use area through participatory consultation with relevant departments, and unanimously agreed on methods, regulations and responsibilities;
- Responsible for Agro-Biodiversity use management, which has rich value, can improve living conditions and stable employment of local ethnic groups;
- Define the high value Agro-Biodiversity areas for permanent water restoration and management;
- Clearly define the undeveloped forest area and other forest areas according to the management level in order to identify important areas for forest restoration and protection;
- Register and restore natural forests to ensure that forest production results are applied to permanent special local product;
- Strengthen agricultural production in upland permanently, connect multiple pieces of land together, or produce in groups in accordance with social and environmental characteristics. On the one hand, it supports forest fire prevention through management and regular supervision. On the other hand, it promotes long-term recycling of fallow fields (For many years), it helps to restore the quality of the land and maintain the value of Agro-Biodiversity, at the same time, it also improves the production efficiency from limited land;
- Recognize the land use includes traditional land use, local traditional knowledge that is valuable to society and the environment, and plays a role in preventing forest destruction and being used or occupied by outsiders, such as illegal and non-compliant of land use development projects or business activities.
- Many public and private organizations, such as Theun-Hinboun Power Company (THPC), Phu Bia Mining Company (Phu Bia Mining) and other projects, under the guidance, they use P-FALUPAM to the land they are responsible for, especially under the guidance of the actual technical implementation of the Department of Agricultural Land Management and TABI project.

3. Steps and Processes

The P-FALUPAM manual was written under the practical implementation experiences and knowledge of the activities in the target villages in the three northern provinces, such as Luang Prabang, Xiengkhouang and Houaphanh provinces from 2011-2018. There are 5 steps in this manual, and multiple processes in each step, which are divided into office work and fieldworks. In the largest of village cluster, we carried out village circulation activities (four times per village), each circulation activities started in one village and then moved to another village, similarly, all steps and processes are implemented in sequence until it is completed, summarized as follows:

Diagram 1. Steps and process of P-FALUPAM implementation

Step 1. Preparation

Process 1. Work plan, budget, equipment/tools and team.

Process 2. Collect data forms and drafted documents

Step 2. Collection village level data and basic village mapping

Fieldwork (round 1)

Process 1. Establish the team and provide training for technical team from relevant sectors at district level

Process 2. Organize village level meetings

Process 3. Establish P-FALUPAM Committee at village level

Process 4. Participatory collection of data on natural resources, Agro-Biodiversity and other relevant data at village level

Process 5. Mapping of village physical geography

Process 6. Mapping of village management areas

Step 3. Current land use mapping, collection socio-economic data, and conduct land fertility assessment

Fieldwork (round 2)

Process 1. Mapping of current agricultural land use and forest cover

Process 2. Collection of family level data

Process 3. Survey and collect soil samples from village agricultural areas

Process 4. Summary and analysis of socio-economic and Agro-Biodiversity data

Process 5. Analyze and conduct land fertility assessment

Step 4. Forest and agriculture land use planning, allocation and management

Fieldwork (round 3)

Process 1. Organize a meting to present forest and agricultural land use planning, allocation and management zoning (FLUMZ)

Process 2. Participatory FLUMZ planning

Process 3. Reviewing and revision of village FLUMZ plan

Process 4. Recommend and promote the implementation of FLUMZ plan

Step 5. Evaluation and monitoring the implementation of FLUMZ plan

Fieldwork (round 4)

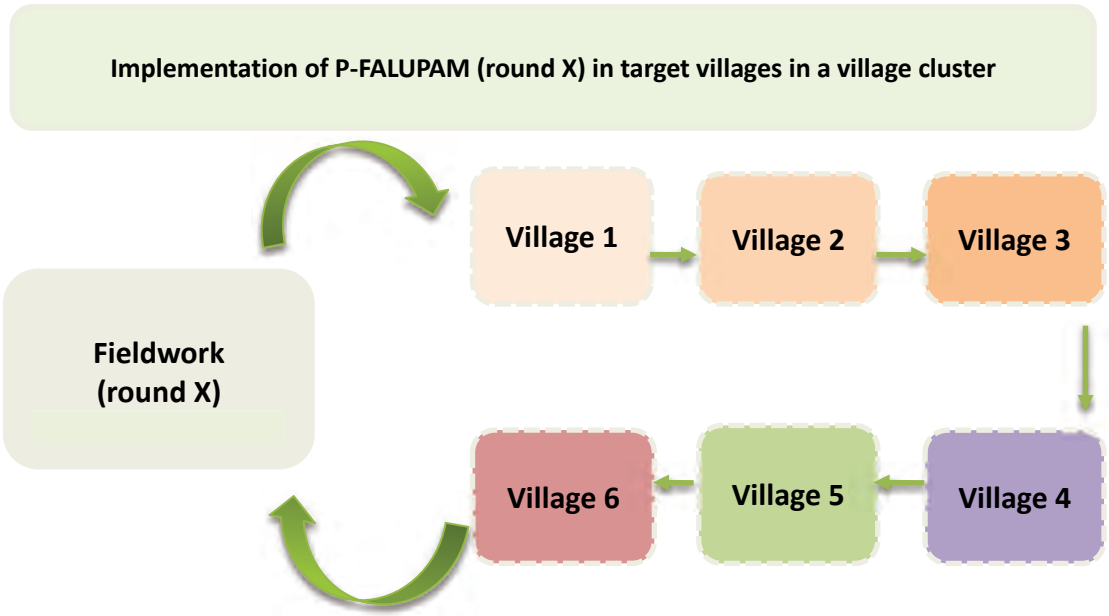
Process 1. Preparation of team, information/data, maps and equipment

Process 2. Evaluation, monitoring and revision of FLUMZ plan

Process 3. Organize a meeting to approve the FLUME plan at district level

Process 4. Hand over FLUMZ allocation plan book and put the village map

Diagram 2. Implementation of P-FALUPAM at village level



Part II: Content section

The English abbreviation for this manual is "P-FALUPAM", which refers to "the Participatory Forest and Agricultural Land Use Planning, Allocation and Management", "CLUFC" refers to "Current Land Use and Forest Cover", and "FLUMZ" refers to "Forest and Agricultural Land Use Management Zone". The steps and processes of implementation of the P-FALUPAM are as follow:

Step 1: Preparation

The preparation step is an office work that involves two processes:

1. Preparation of work plan, budget, equipment / tools and team, and
2. Preparation of document forms for data collection, field surveys, meeting minutes and land information. The details of each process are as follows:

Process 1: Preparation of work plan, budget, equipment / tools and team

Before implementation P-FALUPAM in target village, must prepare: (1) Central level team consisting of specific expert (if necessary), estimated number of personnel at local (provincial, district, and village cluster levels) and village levels, and number of villagers that will participate different activities, (2) summarize existing data of target villages, village clusters and districts, (3) budget planning, (4) define daily work plan or activities, (5) prepare necessary materials, equipment / tools and facilities, as follows:

1. Work plan (Working calendar)

Use the working calendar to define activities/work plan for planning (define number of days) for office work and fieldwork as following sample:

Table 1. Sample working calendar to define number of days and daily activities/works

Task Detail		Date														Numberof days
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Process 1																
Process 2																
Process 3																
Process 4																
Process 5																

2. Budget

Budgeting base on regulations of the Ministry of Finance or funder's Expense Plan, including expenses for food, accommodation costs, transportation costs, material costs, equipment / tools which apply to the implementation of P-FALUPAM.

3. Equipment / Tools

In order to ensure the effective implement of P-FALUPAM, it is necessary to provide facilities / equipment to technical staff as follows:

Table 2. Equipment / Tools

S.N.	Items	Quantity	unit	Remarks
I	**Equipment**			
	Cloths, hats, shoes and raincoats			
	Tents, sleeping bags and bags for technical staff			
	Small computer desk and chair	2	Set	
	Lamps and touches	2	Set	
	Electric motor, cable, light bulb and plug (Full set)	1	Set	If the village has no electricity
	Portable speakers	1	Set	
II	**Technical tools**			
	A computer for mapping and data storage	1	Set	Consisting of cable for loading data
	Computers for general information and data storage	1	Set	
	LCD device and screen	1	Set	
	Printer	1	Set	
	GPS, battery and charger	2	Set	
	Camera	2	Set	
III	**Equipment for village level field mapping**			
	Small(14colors)andmedium(4colors)pensfordrawingmaps			
	Pen for transparent paper writing on the top of maps (if use transparent paper)			
	Transparentplasticsheet(forinterpretationofsatellite/aerial images)			
	Colorful Paper Sticker (1.5 to 2.5 cm)			Forwritingnameson the map

S.N.	Items	Quantity	unit	Remarks
	60 cm long ruler (steel or plastic)			
	1-2 cm cellulose tape			For sticking paper / map
	Box for maps (waterproof)			
	Colored needles to stab maps and papers			
	Yarn or colored cotton yarn			
IV	**soil sample collection tool**			
	Traps, shovels, scraps, knife, iron drums, masonry sticks (2-3 m), soil sample bags, soil box and book for comparing color			
	HCl 10%			
	Soil Test Kit			
V	**Other equipment**			
	White A0 and A4 paper			
	Notebooks, pens, pencils, erasers,			
	Staplerand staples,PaperDrill,binderclips,paperfile,paper knife and Scissors			
	Data collection form			

4. Technical Team

The teams for implementation of P-FALUPAM at village level include staff from central level (2-3 persons), provincial level (2-3 persons) and district level (2-3 person); about 7-10 persons in total. Number of villagers will participate the implementation depends on size of village (small- big villages). In general, mentioned number of staff and local villagers are representatives of the following sectors:

1) At the central level: Department of Agricultural Land Management of the Ministry of Agriculture and Forestry
2) At the provincial level: Section of Agricultural Land Management of the Provincial Agriculture and Forestry Office, and Section of Land of Provincial Office of Natural Resources and Environment,
3) District level: District Agriculture and Forestry Office, District Office of Natural Resources and Environment, Office of Domestic Affairs and other related offices,
4) Village cluster and village Levels: village cluster's authorities, village authorities, P-FALUPAM responsible committee, mass organizations, and villagers.

The number of staff of the technical team can be adjusted according to the situation or conditions and the actual activities at the village level. The detailed assignments are as follows:

Table 3. Responsibilities of the technical team

No.	Tasks – sub-team	Number of persons
1	GIS / mapping technical staff	1 - 2
2	Actual field survey staff (mapping and GPS)	2 - 3
3	Interview and data collection staff	2 - 3
4	Soil survey and sample collection staff	2
	Total:	7 - 10

Note: The mapping team must prepare all the maps needed for fieldwork.

Process 2: Data collection forms and drafted documents

Socio-economic data, agro-biodiversity, forest and agricultural land and other data collection forms for providing data into minutes or agreement; which are important and necessary for P-FALUPAM. Therefore, it is necessary to prepare following complete forms and documents:

Data collection forms （there are 21 forms in total）

Forms for data collection for implementation of P-FALUPAM at village level include 11 forms for round (1-11); 5 forms for round 2 (12-16), 4 forms for round 3 (17-20), and 1 forms in round 4 (21). Overall contents of the forms are as follows:

Form 1. **Basic general information of village:** histories of village such as village establishment, population, occupation, infrastructure, agricultural production and agricultural production tools, land use management (including land allocation), project names and development activities implemented in the village and other information.

Form 2. Village agro-biodiversity data collection: including varieties of rice, flora species, cycle of rotational shifting cultivation, animal husbandry, and forest conditions.

Form 3. Collect agricultural production data and the cash crop cultivation calendar： Crop planting season, crop types and special production areas situation , such as costs, types and main income (including land use).

Form 4. Collect data on harvesting, situation and priority none-timber forest products (NTFPs): 1) harvesting and situation of NTFPs: natural resources play an important role for local villagers' livelihoods, especially economic of local villagers (income), food, medicine, household goods, NTFPs trading data collection and NTFPs status at village level and the main NTFP species. 2) Priority NTFPs: the species that are about to be extinct or already extinct, the species to be protected/managed by local villagers, natural restoration and plant (plant in the plantation) for household use or plant for economic.

Form 5. Collect data on timber harvesting, condition, and priority timber: 1) Harvesting and use of timbers: richness of timbers and timber products that involve with daily livelihoods of local villagers including the sale of timbers, income from timbers and statuses of different tree species; and 2） priority tree: including tree species that are about to be extinct or already extinct, tree species that local villagers want to restor (plant in the plantation for household use or plant for economic income).

Form 6. Collect wildlife data: wildlife species and the important of wildlife for livelihood of local villagers, statuses of different wildlife species, changes and reasons of the changes (if any).

Form 7. **Collect aquatic animal data:** Aquatic animal species and the importance of aquatic animals for livelihood of local villagers, statuses of aquatic animals, changes and reasons for changes (if

any).

Form 8. Collect data on problems and solutions: problems and causes, problems that affecting people and solution approaches that suggested by local villagers.

Form 9. Collect data on village conditions and potential development: Conditions and potential development data include agriculture and forest, and health in the village.

Form 10. Record important results from survey on geographical locations: actual field survey data using GPS to record the location of rivers, streams, the top of mountains and other important locations of village.

Form 11. Record geographical location of village management areas: actual field survey data using GPS to record the locations of village management areas.

Form 12. Rice and livestock need of household: household population, labor force, occupation, and livestock.

Form 13. Collect household income data: income and basic income of each household in village.

Form 14. Collect household land use: land tenure, occupation and land use of household in the village.

Form 15. Collect soil samples: collect soil and soil physicochemical properties, and analyze: 1) location and environment of soil pit, 2) general data such as depth, soil composition, soil color; and 3) soil layer shape.

Form 16. Record the results for field survey on current agricultural land and forest: data on current agricultural land and forest and others by using GPS.

Form 17. Record data on agricultural land allocation, use and management: agricultural land allocation data, including important locations such as 1) local name of the location, 2) location, geographical features, purpose and reasons of the use of location, 3) historical land use and management, 4) list of households that use agricultural land in the area, and 5) village forest fire management / prevention (including list of households conduct agricultural production in such area).

Form 18. Record data on forest land allocation and control used: forest areas that have been allocated for control used (based on village participatory forest and agricultural land allocation and management) such as 1) name of forest area (local name), 2) locations and geographical location information of each area 3) The purposes and reasons of the use of the area, 4) historical use and management of the area, 5) the list of households that conduct agricultural cultivation in such area, 6) vision and plan on forest land management of the village, 7) the management/prevention of forest fire 8) regulation on the use and management of specific forest land area.

Form 19. Record the coordinates of the allocated area agricultural land use and forest management plan: record coordinates of the allocated area based on agricultural land use and forest management plan by using GPS survey.

Form 20. Review and revise agricultural land use and forest management regulations: it is necessary and important for implementation capacity to implement the FLUMZ plan, which will help improvement of local villagers' livelihoods that related to agricultural land use and the use of forest resources.

Form 21. Monitoring and evaluation of P-FALUPAM implementation results： Research and record the comparison of the existing data and the data that obtained from interviews, discussions and exchange experiences in the meeting together with local villagers with regards to P-FALUPAM.

The drafted documents (there are 9 documents in total)

Process 3 of step 2 consisting of 4 documents (1-4), process of step 5 consist of 5 documents (5-9). General contents of the drafted documents include:

Drafted document 1. Drafted request letter for setting up the village committee of P-FALUPAM at village level: The Request letter that village authority requests to the District Governor through District Agriculture and Forestry Office and other concerned offices at district level to establish a responsible committee which was unanimously agreed by villagers and village authority. The request letter includes the list and responsibilities of the P-FALUPAM committee at village level.

Drafted document 2. Drafted request letter of the DAFO to request establishment of "Village Committee for FALUPAM": DAFO proposes to District Governor to approve the establishment of village committee for P-FALUPAM according to the request letter of the village authority.

Drafted document 3. Drafted Agreement of the District Governor to establish village committee for FALUPAM: the approval document that the District Governor agrees to establish village committee for P-FALUPAM at village level.

Drafted document 4. Drafted minutes of village jurisdictional management area: minutes of agreement on village boundaries between villages based on the discussion and agreement amongst village authorities of host village and surrounding villages.

Drafted document 5. Drafted evaluation and reporting the implementation of FLUMZ plan at village level: The Land that permanently used by villagers include permanent agricultural land or residential land/farm (permanent), and the land that villagers intend to develop permanently.

Drafted document 6. Drafted evaluation and reporting the land use based on FLUMZ plan: revise, amend or improve the plan and FLUMZ map that agreed by the villagers.

Drafted document 7. Drafted request letter of village level to approve FLUMZ allocation plan: The village authority requests the District Authority through DAFO and other related offices to approve the FLUMZ allocation plan at village level.

Drafted document 8. Drafted request letter of DAFO to approve FLUMZ allocation plan: The request letter from DAFO to request the District Governor approves the FLUMZ allocation plan through other relevant offices.

Drafted document 9. Drafted agreement of District Governor to approve FLUMZ allocation plan: The approval document of the District Governor to approve the FLUMZ allocation plan of village based on the village 's request letter.

Note: The details of the above form forms, data collection and drafted documents are in the appendix I.

Step 2. Collection of basic village level data and baseline mapping (fieldwork round1)

Process 1. Establish the team and provide training to technical staff from relevant district offices

Before implementation of activities in the target villages, the relevant district teams have to participate in technical training in order to ensure that the team completely understand the, especially their responsibilities, the use of interview forms for data collection, and implementation of other related work activities.

Process 2. Organize village level meetings

In the village meeting, introduction the objectives, steps, processes and the important of P-FALUPAM implementation to village authorities and villagers; this meeting will take about 1-2 hours. Detail of P-FALUPAM activities at village level are listed below:

Table 4. P-FALUPAM activities at village level

Step	Activities	Timeframe
1	- Preparation at office (Central, province, district)	
2	- Selection and establishment of P-FALUPAM committee at village level - Participatory village geographical mapping - Participatory discussion with the host village and surrounding villages, define and survey village management areas together with villagers - Taking minutes of agreement on village management areas between the host village and the surrounding villages - Collection of baseline data of village from village authorities - Collection of data on NTFPs, forest, wildlife, aquatic animals data, problems and conditions/potentials for village development (interview user groups)	4-5 days
3	- Collection of household level data: population, livestock, income, land use management and the main occupation of household members - Evaluation and mapping current agricultural land use forest - Conducting field survey of current agricultural land use and forest - Conducting soil survey and collection of soil samples - Summary and analyzing the collected data, mapping CLUFC maps and writing drafted reports (office work)	4-5 days
4	Organize district meeting (participated by representatives of target villages) to understand the progress of activities under Step 1 and Step 2 and discuss how to implement FLUMZ allocation plan	1 day
	- Establish FLUMZ allocation plan (including establishment of relevant regulations) - FLUMZ allocation plan	3-4 days
	- Summary, reporting and mapping to input into the "Participatory Forest and Agricultural land use and management book" (Office Work) - Organize district meeting to approve the FLUMZ allocation plan	
	- Organize a meeting to introduce the FLUME allocation plan to villagers	
5	Promote and monitor land use base on the FLUMZ allocation plan	2-3 days

Process 3. Establishment of P-FALUPAM Committee at village level

Explain in detail and clearly the terms, roles, rights, and obligations of the P-FALUPAM responsible committee at village level. Facilitating villagers in democratically elect the P-FALUPAM responsible committee committee and report the results of the election that agreed by villagers and technical team to the district governor to sign the agreement (see Appendix I for details and methods).

