



**Community-Based Natural  
Resource Management (CB-NRM)  
in Timor-Leste**





Deforestation and Degradation

Forest Fire

Landslide



# Forest Condition in Timor-Leste

Since 1975, deforestation and forest degradation have constantly expanded in Timor-Leste. The latest assessment made in 2012<sup>1</sup> reveals that the total area of forests in the country has decreased at a rate of 1.7 % per annum for the last decade. This has resulted in deforestation of about 184,000 ha of forest lands, and degradation of about 170,000 ha of dense forest.

Deforestation and forest degradation are attributed to human activities, such as (i) slash and burn for

grazing and hunting, (ii) collection of firewood, (iii) shifting cultivation, and (iv) illegal logging. These activities have caused soil erosion, landslides and flash floods, which have negatively impacted the the lives of people residing in not only hilly and mountainous areas but also lowlands in river basins.

<sup>1</sup> Forest Conservation Program in the Democratic Republic in Timor-Leste, 2012, Japan International Cooperation Service (JICS).



# Support of JAPAN

Since November 2005, the Japan International Cooperation Agency (JICA) has assisted the Government of Timor-Leste, particularly the Ministry of Agriculture and Fisheries (MAF), in sustainable management of forest resources in the Laclo and Comoro river basins with a project introducing the concept of community-based natural resource management (CB-NRM).

As a part of its continuous efforts, “The Project for Community-Based Sustainable Natural Resource Management” has been jointly implemented by MAF and JICA between January 2011 and October 2015. The project has developed and demonstrated the mechanism on community-based sustainable natural resource management (the CB-NRM mechanism) where forest-based natural resources can be managed and protected by local communities in a sustainable manner.

The effectiveness of the CB-NRM mechanism has been proven in six (6) villages over the course of the project. MAF aims to further expand the CB-NRM mechanism not only in the Laclo and Comoro river basins but also other major river basins in the country to tackle the issue of deforestation and forest degradation.







# Community-Based Natural Resource Management

## Empowering Local Communities

**CB-NRM** is an approach to nature conservation by recognizing the inherent rights of local communities to benefit from sustainable use and management of natural resources (i.e., forests, lands, water, and biodiversity) in their locality. Its emphasis is put on enhancement of governance capacity of local communities, especially village leaders in rural areas so that they can protect and manage forests and other natural resources existing within the territory of a village in a proper and sustainable manner.



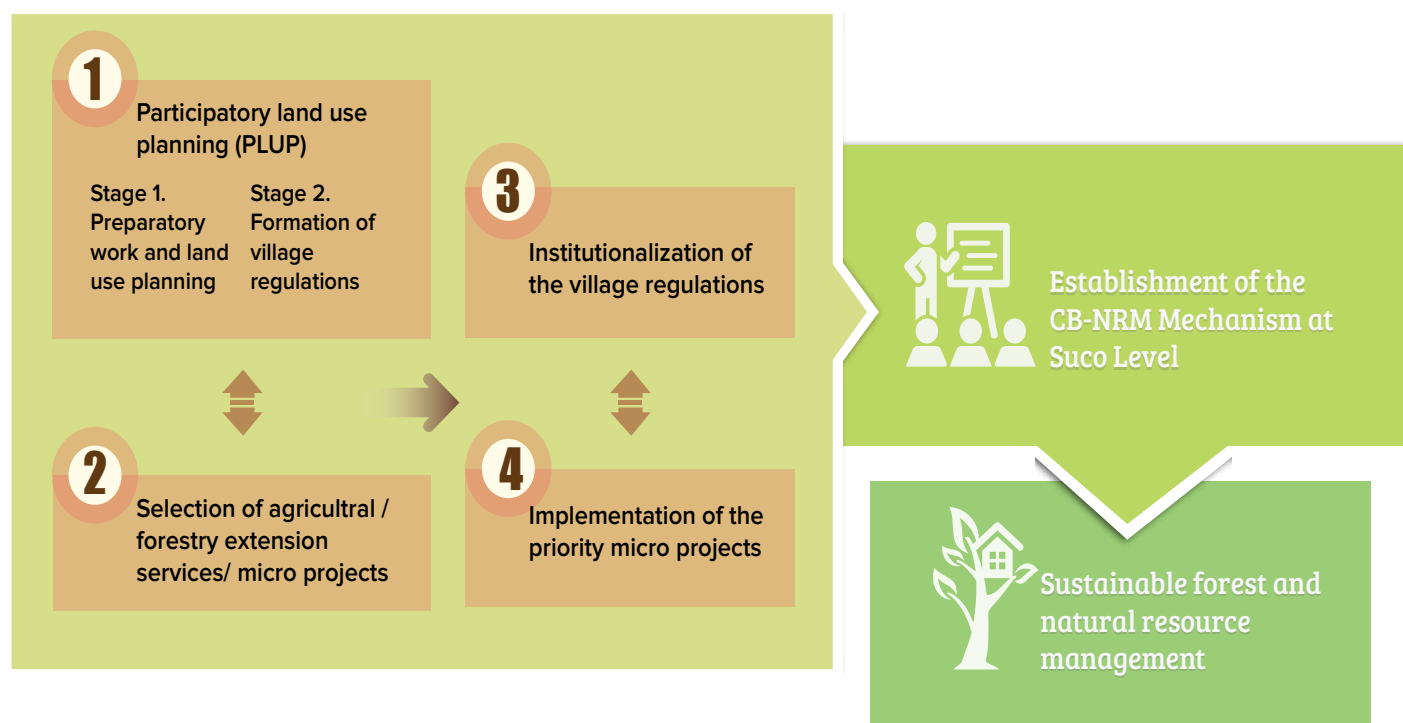


# Overall Process of Introduction of the CB-NRM Mechanism

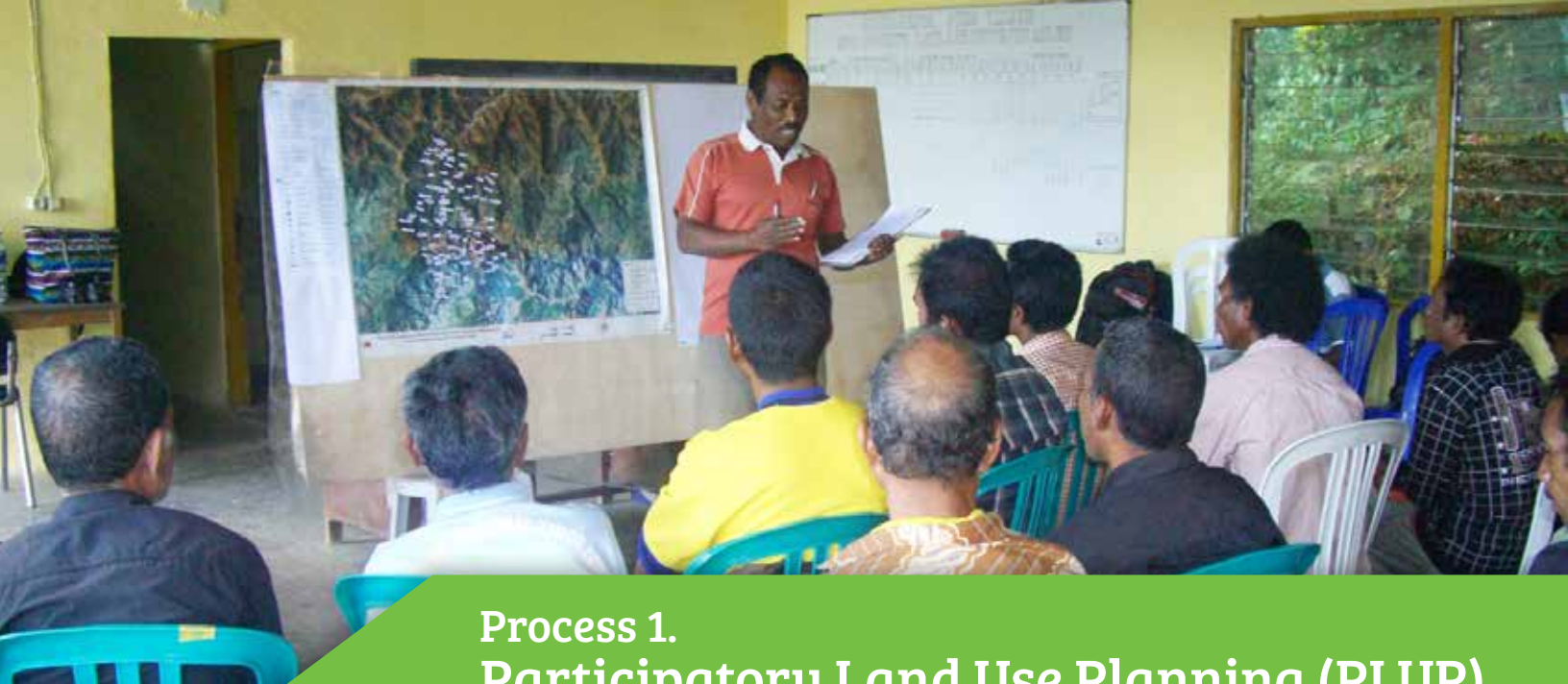
The CB-NRM mechanism aims to deal with forest-related resources: namely i) forests including non-timber forest products, ii) lands, and iii) water sources in rural villages, especially those located in hilly and mountainous areas.