Process 4. Participatory collection data on natural resources, Agro-Biodiversity and potential development of the village

Data collection in this process is critical to P-FALUPAM, especially to ensure its accuracy, appropriateness, and compliance with strategic plan, socio-economic development plan, natural resource potentiality, and food security requirements of villagers that related to agricultural land use for agricultural production.

Research and statistic data collection (including existing data), such as the central, provincial, district and village socio-economic development plans, divided into 2 levels: 1) The basic situation of the village or P-FALUPAM village committee obtained from the village authority, and 2) Agro-Biodiversity data, problems/problem-solution approaches and village potential development that obtained from interviewing villagers: organize village meeting, focus group discussion (women, men, ethnicity, the elderly, production groups, and others) that meet the data requirements, characteristics, local social characteristics and environment, as follows:

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Table 5. Data collection form forms

Activities and forms	Time	Target group
Data set 1: **Interview village authorities**		P-FALUPAM committee at village level
Form 1: General condition of the village	30 minutes	
Form 2: Agro-biodiversity	45 minutes	
Form 3: Status and planting calendar for planting of cash crops	45 minutes	
Data set 2: **Interview user groups who can provide information**		About 20 to 30 persons/group (50% female and 50% male) who can provide the accurate information
Form 4: Harvesting, status and priority NTFPs	1.5-2 hours	
Form 5: Harvesting, status and priority timber	1.5-2 hours	
Form 6: Wildlife	1-2 hours	
Form 7: Aquatic animals	1-2 hours	
Form 8: Problems and Solutions	1-2 hours	
Form 9: Village conditions and potential development	1-2 hours	
Form10:Recordsofcoordinateofimportantgeographicallylocations		Field survey
Form 11: Records of reference coordinates of village management area		Field survey

(For more details implementation methods, please see the appendix)

Process 5. Baseline village geographical mapping

Baseline geographical mapping to define village management area and boundaries between villages in order indicate 1) village geography feature (such as rivers, streams, waterfalls, caves, mountains, ridges and cliffs); 2) roads; 3) cultural and Historical sites; 4) irrigation and gravity fed water; 5) land for construction and others. Detailed baseline geographical mapping activities include:

1) Technical equipment / tools

The required technical equipment/tools include: Topo maps and satellite images/aerial photos, transparent paper (for overlaying on the top maps and satellite images/aerial photos to record geographical information), pens and pencils for drawing maps (size 0.5-0.7 mm), paper note for writing geographical location and paste on map, computer, LCD projector and others.

2) Participants

Participants must have the knowledge and ability to interpret satellite images, aerial photos, and topo maps of land use or forest coverage, river, road, ridge, and mountaintop, and other symbols. Villagers who participate the activities with mapping team must have certain knowledge of the village's background, special circumstances, area, location, and names of important area.

3) Implementation methods

The technical team and the villagers work together to map geographical feature of the village. Each village takes at least two days, as shown below:

Table 6. Village basic geographic map drawing activities

Activity	Topics and content	Time
	Satellite images and topo maps: introduce satellite images, aerial photos and toto maps	30 minutes +
	Criteria and conditions of participants Proactive, strive to contribute to the work Understand the situation of the village Ability to identify important locations on the maps (satellite images, aerial photos and topo maps)	30 minutes +
	Define geographical reference into the maps Lists of rivers and streams (small streams) Main roads and sidewalks (alleys) Mountains, ridges, cliffs Names and location of cultivation and livestock raising areas Other key location names	Half day
	Field survey: The team and the villagers carried out a field survey to verify the accuracy of the data obtained from the map and the interviews with various ethnic groups. Carry out actual site survey by using GPS positioning coordinates, and collect additional data to confirm the accuracy of the area where data is yet accurate.	1 - 2 days
	Improve baseline geographical maps of the village: Technical team collects and uses all field survey data to improve village baseline geographical map	Half day
	Organize meeting to approve village baseline geographical maps: present village baseline geographical maps to villagers for understanding and approval.	1 hour
	TOTAL:	2 days+

Process 6. Mapping of village management areas

Based on existing data, including village interviews/minutes the agreed boundaries between villages to define village boundaries and mapping village management areas (village boundaries), the details are as follows:

Table 7. Activities of mapping village management area

Activity	Topics and content	Time
1.	**<u>Explain to villagers:</u>** Explain the baseline geographical maps of the village to the villagers and define boundaries of village management area	20 minutes
2.	**<u>Define baseline village management area</u>** - Review the data or existing minutes of the village management area (may be a oral telling stories or minutes of agreement on village management area), and if possible making a copy of the agreement (in case the minutes and boundaries of the village is not existed) - Propose to villagers explain details of village management area that are bordering with its surrounding village based on their knowledge and understanding. The technical team take the notes of oral explanation of village management area (boundaries between villages) into paper, indicate the coordinates into locations on the maps, then drawing the boundaries from one point to other points based on oral explanation by villagers.	2-3 hours
3.	**<u>Consultation with surrounding villages and drafting the agreement on village management area</u>** 1) Local authority (District or village cluster) invites representatives of surrounding villages to participate in the meeting, 2) Organize a meeting to discuss the boundaries of the village management area (participated by representatives of party at village cluster and District Domestic Office), 3) The Head of Village Cluster Office presents objectives of the meeting, the host village and the P-FALUPAM team introduce the maps and contents (oral explanation) of the village management area. 4) Representatives of surrounding villages commend on oral explanation or drafting the minutes on the village management area (if any) - In the case of a host village and one or more of the surrounding villages agree on the village management area that presented by the host village, then drafting minutes on management area between villages, - If there is a proposal to modify or improve the location of the management area, it must be improved or modified in accordance with the proposals and consensus of all relevant parties, - If some locations or areas in the village management area do not reach to the agreement due to various reasons (such as unclear locations or conflicting locations on the map), these locations must be recorded or marked on the map, then carried out actual field survey together with relevant parties. **Note:** *If agreement on village management area cannot be reached, the team has to report report/propose to P-FALUPAM steering committees at district or provincial levels (if necessary) for consideration and find appropriate solutions.*	>1 hour
4.	**Actual field survey of the management area between villages**	1 – 2 days

Activity	Topics and content	Time
	- The team together village representatives of the host village and surrounding villages conduct actual field survey focusing on the area where there are still not reached to the agreement, vague or unclear on the map. - Record information for actual field survey and GPS coordinates. **Note:** *If the villages agree on management area between villages, signs should be posted into the importation locations (if any) and along roadside between villages to temporarily indicate the village management area.*	
5.	**Improvement of maps and drafting minutes of agreement on management area between villages** After the actual field survey, revise and correct village management area based on data from actual field survey. The staff who in charge of GIS (all levels) is responsible for recording and storing all information that collected from the actual field survey on the computer system in order to use the GIS software to map the village management area.	2-3 hours
6.	**Organize village meeting to introduce the results delineation of village management areas between villages** Present and explain the results of revision management areas between the villages to authorities and villagers of the host village and surrounding village for understanding, confirmation and approval.	1 hours
7.	**Request the District Governor issues the agreement village management area** 1) After the target village agrees on management area between the villages, then request the district governor to approve the agreement on village management areas through concerned district offices include District Office of Natural Resources and Environment, DAFO and District Domestic Affair Office. 2) Distribute the minutes (approved version) to the village and district level: - Save the original copy in the target village (1 copy) - Surrounding villages (1 copy/ village) - District Domestic Affairs office (1 copy) - District Office of Natural Resources and Environment (1 copy) - Save the copy version in the DAFO (1 copy)	

Step3.Landusemapping,collectionofsocio-economicdata,andassessmentsoilfertility(Fieldwork round 2)

Process 1. Mapping Current Land Use and Forest Cover (CLUFC)

Using existing data such as images, other maps (existing maps) include land and forest allocation allocation maps, baseline geographical maps, village management area maps, and other data to support to CLUFC mapping. This requires evaluation of each land use type, conduct actual field survey together with concerned sectors and use collected data for improving CLUFC maps. The details are as follows:

1. Conduct land use assessment together villagers

In order to ensure that villagers understand, participate and responsible for evaluation of land use types, the team presents the objectives, reasons and the important of mapping, agricultural land use data and forest cover. Common tasks or activities as follow:

1) Assessment of forestland types

Villagers explain forestland area that had not been cleared (maybe cleared during many years ago), but the villagers want to keep the forestland area for future conservation. In this case, please define such area as "unclearly forestland" and draw such forestland area on the satellite images. Villagers explain other existing forestland areas, which include forestland that can be interpreted in the satellite images and draw such forestland on the satellite images.

2) Assessment of industrial plantation area

Villagers define the location of industrial tree plantation that belong to villagers and companies (land concession) that fall within the village management areas and using data from interview village or mark the industrial plantation, names of the owners of plantation and other relevant information by using needle to pin on the satellite images.

3) Assessment of agricultural land types

Villagers explain each agricultural land use type in the village management area: assessment of permanent agricultural land (field, garden, others) that can be seen on interpreted satellite images, take notes and write names of location of such agricultural land and post on the satellite images, then assess upland agricultural land (swidden, garden, others) that can be seen on the interpreted satellite images, draw and write names of location of upland agricultural land and post on the satellite images (use needles to mark location of swidden of each household, write names of the owners of swidden/swidden practitioners to indicate each swidden plot, at least two years, into the satellite). Once completion agricultural land assessment, check agricultural land data of each household and notes-down to the prepared forms for household land tenure by comparing to land use certificate or land development and land occupation book (if existed).

4) Assessment of other lands

Apart from agricultural and forest, ask villagers to define area and other land uses within the village, draw and write names of land uses of such area on the satellite images.

2. Field survey

The team should summarize the land use status that is unclear or unrecognizable or cannot be drawn on the satellite images, and then conduct field survey together with villagers, write notes on the maps and into the prepared forms and take pictures or videos for reference.

3. Improve current land use and forest cover maps

After completion actual field survey, update the data and the current land use and forest cover maps and then stored in the GIS database system.

Process 2. Collection of household level data

Household-level data collection is important for P-FALUPAM, especially as it ensures consistency with FLUMZ allocation plan, potential development, and food needs to serve the family in order to moving toward commercialization agricultural production. The household level data collection includes

three main components: citizenship, the needs of food and livestock; income; and land tenure (The details on how household-level data is collected, please see in the Appendix II).

Process 3. Survey and collect soil samples from village agricultural areas

The field survey and soil sampling are one of the important tasks to assess soil suitability for cropping. It provides basic scientific information for agricultural land use and forest management planning in line with potential development and reality of each locality, strive to maximize the efficiency and permanently used of land. Actual field survey and soil sampling include: 1) two types of detailed survey and soil sampling, and 2) using the Soil Test Kit tool for soil survey and soil analysis, the details are as follows:

1. Detailed soil survey and sample collection

There are two aspects of detailed soil survey and sample collection: 1) basic soil profile which is the sampling hole with 80 cm width, 150 cm length, and 120-150 cm depth. In each sampling hole must record the shapes of sections of the soil, soil layers, observe and notes all observed phenomenon of soil, and collection soil samples of each soil layer, collect 2-5 samples per sampling hole (depending on the characteristics of the area and sampling hole) for analysis; and 2) Use the Auger tool to dig 4 to 5 test holes per basic soil profile, with 120-150 cm depth, to find the degree of difference in various soil distributions, take notes all found shapes of soil and other phenomena of soil in the test holes and collection at least 1-2 soil samples in 0-50 cm depth for analysis and divide into different soil fertility zones.

2. Soil survey and analysis by using the Soil Test Kit

Define or collect soil samples scattered throughout the area. The more frequently random samples are taken, the more the soil samples can represent the whole (There are specific document provide details on this).

Process 4. Summary, socio-economic data analysis and mapping

After completion of data collection on Agro-Biodiversity, Socio-economic, Land and Current Land Use and Forest Cover map (CLUFC) or works at village level (round 1 and round 2), then summarize and key data into prepared forms (in the computer) and analyze some key data for FLUMZ allocation plan. The data to be analyzed include conditions and utilization of NTFPs, timber, wildlife, aquatic animals, population, and the needs of rice for household consumption and livestock and land tenure.

Process 5. Soil analysis and soil fertility assessment

(Details contents of this procedure are available in a separate document)

Step 4. Definition, allocation and management of forest and agricultural land use management (Fieldwork round 3)

Process 1. Organize meeting for forest and agricultural land use planning and management zoning (FLUMZ)

In order for forest and agriculture land use planning, allocation and management (FLUMZ) to conform to local potential development and socio-economic development plans, organize a meeting to present the results of the implementation (rounds 1 and 2) before introducing the FLUMZ. The meeting is participated by concerned authorities at the district, village cluster and village levels, especially villagers. This is to ensure that all parties have an understanding of the data, discussion, negotiation, and participate in decision-making to some important issues Details of meeting include:

1. Presentations to the meeting

Information will be presented in the meeting for providing roadmaps for village Forest and Agricultural Land Use Planning, Allocation and Management, which includes a total of 5 chapters: 1) Brief introduction to the implementation of P-FALUPAM; 2) baseline geographical maps, maps of management area and all collected data; 3) Current agricultural land use and forest cover maps; 4) Problems and priorities of village forest and agricultural land development, and 5) roadmaps of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management.

2. Meeting agenda

launch the meeting for one day, register of participants, present the objectives of the meeting, present the approaches of the meeting and presentation relevant data to the meeting (as presented in 1 of this process), facilitate participants present their ideas and discussion on relevant issues in the meeting (this will help guiding the actual field survey), summarize the results of the meeting, define timeframe and plan for next steps.

Process 2. FLUMZ allocation planning

Developing FLUMZ allocation plan is to define options for forest and agricultural land development in accordance with legislations of Laos, as well as potential socio-economic and environmental development. It is important to encourage villagers involve in the processes including decision-making on FLUMZ allocation plan as follows:

1. Propose options for Forest and agricultural Land Use Management Zoning

Before development of FLUMZ allocation plan, it is necessary to report and review the results of the meeting that held in the first process of this step, so that the village authorities, village organizations, and villagers having a deep understanding and recognition. Introduce FLUMZ sample maps of other villages for discussion, negotiation, and decision-making on allocation of agricultural land and forestland as management area of the village. This is to ensure that villagers have sufficient agricultural land use for food production. In this regard, technical team should pay close attention to many aspects: 1) paddy rice field development (permanent agricultural land); 2) plantation or permanent crop area development; 3) plantation development/intergraded industrial crop plantation forest development; 4) large livestock raising (such as cattle, buffalo, goats, and others); 5) demand for agricultural land and upland agricultural cultivation; 6) demand for forest land area for timber and NTFP (food, handicrafts, income generation, and medicine); 7) population increase; 8) prediction of the changes in agricultural cultivation systems; and 9) Local socio-economic development plan.

2. Participatory land use allocation

Participatory land use (upland) allocation and the use of data or results of participatory implementation of activities that participated by concerned sectors, especially villagers with multi-ethnicities. This includes the use of data on land use for traditional agricultural cultivation, which is a traditional knowledge that contribute to sustainable socio-economic and environmental development in the line with related national policies, laws and regulations. Details of participatory land use allocation are as follows:

1) Agricultural land zoning and allocation

There might be several types of land uses in a village, which must conduct detail study and clearly determine different land types, as follows:

- **Paddy rice fields expansion area:** define all existing paddy rice field and potential expansion area,

then mark those areas on the FLUMZ map (conduct actual field survey to confirm its accuracy);

- **Permanent agricultural area:** designate the existing permanent agricultural land (short-term crops, long-term crops, agroforestry and industrial plantation) and indicate existing agricultural areas and potential area for expansion of agriculture; then mark those areas on FLUMZ map (conduct actual field survey to confirm its accuracy);
- **Irrigation infrastructure development area:** Identify the existing irrigation infrastructure development area and potential area for new irrigation infrastructure development; then mark those area on FLUMZ map (conduct actual field survey to confirm its accuracy);
- **Grassland and pastures:** identify and draw pasture area on FLUMZ maps based on types of livestock such as pastures that belong to individual families (small-size/medium-size), pastures belong to village (large-size), large natural grasslands, forest area where livestock raising is taking place and livestock stocking zone after the agricultural cultivation season;
- **Land concession area:** indicate existing land concession area on FLUMZ map.

2) Upland agricultural cultivation areas (rotation)

- Review rotational upland agriculture system from the past to present, which include areas, number of households, rotational period, management, and land tax payment. After that allowing villagers make decision and agree on the management system and utilization of upland agricultural areas such as agricultural cultivation organizations (in groups), rotational period, selection of crops to be cultivated based on quality of land, slopes, grasslands or covered plant and cultivate rice for household consumption;
- Draw/define timeframe (year) for upland agricultural cultivation (use rotation system) based on the actual social and environmental conditions of the village, such as land area, population and requirement of food (especially rice).
- Allocating from first zone that will be cultivated in the first year (which must be old fallow), the second-year cultivation zone (must be younger fallow than first zone), and allocate next zones to be cultivated in next years respectively. Conserve forest area around the upland cultivation area, which may be allocated as village forest area such as production forest or riverside protection forest, water source protection forest and others.

3) Forest land allocation

- **Plantation forest area:** Identify existing plantation area and possible areas for expansion of plantation forest, then mark on FLUMZ map (include actual field survey).
- **Village forest area:** allowing villagers identify each forest area by themselves (including village production forest) and mark those areas on FLUMZ map.

Once determining allocated of each cultivation and forest area is completed and agreed by villagers and technical team, notes all detail "Agricultural Land Allocation Data form 17 and Forest Land Allocation data form 18 in the Appendix", and summarize all detail information in the table 'Summary Village Agricultural Land Use Allocation Area and used for Planning, and FLUMZ mapping'.

3. Present the results of FLUMZ

once completion of plan and FLUMZ map (draft), organize a village meeting to introduce the plan/map to villagers to recognize, understand, discuss and verify the correctness to ensure effective implementation.

4. Approval of FLUMZ allocation plan

Village authority request to the District Governor to issue the agreement of FLUMZ allocation plan through all relevant sectors. After the villagers implement FLUMZ allocation plan for one year or one cultivation season, conduct monitoring and evaluation to ensure accuracy and compatibility with the local conditions, in line with relevant policies and regulation and villagers can comply (accepted by villagers).

Process 3. Reviewing and revision of village regulation and FLUMZ allocation plan

Village regulation on management and use of natural resources, forest and agricultural land is important and necessary for the effective implementation of FLUMZ allocation plan. Therefore, it is necessary to define approaches for participatory improvement and development of village regulation as follows:

Task 1. Collect all existing relevant documents at village level such as relevant legislation, regulations, other related documents to land (land certificate), and others

Task 2: Discuss and review contents of the collected documents to determine the requirements and contents required development (new) documents such as village regulations on management of natural resources, forest, and agricultural land that (if the regulations are not available), but if they are available, then improve the contents. To develop new village regulation, it is important to include local knowledge and ensure accuracy or compliance with laws, regulations, and local conditions.

Task 3: Check and present the contents of improved or new developed village regulations on management of natural resources, forest and agricultural land to villagers for ensure that villagers aware, understand and agree on the contents.

Task 4. The village-level authority proposes (drafts) new developed regulations to the district governor through relevant concerned sectors at district level for consideration and approval.

Task 5. Once FLUMZ allocation plan (including regulations on management) is formally approved, organize village meeting to officially disseminate and promulgate the plan.

Note: There are ten sets of questions regarding to improve or develop village regulations on management and utilization of natural resources, agricultural land and forest, each set of the questions contents flowing information:

Set of questions 1. Principles and approaches in development of village existing village regulations: these are open questions on principles, approaches of development and implementation of existing regulations from the past to present.

Set of questions 2. Upland agricultural cultivation area and conversion of forest land to agricultural land: covers all information of upland agricultural cultivation areas including area of fallows and forest (conservation forests, production forests, protection forests, and utilization forests)

Set of questions 3. Wetland area: management measures and utilization of wetland, water sources, riverside area include obstacles of water flow.

Set 4. Transportation land: emphasize to maintenance and protection of all forms of all transportation lines within the village management area

Set 5. Cultural Land: The cultural land, tourism area and village sacred forest

Set 6. Construction Land: Includes land for construction and planned for construction area

Set 7. Timber Management and utilization: Includes allocated area for timber management and utilization, timber harvesting, non-timber forest product harvesting, and fire control and protection

Set 8. Aquatic animal and Wildlife Conservation: emphasizing to management and conservation of aquatic animal and wildlife include fish conservation area and hunting.

Set 9. Management of livestock: Includes the management of all livestock, such as the development of livestock raising areas, livestock breeding, prevention of diseases and the movement of livestock

Set 10. Utilization of pesticide and herbicide: Emphasize the use of chemical elements to control pests and weeds.

Process 4. Recommendation and promotion the implementation of FLUMZ Allocation plan

Encourage villagers implement FLUMZ allocation plan by coordinating the information contained in the plan to the relevant stakeholders to recognize and use such information strengthen capacity of villagers to be able carry out socio-economic and environmental development activities according to the actual needs and potential development of the village.

Step 5. Monitoring and evaluation FLUMZ allocation plan implement (Fieldwork round 4)

Conduct monitoring and evaluation FLUMZ allocation plan implementation as follow:

1) Organize a meeting or work in groups with concerned stakeholders to discuss, share experiences and evaluate capacity of village authorities, responsible committee and villagers in P-FALUPAM plan implementation, and

2) Monitoring and evaluation of actual areas in the field, conduct monitoring and evaluation in individual villages, spend about 2-3 days/village with 4 following processes:

Process 1. Preparation of teamwork, information, maps and equipment

To facilitate actual activity implementation, it is necessary to prepare team work, maps, village data (from initial assessments), data collection forms and materials, equipment/tools as indicated below:

1. Preparation of teamwork

Establish technical team, who will conduct monitoring and evaluation of the FLUMZ allocation plan together with villager authorities and villagers. Members of the technical team include staff that used to implement P-FALUPAM, especially GIS specialists, survey staff, and socio-economic data collection staff.

2. Preparation of maps

The P-FALUPAM team, who will conduct monitoring and evaluation FLUMZ allocation plan in the target village, has to prepare maps as indicated in table below:

Table 8. List of maps which will be used for monitoring and evaluating FLUMZ allocation plan implementation

No.	Maps and GIS Information	Scope of utilization
	GeoTopoVB	Village physical geography
	GeoSIMVB	Vegetation cover
	CLUFC	Current land use and forest cover for a particular year, after completion of P-FALUPAM Round 2
	SimCLUFC	Current land use in comparison with satellite images (during P-FALUPAM implementation round 2)
	Original FLUMZ map	Original FLUMZ plan and maps

	FLUMZ map (Updated)	Updated FLUMZ maps (current version)
	SIMFLUMZ map_ Landsat, Sentinel or Skysat images	Latest upland agricultural cultivation areas
	SIMFLUMZ_SPOT or High-Resolution Images	Land types include forest land, agricultural land as well as industrial crop cultivation land

3. Preparation of forms

The forms to be prepared for monitoring and evaluation FLUMZ allocation plan implementation include data collection forms (new) to compare with existing information such as: 1) household land use and and land tenure; 2) Agricultural land, especially upland agricultural land area; 3) forest land; 4) minutes of agricultural land and forest survey; and 5) permanent agricultural land (individuals) within the communal Land or village lands.

4. Preparation of equipment

Required equipment include: needle, colored cotton sting, sticker paper, notebook, pen, pencil, stapler, envelope, A0 paper, scotch tape, printer, LCD projector, and GPS.

Process 2. Monitoring, evaluating and revision of FLUMZ allocation plan

This process introduces the selection of target villages, timelines and activities to be undertaken over time, including data collection and identification, actual field surveys, consultations for uniformity, and verification of monitoring information.

1. Criteria for village selection

Must be the villages that have completed P-FALUPAM round 3 and villagers have been using or following the FLUMZ allocation plan for at least one year.

2. During working in the village

Suitable season for monitoring the implementation of FLUMZ allocation plan in the target village is between October to mid-February or before upland crop (rice) cultivation session or swidden rice cultivation, it should take 2-3 days per village depends on conditions and characteristics of the village, such as land use system, size of upland area, the consistency of FLUMZ allocation plan implemtation and the co-operation and participation of villagers.

3. Preliminary study and evaluation of data

1) Comparing information of FLUMZ allocation plan with the latest satellite images to examine the area and agricultural land use cycle (yearly); assessment of agricultural land area; and the extension of agricultural land into other land types,
2) Use high resolution images to check for any agricultural activities, construction or other activities that occurred outside allocated area after completion of FLUMZ,
3) Specify or notes the land use changes on the maps as a basis information for consultation and conduct actual field survey together with villagers.

4. Activities and working procedures in the village

1) Organize a meeting with the village P-FALUPAM responsible committee to: a) report the results of FLUMZ implement, b) present the results of latest satellite image interpretation to the village P-FALUPAM responsible committee and indicate recent land use in the upland area, especially

emphasizing to the use of location outside the FLUMZ allocation zone, and c) report the names of families that cannot follow the allocation plan (convert land outside the allocated area to agriculture) and notes such information on the satellite images.

2) Organize a meeting with villagers

- Present the results of the joint meeting with the village P-FALUPAM responsible committee and facilitate villagers to provide comments according to the actual situation,
- In case there are some families that conduct last year agricultural cultivation in the area outside allocated area (or did not follow the FLUMZ), ask those families indicate area where they used together with provide explanation of the reasons that they use such area as well as identify the areas will be used and crops will be cultivated next years,
- Mark the family ID or write the names of families on a pieces of paper or sticker to mark the maps and notes the information given by villagers.

3) Actual Field surveys

The technical team together with villagers conduct actual field survey, in case of villagers do not understand or disagree with the results of the initial monitoring and evaluation, or the results of comparison between the results of monitoring and evaluation and the results of satellite image interpretation are unclear.

4) Summary of information and conclusion

Compile, summarize, and use data from consultations and actual field surveys to improve FLUMZ plan/maps before saving such information into database.

5) Verification of information

Verification of information by 1) organizing village meeting to present changes, improvement or modifications of the FLUMZ plan, maps, and recommendations for land use for agricultural cultivation, 2) indicating list of those families on the FLUMZ maps and inform those families and villagers at the village meeting, in case the villagers and other responsible parties agree (permit) those families to continue to maintain production within the common land (of the village); 3) villagers raise question to clarify making understand the information and listen to relevant suggestions or comments; 4) take notes and present the results of the meeting (including the upcoming plan) to ensure that villagers organize, understand and agree before the village authority signs for approval; 5) Use the information that has been officially approved by the villagers to input into FLUMZ map (final version) before printing as a book establishing the maps.

Process 3. Organize district meeting to approve village FLUMZ

Present the FLUMZ to the villages/village clusters and relevant stakeholders at the district level for recognition, approve, and reliance on support villagers bringing the plan into implementation.

1. Preparation

1) Meeting Participants

Participants from district level attending the meeting to approve FLUMZ include village P-FALUPAM Committee, village authorities (village committee), head/deputy of village clusters, P-FALUPAM technical team (central, provincial, district), head/deputy of District Agriculture and Forestry Office, head/deputy of District Office of Natural Resources and Environment, head/deputy of District Domestic Affairs Office, head/deputy of District Office of Justice, head/deputy District Governor's Office and Vice district

governor (There may be a co-chaired by director general/ deputy direct general and director/deputy of related sectors).

2) Location

Organize a meeting at a suitable location, where is easily access by participants, which can be village cluster's office or village meeting hall in the village that located in the area surrounded by other villages where participants of the meeting can easily access to.

3) Meeting Agenda

The agenda of the meeting on approval of the FLUMZ at district level is the similar to the agenda of the other general meeting, which the P-FALUPAM technical team or DAFO must prepare according to activities and local situations.

4) Tools and Equipment

Tools and equipment that are needed and necessary for the meeting include 1) FLUMZ Map and SIM_FLUMZ Map (A0 or A1 size) for taking notes from the meeting, and 2) FLUMZ book plan.

5) Presentation

Presentations and copies of the documents that will be presented and distributed to participants include: a) overview of the village cluster, including the number of villages in the village cluster, the land use within village cluster, the number of villages have been monitored and evaluated the implementation of the FLUMZ; B) Compile all maps of each village in the village cluster, such as 1) GeoSIM satellite images (before allocation), 2) CLUFC current land use (before allocation), 3) FLUMZ maps (revised version), 4) SIM-FLUMZ allocation map (The latest images that can compare to allocation plan), 5) prepared Latest images for monitoring, evaluation, observation, analysis, and preliminary participatory assessment (technical team, village P-FALUPAM responsible committee, and village authority).

2. Conduct the meeting

Once the meeting is officially opened, a representative of P-FALUPAM implementation team present the overall situation of implementation e FLUMZ and participatory monitoring and evaluation FLUMZ. During the discussion, participants shall be divided into groups (2 villages per group) to review the maps, the results of evaluations, analyze and answer questions on: 1) When and how to use the FLUMZ allocation plan, 2) Difficulties in implementation of FLUMZ, 3) Advantages and disadvantages in management of agricultural and forest before and after FLUMZ, 4) Issues and challenges of FLUMZ implementation, 5) Solutions to problems and challenges.

3. Evaluation the results of the meeting

Evaluate meetings based on the results of discussions among stakeholders, review and analyze data from the FLUMZ compared with relevant images. Applying the results of assessments to enhance strengths, address challenges, and plan for the next steps.

Process 4. Handover FLUMZ allocation planand post FLUMZ map at the village

After the completion of the village FLUMZ allocation plan or maps based on the recommendation and agreement from the meeting at district level (process 3) of this step, printing the FLUMZ allocation plan (book) and maps. The numbers of copies should be sufficient for distribution and accessed by all relevant stakeholders at the village/village cluster, district, provincial and central levels.

The district authority (district governor) will hand over the FLUMZ allocation plan and maps to the village that has officially completed implementation P-FALUPAM. When handover FLUMZ allocation plan /maps to target villages, the technical team will explain how to use the maps/posted maps at the villages in order to ensure that villagers understanding the contents and instruction written in the FLUMZ allocation plan/maps in order to properly use the allocation plan and maps for participatory implementation of related activities to management and utilization of village agricultural land and forest at the village and surrounded villages. This is to create favorable conditions for the effective agro-biodiversity development.

In case villager can implement FLUMZ allocation plan, it is necessary to continuously facilitate responsible organizations or related sectors to issue certificates of agricultural land use and land development (such as all village common land, personal or family land, and others.) that can be used as a basis reference for land titling.

Criteria for Agricultural Land Use and Forest Zoning

Implementation of P-FALUPAM is an application of criteria to define existing Agricultural Land Use and Forest Zoning as well as satellite images/aerial photos, information of classification of three forest categories (Protected forest, production forest and production forest) and actual social-environmental data that has been collected, studied, discussed, and agreed by concerned relevant sectors at local level.

I. Defining Forestland area

1) **Dry Evergreen Forest:** Forests that consisting non-dropped leaves tree species lesser than moisture evergreen forest, comprising 50%-80% of non-dropped leaves tree species. It may be a bamboo forest area with depth soil, and the forest is composed of *Hopia Odorata, dipterocapus alatus, Anisorptera Costata* or *Lythraceae spp*. If the elevation more than 200 meters above sea level (is called highland dry evergreen forests, if elevation lower than 200 meters, the tree is 10-30 meters height is called lowland evergreen forest;

2) **Mixed deciduous forests:** having dropped leave tree species more than 50%, and lower part of canopy layer is not as dense as evergreen forest (may include bamboo). If this forest located in the elevation of above 200 meters is called highland Mixed deciduous forest and if this forest located in the elevation lower than 200 meters is called a lowland mixed deciduous forest.

3) **Dipterocarp forest or dry dipterocarp forest:** In knoll or opened areas. Mostly located in areas where the soil is shallow, the surface of the soil is hard and the soil is not fertile. Tree species include *Shorea obtusa* Wall, *Dipterocarpus obtusifolius*, *Terminalia tomentosa* and *Shorea siamensis* Miq, as well as curved trees with small diameter and height of trees is not higher than 10 meters;

4) **Riverside Forest:** this forest occurred along the riverside, which can be evergreen forest or mixed deciduous forest, width of forest along the riverside should not exceed 100 meters counting from riverside. This type of forest land can be distinguished from other types of land uses such as village land and paddy rice field;

5) **Coniferous forest (pine forest):** this forest has only one canopy layer, and the bottom layer is not dense, but in some highland area, there are seedlings form as second canopy layer; the characteristics of the trees (pine trees) with two or three leaves, apart from pine, *Keteleeria evelyniana* and *Fokienia hodginsii* can also be found in the coniferous forest.

6) **Mixed broadleaf and coniferous Forest:** This may include broadleaf and coniferous, if the coniferous species are mixed with Broadleaf species on upland, there may be non-dropped leave tree species or dropped leave tree species;

7) **Plantation Forest:** Similar age, height and distance between trees. Small-planted tree with canopy

cover less than 20% (e.g, rubber plantation and eucalyptus plantation) are classified as plantation forest. Planted areas intended for shade coffee, tea, and fruit trees are not classified as plantation forest;

8) **Bamboo forest (not classified as forest cover):** If the land is covered by bamboo and canopy cover less than 5% is classified as bamboo forest, and the bottom layer consist of bamboo less than 80% of total species is not classified as forest.

9) **Degraded Forest (not classified as forest cover)：** The area used to cover by forest canopy, but canopy cover is lesser than 20% due to forest had been disturbed by different activities such as Logging, shifting cultivation practice and other activities. Depending on the status of the forest and the degree of degradation; degraded forest may be naturally regenerated and become forest in the future. If forest is highly degraded and covered by grass and broom grass, it may be able to regenerate in the future.

II. Assessment of forest land and industrial plantation area

Conduct the assessment of forest land and industrial plantation area to allocate forest land as indicated in (I) above as follow:

1) **Assessment of forest land area：** Villagers provide clearly explain about 1) forest land that has never been slashed and burned (some area has been slashed and burned over the years), It is the forest land that the village now intends to maintain as a forest area in the future and designated as "never cleared area", and 2) existing forest area that can be seen in the satellite images (use information from village to map such forest area on the images).

2) **Assessment of industrial plantation area:** villagers identify the area and types of industrial plantations that belong to villagers and companies (land concessions) that are available in their village, and take the notes of plantation area, name of owner of the plantation, and other relevant information on satellite images.

III. Allocation of agricultural land

1) **Paddy rice field:** Permanent paddy rice cultivation area (excluding abandoned paddy land or unused paddy land for more than one year)

2) **Garden area for long-term plant cultivation:** land area used for agricultural cultivation (exclude rice) such as vegetables, fruit trees, coffee, tea, coconuts, cotton, and others.

3) **Swidden land:** Forest land which had been slashed and burned for cultivation of upland rice and other crops for a certain period of time, the land was abandoned for one year starting from the slashed forest area and abandoned (it is called swidden land), if the area had not been used for rice and other crop cultivation for more than 2 years is called (abandoned swidden land) it is fallow land (rotational shifting cultivation land);

4) **Other agricultural land:** agricultural land used for other purposes such as grazing for livestock (if the grazing area consist of canopy cover more than 20% is called forest);

5) **Grassland:** degraded soil with no trees or bushes or arid areas but grass-covered or used to covered by forest, but heavily disturbed by such as several time of forest fire. May be found in the upland area in the north, with deep soil layer and high humidity;

6) **Wetlands (water surrounded land):** land area consisting of soil with saturated water, such area may befertilebutlackofoxygenwhichcannotbeusedforagriculturalcultivationandnoforest.Thewetlands

maybeimportanttotheecologicalandenvironmentalwithavarietyoffloraandfauna.Plantsoccurring in wetlands include *salix tetrasperma* roxb , edible bracken, and others. The wetland assessment can be used for calculating the carbon footprint and greenhouse gas emission (CO_2) from forest and land uses.

IV. Determination of agricultural land and forest zoning and allocation (land area for extension)

Identifythe twomainlandareas:1)Landareasforagriculturalextensionsuchaspaddyfields,cropland,livestock grazingareas;and2) Forestareassuchasforestregenerationandindustrialtreeplantations.Overlayinggeographical information (GIS), forest and land use maps with slope information, water layer, land use, and others. Criteria and conditions for the identification of different land use types are listed below:

1. **Criteria and conditions for agricultural land allocation based geographical criteria**

    1) **Area for extension of paddy rice field:** flat area, the slope of 0-8% (0-5 degrees), 5 grade water level (WSC5) and can be fallows, swidden or abandoned area (where is not permanently used);

    2) **Area for crop cultivation:** The area with slope range of 8-46% (or 5-25 degrees), 4-3 grade water level (WSC 4-3) and lands in forest areas, can be fallows, swidden or abandoned area (where is not permanently used);

    3) **Land for grazing:** the area with slopes between 0-46% or 0-25 degrees, 3-5 grade water level (WSC 3-5) and can be natural grassland area that can be used for livestock raising(where is not permanently used) or may be open dry dipterocarp forest areas.

2. **Criteria and conditions for identification of forest land allocation based on geographical criteria**

1) **Area for forest regeneration:** Define an area with slope >70% (or 35 degrees), 1-2 grade water level (WSC 1-2); this area can be fallow land, degraded forest, bamboo forest. This area can be naturally regenerated (if it does not continuously encroached) or it can be enriched planted area with properly manage, protect, conserve and monitor;

2) **Area for industrial tree plantation:** The area with slope >70% (or 35 degrees), 2-3 grade water level (WSC 1-2); this area can be fallow land, degraded forest, bamboo forest. It can be systematically plantation or enriched planted area with properly manage, protect, conserve and monitor.

ແຜນທີ່ ໂຕໂປ 2.5D ແລະ ຂອບເຂດຊາຍແດນບ້ານ

2.5D Topographic and Village Boundary

ບ້ານ ປ່າຂົມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກອັນ

Pakhom Village, Homphanh Kumban, Kouan District

436,000

438,000

2,210,000

2,208,000

2,206,000

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ຫ້ວຍຕະລາດ

ຫ້ວຍຄຸ້ງ

ຫ້ວຍພັກເຊົາ

ຫ້ວຍໄຮ່ເມຍ ທ້າວ ກ

ຫ້ວຍຫຼຽ້ມ

ຫ້ວຍກີ່ໄຫ

ຫ້ວຍປ່າຕໍ້

ຫ້ວຍກີ່ເໜືອຍ

ຫ້ວຍປ່າຫີ

ຫ້ວຍສີ້ມ

ພູເບີ້ງມາ

ພູຊັ້ມ

ຫ້ວຍຊຸ້ມລິ້ມ

ຫ້ວຍສຸ້ມປີ້ງ

ຫ້ວຍກ່ໍໂຮ

ຫ້ວຍໜ້ຳແດ

ຫ້ວຍໜ້ຳເຜ

ຫ້ວຍຫາດແສມນ້ອຍ

ສັ້ນປະຕຸ

ຫ້ວຍສັ້ນປະຕຸ

ບ. ນ້ຳປາດ

ພູຜັ້ງຄາເຮືອນ

ຫ້ວຍກາງທອດ

ຫ້ວຍຫາດແສມໃຫຍ່

ຫ້ວຍໜອງປີ້ງ

ຫ້ວຍສຸ້ມຫວານ

ພູຫຼວງຫົວບ້ານ

ຫ້ວຍຂ່າ

ຫ້ວຍປ່າແຈ

ຫ້ວຍຊາຍໂພ

ຫ້ວຍໜອງນ້ຳນ້ອຍ

ພູແກ່ວຫີນເຫຼັກໄຟ

ຫ້ວຍໜອງປ່າ

ຫ້ວຍຫີນລັບ

ສັ້ນໄຮ່ປອກມີຄຳ

ຫ້ວຍຂີ້ສຸ

ຫ້ວຍປ່າໆ

ຫ້ວຍບ້ານຮ້າງຕ່ຳ

ຫ້ວຍປ໋ຳລິ

ຫ້ວຍຮາງຄຳນ້ອຍ

ຫ້ວຍກ່ໍໂຮ

ຫ້ວຍໜ້ອງຫ

ແກ້ງສູງ

ຫ້ວຍດົງເໜືອຍ

ຫ້ວຍຜາປົກເຕົ້າ

ຫ້ວຍບ້ານກ່ໍ

ຫ້ວຍຮາງຄຳ

ປອມຜານັ້ງ

ຫ້ວຍວ່ວງເລີ

ຫ້ວຍບ້ານໃຕ

ໂຮງຮຽນ

ສະນຳສ້ຽງກ໋ວທ່ອງລິນ

ແກ່ວປ່າຂົມ

ບ. ປ່າຂົມ

ອັດ

ຜາດົງໃຫຍ່

ອ່າງນ້ຳລິນ

ຫ້ວຍປ່າຂົມ

ຫ້ວຍເໜນ

ຫ້ວຍຖ້ຳໜຸ

ຫ້ວຍກໍ່ປຸກ

ສັ້ນຂຸມເງິ ນ

ຜາດົງນ້ອຍ

ຫ້ວຍໄມ້ມາຍ

ປ່າຄໍ້ໄຫໂຄງເລົ

ຫ້ວຍກຸ່ມ

ຫ້ວຍຕ່ຳ

ພູຖ້ຳໄມ້ຮາວ

ທາງລົດຍອດຫ້ວຍຕ່ຳ

ແກ່ວເຖື່ອນງ໋ວ

ທ້າວ ຕົ໋ວ

ສັ້ນແຍກສັ້ນຫ້ວຍກຸ່ມ

ກ໋ກໄມ້ຕະຄາ

ຜາບັ້ນ

ຫ້ວຍປ່າຄາ

ຫ້ວຍໂຄກໄຮ

ຫ້ວຍໄຮ່ລາວເຊ

ຫ້ວຍໄຮ່ລາວ

ຫ້ວຍໄຮ່ຍິ້ນພອນ

ຫ້ວຍໄຮ່ລາວ

ຫ້ວຍຫ້ວຍ

ຫ້ວຍບ້ວ

ສັ້ນຫ໋ວໄຮ່ຄ້ິນທອງ

ຫ້ວຍໜ້ຳຮ້ຳ

ບ. ໂຮມພັນ

ບ້ານຮ້າງໂຄງເລົ

ແກ່ວປ່າວ

ຫ້ວຍໜອງເປັດ

ສັ້ນແກ່ວກ່ວ້ າງ

ຫ້ວຍສ້ຳ

ຫ້ວຍລາວຍ້ຳໃຫຍ່

ຫ້ວຍປ່າຫ້ຳ

ຫ້ວຍໜ້ອງຮ້ອງ

ຫ້ວຍສ້ຳ

1:9,000

Kilometers

0 0.5 1

Projection: UTM48, 48N, WGS84

ເຄື່ອງໝາຍ / Legend

ຈຸດທີ່ຕັ້ງສຳຄັນ / Points of Interest

- ບ້ານ Village
- ພູ Mountain
- ແກ່ວ Mountain Pass
- ສັນພູ Mountain Ridge
- ໂຮງຮຽນ School
- ວັດ Temple
- ສະນຳ Sanam
- ຜາ Cliff
- ອື່ນໆ Other POI

ທາງ / Road

- ເສັ້ນທາງຫຼວງແຫ່ງຊາດ National road
- ເສັ້ນທາງລະຫວ່າງແຂວງ/ເມືອງ Provincial/District road
- ເສັ້ນທາງທ້ອງຖິ່ນ/ຊົນນະບົດ Rural road
- ເສັ້ນທາງເຜດສະບານ/ເຂດທີ່ຢູ່ອາໃສ Residential road

ສາຍນ້ຳ / River

- ແມ່ນ້ຳໃຫຍ່ Major River
- ແມ່ນ້ຳ River
- ສາຍຫ້ວຍ Stream
- ສາຍຫ້ວຍຂາດໃນຍາມແລ້ງ Intermittent Stream

ຂອບເຂດເຊື່ອມຕໍ່ບ້ານ Village Boundaries

ລະດັບຄວາມສູງຈາກໜ້ານ້ຳທະເລ / Elevation

- 801m - 1100m
- 1101m - 1300m
- 1301m - 1500m
- 1501m - 1700m

Map produced by TABI: 01.04.19

ແຜນທີ່ ການນຳໃຊ້ທີ່ດິນ ແລະ ຄວາມປົກຫຸ້ມປ່າໄມ້ ໃນປະຈຸບັນ

Current Land Use and Forest Cover revised as of 06.12.2017 - Sentinel - June 2017

ບ້ານ ປ່າຂີ້ມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກວັນ

Pakhom Village, Homphanh Kumban, Kouan District

436,000 438,000 2,210,000 2,208,000 2,206,000 2,204,000

ຫ້ວຍຕະລາດ ຫ້ວຍຄຳປີ ຫ້ວຍພັກເຕົ່າ ຫ້ວຍຫົວໜ່ວຍ ຫ້ວຍຫຼຽ້ມ ຫ້ວຍຄຶບໄຫ ຫ້ວຍປາຕໍ ຫ້ວຍຫົວໜ່ວຍນ້ອຍ ຫ້ວຍປ່າຫີກ ຫ້ວຍສົ້ມ ຫ້ວຍຊຸມລົ້ມ ຫ້ວຍຫາງທວກ ຫ້ວຍຂ້ວຍ ຫ້ວຍຊຸມປ໋ຳ ຫ້ວຍທາດແສມນ້ອຍ ຫ້ວຍທາດແສມ ໃຫຍ່ ຫ້ວຍທ່ອງເປົ໋ກ ຫ້ວຍຊຸມຫວານ ຫ້ວຍຕາຍໂຍນ ຫ້ວຍກຳໄຮ ຫ້ວຍຫ້ວຍ ຫ້ວຍຫ້ວຍ ຫ້ວຍຫ້ວຍ

ແຜນທີ່ ການນຳໃຊ້ທີ່ດິນ ແລະ ຄວາມປົກຫຸ້ມປ່າໄມ້ ໃນປະຈຸບັນ

Current Land Use and Forest Cover revised as of 06.12.2017

ບ້ານ ປ່າຂີມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກວ້ານ

Pakhom Village, Homphanh Kumban, Kouan District

436,000 438,000 2,210,000 2,208,000 2,206,000 2,204,000

ห้วยตะลาด ห้วยคุ้ม ห้วยพักเฮา ห้วยไร่นาย ห้วยกะปิใบ ห้วยป่าตั้ง ห้วยหัวเหมืองยา ห้วยป่าหิก ห้วยฮู้ม ห้วยสิ้ม ห้วยน้ำแถง ห้วยปาฝั่ง ห้วยสันปะตุ ห้วยสันปะตุ ห้วยสันปะตุ ห้วยคุมสิ้ม ห้วยหาดแสมน้อย ห้วยหาดแสมใหญ่ ห้วยหองเย็ก ห้วยสุมขวาม ห้วยกำไร ห้วยมองน้ำน้อย ห้วยป่าแจ ห้วยมองป่า ห้วยน้ำลิน ห้วยน้ำเงิง ห้วยน้ำกิ่ม ห้วยชายโพม ห้วยชีนไล้ใบ ห้วยราดำน้อย ห้วยย่าง ห้วยบ้านเงิง ห้วยราดำ ห้วยผาบึกเถ้า ห้วยลวงเลิบ ห้วยบ้านใหญ่ ห้วยป่าข่า ห้วยเชียม ห้วยกุ่ม ห้วยธาง ห้วยขมองเย็ก ห้วยสิ่ง ห้วยลาวยิ่งใหญ่ ห้วยป่าขุ้ง ห้วยไร่ลาวเฒ่า ห้วยไร่ลาวลี ห้วยไร่ลาวลี ห้วยไร่ยืมมอม ห้วยขัน ห้วยขมรุ้ง ยอดน้ำปาด ห้วยไร่ถิ่มทอง

ผู้ใหญ่บ้าน ผู้ใหญ่บ้าน ผู้ใหญ่บ้าน

ແຜນທີ່ ເຂດຈັດສັນ ແລະ ຄຸ້ມຄອງ ນຳໃຊ້ທີ່ດິນກະສິກຳ ແລະ ປ່າໄມ້

Forest and Land Use Management Zone revised as of 19.06.2018

ບ້ານ ປ່າຂີ້ມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກວັນ

Pakhom Village, Homphanh Kumban, Kouan District

436,000 438,000 2,210,000 2,208,000 2,206,000 2,204,000

ເຂດນາຫ້ວຍສົ້ມ
ເນື້ອທີ່112.34ຮຕ

ເຂດຫ້ວຍພູບໍ່ລົ້ມ
ເນື້ອທີ່88.64ຮຕ

ເຂດຊາຍໂພນ
ເນື້ອທີ່131.46ຮຕ

ເຂດຫ້ວຍຢ່າງ
ເນື້ອທີ່142.02ຮຕ

ເຂດແກ່ວພົ່ນງ
ເນື້ອທີ່87.01ຮຕ

ເຂດໄຮ່ພຽງຫ້າວໄຕ
ເນື້ອທີ່71.22ຮຕ

ເຂດແກ່ວທ່ານ
ເນື້ອທີ່90.76ຮຕ

ເຂດພຽງຕະດູ້
ເນື້ອທີ່113.9ຮຕ

ແກ່ວແວ່ນແຍງ
ເນື້ອທີ່128.05ຮຕ

ບ. ນ້ຳປາດ

ບ. ປ່າຂີ້ມ

ບ. ໂຮມພັນ

	ບ. ປ່າຂີ້ມ	ເນື້ອທີ່ ຮຕ	ສ່ວນຮ້ອຍ
I	**ທີ່ດິນກະສິກຳ**	**1,052.4**	**71.2%**
	ເຂດທີ່ດິນນາ	2.0	0.1%
	ເຂດທີ່ດິນນານ້ຳຝົນ (ນາປີ)	6.7	0.5%
	ເຂດທົ່ງຫຍ້າທຳມະຊາດລ້ຽງສັດ (ຄ້ງ)	49.4	3.3%
	ເຂດປູກ: ຊາ	29.0	2.0%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 1	90.8	6.1%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 2	88.6	6.0%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 3	142.0	9.6%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 4	71.2	4.8%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 5	128.1	8.7%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 6	113.9	7.7%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 7	87.0	5.9%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 8	131.5	8.9%
	ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 9	112.3	7.6%
II	**ທີ່ດິນປ່າໄມ້**	**410.0**	**27.8%**
	ປ່າຄຸ້ມຄອງນຳໃຊ້ ທົ່ວໄປ	33.5	2.3%
	ປ່າສະຫງວນອະນຸລັກຂອງບ້ານ	297.5	20.1%
	ປ່າຮັກສາແຫລ່ງນ້ຳ ຂອງບ້ານ	79.0	5.4%
III	**ທີ່ດິນປຸກສ້າງ**	**4.9**	**0.3%**
	ທີ່ດິນປຸກສ້າງບຸກຄົນ	4.8	0.3%
	ໂຮງຮຽນ	0.1	0.0%
IV	**ທີ່ດິນວັດທະນະທຳ**	**6.3**	**0.4%**
	ຕຶກອາຄານ ແລະ ຈຸດທີ່ຕັ້ງທາງວັດທະນະທຳ	0.1	0.0%
	ປ່າຊ້ຳ	6.2	0.4%
V	**ທີ່ດິນໂຍທາທິການ ແລະ ຂົນສົ່ງ ເສັ້ນທາງຄົມມະນາຄົມ**	**3.6**	**0.2%**
	ຖະໜົນທາງດິນແດງ	3.6	0.2%
	ລວມທັງໝົດ	**1,477.2**	**100.0%**

1:9,000
Kilometers
0 0.5 1
Projection: UTM48, 48N, WGS84

ເຄື່ອງໝາຍ / Legend

ຈຸດທີ່ຕັ້ງສຳຄັນ / Points of Interest

- ບ້ານ Village
- ພູ Mountain
- ແກ່ວ Mountain Pass
- ສັນພູ Mountain Ridge
- ໂຮງຮຽນ School
- ວັດ Temple
- ສະນຳ Sanam
- ຜາ Cliff
- ອື່ນໆ Other POI

ທາງ / Road

- ເສັ້ນທາງຫຼວງແຫ່ງຊາດ National road
- ເສັ້ນທາງລະຫວ່າງແຂວງ/ເມືອງ Provincial/District road
- ເສັ້ນທາງທ້ອງຖິ່ນ/ຊົນນະບົດ Rural road
- ເສັ້ນທາງເຫດສະບານ/ເຂດທີ່ຢຸ່ອາໃສ Residential road

ສາຍນ້ຳ / River

- ແມ່ນ້ຳໃຫຍ່ Major River
- ແມ່ນ້ຳ River
- ສາຍຫ້ວຍ Stream
- ສາຍຫ້ວຍຂາດໃນຍາມແລ້ງ Intermittent Stream

- ຂອບເຂດເຊື່ອມຕໍ່ບ້ານ Village Boundaries
- ປ່າຄຸ້ມຄອງນຳໃຊ້ ທົ່ວໄປ Managed Use Forest - General Purpose
- ປ່າສະຫງວນອະນຸລັກຂອງບ້ານ Village Biodiversity Conservation Forest
- ປ່າຮັກສາແຫລ່ງນ້ຳ ຂອງບ້ານ Village Watershed Protection Forest
- ເຂດທີ່ດິນນາ Wet Rice Paddy land zone
- ເຂດທີ່ດິນນານ້ຳຝົນ (ນາປີ) Rainfed Paddy land zone
- ເຂດທົ່ງຫຍ້າທຳມະຊາດລ້ຽງສັດ (ຄ້ງ) Natural Grassland livestock land
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 1 Annual Rotation Crop Zone: Year 1
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 2 Annual Rotation Crop Zone: Year 2
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 3 Annual Rotation Crop Zone: Year 3
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 4 Annual Rotation Crop Zone: Year 4
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 5 Annual Rotation Crop Zone: Year 5
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 6 Annual Rotation Crop Zone: Year 6
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 7 Annual Rotation Crop Zone: Year 7
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 8 Annual Rotation Crop Zone: Year 8
- ເຂດປູກຝັ່ງໝຸນວຽນ ປີທີ 9 Annual Rotation Crop Zone: Year 9
- ເຂດປູກ: ຊາ Tea
- ທີ່ດິນປຸກສ້າງບຸກຄົນ Private Building Land
- ໂຮງຮຽນ School
- ທາງດິນແດງ Unpaved Road
- ຕຶກອາຄານ ແລະ ຈຸດທີ່ຕັ້ງທາງວັດທະນະທຳ Cultural Buildings And Sites
- ປ່າຊ້ຳ Cemetery Forest

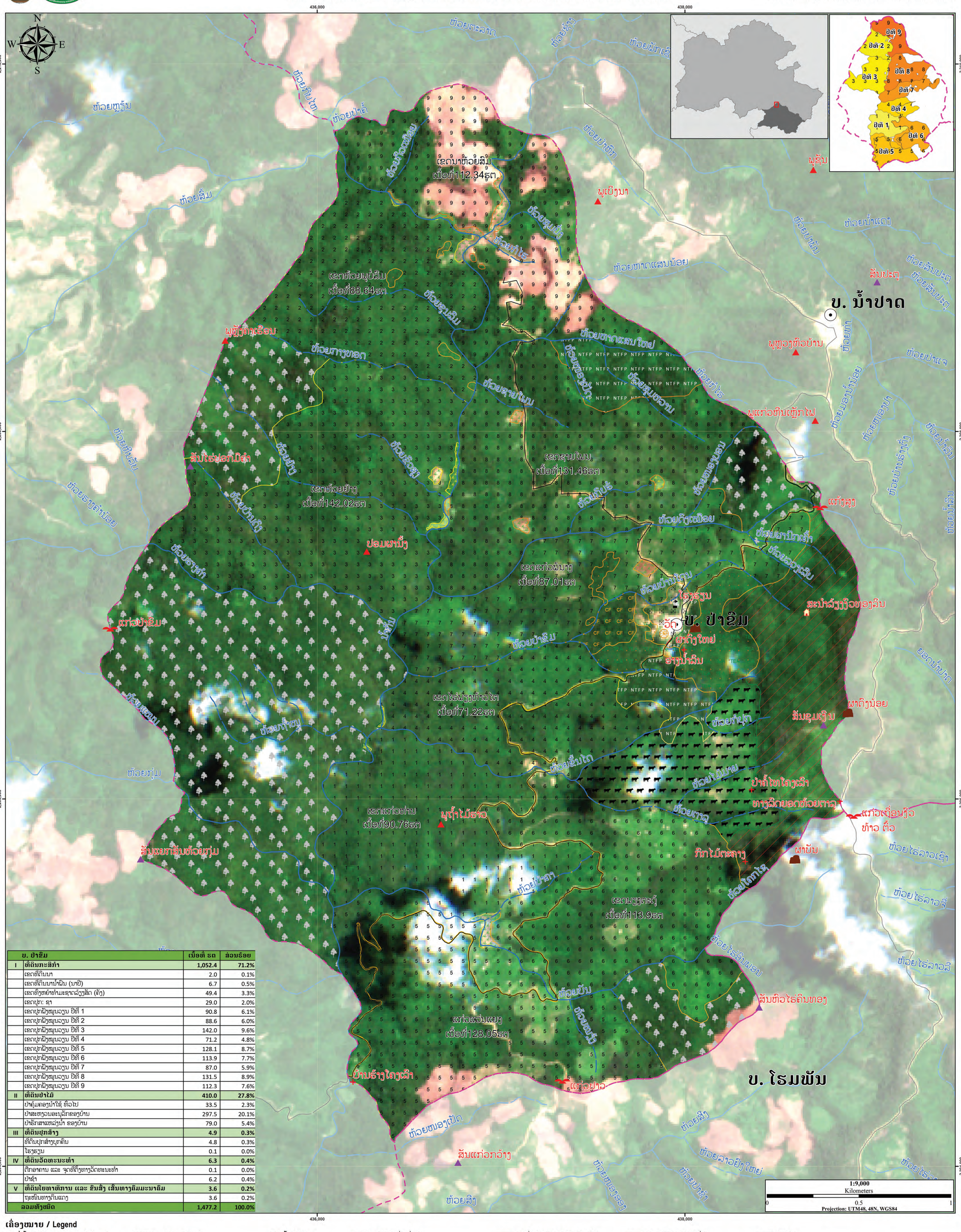
Map produced by TABI: 01.04.19

ແຜນທີ່ ເຂດຈັດສັນ ແລະ ຄຸ້ມຄອງ ນຳໃຊ້ທີ່ດິນກະສິກຳ ແລະ ປ່າໄມ້

Forest and Land Use Management Zone revised as of 19.06.2018 - Sentinel - June 2017

ບ້ານ ປ່າຂີມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກວ້ານ

Pakhom Village, Homphanh Kumban, Kouan District


436,000
438,000
2,210,000
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2,206,000
2,204,000
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S
ເຂດນາຫ້ວຍສົ້ມ
ເນື້ອທີ່112.34ຮຕ
ເຂດຫ້ວຍພຸບໍ່ລົ້ມ
ເນື້ອທີ່88.64ຮຕ
ເຂດຊາຍໃໝ
ເນື້ອທີ່131.46ຮຕ
ເຂດຫ້ວຍຢ້ຳ
ເນື້ອທີ່142.02ຮຕ
ເຂດເກ່ວພ້ມາ
ເນື້ອທີ່87.01ຮຕ
ເຂດໄຮ່ຝຽງທ້າວໄຕ
ເນື້ອທີ່71.22ຮຕ
ເຂດເກ່ວຫ່ານ
ເນື້ອທີ່90.76ຮຕ
ເຂດພຽງຕະກຸ
ເນື້ອທີ່113.9ຮຕ
ເກ່ວແວ່ນແຍງ
ເນື້ອທີ່128.05ຮຕ
ຂ. ປ່າຂີມ
ຂ. ນ້ຳປາດ
ຂ. ໂຮມພັນ
ປ່າທີ 1
ປ່າທີ 2
ປ່າທີ 3
ປ່າທີ 4
ປ່າທີ 5
ປ່າທີ 6
ປ່າທີ 7
ປ່າທີ 8
ປ່າທີ 9
ພູຊ້ຳ
ພູເບີ້ງນາ
ສັນປະຕູ
ພູຫຼວງຫົວບ້ານ
ພູເກ່ວຫີນເຫຼັກໄຟ
ແກ້ງສູງ
ພູຫຼ້ງຄາເຮືອນ
ສັນໃຮ່ປອກມີຕຳ
ປອມຜານຶ້ງ
ເກ່ວປ່າຂີມ
ສັນແຍກສົ້ນຫ້ວຍກຸ່ມ
ພູຖ້ຳໄມ້ຮາວ
ຜາດ້ຳໃຫຍ່
ຜາດ້ຳນ້ອຍ
ສົ້ນຂຸມເງິ ນ
ປ່າຄ້ໍໄຫໂຄງເລົ້າ
ທາງລົດຍອກຫ້ວຍຕາລຸ
ຜາບັ້ນ
ກິກໄມ້ຕະຄາງ
ສັນຫົວໄຮ່ຄົນທອງ
ບ້ານຮ້າງໂຄງເລົ້າ
ສັນແກ່ວກ້ວ້າງ
ແກ່ວເຖື່ອນງົວ
ທ້າວ ຕື໋ວ
ສະນຳສ້ຽງງົວທອງລົ້ມ
ໂຮງຮຽນ
ວັດ
ຜາດ້ຳໃຫຍ່
ຢາງນ້ຳລົ້ມ
ຫ້ວຍສົ້ມ
ຫ້ວຍນ້ຳແດ
ຫ້ວຍຫາດແສມນ້ອຍ
ຫ້ວຍຫາດແສມໃຫຍ່
ຫ້ວຍຊາຍໃໝ
ຫ້ວຍສົ້ມຫ້ວນ
ຫ້ວຍຫ້ວຍຢ້ຳ
ຫ້ວຍຫ້ວຍສົ້ມ
ຫ້ວຍຫ້ວຍຫ້ວ
ຫ້ວຍຫ້ວຍຫ້ວ
ຫ້ວຍຫ້ວຍຫ້ວ

ແຜນທີ່ ເຂດຈັດສັນ ແລະ ຄຸ້ມຄອງ ນຳໃຊ້ທີ່ດິນກະສິກຳ ແລະ ປ່າໄມ້

Forest and Land Use Management Zone revised as of 19.06.2018 - Skysat - November 2018

ບ້ານ ປ່າຂີ້ມ, ກຸ່ມບ້ານ ໂຮມພັນ, ເມືອງກວັນ

Pakhom Village, Homphanh Kumban, Kouan District

436,000 438,000 2,210,000 2,208,000 2,206,000 2,204,000

N W E S

ຫ້ວຍຫຼຽ້ມ ຫ້ວຍມີ້ໄຫ ຫ້ວຍປ່າຕໍ້ ຫ້ວຍຕະລາດ ຫ້ວຍຄຳ ຫ້ວຍພັກເຫ ຫ້ວຍປ່າຫ້ວ ຫ້ວຍສົ້ມ ຫ້ວຍກ້ວຍເພ ຫ້ວຍສຸ ຫ້ວຍກ ຫ້ວຍຫາດແສມນ້ອຍ ຫ້ວຍປ ຫ້ວຍນ ຫ້ວຍນ ຫ້ວຍສ ຫ້ວຍ ຫ້ວຍ ຫ້ວຍ

Annexes

Annex Ⅰ：Data Collection Forms

Annex Ⅱ：Approaches of using Data Collection Forms

Annex Ⅲ： Drafted Documents

Annex I: Data Collection Forms

List of Data collection forms for Participatory Forest and Agricultural Land Use Planning, Allocation and Management in the target villages (Round 1-4)

Form No.	Name of Forms	Level
I	**Data collection form, Round 1**	
1	Collection of village general data (preliminary)	Village
2	Collection of village agro-biodiversity data	Village
3	Situations and calendars of the village's main Cash crop cultivation	Village
4	Collection data on harvesting, situation, and priority NTFPs	Village
5	Collection of data on harvesting, use, and priority timbers	Village
6	Collection of wildlife data	Village
7	Collection of aquatic fauna data	Village
8	Book of problems and solutions	Village
9	Collection of data on conditions and potential of village development	Village
10	Minutes survey of important geographical Locations	
11	Minutes of survey on coordinate references of village management area	
II	**Data collection form, Round 2**	
12	Collection of data on family requirement of rice for family consumption and livestock raising	Family
13	Collection family information data	Family
14	Collection of family's land use data	Family
15	Minutes of soil sample survey	
16	Minutes of survey on current agricultural land and forest	
III	**Forms for collection of individual land use zones, Round 3**	
17	Minutes of agricultural land use zones	
18	Minutes of forest land use zones	
19	Minutes of geographical coordinate references of agricultural land use and forest allocation plan	
20	Review and improve village regulation on management and use of natural forest resources and agricultural land and forest.	
IV	**Forms for collection of individual agricultural land use zones, Round 4**	
21	Participatory monitoring and evaluation of forest and agricultural land use planning, allocation and management	Village

Form 1: Collection of village general data (preliminary)

Village general data

1. Village name		Village cluster		District	
Name of interviewer		Data collector		Date	
2. Background					

3.1 Population, requirement of rice, ethnicity, and occupation

3.1	Number of families		Number of households		Number of persons	
3.2	Number families with food for self sufficiency		Number families without food for self-sufficiency		Average number of months of rice shortage	
3.3	Ethnic:	Number of households:	Ethnic:	Number of households:	Ethnic:	Number of households:
	Ethnic:	Number of households:	Ethnic:	Number of households :	Ethnic:	Number of households :

3.2 Population changes over the past 10 to 20 years

Year>>							
Number of households							
Number of populations							

3.3 Occupation (number of households)

Swidden farming		Garden farming		Business		Weaving		Civil servant	
Paddy rice farming		Animal husbandry		Employee		Taxi / Bus		Soldier	

4. Infrastructure (number of households)

State electricity: Number of households (have/don't have）		Water supply: Number of households		Elementary school have/don't have）		Temple (number)	
Community electricity (have/don't have)		Gravity water: Number of households		Secondary School have/don't have）		Other religions	
Community Electricity：Number of households		Water well: Number of households		Village meeting hallhave/don't have）			
		Creek Water: Number of households		Toilet: Number of households			

5. Vehicles (total number of villages)

6-wheeled trucks		Pickup		Kubota		Rowboat		Passenger boat	
4-wheeled truck		Sedan		Tractor		Motorboat			

6. Livestock raising situation situation and number of animals:

Cattle		Poultry		Goat		Fish pond/ Pond	
Buffalo		Pig		Horse		Number of Fish	

7. Production situation

	Lowland Rice field	Upland Rice field	Upland Crop Field	Permanent Crop field	Fruit Orchard	Industrial Plantation area	Other Land use Types
Hectare							
Number of Households							
Type	Annually				Garden		

8. Land tax

	Land Type	Tax rate	Reason

9. Land use planning in the past

When it has been implemented?		It had been implemented by what sectors?	
Is there information or a map available in the village?			
Did the village the land use planning? Explain			

10. agricultural cultivation in the forms of contract farming, Land concessions, and Others

1	Is there any contract farming for agricultural cultivation?	
2	Is there any land concession?	
3	The producer group	
4	Are there market preparations?	

11. List of related project to agricultural cultivation and forest implemented in the village

No.	Project name	Activity

Form 2: Village Agro-Biodiversity data collection

1: Agricultural aspect

1.1: Approximate number of family conduct having paddy rice cultivation, upland rice cultivation, include area?

	Only paddy rice cultivation	Only upland rice cultivation	Only upland crop cultivation	Both paddy rice and upland rice cultivation	Not Engaged in any agricultural cultivation
Number of Households					

1.2: Names and varieties of cultivated rice

	Varieties of paddy rice	Improved or traditional varieties	Sticky rice or stream rice	Seasonal paddy rice or annual paddy rice	Varieties of upland rice	Improved or traditional varieties	Sticky rice or stream rice	Seasonal upland rice and annual upland rice

1.3: Other crops

	Name of crops cultivated in swidden	Sale	Consumption		Name of other crops only cultivated in swidden	Sale	Consumption
	Name of crops cultivated in paddy				Name of crops cultivated in garden or permanent agricultural land		

1.4 Problems found in the agricultural production:

1.4.1: Crop varieties: Problems and potential

Crop varieties	Problems	

1.4.2: Problems found in the crop cultivation, production control and harvesting

Problems	Solutions	

1.4.3: Soil types and characteristic of soil in the village

Soil types	Location	Suitable for what crops	Problems

1.4.4: Pests and disease epidemics problems

Pest or disease Epidemics	Problems	Impacts

1.5 Upland agricultural cultivation

1.5.1 Rotational period of shifting cultivation

	Question	Answer
1	How about the rotational period of shifting cultivation cycle in the past (20-30 years)?	
2	How many years of current rotational shifting cultivation cycle	
3	How do villagers expect to have future rotational shifting cultivation cycle?	

1.5.2: The suitability of fallows

	Type	Appropriate fallow age for slash and burn	What types of crops are suitable for planting

1.5.3: Criteria or factors in selection of shifting cultivation each year

What are the criteria or factors that family or villagers use to select places for each year shifting cultivation?

	Factors used for section of shifting cultivation area	Explanation or reason
1	Age of fallows	
2	Types of fallows	
3	Soil quality (if it is considered as a factor)	
4	Use rights	
5	Permission required before slashing	
6	Other factors	

1.5.4: Shifting cultivation system (rice cultivation)

How should the shifting cultivation system be organized and managed? Conduct shifting cultivation in individual families or in groups (many families or entire villagers conduct shifting cultivation in the same location)

2: Livestock raising

2.1: Livestock raising area

	Rainy season		Dry season	
	Area	Regulations	Area	Regulations
Cattle				
Buffalo				
Goat				
Others				

2.2: Grazing area for livestock raising

		Grass cultivation for livestock		Natural pasture	
		Number of Families	Plant species	Number of Families	Plant species
	Number of family cultivate grass for livestock raising				

2.3: Animal diseases and vaccination

No.	Animal diseases	Season	Reason	Number of families use vaccination for their livestock	Number of families haven't used vaccination for their livestock

3. Forest land

3.1: Forest areas that had never been slashed or used for agricultural cultivation

Name of forest's location	Location	Forest types	Why the area is preserved as forest	Forest cover status (%)

3.2: Forest types and forest products collected from village managed area

Forest types (local name)	Location	What are the key forest products?	Remark

3.3: Bamboo Forest

Name /species of Bamboo	Location	Objectives of Utilization	Background

3.4: Plantation forest or Non-Timber Forest Products (NTFPs)

Species	Location	Number of Family (Cultivator)	Ownership (possession)

Form 3: Condition and calendar of key cash crop cultivation in the village

1. The calendar key cash crop cultivation

Type of Crop	Land Preparation (Month)	Growing season (Month)	Water Source	Crop cultivation		Fertilizer utilization		Weeds removal		Prevention of pestsanddiseases		Harvest	
				Method	Number of Working Days	Type	Rate	Method	Number of Working Days	Method	Number of working days	What month	Method

2. Investment cost for key cash crop cultivation in the village (average per hectare)

Items	Amount	Price (Kip)	Total (Kip)	Note
Type of Crop:				
- Costs seedlings				
- Costs for Land preparation				
- Costs for maintenance				
- Costs for fertilizer				
- Costs for harvesting				
- Threshing/ Husking				
- Cost for transportation				
- Others				
Average Yield:Tons / hectare. Price: Kip/kg				

Form 4: collection of data on harvesting, situation, and priority NTFPs

Form 4.1: Collection of data on harvesting and conditions of all NTFP species, users groups that can provide information include Female-male >30% of number of families in the village

Village:		**District:**		**Data collection Date:**		**Ethnicity 1:**	Family
Village cluster:		**Province:**		**Data Collector:**		**Ethnicity 2:**	family
						Ethnicity 3:	family
						Total	family

		Objectives/Goals				Assessment of forest production that villagers harvest and earn													
No.	Species (Local name/Lao name)	For sale	For use	For food	For medicine	Number of Harvesting Families	Unit	Harvested amount per family	Total harvested amount in the village	Number of sellers （Families）	Average sales volume per family	Total sales of Village	Value (Kip)	Gross Village Income (Kip)	Name of harvested area	Distance from Village (Minutes)	Forest Types	Status (Few, Medium, Many)	Changes in the last 5 years (%)	Causes of Change
	1	2	3	4	5	6	7	8	9(6x8)	10	11	12 (10x11)	13	14 (12x13)	15	16	17	18	19	20
Remark: (i) for mushrooms and (ii) for bamboo shoots, please clearly identify each variety and ask for information about honey.																				

Form 4.2: Collection of endangered NTFPs and priority species that are beneficial for development

Village			
Village cluster			
District		**Date of data collection**	
Province		**Data Collector Name**	

1: Endangered NTFPs

Species (local name)	Extinction (since what year)	Causes of extinction

2. The Priority Species that are Beneficial for Development

2.1 NTFP species that need to conduct enrich planting (in the forest) and management

Special (local name)	Number of families	Reasons	Methods

2.2 NTFP species that need to planting in the plantation

Species (local name)	Number of families	Reasons	Methods

Form 5: Collection of data harvesting, utilization, and Priority timber

Form 5.1: Collection of data on harvesting and utilization of timer

The user group can provide information; Female-male >30% of total number of families

Village:		**District:**		**Data Collection Date:**	
Village Cluster:		**Province:**		**Data Collector Name:**	

Ethnicity 1:		Families
Ethnicity 2:		Families
Ethnicity 3:		Families
Total		Families

		Objectives / Goals				Evaluate the Forest Production that People Harvest and Earn														
No	Species	For sale	For use	For food	For medicine	Number of Harvesting Families	Unit	Harvested amount per family	Total harvested amount in the village	Number of sellers （Families）	Averagesalesvolume per family	Total sales of Village	Value (Kip)	Gross Village Income (Kip)	Name of harvested area	Distance from Village (Minutes)	Forest Types	Status(Few, Medium, Many)	Changes in the last 5 years (%)	Causes of Change
	1	2	3	4	5	6	7	8	9 (6x8)	10	11	12(11x12)	13	14 (12x13)	15	16	17	18	19	20
													Total village income							

Form 5.2: Harvesting of priority timber

Village			
Village Cluster			
District		**Data collection Date**	
Province		**Data collector Name**	

1: Endangered Trees

Species (local name)	Extinction (since what year)	Causes of extinction

2. Priority trees that are beneficial for development

2.1 Tree species species that need to conduct enrich planting (in the forest) and management

Special (local name)	Number of families	Reasons	Methods

2.2 Tree species that need to planting in the plantation

Species (local name)	Number of families	Reasons	Methods

Form 6: Collection of wildlife data

The user groups that can provide information; female-male >30% of total number of Families

Village		**District**		**Data Collection Date**	
Village cluster		**Province**		**Data collector name**	

No.	Name of wildlife	Name of places where wildlife is found	Forest/land use types (habitats of wildlife)	Distance from village (minutes)	Number of families who Use the area	Status	Changes in the last 5 years (%)	Causes of Change
	1	2	3	4	5	6	7	8

Names of Wildlife that are Extinct in the Last 20 Years

No.	Species	Number of extinct years	Causes of extinction	English names	Scientific Names

Form 7: **Collection of aquatic animal data**

Village		**District**		**Data collection Date**	
Village cluster		**Province**		**Data collector name**	

Indicate number of collected amount: 3 (many), 2 (medium), 1 (fewer)

		Name of important rivers or streams, the number of collected amount (3, 2, 1)					Status	Changes in the last 5 years (%)	Causes of changes
No.	Name of collected animals	Name:	Name:	Name:	Name:	Name:			

Names of Endangered Aquatic Animals in the Last 20 Years

No.	Name	Species	Number of extinct years	Causes of extinction

English names	Scientific names

Form 8: Book of problems and solutions

The user group that can provide information; Female-male >30% of total number of families

Village:		District:	Day /Month /Year:	Number of Data Providers (female):
Village cluster:		Province:	Data collector Name:	Number of data providers (male):
No.	Sectors and Issues	Cause	Impact	Solutions (feasible)
1	Management and utilization of timber			
2	Management and utilization of NTFPs			
3	Management and utilization Wildlife			
4	Management and utilization Aquatic Animals			

5	Paddy rice farming (Annual and seasonal rice cultivation)			
6	Upland rice farming (cultivation and harvesting)			
7	Other crops farming (Except rice)			
8	Gardening/long term crop cultivation			
9	Livestock raising			
10	Management of agricultural land and forest			
11	Marketing/Sales of agricultural products			

12	Water for consumption and utilization			
13	Health			
14	Other Issues			

Form 9: Conditions and potential for village development

The user group can provide information; Female-male >30% of number of families

	Village:	District:	Day/Month/Year:
	Village cluster:	Province:	Data collector name:
No.	Sector/type	Location	Special conditions/potential
1	Forest		
2	Cultivation		
3	Livestock		
4	Public health		
5	Infrastructure		
6	Others		

Form 10: minutes of survey on important geographical location

Village		District		Data collection date:	
Village cluster		Province		Data collector name:	

No.	Name of point/location	Latitude (X)	Longitude (Y)	Elevation	Accuracy	Image No.	Description of special feature
	1	2	3	4	5	6	7

Form 11: Minutes of survey geographical coordinate references of village

Village		District		Data collection date	
Village cluster		Province		Data collector name	

No.	Name of Point /location	Latitude (X)	Longitude (Y)	Elevation	Accuracy	Image No.	Bordering villages (nearby)	Description of physical geographical feature
	1	2	3	4	5	6	7	8

Form 12: Collection of family level data on population, rice and livestock requirement - Family-level interviews

Village		**District**		**Data collection date:**	
Village cluster		**Province**		**Data collector name:**	

Must be printed on paper F14

Unit	House	No.	Name of family head *(and interviewee)*		Family Reg. No.	Ethnic		Occupation		Family members		Labor		Family Status	Rice needs/Year	Rice yield/Year (Paddy rice)	Rice yield/Year (Swidden rice)	Insufficient amount of Rice / Year	Number of current livestock						Fish pond	
			Husband	Wife		Husband	Wife	Main	Other	Total	Female	Main	Sideline		Kg	Kg	Kg	Kg	Buffalo	Cattle	Goats	Pig	Poultry	Horse	No	area
			1	2	3	4	5	6	7	8	9	10	11	12	13 (8x350)	14	15	16=14+15-13	17	18	19	20	21	22	23	24

Form 13: **Collection of family income (Kip/year)**

Village		**District**		**Data collection date**					
Village cluster		**Province**		**Data collector name**		**Period of data**	**Month**	**to**	**Month**

Must be printed on paper F14

		Name of family head																						
No.	Unit	Husband	Wife	Sale rice		Other products		Sale animals	Sale fish	NTFPs		Sale of charcoal	Sale of Sawn wood	Handicraft		Business	Labor wage		Salary	Other		Total / year
				Paddy rice	Swidden rice	Type of crops	Income			NTFP species	Income			Types	Income		What kind of work	Income		Type	Income	
		Total		1		2		3	4	5		6	7	8		9	10		11	12		
Total income (%)																						
Number of households that have income																						
Average household income																						
Average household income per village																						

Form 14: Collection of family land use data

Village		**Village cluster**		**District**		**Province**		**Data collector name**	
								Data collection date	

Unit	House	No.	Husband name	Wife name	Plot	Location	Area (ha)	Use (Type of crop)	Year	Yield Kg / year	Future plan	Permanent or rotational	Background of land use	Types of land use document	Remark
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Form 15: Minutes of soil sampling survey

I. Location and environmental characteristics of the pit

Pit No.....; Date, month, year .....; Weather conditions.....

Pit locations .....

Village....., Village cluster ....., District, ..., Province.....

Northern latitude .....; Eastern longitude.....

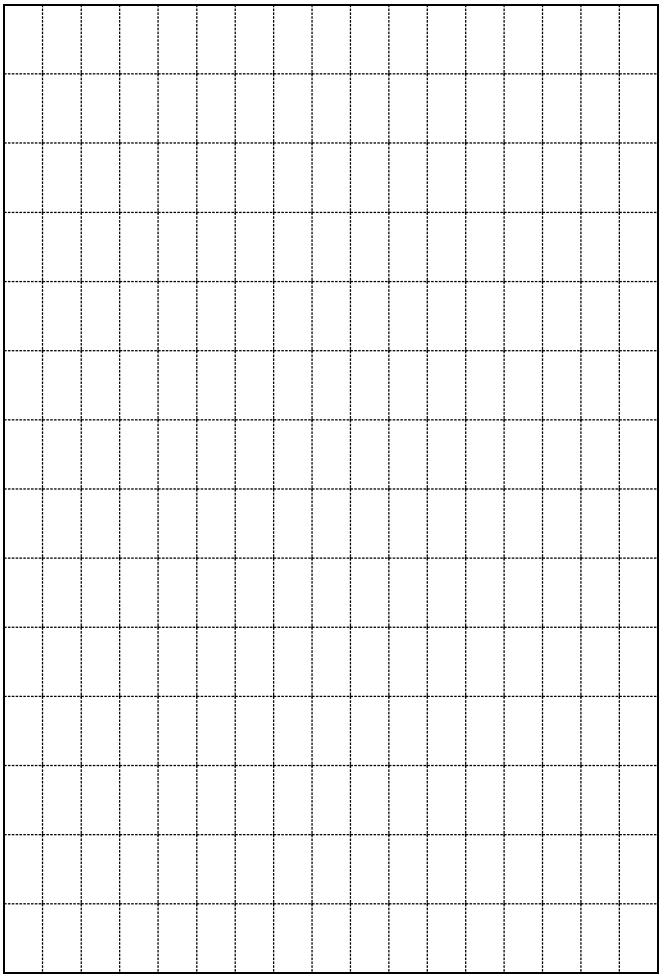
Geographical condition and slope: Flat or relatively flat 0-2% (a), convex-concave 2-8%(b), condition live wave 8-16%(c), slope 16-30%(d), steep slope 30-55%(e), high mountain with steep slope >55% (f)

Slope direction .....; elevation .....

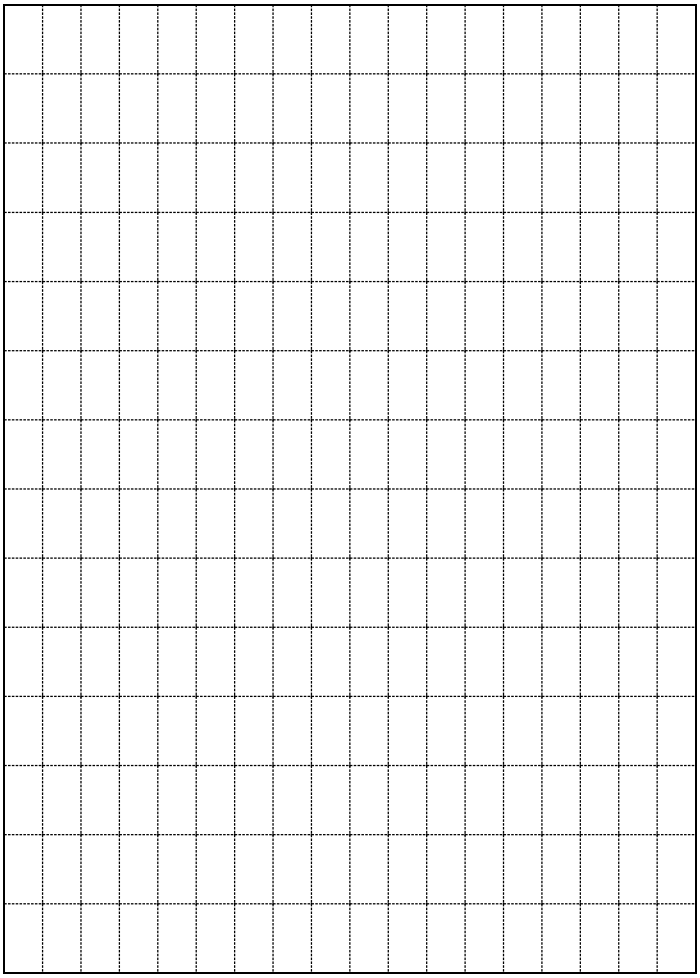
Water flow: water cannot flow, difficult to flow, flow, good flow, very good flow; soil erosion: few, medium , fast/very fast

Ground conditions: fractured .....; stone .....; other.....

Diagram of land profile



Horizontal lines



Natural vegetation ..... crops.....; Planting conditions ..... Suitability assessment, Land use condition, other issues of Land .....
Groundwater level ..... ; Origin/original material ..... Local name of soil.....
name of the soil according to the classification in the field .....

Minutes taker .....

II. Soil layers illustration

Soil layers							
Depth of soil layer							
Point of division of soil layers							
Colors	Dry						
	Moisture						
Soil							
Soil moisture							
Amounts of organic matter							
Structure	Shape						
	Soil bearing capacity						
	Size						
Stickiness	Dry						
	Moisture						
	Wet						
Soil spot	Amount						
	Size						
	Colors						
Fe, Mn Stone	Amount						
	Size						
	Shape						
Mixed stone	Amount						
	Size						
($CaCo_3$) Lime							
Salt							
Fracture	Width						
	Depth						
Tree root/ grasses /	Amount						

other plants	Size						
	Feature						
Gaps	Amount						
	Size						
	Shape						
Biology	Amount						
	Types						
pHH_2O							

From 16: minutes of current agricultural land use and forest survey

Village		District		Data collection date:	
Village cluster		Province		Minutes taker name:	

No.	Name of point/location	Latitude (X)	Longitude (Y)	Elevation	Accuracy	Image No.	Landusetypeorforesttype	Additional explanation
	1	2	3	4	5	6	7	8

Form 17: Minutes of agricultural land use zones

List of agricultural land use allocation in the village allocated area

Land code (SubCatZ_ID)	Name of area served for agricultural cultivation each year	Location	Area (Hectare)	Possession and use

Minutes of information of individual agricultural land use zones in the management area

Zone code		Village:		Village cluster:		District:		Date:	
1: Name of agricultural land: (local name)									
2: Location:									
Remark: The team must take minutes in details of location of allocated area for agricultural land use such as where is the location, close to what mountain, stream or geographical location?									
3: Detailed characteristics of boundary, allocated zones and agricultural land use plots (explain from one point to another)									
4: Reasons and purposes of villagers decide to define as agricultural land use									

5: Status of agricultural land use (from the past to the present)

	Status of Land use (select answer 1-2)	Yes / No	Additional details
1	Fallow, villagers used to use such area for shifting cultivation where currently become old fallow		
2	Fallow, villagers used to use such area for shifting cultivation where currently become young fallow		
3	Current fallow， but shifting cultivation still practice in some plots		
4	Degraded forest area		
5	Other (describe)		

6: The characteristics of the soil and the topographical feature of the land area		
	Detail	Additional information
1	Average Slope	
2	Soil type (by language or local name)	
3	Soil type (based on staff evaluation or soil analysis)	
4	Soil color classification	
5	Is there any worst Land? Land that cannot be used	
6	Can the land be accessed?	
7	Other	

7: Soil quality identification and analysis					
Depth		P		N	
Soil layer		K		Organic (%)	

8: Agricultural/Crop cultivation area described above section			
	Crops will be cultivated in this area		**Remark**
1			
2			

9: List of families who occupy, manage or claimed land use rights of the land area								
	Full name	Land use types	Area	History of land use	Full name	Land use types	Area	History of land use

10: How does the village plan to allocate land within each area to individual families?

11: How does the village plan to control and prevent forest fire?

12: Should there be more regulations for this area?

Form 18: Minutes village Forestland use zones

List of individual forest land use zones in the village FLUMZ allocation plan

Zone code (SubCatZ_ID)	The name location where villagers will manage and preserve as forest land	Location	Area (Hectare)	Possession and use

Minutes of data individual forest land use, where villagers define as management area

Area level		Village:		Village Cluster:		Day / Month / Year		Data collector name:	

1: Forest land name: (local name)		
Remark: Write the name of the forest land area as people call it, possibly derived from a combination of (a) the geographical name of the area and (b) the purpose and objectives of the use of the area		
2: Land location / geographical features:		
Note: technical team writes the name of individual locations of such forest land (although the name of the forest area may already indicate the location), where the area is located, close to what mountain, river, or what geographic location of such area or where the area is indicated in the geography maps.		
3: detail boundaries of individual forest land zones		
4: Reasons and purposes of villagers decide to define as forest land		
5: Status of individual land use zones (from the past to the present)		
5.1 Management characteristic 2, 3 or 4. or current forest land use	**Yes/No**	**Detail**
1 "current forest land where villagers already preserve as forest land and will continuously preserve as forest land"		
2 Currently forest land, but some areas are being upland swidden and fallows		
3 Mostly, upland swidden and fallow		
4 Most of them are permanent agricultural land		
5 If it is not agricultural land or forest land - please explain		
5.2: If answer questions 1 and 2, please write details of forest area and forest type		
For example, coniferous forest, deciduous forest, bamboo forest, riverside forest, evergreen forest and others		
5.3: In the case of answering the above question, if villagers want to convert agricultural land into forest land, how do villagers plan?		

Regenerate such land area into to natural forest	
Industrial plantation area	
Other lands	

6: The characteristics and topography of the land

	Name of forest products obtained from this area or land use activities	Yes/No	More details
1	Timber for construction		
2	Bamboo for construction or handicraft		
3	Firewood		
4	Bamboo shoots		
5	Non-timber forest products for sale, food or others		
6	Wildlife		
7	Fish and other aquatic animals		
8	Livestock raising		
9	Production or other uses		

7.1: If in the case answer questions (1) to (5) in section 5.1 above (the area has been defined as forest land, but current is agricultural land), list individual family that using the land for agricultural production (For more details, compare it with Form 12).

	Full name	Land use type	Area	Background	Full name	Land use type	Area	Background

7.2 **How does the village plan to control the families that do not use allocated area (current forest land area) for e agriculture?**

8: How does the village plan to control and prevent forest fire?
9: Should there be more regulations for this area?
Forest Management:
NTFP management:
Wildlife Management:
Livestock management:
Other:

Form 19: Minutes of geographical coordinate references of based on agricultural land use and forest allocation

Village		District		Data collection Date**:**	
Village cluster		Province		Name minutes taker**:**	

No.	Name of point/location	Latitude (X)	Longitude (Y)	Elevation	Accuracy	Image No.	Land use type or forest type	Additional explanation
	1	2	3	4	5	6	7	8

Form 20: **Reviewing and improvement of village regulation on management and utilization of natural resources, agricultural land and forest.**

Questions for reviewing and improvement of village regulations on management and utilization of natural resources, agricultural land and forest, which divided into different groups of questions and each group consists of following questions:

Group of question 1. <u>The principles and methods for establishment/implementation of village's existing regulations</u>

1) In the past and present, what methods are used for management of village agricultural land and forest in the village?
2) Is there any land use plan or method for using land? If any, do the villagers follow such plan of method?
3) Does the village have regulations on management of natural resources, agricultural land and forest? If yes, please provide to the staff to read and understand together.
4) Village level responsible committee
   - Is the village established village level committee that responsible for management village natural resources agricultural land use and forest?
   - If established, who are the members of the committee? Which month and year was it established? Approved by what sectors?
   - Is the committee work conscientiously and responsibly? What are the difficulties for such committee to implement their responsible tasks, please explain?
   - What are the key responsibilities and decision process of the committee?
5) Incentives or supports for people to follow village regulations
   - What incentives or supports have been provided to villagers to enforce the regulations?
   - How does the village to encouraging villagers to follow the regulations if there is no incentive or supports?

Group of question 2. <u>Upland agricultural land and conversion of forest land into agricultural land</u>

1) If villagers slash forested area or fallows in the area outside allocated area for agricultural cultivation without getting permission from village level committee, what regulation do you have to use with violators?
2) If villagers slash forested area or fallow, but do not burn the area and do not do not cultivate any crops into such slashed area (abandon), what regulation do you have to use with violators?
3) How does the village allocate agricultural land to new relocated family, if any?
4) If someone moves into a new house (get married) how do you allocate land for agricultural cultivation to such persons?
5) If someone is selling agricultural land (fallow land) without getting permission from village level committee, what measures will you use to punish or fine?
6) What measures will village uses to against an individual persons (from another village) slash allocated agricultural land and forested area of the village?

7) What measures will village use to against individual persons encroach village forested area (village utilization forest, protected, production forest, and protection forest)?

Group of question 3. <u>Emphasizing to wetland</u>

1) **How does the village manage wetland?**
   - How to define forest for protection of water sources, forest along the rivers or stream in order to prevent landslides and protect water for consumption and use?
   - What measures will be used if someone creates dirty to water (dumping garbage, animal carcasses, etc.) in the water sources and beside rivers where villagers consume and use water?
2) **What measures does the village have for management of wetland?**
   - Villagers who use land along rivers or stream for agricultural cultivation, how do they prevent landslide or erosion?
   - What are the restrictions on create something that blog water flow (blog water flow for fishing)?

Group of question 4. <u>Transportation land</u>

1) What approaches are used for management of transportation-roads and walking trial?
   - In order to prevent landslide, how meters agricultural cultivation area must distance from district roads, provincial roads, and national roads?
   - What are the prohibition measures or restrictions for livestock raising in the highway area?
   - What are the prohibition measures or restrictions on littering to the road area?
   - What are the prohibition measures or restrictions on construction, store the logs and drying crops on the roadsides?
   - What are the measures taken against a person who violates the above measures?

Group of question 5. <u>Emphasizing on cultural land</u>

1) What regulations does village have for management of village common cultural land?
   - What methods does village have for management of spirit forest and cemetery of the village?
   - What are the measures will be used for persons that encroach, access without permission and slash the village common cultural land?

Group of question 6. <u>Construction Land</u>

1) What are regulations does village have for management of village construction land?

Group of question 7. <u>Management and utilization of timber</u>

1) **Allocation of timber management zones**
   - Does village have methods for management of forested area for conservation and preservation of different species of biodiversity? If does, please provide detail explannation

- Does the village have conservation forest area for protection of water sources or gravity water and sources of irrigated water? If does, please provide detail explanation.
- Does village have conservation forest area for wildlife conservation? If does, please provide detail explanation. Does village have forest area or natural area that use for preservation and management for other purposes? If does, what are the purpose?

2) Timber Exploitation

- What are the management methods that village use for management of timber exploitation and harvesting forest products?
- What tree species that village allows or doesn't allow for logging?
- Do villagers have to ask permission, in the case of need for logging for construction, fencing, firewood, charcoal, etc.? Or can villagers have freely log base on their need without permission?
- What are criteria or requirements for timber harvesting permits?
- After the timber exploitation, is there a replacement planting plan for forest reforestation in the village managed forest area?
- If someone conduct illegally logging for timber, what measures will the village take against the offender? How to fine offender? In case offender log big trees in the village conservation area, what measures or regulations shall be enforced to the offender?

3) Non-timber forest products

- What are the regulations and management with regards to the collection of NTFPs from natural forest?
- Do villagers have to ask permission from the village for collection of NTFPs?
- Is there any prohibited to harvest NTFP species? If so, what species?
- Are there specific methods for harvesting some NTFP species? What kinds of methods? why?
- Is there limited amount (quota) of harvesting NTFPs?
- Does any family claim for right to use NTFPs from natural forest areas? where? Description (if any)
- Are there any nursery to produce seedlings of plants of or NTFP seedlings, which can be used for enrichment planting and plant in the plantation? How seedlings are produced? What species?

4) Forest fire management

- What are regulations, management approaches and prevention of forest fire in the villages?
- Are there any approaches to inform and warn villagers about the dangers of forest fire?
- What are the regulations for controlling forest fire from the burn of shifting cultivation?
- Have firebreaks been built? If so, what approaches are used for building firebreaks?
- Are there any volunteer in charge of village forest fire control and prevention?

- To prevent forest fires, did the village coordinate to surrounding villages before burning?
- In case of Illegal forest burning or cause forest fire without any precautions (no firebreak), how will violator be punished according to the regulations?

Group of question 8. <u>Management and utilization of wildlife</u>

What approaches and regulations have been used to manage and use of wildlife and aquatic animals in the village?

1) Aquatic Animal

- Does the village establish Fish Conservations Zone in the village?
- Are there any regulations used for management of such Fish Conservations Zone in the village? If any, please explain
- Do the villagers follow the regulations of Fish Conservations Zone? How will the offender be fined, if any?
- Does the village control or management of fishing in general areas and Fish Conservations Zone?
- Does the village set fishing seasons or control fishing equipment?
- If someone violates the regulation, how will the village punish the offenders?
- Which fishes or aquatic animals are prohibited from fishing in the village?
- Can village sell the fish or aquatic animals which they have caught?

2) Wildlife

- Does the village define specific forest area for wildlife conservations, wildlife protection, and area prohibited hunting?
- Are there any wildlife hunting regulations in the village? If so, what regulations are existed?
- Are there any regulations define hunting seasons and controlling hunting weapons in the village?
- Which wild animals are not allowed to hunt in the village?
- Can villagers sell the wild animals which they have caught?
- What are the penalties for violators?

Group of question 9. <u>Management of Livestock</u>

- What are the livestock regulations and management in the village?
- Does the village allocate any "fixed" or "permanent" livestock raising zone?
- Are there any warnings/punishments for villagers who raise livestock in outside the allocated zone for livestock in the village?
- Has the village vaccinated the livestock?

- How does the village solve when livestock one person damages agricultural cultivation areas of other persons?
- How does the village monitor and report the animals' disease outbreaks?
- Before bringing a new animal breed into the village, have the owners obtained permission from village and what measures are used to prevent diseases?
- How does the village respond to the death of livestock? Will villagers follow this approach?
- What measures are used to villagers who bring part of livestock that die from diseases for (food), (sale), or do not destroy carcasses (Do not dispose of animal corpses and prevent it)?
- If vaccinations are given to livestock, but some villagers do not bring their own animals for vaccination or ignore vaccination (don't want to cooperate), what penalties will the village use for such person?

Group of question 10. Chemical prevention measures to control the utilization of pesticide and herbicide

- Are there any measures and regulations for controlling the use of dangerous pesticide and herbicide in the village?
- Do villagers understand the regulations? Have such regulations been clearly and accurately written?
- Do villagers follow the regulations?
- What chemical pesticides and herbicides are prohibited in the village?
- If someone illegally uses banned chemical pesticide or herbicide, what measures or penalties will the village use for such person?
- What are the measures for village use for dealing with (1) chemical pesticide or herbicide tanks and (2) chemical pesticides or herbicides that are no longer used?
- How does the village monitor and prevent the spread of disease and insects?

FLUMZ Form 21: Monitoring and evaluation of participatory forest and agricultural land use planning, allocation and management

Evaluate the results of P-FALUPAM implementation activities in the aspect of villagers' livelihood development; especially development agricultural cultivation in relation to Agro-Biodiversity. This is to increase household food sufficiency toward production for income generation by discussion with villagers during village meetings, interview target groups or sample selection of villagers for interview.

Before working with the villagers, technical team should study the information in the FLUMZ allocation plan, take notes of existing information in the table (as shown below), and use this information in conjunction with the information provided by the people (if there is new information) to help observe whether provided information is accurate or reliable.

Villagers who can provide information, as indicate in this form, include: village organization committee, P-FALUPAM responsible committee at the village and other groups of villagers (Including ethnic groups, the

poor, females, males, villagers that have knowledge and experiences/elderly people) and the villagers.

Taking notes of answer or collected information by using (√) as answer for yes, available, clear or decrease; and using (x) as an answer of unclear, no/not, or no decrease. Then notes all detail answers taken from villagers to "remark column of the table" to explain the causes or reasons or other details information.

Remark: Users of the following table need to understand the purpose of each data collection and develop own questions, for example, in subsection 2 of the I section ask for the clarification of village management area, information collectors shall allow villagers indicate agricultural cultivation areas by comparing to land allocation maps; questions include where do you use land for rice cultivation? Data collectors should compared the answers taken from villagers to existing information on the maps; then take notes into the prepared table in order to indicate whether villagers know the allocated area for agricultural cultivation in the village. In case of interview many villagers at the same time, some villagers know the allocated area for agricultural cultivation, while some others don't; then take notes of details information into remark column in the prepared table.

Name of assessment responsible person:.....Date of assessment:.....

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

Total number of families in the village (currently): ..... Total population: .... (Female).....

ethnic group: .....

P-FALUPAM implementation period (Month/Year): Round 1 : ..... Round 2: ..... Round 3: .....

I. Clarification of village management areas	**Clear**	**Unclear**	**Explanation**
1. Management area (border) between villages			
2. Agricultural production area			
3. Forest Land			
II. Organization, rights and capacity	**have/yes**	**no/not**	**Explanation**
4. There is a P-FALUPAM responsible committee in the village			
5. There are female and ethnics participate as P-FALUPAM responsible committee in the village			
6. Village P-FALUPAM responsible committee members understand their tasks			
7. The P-FALUPAM responsible committee in the village implement the roles and tasks			
8. Knowledge and capacity of villagers on management of agricultural land and forest has increased			
9. Villagers implement village regulations on management of agricultural land use and forest			
III. Upland forests and agricultural land use, protection and development	**yes**	no/**not**	**Explanation**
10. Total agricultural land of the village decreased (compared to CLUFC data)			
11. Agricultural land is sufficient for the actual needs of the villagers			
12. Upland agricultural land of villagers fall within the boundary of allocated area for agriculture			
13. Villagers practice upland rotational agricultural cultivation based cycle defined in FLUMZ.			
14. Villagers practice upland agricultural cultivation in group			

15. Villagers cultivate other crops in the upland agricultural cultivation to replace upland rice			
16. Are villagers practice enrichment planting (if they are, which tree species have been planted and planted in what types of land use: forest, upland agricultural land)?			
IV. Agro-ecosystem status	**yes**	**No/not**	**Explanation**
17. Forest area increases			
18. Volume of the stream water increases			
19. Numbers of wildlife increases			
20. Number of aquatic animals increases			
21. Number of NTFPs (in the forest) increases			
22. Number of NTFPs (in fallow) increases			
23. Average yield of upland rice (rotational swidden) in the village increases[1]			
24. Average rice yield (paddy rice) in the village increases[2]			
25. Overall economic growth of the village has improved			
V. **Participation**	**yes**	**No/not**	**Explanation**
26. P-FALUPAM responsible committee at village level includes female and ethnic groups (in case, there are many ethnics in the village)			
27. Villagers (genders, ethnics, clan elders or elders) participate in P-FALUPAM activities in the village			
28. Villagers (ethnics, gender[3], and all classes of villagers) provided comments, raised questions, and proposals during implementation of P-FALUPAM activities.			
29. During implementation of P-FALUPAM activities, villagers are divided into groups (eg, female-male or ethnics) for discussion or collection of information			

[1] Comparison of rice (upland rice) in the village before and after FLUMZ by estimate as tons/ha/year
[2] Comparison of rice (paddy rice) in the village before and after FLUMZ by estimate as tons/ha/year
[3] More than half of total participants

30. Issues, unclear issues and questions raised by villagers have been carefully considered or solved[4] or proposed to higher level (according to the situation)			
VI. Problems and conflicts	**Decrease**	**No decrease**	**Explanation**
31. Forest fires decreased			
32. Pest problem decreased			
33. Village management conflicts decreased			
34. Conflicts over land use decreased			
35. Disputes over land ownership decreased			
36. Conflicts over NTFPs decreased			
37. Disputes over wildlife decreased			
38. Conflicts or other issues (if any) recreased			

Signature of the person in charge of assessment

Remark:

Use this form can be used for data collection during collection of socio-economic data at village and family levels or use data collected from actual field survey round 1 and round 2 as reference for comparing impacts and changes from P-FALUPAM implementation.

[4]Issues proposed by villagers have been dealt?

Annex II： Explanation on how to use the forms

Form 1: Collection of general village data

Collect information about village history, population, occupation, infrastructure, livestock raising status, cultivation situation, tools, land use status (forest and land allocation), projects, development activities, and other information in the village from the past to the present. Direct interviews with village authorities (see Annex III, table 1).

Form 2: Collection of Agro-Biodiversity data

Collect data on village agricultural biodiversity, such as rice seedlings, rotational shifting cultivation cycles, livestock raising, and forest (see Annex III, Form 2).

Form 3: Collection of village data on statuses and calendar of main cash crop cultivation

Collect data on cultivation season and status of individual crop cultivation in the specific area such as production cost, yield, and income from individual main cash crops. If possible, ask for information on land use for cultivation of other crops. Methodological approaches for asking question on crop cultivation is that the technical team ask question for first crops. The method of inquiry is to complete the inquiry of a main cash crop in the village, and then start asking other plants to continue the inquiry (see Annex III, table 3).

Form 4: collection of data on harvesting, condition, and priority of NTFPs

Collection of data on harvesting, conditions and priority of NTFPs should follow each individual steps as follow:

Question	Contents
Cell 1	Ask about the names of the main NTFP species that villagers collect for sale, then ask about the main NTFP species that villagers collection for household consumption or use for other purposes (paying special attention to mushrooms and honey by identifying each individual species).
Cell 2, 3, 4, 5	Ask for the purposes of use, species of NTFPs collected to meet the user's objectives such as for sales, consumption, food, and medicine
Cell 6	Ask for number of families that use NTFPs, it may be difficult to estimate the number families, but technical staff should estimate the number of families that use NTFPs; then estimate the amount of used NTFPs in percentage.
Cell 7	Take notes the amount of used individual NTFP species in kilogram
Cell 8	What is the number or amount of NTFP used or collected by each individual family, take notes in kilogram. In case villagers indicates in the other unit, technical staff should take notes based on actual unit used by villagers, then technical staff convert into kilogram afterward.
Cell 9	The amount of NTFPs that collected or harvested by villagers is derived from numbers indicated in cell 6 multiplied by the numbers in cell 8.

Question	Contents
Cell 10	Number of families collect NTFPs for sale
Cell 11	Quantity of sold NTFPs per family
Cell 12	The total amount sold NTFPs in the village, which is derived from number in cell 10, multiplied by the number in cell 11.
Cell 13	Prices of NTFPs per kg (prices of individual NTFPs based on villagers' answers)
Cell 14	The total income from NTFPs, which is derived from number in cell 12 multiplied by the cell 13
Cell 15	Status of harvesting of each individual NTFP species, for example: in which mountain near to which river, etc.
Cell 16	Distance (how many minutes) from the village to place where villagers harvest NTFPs (minutes)
Cell 17	Ask villagers describe details of forest types such as dry dipterocarp forest, bamboo mixed forest, coniferous forest, upland evergreen forest, evergreen forest connection to bamboo, fallow and other forest types.
Cell 18	Status of NTFPs compared to the past (5 years), such as low, medium or very high
Cell 19	Percentage NTFPs change (compared to last 5 years) based on villagers' observations
Cell 20	Reasons of change, ask villagers describe reasons of NFTP change in order to find future solution (please see Annex 3, table 4)

Form 5: Collection of data on harvesting, ultization and priority timber

Use this form to collect data on harvesting, utilization, and priority timber by following steps as indicated below:

Question	Contents
Cell 1	Ask for the name of timber species that villagers harvest for sale, then ask for the name of main timber species which villagers harvest for household use or for other purposes (paying special attention to bamboo by indicating details of each individual species).
Cell 2,3,4,5	The purposes of the harvesting timber based on the proposes of utilization of timber such as for sales, consumer, food and medicine.
Cell 6	Number of households using timber, which may be difficult to correctly estimated, in this case, the staff must estimate the amount of timber from the number of households that use the timber, which can be estimated in percanges.
Cell 7	Take notes of volume of each individual timber harvest in cubic meters (M3)

Question	Contents
Cell 8	What is the quantity of timber harvesting for each family? Take notes in cubic meters. In case villagers report in another units then take the minutes based on reported by villagers; then technical staff will have to convert the units into cubic meters afterward.
Cell 9	Total volume of harvested timber in the village, which derived number in n cell 6, multiplied by number in cell 8.
Cell 10	Number of families harvesting timber for sale
Cell 11	Quantity of sold timber timber per family
Cell 12	Total volume of sold timber, which is derived from numbers of cell 10 multiplied by the number in cell 11.
Cell 13	Prices of each individual timber species based on information given by villagers
Cell 14	Total income from individual timber species, which derived from number in in cell 12 multiplied by the number in cell 13.
Cell 15	Places where village harvest timber, for example: In which area, in which mountain, near which river?
Cell 16	Distance (calculated in minutes) from village to places where villagers harvest timber
Cell 17	Ask people to explain the type of forest, such as dry dipterocarp forest, mixed bamboo forest, mixed forest, upland evergreen forest, evergreen forest connecting bamboo forest, fallow, etc.
Cell 18	Status of timber species compared to the past (last 5 years): Low, medium or very high
Cell 19	The percentage of timber changes (compared to the last five years) based on villagers' observation.
Cell 20	Reasons of change, ask villagers describe reasons of timber changes in order to find future solution (please see Annex 3, table 4)

Form 6: Collection of wildlife data

The technical team must provide clearly explain the objectives and goals of the collection of wildlife data in order to ensure that villagers are not fear and having confidences to answer questions in order to have actual data on wildlife hunting and other related information. Steps for collection of wildlife data are listed below:

Question	Contents
Cell 1	List all specific wildlife species in the village (not the overall name), for example there are many snake species such as green snake, kingsnake, king cobra, common rat snake, cobra, etc. However, details of bird species are exception because to record bird species is time consuming.
Cell 2	Places where wild animal species are found, for example, in which area, which mountain, near which river, etc.
Cell 3	Ask people to provide detail description on forest types that are habitats of wildlife such as dry dipterocarp forest, bamboo mixed forest, coniferous forest, upland evergreen forest, evergreen forest connecting bamboo forest, fallow and other forest types.
Cell 4	Distance (calculation in minutes) from village to places where wildlife species are found.
Cell 5	Take notes on number of families that use wild animals (for food, sale, etc.) as statistical data.
Cell 6	Status of wildlife compared to the last (5 years): fewer, medium or many
Cell 7	Take minutes of wilflife changes based on villagers' observation, indicate in percentage.
Cell 8	Reasons of each individual wildlife species change, ask villagers describe reasons of timber changes in order to find future solution.
Finally, collection of data on extinct wild animal species (no animal prints, animals are not found, and other evidences of such extinct wild animals had not been found for last 20 years), what are the extinct species, and what are the endangered species and what are the reasons of extinct. Take notes of data into form (please see Annex III, Form 6) .	

Form 7: Collection of data on aquatic animals and water products

Provide clearly explanation to ensure that villagers understand the objectives and goals of data collection, then follow the steps as indicated below:

Question	Contents
Cell 1	Aquatic animals, semi-aquatic animals, plants, moss, and others that villagers collect from main rivers, lakes, streams, and wetland.
Cell 2	Ask about the name of each main river, stream where villagers collect food. After that ask about aquatic animals and other water products that villagers collect (based on information from cell 1). In addition, ask about the richness of aquatic animals and other water products (rating 1 to 3 points).
Cell 3	Status of aquatic animals and other water products (compared to last 5 years): fewer, medium or many
Cell 4	Changes of aquatic animals and other water products (compared to last 5 years) based on villagers' observation; estimated in percentages.
Cell 5	Ask villagers describe reasons of changes of each individual aquatic animals and other water products for planning for future solutions.
Finally, collection of data on extinct aquatic animals and other water products (prints of aminals and water products had been longer found, aquatic animals and other water products are not found, and other evidences of such extinct aquatic animals and water products had not been found for last 20 years), what are the extinct species, what are the endangered species and what are the reasons of extinct. Take notes of data into form (please see Annex III, Form 7) .	

Form 8: Books of problems and solutions

The purpose of this form is to collect data on agricultural land and forest, require data include issues with regards to gravity water, health, and education. In addition to problems, we should also ask about the cause of the problems and impacts to villagers; and discuss with villagers to find solution approaches. Ask villagers to raise issues as following example (see Appendix III, Form 8).

Question	Contents
Cell 1	Issues occurred in the village. This form includes 13 issues. Issue number 14 is not include within 13 issues
Cell 2	Causes of the problems in the target village
Cell 3	Impacts of problems in the target villages
Cell 4	Solution approaches (optional) offered by villagers

Form 9: Conditions and potential for development

This form is very important because it highlights the development of various aspects of the village, such as agriculture, forestry, sanitation, and others. Therefore, the team must clearly explain the objectives and goals of data collection to villagers or village authorities to have common understanding. The methodological approach of data collection is similar to other forms (see Appendix III, Form 9).

Question	Contents
Cell 1	There are 5 types of conditions and potential for development in the village. The item 6 is not within the scope of the first 5 items.
Cell 2	The location of each conditions and potential development of the village
Cell 3	Special conditions and potential for development of the village

Forms, procedures, and methodological approaches for collection of data at family level

Family level data collection according to forms number 12, 13, and 14 are for inquiries and openings to facilitate each family to answer questions. Technical staff, about 2-3 staff conduct direct interview based on different steps such as 1) the team collects the names of family members in each family in each unit in the village; 2) ask village authority to announce to villagers or make appointment with individual families for interview, and 3) briefly introduce the technical team, objectives, goals, and processes of family data collection to interviewed families.

Recommendation

- Provide opportunities to villagers asking questions and understand having correctly understand the questions
- Technical team should ensures that villagers are not fear to provide actual information by providing explanation that collected information will not be used for other proposes that might bring impacts on villagers and village.
- Don't just ask one person, the team should ask both husband and wife, and pay attention to observation or inspection to ensure that the information from both (husband and wife) is consistency. If necessary, language translation can be provided.
- The data collection form contains some sub-questions. The technical team should use the local language to ensure that the villagers can easily understand (should not use difficult words)
- Conduct interviews to collect data according to the forms, and present on behalf of the technical team provide sincerely thank the villagers who provided data.

During conduct field survey, if it is neccessary to conduct in the village where villagers are busy with agricultural cultivation activities, technical team should collect data from villagers in the night time or any time that suitable based on available time and conditions of individual families.

Topic - Questions to be asked each individual family according to Forms 12, 13 and 14

No.	Form 12: Population, required rice for consumption and livestock raising	Form 13: Family's Income	Form 14: Family's Land Use
	Unit		Unit
	House No.	Unit	House No
1	Husband's name	Husband's name	Husband's name
2	Wife's name	Wife's name	Wife's name
3	Family Registration No.	Rice	Plot
4	Ethnic group (Husband)	Other products	Location
5	Ethnic group (Wife)	livestock	Area (ha)
6	Main occupation	Fish	(Plant species) Use
7	Auxiliary occupation	NTFPs	Year
8	Family members	Charcoal production for sale	Yield
9	Female Members of the family	Sale of sawn wood	Future goals
10	Main labor force	Handicrafts products	Permanent or rotational
11	Auxiliary labor	Private business	Sources of land
12	Family status	short-term employee	Land document types
13	Annual rice demand	Salary	**Remark:**
14	Annual lowland rice production	Others	
15	Annual upland rice production		
16	Annual rice shortage		
17	Current number of livestock: cattle, buffalo and Other		

Annexes III: Draft of Documents

No	Names of drafted documents	Note
I.	**The Draft apply in step** 2 **process** 3	
1.	The Draft of Request Letter on the request for the establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Committee at Village Level	Village responsible for request
2.	The Draft of Request Letter of District Agriculture Forestry Office on the request for the establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Committee at Village Level	District Agriculture Office Responsible for request
3.	The Draft the District Governor's Agreement on the Appointment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Committee at Village Level	Governor's Agreement
4.	The Draft of the Village Management Area Record (between villages)	Village to village
II.	**The Draft apply in step 5 process 2**	
5.	The Draft of Monitoring - Inspection Report on the implementation of Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	
6.	The Draft of Monitoring - Inspection Report on the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	
7.	The Draft of Village Request Letter to Office of Agriculture and Forestry for approval the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	Village responsible for request
8.	The Draft of Village Request Letter of Agriculture and Forestry Office for adoption the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	District Agriculture Office Responsible for request
9.	The Draft of the District Governor's Agreement on the adoption the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	Governor's Agreement
III. Drafted documents will be used in step 2, process 3		
10.	Drafted request letter of village on request establishment of P-FALUPAM responsible committee at village level	Request letter from village
11.	Drafted request letter of DAFO on resquest establishment of P-FALUPAM	Request letter from DAFO

No	Names of drafted documents	Note
12.	Drafted agreement letter of District Governor on establishment of P-FALUPAM responsible committee at village level	Agreement of District Governor
13.	Drafted munites of village management area (between villages)	Between villages
IV. Drafted documents will be used in step 5, process 2		
14.	Drafted report on evaluation and monitoring and report on implementation of P-FALUPAM at village level	
15.	Drafted report on evaluation and monitoring of land use based on P-FALUPAM at village level	
16.	Drafted request letter from village to DAFO for approval of P-FALUPAM at village level	Proposed by village level
17.	Drafted request letter from DAFO to District Govern for approval of P-FALUPAM at village level	Proposed by DAFO
18.	Drafted agreement of District Governor on approval P-FALUPAM at village level	Agreement of District Governor

1. **Drafted request letter of village on request establishment of the P-FALUPAM responsible Committee at Village Level**

Lao People's Democratic Republic

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District…….

Village..... No……/.....

Dated .....

Request Letter

To: Head of the District Agriculture and Forestry Office

Subject: Request the District Governor to issue an agreement for establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management responsible Committee at Village Level of……. Village……. District……. Province

- Pursuant to: the Law on Local Administration of Lao PDR No……, Dated: ..... Part ..... Article.....on Roles and Duties of Governors.
- Pursuant to: the consultation and consensus in the village on the date.....

The village head ……..... is honored to request the Head of the District Agriculture and Forestry Office to issue an agreement on the establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of……. Village……. District……. Province. The list of committees is as follows:

	Name and surname	Responsibility in the village	Responsibility on the committees
1	Mr/Mrs:		Chairman
2	Mr/Mrs:		Vice Chairman
3	Mr/Mrs:		Member
4	Mr/Mrs:		Member
5	Mr/Mrs:		Member

The committee will perform its rights, responsibilities and obligations and regularly report to the village authority.

Therefore, please consider according to the actual situation.

Sincerely yours

Village Head**.....**

2 Drafted Request Letter of District Agriculture and Forestry Office to request establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level

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Province……

District Agriculture and Forestry Office.....

No...../ DAFO
Date.....

Request Letter

To: District Governor

Subject: Request to issue an agreement on establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of……. Village……. District……. Province

- Pursuant to: the Ministers' Agreement on Organization and Activities of the District Land Management and Development Unit, No. 1931 / MAF Dated 20 September 2013.
- Pursuant to: the proposal of the village administration ....., district ...., province .... Dated .....

The head of ..... District Agriculture and Forestry Office is honored to request the District Governor to issue an agreement on establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of……. Village……. District……. Province. The list of committees is as follows:

	Name and surname	Responsibility in the village	Responsibility on the committees
1	Mr/Mrs:		Chairman
2	Mr/Mrs:		Vice Chairman
3	Mr/Mrs:		Member
4	Mr/Mrs:		Member
5	Mr/Mrs:		Member

Therefore, I would like to propose it to the District Governor for a proper consideration.

Sincerely yours

District Agriculture and Forestry Office

3. Drafted District Governor's Agreement on establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level

Lao People's Democratic Republic

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Province……

The Governor of the .....

No……. / Governor
Date .....

The agreement

on establishment of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of ..... Village ..... district ..... province

- Pursuant to: the Law on Local Administration of the Lao PDR, No. 03 /NA, Dated 21/10/2013, chapter III, Article 27 on the rights and duties of the Governors
- Pursuant to: the District Agriculture and Forestry Office No..../ DAFO, Dated.....

The District Governor issues the agreement

Article 1. Establishment of Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of..... village, ...district ... province ...

	Name and surname	**Responsibility in the village**	**Responsibility on the committees**
1	Mr/Mrs:		Chairman
2	Mr/Mrs:		Vice Chairman
3	Mr/Mrs:		Member
....	Mr/Mrs:		Member

Article 2. The above-mentioned committee is responsible for the responsibilities and obligations specified in the appendix, performs the responsibilities given by the village authority, and regularly reports to the village authority on the implementation of the tasks.

Article 3. Relevant stakeholders must recognize and facilitate the committee to effectively implementation their task.

Article 3. This agreement takes effect from the date of signing.

.

District Governor.……

4. Drafted village management minutes (between villages)

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Province: .....

District : .....

Village Cluster : .....

Village : ..... No...../
Date .....

Minutes on

Management Area Between .....Village.....and villages .....

- Pursuant to: the Agreement of the Minister of the Prime Minister's Office of the Organization and Activities of the National Land Management Authority, No. 67/PM. Dated 18/4/2004.
- Pursuant to: the consultation meeting held with the surrounding villages on the ..... village management area, the meeting organized in ..... Village meeting room, dated .....

In order to consistency with the policies of party and state on management of land and forest in each village, which should be clearly and agreed within the village and village cluster to facilitate the management and preservation of land and forest according to customary rules and state regulations and laws.

The relevant village authorities agreed to unanimously define the boundaries between the villages as follows:

.....
.....
.....
.....
.....

The management area is length ..... m and has geographical coordinates references as shown in Table 01 below:

Table 01: Reference coordinates of village boundaries of two adjacent villages

Coordinate code	Accuracy **(**m**)**	Elevation	Latitude (X)	Longitude (Y)	Name the GPS point

The management area map of two adjacent villages

The authorities of host villages and bordering villages jointly developed this minute to be official reference documents for management the area between the two villages.

Table 02: Participants of discussion on village management area

No.	Village/ Village Cluster	Name and surname	Responsibility	Tel	Signature
1					
2					
3					
4					
5					
6					
7					
8					

Village Head**:**		Village Head**:**	
Sign and seal:		Sign and seal:	
Full name:	Date	Full name:	Date

<u>Recognized and verified by</u>

District Office of Natural Resources and Environment	District Agriculture and Forestry Office	District Domestic Affair Office
Sign and seal:	Sign and seal:	Sign and seal:
Full name:	Full name:	Full name:

Verified by District Governer ….……..…

5. Drafted minutes on results of monitoring and report on the implementation of Forest and Agricultural Land Use Management Zone (FLUMZ) Allocation Plan

Lao People's Democratic Republic

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District .....

Village Cluster..... No...../.....

Village..... Date ...../.....

Minutes on

personal Agricultural Land within Communal / Community Land

- Pursuant to: the research and approval of the .....village authorities, Dated.....

- Pursuant to: the data collection and map drawing..... Dated ... / .... / ....

This minutes has been written to certify land use for agricultural production or for permanent livestock raising which the landowner intends to develop such land area for permanently used and to be private land. Therefore, the village authority finds that his/her family: ..... has used the land under family reg. No. ..... unit ..... village ..... District. .... Province ..... for long time (number) years. Detail of this land have been stated below:

Location			In which Communal Land
Coordinates	X:	Y:	
Area (Estimated)		Ha	
Purpose/ Activity			

Allow him/her to use the land for permanent agriculture production or livestock raising under the following conditions: 1) follow the Forest and Agricultural Land Use Management Zone Allocation Plan (FLUMZ), not expand to Communal Land, 2) Do not slash or use any other parcels of fallows designated as a collective agricultural land in the upland areas as specified under the FLUMZ Allocation Plan; 3) Do not sell or transfer the land rights to the others.

Therefore, this minutes has been established as an evidence and Effective from the date of signing.

Mr./Mrs.:	Date	Mr./Mrs.:	Date
Permanent landowner		Chairman of responsiblecCommittee of Forest and Agricultural Land Use Planning, Allocation and Management at Village Level	
Sign:		Sign:	
Mr./Mrs.:	Date	Mr./Mrs.:	Date
Village Head		Head of District Office of Natural Resources and Environment	

6. Drafted report on results of monitoring the implementation of Forest and Agricultural Land Use Management Zone Allocation Plan at Village Level

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

Village.....

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

Reports

On results of monitoring the implementation implementation of the Forest and Agricultural Land Use Management Zone Allocation Plan at Village Level of…… Village…… District…… Province……..

- Pursuant to: Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee (P-FALUPAM) at Village Level …… which was completed on date ……/……. /.....

- Pursuant to: the results of the monitoring of actual land use compared with the FLUMZ allocation plan and to encourage villagers to follow the plan effectively, efficiently and sustainably in Agro-ecosystem.

- Pursuant to: the proposal and recommendation to revise or improve the FLUMZ allocation plan according to actual conditions, local realities and villagers can bring into implementation.

Results of land use monitoring based on Forest and Agricultural Land Use Management Zone Allocation Plan at Village Level. The details are as follows

1.1: **List of technical staff responsible for monitoring land use in target villages**

No	Name and surname	Responsibility	Organizations	Tel	

1.2: List of P-FALUPAM responsible committee members and attended villagers together with technical team

No	Name and surname	Responsibility	

2: Data on population (minutes dat ..... / ..... / .....)

Total population		Upland rice Cultivation	Upland rice + maize cultivation	Maize cultivation	Other crops cultivation	Not cultivate any crops	Total
	Number of families						
Total population		Upland rice cultivation	Upland rice + Maize cultivation	Non-rice cultivation			
	Number of families						
					Total Family		

3: Results of monitoring upland rotational agricultural land use

3.1: Rotational upland agricultural land use zone - according to the agricultural land allocation and management plan

Code	Name of allocated land	Cultivated areas for year ….	Area

3.1: Rotational upland agricultural land zone - according to the agricultural land allocation and management plan

1	In the allocated land for agricultural cultivation in year…..	Number of families	Reasons	Solutions
2	Outside of allocated land area, but in agricultural land	Number of families	Reasons	Solutions
3	Outside the allocated land, outside the forest land	Number of families	Reasons	Solutions
4	Outside the allocated land in the other type of land	Number of families	Reasons	Solutions

4: Results of monitoring other allocated land uses- /Inconsistency with the FLUMZ allocation plan

Code	Name of allocated land area	Problems	Revision or improvement for next year

5: Summary of revisions and improvements of FLUMZ allocation plan

After technical staff, forest and agriculture land use planning and management responsible committee at village level together with all concerned villagers have completed monitoring the implementation of FLUMZ plan. The results of monitoring shall be recognized and understood by villagers and the villagers shall understand and agree on how to revise, modify or improve some contents/maps of the plan based on the conditions of local reality and villagers can bring the plan into implementation. Technical team must take minutes, modify or improve some contents of the plan/ FLUMZ allocation plan based on agreement of villagers and all concerned stakeholders as well as consistency with existing principles and regulations at the village and the revised or improved FLUMZ allocation plan shall be consistency related regulations at village level, as following details:

5.1 Upland rotational crop cultivation area (revised version) - based on rotational crop cultivation area in year XX				
Code	Name of allocated land	Year	Area (Ha)	Name of the modified allocated land area
5.2 Forest Land Area (revised version) - the modified forest land area only				
Code	Name of allocated land	Area(ha)	Name of modified allocated land area	
5.3 Other types of land (revised version)				
Code	Name of allocated land	Area (ha)	Name of modified allocated land area	

6: Other recommendation

7: Agreement and approval

Mr/Mrs:	Mr/Mrs:	Mr/Mrs:
Position	Position	Position
Sign Date.....	Sign Date.....	Sign Date.....
Mr/Mrs:	Mr/Mrs:	Mr/Mrs:
Position	Position	Position
Sign Date.....	Sign Date.....	Sign Date.....

7. Drafted Request Letter from village to District Agriculture and Forestry Office on approval the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

District…….

Village..... No……../.....

Date .....

Request Letter

To: Head of District Agriculture and Forestry Office

Subject: Request to District Governor for approval of the village's FLUMZ allocation plan of .....Village……. City ..... Province .....

- Pursuant to: the Land Law, Article 11 on the Survey, Zoning and Classification of Land.
- Pursuant to: Legislation (.... related ...)
- Pursuant to: the results of the implementtation of the village FLUMZ allocation plan activities conducted from date ..... to ..... in the village ..... district .... Province .....
- Pursuant to: the unanimous agreement of the village FLUMZ allocation plan plan of the committee and the people dated ..... at ...

Village Head of..... honored request the Head of the District Agriculture and Forestry Office to consider request to District Governor for approval of Participatory Forest and Agricultural Land Use Planning, Allocation and Management Responsible Committee at Village Level of.....Village....District.....Province which includes the following: 1) the Participatory Forest and Agricultural Land Use Planning, Allocation and Management book, 2) village geographical map, village management map, current land use and forest map, and forest land use management map.

Therefore, honored request you to consider approval above listed plan and maps to be official references for further implementation of related activities to development.

Sincerely yours

Village Head.....

8. Drafted Request Letter of District Agriculture and Forestry Office to District Governor for Approval the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

Province……

District Agriculture Forestry Office Dated.....

No……. /DAFO

Request Letter

To: Respective District Governor of.....

Subject: Consideration and issue an agreement for approval Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level of ..... Village ..... District.....Province .....

- Pursuant to: the Law on Land, No. ..., Dated, ... Article 11 on the Survey of Zoning and Classification of Land,

- Pursuant to: the Request Letter of ..... to the District Governor for the approval of the village-level FLUMZ allocation plan, No ..... /village .....

- Pursuant to: the success of the FLUMZ implementation in the Village ..... District ..... Province ..... between the date ..... to ..... and the unanimous agreement of such work between the responsible committee and the villagers on the date .....

Head of District Agriculture and Forestry Office of……. honored request the District governor to issue an agreement for the approval of the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level of village ..... District ..... Provinces .... with details such as 1) FLUMZ allocation plan book, and 2) village geographical map, village management area map, CLUFC and FLUMZ maps.

Therefore, honored request you to consider approval such above listed plans and maps to promote the effective management of forest and agricultural land use and to be official reference actual implementation of such plans maps.

Sincerely yours

Head of the District Agriculture and Forestry Office

9. Drafted District Governor's Agreement on approval the Participatory Forest and Agricultural Land Use Planning, Allocation and Management at Village Level

Lao People's Democratic Republic

Peace Independence Democracy Unity Prosperity

Province……

District .....

No……. / Governor

Date .....

Agreement

On approval Village FLUMZ allocation Plan of.....Village.....District..... Provinces .....

- Pursuant to: the Land Law, Article 11 on the Survey, Allocation and Zoning of Land No.....
- Pursuant to: the success of the Implementation of the FLUMZ Plan, request letter of District Agriculture and Forestry Office and District Office of Natural Resources and Environment on Consideration for approval of FLUMZ Allocation Plan of Villages ....., Village Cluster..., Districts ....., Provinces ....., No....
-

The District Governor issues the agreement

Article 01. Approves the Participatory Forest and Agricultural Land Use Planning, Allocation and Management of .....Village .....District.....Province.....

Article 02. The District Agriculture and Forestry Office, District Office of Natural Resources and Environment and other concerned sectors are responsible for facilitating the implementation of the plan in accordance with the related plan, , especially to ensure the villager's land use rights.

Article 03. Village authorities and villagers of village……. shall recognize and simultaneously manage, protect and use the land in accordance with the plan and ensure permanent protection of forests and agricultural environments and ecosystems..

Article 1: This agreement takes effect from the date of signing.

signature.

District Governor.....