In principle, the CB-NRM mechanism is introduced and established at the village level by going through the following processes.

- Process 1. Participatory Land Use Planning (PLUP)
- Process 2. Selection of Agriculture/Forestry Extension Services/Micro Process
- Process 3. Institutionalization of the Village Regulations
- Process 4. Implementation of Priority Extension Services/Micro Programs







## Process 1. Participatory Land Use Planning (PLUP)

### Stage 1. Preparatory work and land use planning

**PLUP.** Participatory land use planning is an interactive process to create an enabling environment for sustainable use and management of natural resources (i.e., land, forest, and water) and enhance village leaders' capacity to govern the village, particularly natural resources in a wise and sustainable manner.

#### ▶ Procedure of Preparatory works and land use planning



1. Consultation with local leaders.



2. Organization of working group.



3. Study tour to a JICA project village



4. Present land use mapping



5. Future land use planning



**Step 1. Organize** a meeting with village leaders to consult with them about the possibility of introduction of the CB-NRM mechanism in general and conduct of PLUP in particular.



**Step 2. Form** a working group composed of village leaders and other key stakeholders as well as informants in a village for discussions in the further steps.

**Step 3. Deepen** village leaders' understanding of CB-NRM, especially PLUP, through dialogues with communities in the JICA CB-NRM Project village and observation of the CBNRM activities in the field.

**Step 4. Assess** the current land use patterns in a village and make a present land use map using an aerial photo in a participatory manner.



**Step 5. Discuss** and determine the future land use of a village to maintain and improve the quality of natural resources for their future generations.



## Stage 2. Formulation of Village Regulations

A set of **Village regulation** can function as a village-based legal framework to control illegal activities, especially those causing deforestation and forest degradation. Village regulations are to be developed by reviewing and evaluating the past and existing customary rules in a participatory manner. A traditional/customary ceremony named “Tara Bandu ceremony” is requisite for enactment of the village regulations. The village regulations are to be developed in accordance with the following procedures.

### ▶ Procedure of **Formulation of Village Regulations**



1. Review of the past existing rules.



2. Discussion of the draft village regulations.



3. Review of the draft village regulations.



4. Consultation with the communities about the draft village regulations.



5. Finalization of the village regulations and preparation of Tara Bandu ceremony.



6. Organization of Tara Bandu ceremony.



## Steps in Formulation of Village Regulations



**Review customary rules** that communities had obeyed in the past and those effective at present.

01



**Discuss and draft the contents of village regulations** by referring the customary rules as well as those implemented in other villages.

02



**Review the draft village regulations** developed in Step 2.

03



**Hold a series of consultation meetings** at the aldeia level to get feedbacks on the draft village regulations from as many communities in a village as possible.

04



**Finalize the village regulations** and prepare for a customary ceremony (Tara Bandu ceremony).

05



**Hold a customary ceremony (Tara Bandu ceremony)** to officially notify communities in and around a village of the enactment of the village regulations. resources for their future generations

06



## Process 2. Selection of agricultural or forestry extension services/micro programs

**Agriculture and forestry extension services (or micro programs)** are essential for enabling local communities to change the current land uses into sustainable forms and replace the conventional farming practices with more productive and environmentally friendly ones.

The extension services must be effective in implementing the future land use plan and commonly acceptable to a wide range of communities in a village; therefore, the priority extension services should be identified and selected in accordance with the following procedures in a participatory manner.

### ▶ Procedure of Selection of Priority Agriculture and Forestry Extension Services/Micro Programs



1. Long-listing of potential extension services / Micro Programs.



2. Examination of the Potential Extension Services / Micro Programs for Short-listing



3. Evaluation of the Short-listed Extension Services / Micro Programs



4. Discussions of Scopes of the Priority Extension Services / Micro Programs



## Process 3. Institutionalization of the village regulations



It will be still difficult for village leaders and communities to use the village regulations without any support in the initial years even though the regulations are in place through PLUP. In fact, there have been many cases where the effectiveness of the customary rules did not last long after the Tar Bandu ceremony.

It is, therefore, necessary to help local communities, particularly village leaders, govern a village using the village regulations to familiarize themselves with the new system. To this end, the following meetings should be periodically held for at least two to three years after the village regulations are in place.

### ► Procedure of **Formulation of Village Regulations**



1. Monthly monitoring meeting at the village level



2. Quarterly information sharing meeting at the sub-village level



3. Annual evaluation meeting at the village level





## Process 4. Implementation of the Extension Services / Micro Programs



### Seedling Production and Tree Planting Promotion Micro Program

This micro program aims to enable local communities to produce quality seedlings and develop plantations or rehabilitate degraded lands in a village using seedlings produced through a series of hands-on and on-the-job training.



OJT in building a small-scale nursery at Aldeia level using locally available materials.







OJT in maintaining seedlings such as watering, weeding and relocating seedling pots to ensure healthy growth of seedlings in the nursery.



Hands-on training in planting seedlings in a proper manner and measuring the survival rate and growth conditionsof seedlings.





## Sustainable Upland Farming Promotion Micro Program including Community-Based Seed Extension and Sustainable Use of Backyard/Permanent Farm Micro Programs

**T**he main aim of the micro program is to enable communities to continuously use sloping farmlands and produce a sufficient amount of staple and other cash crops without deterioration of soil fertility through a series of hands-on and on-the-job training.







Training in producing organic liquid fertilizer using materials locally available



Training in applying soil conservation measures .



Hands-on training in weeding and applying liquid fertilizer to crops





## Income Generating / Livelihood Development micro program

This micro program targets local women and provides a series of hands-on training with an aim to enable them to earn cash income or improve their daily livelihoods by improving their skills in food processing and handcraft making.



Hands-on training in dress making.



Hands-on training in making



Hands-on training in pickles making



Hands-on training in making







making herbal tea (Checking the quality of herbal tea)



making cassava chips (slicing, weighing and packing)





MAF and the National Directorate of Forest and Watershed Management (NDFWM) have approved and endorsed the following documents with the intention to expand the CB-NRM mechanism more villages throughout the country.

- 📄 Policy Recommendations for CB-NRM Expansion (with a draft ministerial order for promotion of the CB-NRM mechanism)
- 📄 Operation Manual for Establishment of the CB-NRM Mechanism at the Village Level (CB-NRM Operation Manual)
- 📄 CB-NRM Technical Manuals Vol. 1: Seedling Production and Tree Planting, Vol. 2: Sustainable Upland Farming, and Vol. 3: Income Generating/Livelihood Development
- 📄 Manual for Formation of the Watershed Management Council

It is, therefore, recommended that these documents be used by a wide range of stakeholders in the forest sector as main tools for expansion of the CB-NRM mechanism.







## Further Actions to be Taken for Future Generations

**Next Steps...** The following actions are to be further taken for smooth expansion of the CB-NRM mechanism.

- 🕒 Develop capacities of a wide range of stakeholders in the forest sector to introduce the CB-NRM mechanism.
- 🕒 Finalize and approve a legal framework for CB-NRM expansion.
- 🕒 Develop cooperation and linkages with development partners and civil societies to expand the CB-NRM mechanism







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## 🎥 Program Partners:

