

# Manual for Formation of the Watershed Management Council



Prepared by

**The Project for Community-Based Sustainable Natural Resource Management in the Democratic Republic of Timor-Leste**





## FOREWORD

Forest degradation and deforestation is one of the critical issues that the Government of Timor-Leste (GoTL) needs to tackle to achieve sustainable socio-economic development in the country. The study made in 2013 shows that approximately 184,000 ha of forest has disappeared between 2003 and 2012 and around 170,000 ha of dense forest has been degraded into sparse canopy forests for the same period.

Community-Based Natural Resource Management (CB-NRM) is an approach to nature conservation by recognizing the rights of local communities to benefit from sustainable management of natural resources (forests, lands, water, and biodiversity) within a designated area. This is an alternative to a top-down regulatory approach, which has not been necessarily effective in many countries, especially when the regulations do not fully cope with the changes in social, cultural, and economic contexts in the countries.

The Project for Community-Based Sustainable Natural Resource Management (the CB-NRM Project) jointly implemented by the Japan International Cooperation Agency (JICA) and the Ministry of Agriculture and Fisheries (MAF), particularly the National Directorate of Forest and Watershed Management (NDFWM), has developed an operative mechanism for CB-NRM in Timor-Leste. The same project has also issued the following manuals over the course of the project to help MAF expand the same mechanism in major river basins in the country.

- ◆ Operation Manual for Establishment of the CB-NRM Mechanism at the Village Level
- ◆ CB-NRM Technical Manuals
  - Vol. 1: Seedling Production and Tree Planting Promotion
  - Vol. 2: Sustainable Upland Farming Promotion
  - Vol. 3: Income Generating/Livelihood Development
- ◆ Manual for Formation of a Watershed Management Council

The Manual for Formation of a Watershed Management Council describes the procedures for formation of a watershed management council, which can function as a collaboration platform for local leaders to coordinate their efforts for proper management of natural resources in a target watershed. Such an institutional framework has proven to be effective in expanding the CB-NRM mechanism from the village to the watershed level. We, representatives of the MAF, therefore strongly recommend that the same approach should be adopted along with the CB-NRM mechanism in major river basins in Timor-Leste.



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October 2015



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## **About the CB-NRM Manuals**

The CB-NRM Manuals have been developed and published by the JICA and MAF Joint Project named the Community-Based Sustainable Natural Resource Management to provide practical and useful tools for planners and practitioners in the forest sector in Timor-Leste to enable them to protect and manage natural resources in a collaborative and sustainable manner. There are three (3) types of manuals as shown below.

- i) Operation Manual for Establishment of the CB-NRM Mechanism at the Village Level
- ii) CB-NRM Technical Manuals
  - Vol. 1: Seedling Production and Tree Planting
  - Vol. 2: Sustainable Upland Farming Promotion
  - Vol. 3: Income Generating/Livelihood Development
- iii) Manual for Formation of the Watershed Management Council

The Operation Manual is the main document which spells out the standard operation procedures for introduction and establishment of the CB-NRM mechanism at the village level. It is designed for use by planners, field practitioners, and researchers working/studying in the forest sector in Timor-Leste, especially those who engage in forest protection, watershed conservation, and community forestry in the National Directorate of Forest and Watershed Management (NDFWM).

The CB-NRM Technical Manuals supplement the Operation Manual by introducing relevant techniques and skills which can help rural communities use and manage natural resources, especially lands and forests, in a productive and sustainable manner. They will be used mainly by field extension workers (such as MAF municipal staff: namely, municipal officers, extension officers, and forest guards) and NGO staff, as technical references for their field works.

The Manual for Formation of the Watershed Management Council introduces the process to develop a collaboration platform/framework for sustainable natural resource management at the sub-municipal or sub-watershed level, which can also lay groundwork for expansion of the CB-NRM mechanism on watershed scale. As one of the key approaches to improvement of environmental governance at the watershed level by enhancing coordination and networking among local stakeholders, this manual can be of help for those who engage in watershed management.

Furthermore, the JICA and MAF Joint Project has also developed and issued simplified versions of those manuals to help users in the field easily follow the procedures or apply the techniques described in the manuals.

It is hoped that these manuals with their simplified versions will serve as practical references for a wide range of stakeholders in the forest sector in Timor-Leste.

## Manual for Formation of the Watershed Management Council

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## **1. Introduction**

### **1.1 Background**

Between 1972 and 1999, the Democratic Republic of Timor-Leste (Timor-Leste) had reduced its forest cover at a rate of 1.1% per annum or by 24% in total during the period. The latest assessment made by JICS (Japan International Cooperation System)<sup>1</sup> revealed that about 184,000 ha of forests had disappeared between 2003 and 2012 and about 170,000 ha of dense forests had been degraded to sparse forests for the same period. Due to constant deforestation, the total forest coverage became about 50% of the whole country (740,000 ha) in 2012.

Deforestation and forest degradation have been mainly caused by human economic activities, such as i) burning of forest, ii) tree cutting for firewood collection, iii) shifting cultivation, and iv) uncontrolled illegal logging. Deforestation and forest degradation have further caused soil erosion, landslides and flash floods, which have eventually affected the lives of people residing in not only hilly and mountainous areas but also lowlands. Although the Government of Timor-Leste (the GoTL) has made efforts to reduce the progress of deforestation and forest degradation, the situation has not been improved or rather gotten worse as the GoTL has not been able to take effective measures due to the inadequate institutional setup and lack of human resources in the government.

The Japan International Cooperation Agency (JICA) has assisted the GoTL in sustainable management of forest resources in the Lacleo and Comoro river basins introducing a concept of community-based natural resource management (CB-NRM) since November 2005. The Ministry of Agriculture and Fisheries (MAF) and the National Directorate for Forestry (NDF), which split into two national directorates (i.e., the National Directorate of Forest and Watershed Management (NDFWM) and the National Directorate of Forest Conservation (NDFC)) in October 2014, have worked with JICA to tackle this difficult issue since then. As a result of the continuous efforts, a JICA and MAF joint project, named “The Project for Community-Based Sustainable Natural Resource Management” (hereinafter referred to as “the JICA CB-NRM Project”), has developed and demonstrated a mechanism on community-based sustainable natural resource management (hereinafter referred to as “the CB-NRM mechanism”) where forest-based natural resources could be managed and protected by local communities in a sustainable manner.

The JICA CB-NRM Project has also developed several manuals useful for introduction and promotion of the CB-NRM mechanism in major river basins in Timor-Leste, especially in the Lacleo and Comoro river basins. This is one of the manuals developed by the same project, which describes the procedures for formation of a collaborative framework/platform where local stakeholders, such as sub-municipal administrative offices and villages, could work together on sustainable natural resource management on a watershed (or sub-watershed) scale. The manual is based on the experiences gained by the JICA CB-NRM Project in the process of forming the watershed management council of the Noru watershed in 2014/2015.

### **1.2 Objectives of the Manual**

The main objective of the manual is to guide field officers and planners in MAF, especially

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<sup>1</sup> An forest assessment study was conducted by the consultants hired by JICS under the Japan’s Grant Aid Program named the Forest Conservation Program in the Democratic Republic in Timor-Leste” in 2012.

NDFWM, on how to form a collaboration platform on a watershed (or a sub-watershed) scale in coordination with local leaders at the sub-municipal and village levels and make the platform operational as a council for watershed management (hereinafter referred to as “the watershed management council”). Specifically, this manual specifies the procedures for:

- i) identification and analysis of stakeholders relevant to forest/natural resource management in a target watershed;
- ii) Analysis of current conditions of a target watershed in a participatory manner;
- iii) Determination of vision, missions, objectives, and functions of the watershed management council to be formed; and
- iv) Preparation of the watershed management plan in collaboration with local stakeholders.

### **1.3 Coverage/Targets of the Manual**

This manual targets technical staff of MAF, especially NDFWM and MAF municipal officers, and planners/field officers in any organizations working in the forest sector in Timor-Leste. Particularly, the manual will be useful for those who work on sustainable forest management and watershed conservation in the country.

On the other hand, the watershed defined in this manual should be limited to a manageable size, which is a catchments overlapped with at most two (2) sub-municipalities. In fact, it would be difficult to manage a catchment which extends more than two (2) sub-municipalities due to poor accessibilities. Hence, catchments of the secondary or tertiary tributaries of the major river basins in the country would be the targets of this manual in general.

### **1.4 Composition of the Manual**

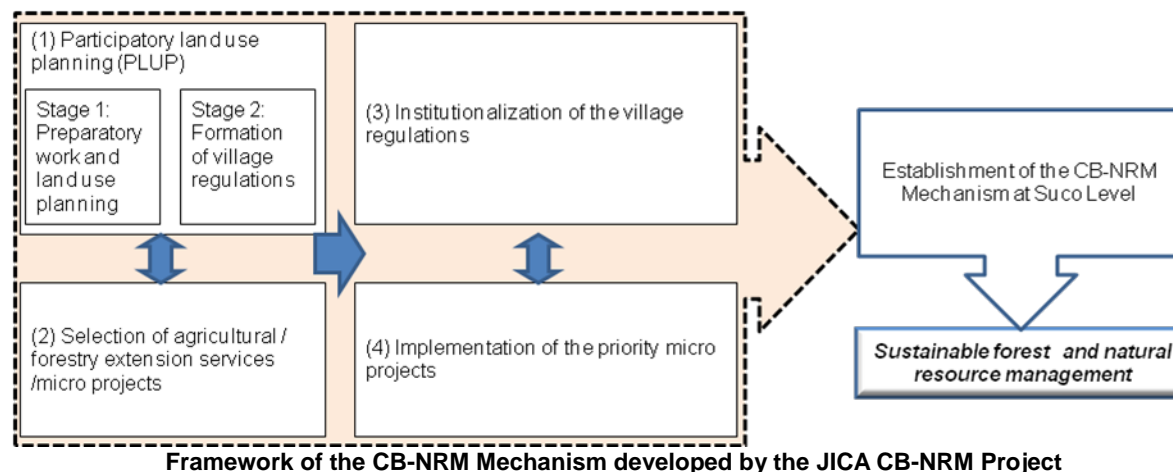
The manual composed of five (5) chapters. Chapter 1 gives the background and objective of the manual, while Chapter 2 introduces the rationale for formation of the watershed management council. The overall process of and detailed procedures for forming the watershed management council are described in Chapter 3. Chapter 4 outlines the process of making a watershed management plan for a watershed located in the Lacle and Comoro river basins. The last chapter, Chapter 5 describes a proposed institutional framework for implementation of this manual with standard schedules for forming the watershed management council and making a watershed management plan.



## **2. Rationale for the Formation of the Watershed Management Council**

### **2.1 Rationale**

The CB-NRM mechanism developed by the JICA CB-NRM Project aims at enhancement of local governance by reinforcing the customary rules/systems in a village along with introduction of improved agricultural and forestry techniques as illustrated below.



**Framework of the CB-NRM Mechanism developed by the JICA CB-NRM Project**

Source: JICA Project Team (2015)

The mechanism has been proven effective in not only reducing illegal activities which have caused forest and land degradation but also improving agricultural and forest production in a village. Although it can generate significant positive impact at the village level, the following limitations have also been confirmed over the course of the CB-NRM Project.

- The mechanism is generally effective only within the territory of a village; therefore, it cannot necessarily influence the activities/attitudes of local communities in the neighboring villages.
- The majority of illegal cases, such as wildfires, illegal cutting, and crop damage caused by grazing animals, have happened along the boundaries with the neighboring villages.
- There has been a need to introduce another mechanism to deal with inter-village issues in coordination with local leaders at the sub-municipal level in addition to introduction of the CB-NRM mechanism at the village level.

It is, therefore, important to introduce and develop a framework where local leaders of villages concerned with a watershed can work together on sustainable management of forest and natural resources in the target area. It is also expected that such a framework can accelerate the expansion of the CB-NRM mechanism on a watershed scale.

In fact, the CB-NRM Project has assisted local leaders in Remexio and Liquidoe Sub-municipalities in Aileu in the formation of the watershed management council for the Noru watershed. The watershed management council has functioned as a collaborative platform where local leaders could cooperate with each other for improvement of natural environment as well as living conditions of local communities in the watershed. Another case of the watershed management council in Lauten has also shown the positive results of such inter-village coordination for sustainable forest management.

## **2.2 Relevance to the Forest Sector Policy**

Watershed conservation is one of the policy objectives of the Forest Sector Policy in Timor-Leste as it contributes to the maintenance of water quality, stabilization of water flows, and reduction of flood risks in the downstream areas in the major river basins. The formation of the watershed management council is expected to contribute to the achievement of the policy objective, as it can enhance local leaders' awareness of forest protection and sustainable management of sloping areas and lay foundation for introduction of the CB-NRM mechanism at the village level. In fact, "public relations," "empowerment of rural communities to protect and manage forest lands," "education of rural and urban communities," and "encouragement of cooperation between rural communities and the Government through technical extension services," which are the strategies enumerated in the policy for watershed conservation, are also elements of the activities proposed for formation of the watershed management council.

## **2.3 Expected Outcomes from the Formation**

The following outcomes are expected to be generated from the formation of the watershed management council based on the experiences in the field.

### Long-term

- i) The incidence of wildfires and illegal cutting will be reduced in a target watershed.
- ii) Inter-village disputes caused by animal grazing will be reduced in a target watershed.
- iii) Vegetation cover in a target watershed will be restored.
- iv) Crop production in a target watershed can be stabilized because of less soil erosion in farms.
- v) The incidence of landslides and floods will decline in a target watershed.

### Short-term

- i) Local leaders in a target watershed (such as village leaders and sub-municipal administrative officer/s) enhance their awareness of necessity of sustainable forest and natural resource management in general and effectiveness of the CB-NRM mechanism in particular.
- ii) Communications between/among local leaders can be improved so that local leaders could work together for solving inter-village issues.
- iii) Local leaders can collaborate with NDFWM, MAF municipal office, and SAS (National Directorate for Water and Sanitation) for forest protection, reforestation, and improvement of local livelihoods.
- iv) Local leaders will be ready to accept and introduce the CB-NRM mechanism in their villages.

### 3. Process of and Procedures for Formation of the Watershed Management Council

#### 3.1 Overall Process

The following eight (8) steps shall be taken to form the watershed management council in coordination with local leaders in a target watershed.

Step 1: Consultations with local leaders concerned with a target watershed about the idea on formation of the watershed management council

Step 2: Meeting with the members of the Noru watershed management council

Step 3: Study tour to one of the villages that the JICA CB-NRM Project assisted in the establishment of the CB-NRM mechanism

Step 4: Meeting with local leaders concerned with a target watershed to analyze stakeholders, select members of the watershed management council, and discuss their roles and responsibilities

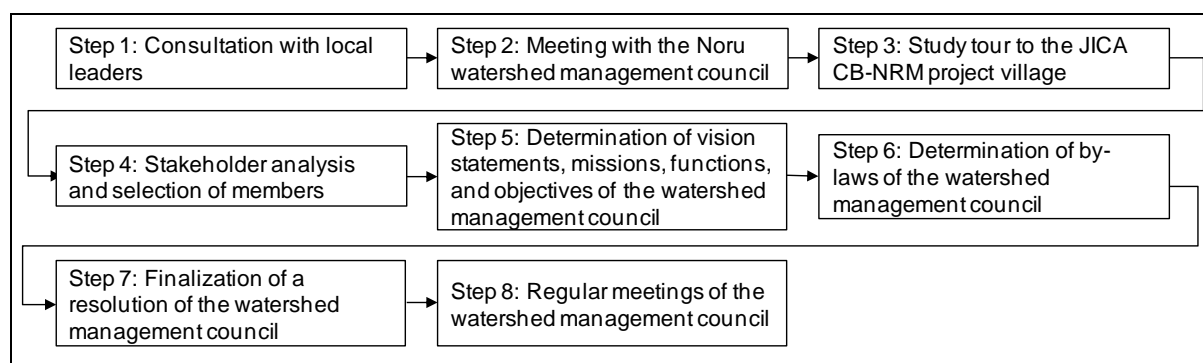
Step 5: Meeting with members of the watershed management council (stakeholders selected as members of the watershed management council) to assess the current situations of a target watershed and discuss vision, missions, and functions of the council

Step 6: Meeting with members of the watershed management council to develop and determine by-laws of the council

Step 7: Meeting with members of the watershed management council to develop and finalize a resolution of the council on its membership, by-laws, vision, missions, and functions

Step 8: Regular meetings of the watershed management council on a quarterly basis

The overall process of the steps listed above is summarized below.



**Overall Process of Formation of the Watershed Management Council**

The following sections show the overall process of the activities for formation of the watershed management council.

## 3.2 Procedures for Formation of the Watershed Management Council

### **【Step 1】 Consultation with Local Leaders**

Prior to meetings and discussions with key stakeholders (e.g., village leaders) in a target watershed, consultations meetings shall be held with local leaders at the respective administrative layers, namely the municipal, sub-municipal, and village levels.

#### (1) Objective

The main objective of the consultation meetings is to obtain prior consent from local leaders at the respective layers on formation of the watershed management council and seek their assistance in the entire process.

#### (2) Target Groups

Municipal and sub-municipal administrators shall be the counterparts of the meetings at the municipal and sub-municipal levels, respectively, while village leaders shall be the main target of the meetings at the village level.

#### (3) Timeframe and Venue

A half-day or one-day meeting shall be held each at the respective target levels. If a target watershed is overlapped with two (2) sub-municipalities, a meeting should be held at each sub-municipality. Meetings with village leaders shall be held at the sub-municipal office/s to which villages belong.

#### (4) Proposed Agenda of the Meeting

The meetings with administrators shall be separately arranged and held at the municipal and sub-municipal offices. In the meetings, the following topics shall be explained.

- a. Aims of the watershed management council
- b. Summary of the results of the CB-NRM mechanism introduced by the JICA CB-NRM Project in its target villages
- c. Schedule of meetings to be held for formation of the watershed management council
- d. Persons/groups to be involved in the process
- e. Expected outputs from formation of the watershed management council

On the other hand, the meetings with village leaders shall be held in the form of a workshop at the sub-municipal office/s concerned. The standard agenda of the meeting is shown below.

**Standard Agenda for the Consultation Meeting**

<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Session 1: Introduction (Purpose and timeframe of the meeting, objectives of the formation of the watershed management council)	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-11:00	Session 2: Explanation of concepts and summary of the results of the CB-NRM mechanism (including a coffee break)	ditto
11:00-12:45	Session 3: Introduction of the process of formation of the council and key participants in the meetings	NDFWM/Municipal Forest Officers Facilitators/NGO
12:00-13:00	Session 4: Confirmation of the intentions of village leaders	ditto
13:00-	Lunch and close	-

Source: JICA Project Team (2015)

The meetings shall be convened under the leadership of a/ sub-municipal administrator/s to facilitate their participation in the meetings.

## (5) Guidelines for the Meeting/Workshop

The meeting with village leaders shall be conducted in accordance with the following procedures.

Session 1(1): Introduce the members who participate in the meeting and explain the purpose of the meeting to the participants.

Session 1(2): Introduce the objective, concepts and necessity of formation of the watershed management council to the participants.

Session 2: Explain the concepts of the CB-NRM mechanism developed by the JICA CB-NRM Project and the results/experiences in the six (6) project villages which the JICA CB-NRM Project have assisted.

Session 3 (1): Explain the process of forming a watershed management council showing a list and schedule of meetings to be held.



### **Tips on discussion**

*Prior to the meeting, you should prepare a list of the meetings/workshops with topics to be discussed and timelines of the meetings as shown in **Appendix 3-1** in this manual.*

Session 3 (2): Remind the participants that they should participate in the meetings as they are key stakeholders relevant to management of a target watershed.

Session 4: Confirm the participants' willingness to form the watershed management council after discussions.

During the meeting, the discussion shall be noted down in flipcharts and memos.

## (6) Inputs (Human Resources and Materials) needed

The following inputs are required for this step.

- Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- Pre-made explanatory materials (flipcharts with a schedule of meetings/workshops to be held in the process)
- Stationary (i.e., flipcharts, felt-type pen, and masking tape)
- Snack, water and lunch for the participants

## (7) Expected Outputs

Unanimous consent on the formation of the watershed management council will be obtained from the relevant stakeholders.

## **【Step 2】 Meeting with the Noru Watershed Management Council**

It is important to help local leaders deepen their understanding of the watershed management council to make their discussions in the process efficient and effective.

### (1) Objectives

The main objective of the meeting is to help local leaders have a clear picture of a watershed management council, in terms of its functions, effectiveness, and roles/responsibilities of its members, through direct dialogues with members of the Noru watershed management council, which is one of the existing watershed management councils in the country.

### (2) Expected Participants

Sub-municipal administrator/s and village leaders concerned with a target watershed shall be invited to the meeting with the Noru watershed management council.

### (3) Timeframe and Venue

A half-day or one-day meeting shall be held at the sub-municipal administrative office of Remexio. Another one (1) or two (2) day/s may be needed for travelling from a target watershed to Remexio.

### (4) Proposed Agenda of the Session

The following table shows the standard agenda for the meeting.

**Standard Agenda for the Meeting with the Noru Watershed Management Council**

Timeframe	Activity	Resource person
10:00-10:15	Session 1: Introduction (Participants and objectives of the meeting)	NDFWM/Municipal Forest Officers Facilitators/NGO
10:15-11:15	Session 2: Briefing of the Noru watershed management council - Process of the formation of the watershed management council - Members of the council - Vision, missions, and functions of the council - Outline of the watershed management plan - Major activities that the council has made (including coffee break)	Facilitators/NGO Representatives of the Noru watershed management council
11:15-12:15	Open discussions (questions and answers)	-
12:15-12:30	Closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

### (5) Guidelines for the Meeting

A meeting with the Noru watershed management council shall be conducted according to the following procedures.

Session 1 (1): Introduce the participants from a target watershed to members/representatives of the Noru watershed management council and vice versa.

Session 1 (2): Explain the purpose, timeframe, and expected outputs of the meeting to the participants.

Session 2: Ask representatives/members of



the Noru watershed management council to explain the following points of the watershed management council to those from a target watershed.

- Process of forming the watershed management council
- Vision, missions, and functions of the council
- Major activities that the council has done
- Outline of the watershed management plan

Session 3: Facilitate the discussions between the participants in the meeting.

During the meeting, the discussion shall be noted down in flipcharts and memos.

#### (6) Inputs (Human Resources and Materials) needed

The following inputs are required for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Meeting materials (i.e., copies of i) the resolution of the Noru watershed management council on membership and by-laws and ii) the watershed management plan for the Noru watershed)
- c. Transportation means for the participants
- d. Snack, water and lunch for the participants
- e. Accommodations for the participants, if necessary

#### (7) Expected Outputs

The local leaders, namely sub-municipal administrator/s and village leaders, can have a clear idea of what the watershed management council is about.

### **【Step 3】 Study Tour to the JICA CB-NRM Project Village**

Local leaders concerned with a target watershed shall be taken to one of the villages that the JICA CB-NRM Project has assisted so that they could learn the CB-NRM mechanism, which could be introduced in villages after the set-up of the watershed management council.

#### (1) Objectives

The main objective of the study tour is to help local leaders have a clear picture of how the CB-NRM mechanism has changed local situations and improved livelihoods of communities by having dialogues with communities in the host village and observing the CB-NRM activities in the field.

#### (2) Expected Participants

Local leaders (i.e., sub-municipal administrator/s and village leaders) concerned with a target watershed shall be the main target groups of the study tour.

#### (3) Timeframe and Venue

One (1) day is used for a field visit and dialogues with communities in the host village. Another one (1) or two (2) day/s may be needed for travelling from a target watershed to the host village.

#### (4) Proposed Agenda of the Session

The following table shows the standard agenda for the meeting.

**Standard Agenda for the Study Tour**

<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Session 1: Introduction (Participants and objectives of the tour)	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-12:30	Session 2: Sharing of experiences of the CB-NRM activities - Outline and process of introduction of the mechanism - Major activities conducted in the process - Roles and responsibilities of the village leaders - Lessons learned (including coffee break)	Facilitators/NGO Villagers of the Host Village
12:30-13:30	Lunch	-
13:30-14:30	Session 3: Questions and answer	Facilitators/NGO
14:30-15:30	Session 4: Field observation	Ditto
15:30-16:00	Closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

#### (5) Guidelines for the Meeting

A meeting with communities in the host village shall be conducted in accordance with the following procedures.

Session 1 (1): Introduce the participants from a target watershed to communities in the host village and vice versa.

Session 1 (2): Explain the purpose, timeframe, and expected outputs of the tour to the participants.

Session 2: Ask village leaders or communities in the host village to explain to those from a target watershed the outline and results of the CB-NRM mechanism putting emphasis on the following points:



- Major activities done for establishment of the CB-NRM mechanism;
- Effectiveness of the village regulations and the CB-NRM techniques (e.g., reforestation and sloping agricultural land management techniques, for sustainable natural resource management and livelihood development) introduced in the village;
- Major roles of village leaders and other villagers in the process of establishing the CB-NRM mechanism; and
- Lessons learned and good practices obtained from the CB-NRM activities.



Session 3: Facilitate discussions between the participants from a target watershed and those in the host village.

Session 4: Take the participants to farms and/or plantations where CB-NRM techniques.

## (6) Inputs (Human Resources and Materials) needed

The following inputs are required for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Meeting materials (copies of the village regulations with future land use map of the host village)
- c. Transportation means for the participants
- d. Chairs and venue for the meeting in the host village
- e. Snack, water and lunch for the participants
- f. Accommodations for the participants, if necessary

## (7) Expected Outputs

Local leaders, namely sub-municipal administrator/s and village leaders, could deepen their understanding of the CB-NRM mechanism, in terms of its activities, possible outputs, and roles of communities in establishing the CB-NRM mechanism.

## 【Step 4】 Stakeholder Analysis and Selection of Members

It is essential to analyze the relevance of local stakeholders to natural resource management in a target watershed and selected appropriate members of the watershed management council based on the analysis of stakeholder (stakeholder analysis) so that the council could function as an effective collaboration platform.

### (1) Objectives

The main objective of this step is to assist local leaders in i) analyzing stakeholders concerned with a target watershed, ii) selecting members of the watershed management council based on the stakeholder analysis, and iii) determining roles and responsibilities of members selected.

### (2) Expected Participants

Local leaders concerned with a target watershed shall be involved in the meeting. It is also advisable to involve relevant government offices at the municipal/sub-municipal levels (e.g., MAF municipal office, Municipal office of National Directorate of Disaster Management, and Municipal/Sub-municipal offices of National Directorate of Water Supply & Sanitation) in the meeting, as they are considered as potential members of the watershed management council.

### (3) Timeframe and Venue

A two-day meeting shall be held at the sub-municipal office.

### (4) Proposed Agenda of the Session

The following tables show the standard agendas for the meetings.

**Standard Agenda for Stakeholder Analysis and Selection of Members**

#### **a. 1<sup>st</sup> day**

<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-12:30	Session 2: Stakeholder analysis (including coffee break)	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Identification of members of the council (including coffee break)	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

#### **b. 2<sup>nd</sup> day**

<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Recapturing of the discussions made in the 1 <sup>st</sup> day	Facilitators/NGO
10:30-12:30	Session 4: Discussions on roles and responsibilities of members (including coffee break)	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 4: Discussions on roles and responsibilities of members (including coffee break)	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

### (5) Guidelines for the Meeting

The meeting and discussions shall be conducted in accordance with the following procedures.

- Session 1: Explain the purpose, timeframe, and expected outputs of the meeting to the participants.
- Session 2(1): Ask the participants to identify and enumerate persons/groups/organizations relevant to management of a target watershed, such as villages/communities, sub-municipal administrative office/s, NPTL, MAF, etc.
- Session 2 (2): Ask the participants to assess the relevance and evaluate importance of persons/groups/organizations identified above using the following formats.

**Format for Discussion**

Name	Relevance (how does the stakeholder relate to management of a watershed?)	Importance (how far is the stakeholder important for management of a watershed?)
	-	-
	-	-
	-	-
	-	-

**Tips on discussion**

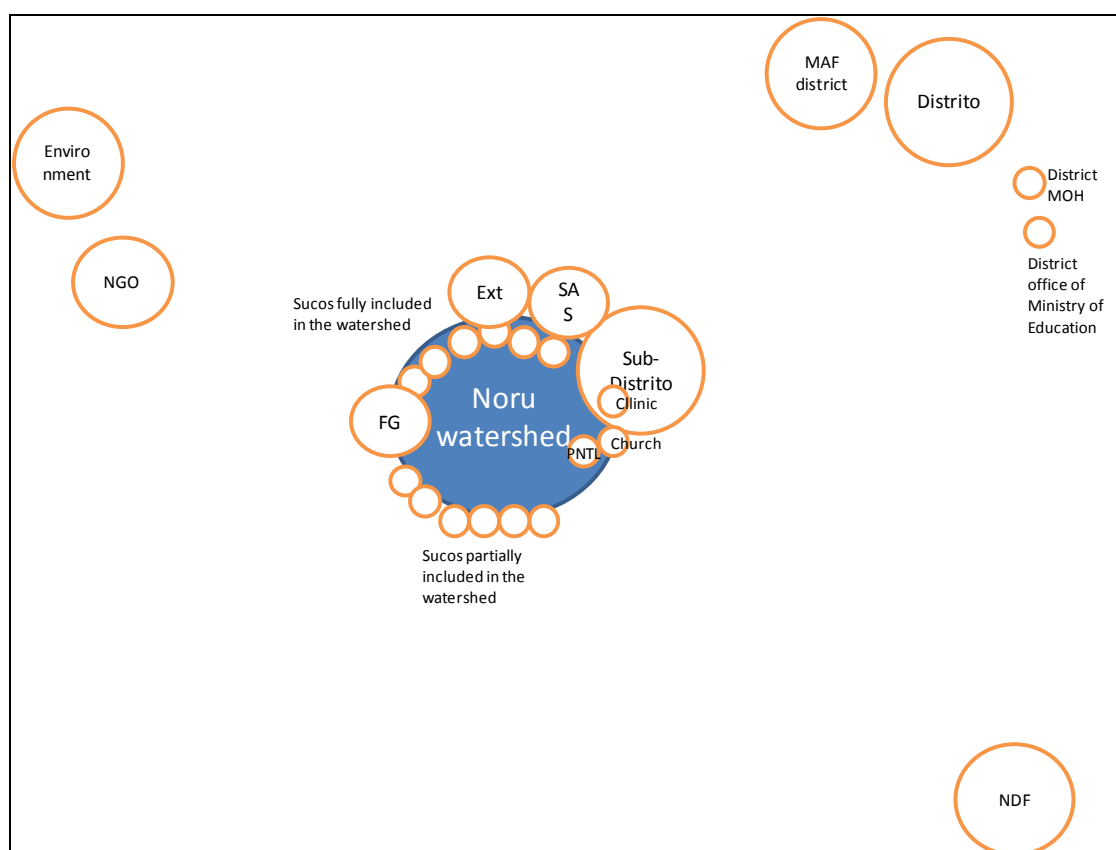
- a. Prior to the meeting, you should prepare a format for discussions in session 2. **Appendix-3.2** shows a sample of the results of discussions.
- b. In case it is difficult for the participants to get a point of discussions, you should give them an example, such as “Forest Guard is highly relevant to watershed management as his main task is to protect forests in a watershed, and he plays an important role in management of a watershed as he is supposed to orient and guide local communities toward sustainable forest management.”

- Session 2 (3): Ask the participants to visualize the relationship/importance of the persons/groups/organizations using a venn diagram method, namely:
- Draw one large circle with a name of a target watershed at the center of a flipchart;
  - Ask the participants to draw a circle of one of the persons/organizations on the same flipchart instructing them to i) make a large circle if the person/organization is important and ii) depict the circle closer to the one of the watershed if the relevance of the person/organization is high (the bigger the circle, the higher the importance, and the closer to the center, higher the relationship with watershed management.); and
  - Do the same for the rest of the persons/groups/organizations identified.



**Tips on discussion**

- a. You can use different sizes of paper circles instead of directly drawing circles on a flipchart. In fact, the use of paper circles is more easy to change the location or size of circles while discussing the importance and relationship of organizations with the participants. However, you should prepare different sizes of paper circles prior to the meeting.
- b. The sample result of the venn diagram is shown below.



**Sample of the Venn Diagram**

- Session 3: Ask the participants to categorize the persons/groups/organizations identified in Session 2 (1) as “member” or “non-member” based on the results of discussions in Sessions 2 (2) and (3).

**Tips on discussion**

- a. In principle, local leaders (i.e., sub-municipal administrator/s and village leaders) should be the members of the council in addition to NDFWM and MAF municipal office concerned.
- b. NDFWM and MAF municipal office concerned shall be the secretariat of the council.
- c. In order to facilitate the discussions, you can introduce the case of the Noru watershed management council to them as an example, namely:

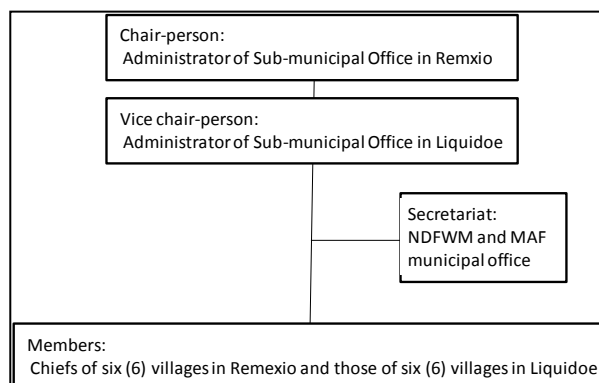
**Members:** administrators of Remexio and Laulara sub-municipal offices, leaders of 12 villages, NDF, MAF municipal office in Aileu, Department of Environment in Aileu, and Water Supply and Sanitation sub-municipal offices in Remexio and Laulara.

**Non-members (Observers):** Municipal Office in Aileu, MOH municipal office, clinics, MOE municipal office in Aileu, Representative of church in Remexio, and NGOs.

Session 4 (1): Ask the participants to determine the structure of a watershed management council introducing the same of the Noru watershed management council as shown right.

Session 4 (2): Ask the participants if they like to add any position to the sampled one or change the same.

Session 4 (3) Ask the participants to discuss and determine i) members who should be placed in the respective positions and ii) roles and responsibilities of the members.



**Structure of the Noru Watershed Management Council**

**Tips on discussion**

- a. To facilitate the discussions, you can introduce the structure of the Noru watershed management council with roles/responsibilities of the members shown in **Appendix-3.3**. The table shown in **Appendix-3.3** should be transcribed on flipcharts to this end prior to the meeting.
- b. You should ask the participants if they like to revise them or add some other roles/responsibilities to them after introduction of the case of the Noru watershed management council.

During the meeting, the discussion shall be noted down in flipcharts and memos.

**(6) Inputs (Human Resources and Materials) needed**

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Premade explanatory materials (i.e., i) flipcharts with a format for stakeholder analysis, ii) flipcharts with the structure of the Noru watershed management council, and iii) flipcharts with descriptions of roles and responsibilities of the members)
- c. Paper circles with different sizes (if necessary)
- d. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- e. Snack, water and lunch for the participants

**(7) Expected Outputs**

Local leader, who would be key members of the watershed management council, will develop an organizational structure of the council and agree on roles and responsibilities of its members.

**【Step 5】 Determination of Vision Statements, Missions, Functions, and Objectives of a Watershed Management Council**

Vision, missions, and objectives shall be developed and agreed upon by members of the watershed management council since they could be the guiding principles for them.

**(1) Objectives**

The main objective of this step is to assist local leaders, who are supposed to be selected as members of the watershed management council in Step 4, in determining vision statements, missions, objectives, and functions of the council.

**(2) Expected Participants**

Stakeholders selected as members of the watershed management council, such as a/ sub-municipal administrator/s, village leaders, and representatives of municipal government offices concerned will be the main participants in the meeting.

**(3) Timeframe and Venue**

A two-day meeting shall be held at the sub-municipal office.

**(4) Proposed Agenda of the Session**

The following tables show the standard agendas for the meetings.

**Standard Agendas for Determination of Vision, Missions, Objectives, and Functions of the Council**

**a. 1<sup>st</sup> day**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-12:30	Session 2: Situation analysis of a target watershed (including coffee break)	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Envisioning of the future condition of a watershed (including coffee break)	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

**b. 2<sup>nd</sup> day**

Timeframe	Activity	Resource person
10:00-10:30	Recapturing of the discussions made in the 1 <sup>st</sup> day	Facilitators/NGO
10:30-12:30	Session 4: Discussions on vision statements and missions of a watershed management council (including coffee break)	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 5: Discussions on objectives and functions of the council (including coffee break)	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

**(5) Guidelines for the Meeting**

The meeting and discussion shall be conducted in accordance with the following procedures.

Session 1: Explain the purpose, timeframe, and expected outputs of the meeting to the participants.

Session 2(1): Show to the participants aerial photo maps of a target watershed with boundaries of the watershed as well as villages concerned to help them understand the current vegetation covers of the watershed.

At the same time, show to the participants a vegetation cover/land use map and slope map covering the area, if available, and explain to them the implications of the maps so that they could grasp current situations of a target watershed.



**Tips on discussion**

- a. Prior to the meeting, you should obtain and process digital data of aerial photos kept in ALGIS and make an A-0 size aerial photo map covering a target watershed.
- b. At the same time, you should make a vegetation cover/land use map and slope map of a target watershed by using the same maps developed by JICS.
- c. The activities written above require skills on the use of GIS software in addition to data of aerial photos, present land use/vegetation cover map, and slope map of the country.
- d. The maps should be printed on A-0 sized papers (or any other materials which must be cheaper than the papers) before the meeting.

Session 2 (2): Help the participants assess: i) how forests and natural resources in a target watershed have been changed and ii) how socio-economic conditions have been influenced by such changes in forests and natural resources asking them to discuss the situations of a target watershed from the following points of view.

**Points on natural resources**

- Progress of deforestation and forest degradation
- Occurrence of landslides and slope failure
- Deterioration of soil fertility caused by soil erosion
- Changes in sources of water in terms of volume and quality
- Any other incidence of environmental degradation events



**Points on socio-economic conditions**

- Any changes in living conditions of local communities
- Any impact on local livelihoods
- Any social problems or concerns caused by changes in natural resources in a target watershed

The following format can be used for the discussions described above.

**Formats for Discussion**

**a. Natural resources**

Villages	Forest degradation	Landslide	Soil erosion	Influence on water	Others

**b. Socio economic conditions**

Villages	Living conditions	Livelihoods	Others

**Tips on discussion**

- a. You should transcribe the formats shown above on flipcharts prior to the meeting, so that you can enter into discussion smoothly.
- b. You should secure sufficient spaces for each topic in the formats to fill all comments given by the participants in the formats as shown in **Appendix-3.4**.

Session 3 (1): Explain the purpose and outline of the session stressing that the participants will draw or express an ideal future of their villages.

Session 3 (2): Ask the participants to freely envision the future of their villages without worrying about resources, money, or time, but do not ask them to consider their own or personal future.

**Tips on discussion**

- a. You can guide them on how to envision the future of their villages using the following phrases:
  - i) Please imagine that you have left your village for 10 years, and after 10 yers without contact, you return to find that things have turned out well.
  - ii) Also imagine that you are walking around the village and observing the village as well as communities.
  - iii) Please imagine silently in your mind how the following things could get better:
    - living conditions in the village;
    - scenery of the village;
    - infrastructure of the village, such as road, houses, water, and school;
    - farms, forests, and water sources; and
    - any other things that might show marked changes.”

Session 3 (3): Let the participants imagine the future for ten minutes, and ask them to draw the things that would stand out most in their vision.

Session 3 (4): Give them an A-5/A-4 size paper with a pencil and ask them to depict a drawing on the paper. Ask them to use colored pencils if necessary.





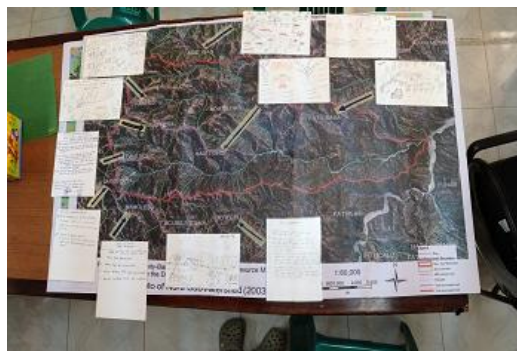
**Tips on discussion**

- a. It may take 30 minutes or more for the participants to draw pictures unless the participants get used to drawing a picture.
- b. You should wait and allow them to decide how they complete the task without any intervention.

Session 3 (5): Place the aerial photo map of a target watershed and ask the participants to put their drawings at the locations of the respective villages on the map.

Session 3 (6): Ask the participants to introduce their visions to each other.

Session 3 (7): Ask the participants to discuss the future vision of a target watershed.



**Tips on discussion**

- a. In case some participants cannot make a drawing, you can advise them to make statements of the future vision of their places.
- b. You should note the discussions, especially their visions of their villages as well as the watershed.

Session 4 (1): Recapture the future visions made and discussed by the participants in Session 3 as this session may be conducted on the 2<sup>nd</sup> day.

Session 4 (2): Ask the participants to discuss and determine a vision statement of the watershed management council referring the same of the Noru watershed management council.



**Tips on discussion**

- a. You can introduce to them the following vision statement of the Noru watershed management council as an example to facilitate their discussions.

**Vision statement of the Noru watershed management council**

The Noru watershed management council is a non-profit alliance comprising sucos and sub-district administrative offices concerned and relevant government agencies with an aim to properly protect and manage forests, lands, and water resources in the Noru watershed to improve living conditions and livelihoods of residents in the watershed and stabilize water supply to the downstream areas.

*b. The vision statement described above shall be transcribed on flipcharts in advance of the meeting.*

Session 4 (3): Discuss and finalize the vision statements of the council referring the sample introduced in Session 4 (2).

Session 4 (4): After determination of the vision statement of the council, ask again them to discuss and determine missions of the council. Likewise, the same of the Noru watershed management council can be used for their discussions.



**Tips on discussion**

*a. Likewise, you can introduce to the missions of the Noru watershed management council to the participants as an example to facilitate their discussions.*

**Missions of the Noru watershed management council**

- to provide guidance and orientation to village leaders in the sucos concerned toward sustainable management of forests and forest-related natural resources (e.g., NTFPs, lands, and water) in the watershed;
- to provide leadership in harmonizing the interests and activities of sucos in the watershed to achieve sustainable forests and forest-related natural resource management in the watershed;
- to take initiative in planning, implementing, and evaluating a watershed management plan to manage forests and forest-related natural resources in a proper and sustainable manner while improving local livelihoods in the watershed;
- to help village leaders in the villages concerned enhance awareness of sustainable forest and forest-related natural resource management among communities in the respective villages;
- to promote necessary actions for sustainable forest and forest-related natural resource management in the watershed in coordination with relevant government and non-government organizations as well as international organizations;
- to help village leaders in the villages concerned hand over the valuable forests and forest-related natural resources to the future generations in the respective villages; and
- to share the experiences in the watershed with local government units (sucos, sub-districts, and districts) in other watersheds in Timor-Leste to promote sustainable forest and forest-related natural resource management at the watershed level.

*b. The missions described above shall be transcribed on flipcharts in advance of the meeting.*

Session 4 (5): Discuss and finalize the missions of the council referring those introduced to them in Session 4 (4).

Session 5 (1): Furthermore, help them discuss and determine objectives and functions of the watershed management council using those of the Noru watershed management council.

**Tips on discussion**

a. *In the beginning of Session 5 (1), the objectives and functions of the Noru watershed management council shall be shared with the participants as samples to enable them to have ideas on those of their council.*

**Objectives of the Noru watershed management council**

- to reduce the incidence of environmental degradation events, such as forest/wild fire, illegal exploitation, and free grazing in the watershed;
- to improve the conditions of forests and forest-related natural resources, namely, forests, lands/soils, and water, in the watershed;
- to maintain and improve livelihoods of local communities in the watershed; and
- to enhance the capacity of village leaders as well as communities in the respective villages to manage forests and forest-related natural resources in a proper and sustainable manner.

**Functions of the Noru watershed management council**

- to formulate a watershed management plan with the assistance from relevant government and non-government organizations;
- to prepare an annual action plan to implement the watershed management plan at the beginning of the year;
- to monitor and evaluate the implementation of the annual action plan at the end of the year;
- to coordinate the implementation of the watershed management plan with relevant government and non-government organizations;
- to convene a regular meeting every quarter to monitor the situations of the watershed and discuss any issues relevant to sustainable management of forests and forest-related natural resources in the watershed;
- to adopt a resolution that would encourage all the sucos in the watershed to work on sustainable forest and forest-related natural resource management in the watershed;
- to call a meeting whenever circumstances require it; and
- to organize a working group (or a committee) to tackle any important issues that would affect the management of the watershed.

b. *The objectives and functions described above shall be transcribed on a flipchart in advance of the meeting.*

Session 5 (2): Finalize the objectives and functions of the council referring the samples shown above.

During the meeting, the discussion shall be noted down in flipcharts and memos.

(6) Inputs (Human Resources and Materials) needed

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)

- b. Aerial photo map of a target watershed
- c. Land use/vegetation cover map and slope map of a target watershed (if available)
- d. A-5 size cardboards
- e. Premade explanatory materials (i.e., i) flipcharts with formats for discussions on current situations of a target watershed and ii) flipcharts with the vision statement, missions, objectives, and functions of the Noru watershed management council)
- f. Stationary (e.g., pencils, colored pencils, flipcharts, felt-type pen, and masking tape)
- g. Snack, water and lunch for the participants

(7) Expected Outputs

Local leader, who would be key members of the watershed management council, will determine and unanimously agree on the vision statements, missions, objectives, and functions of the council.

(8) Follow-up Activities

The secretariat (NDFWM and MAF municipal office concerned) with the assistance from facilitators/NGO shall draft a document stating vision statements, missions, objectives, and functions of the watershed management council based on the results of discussions made in Step 5. **Appendix-3.5** shows the same document for the Noru watershed management council, which can be used as reference for making the document.

## [Step 6] Determination of By-laws of the Watershed Management Council

In addition to vision, missions, functions, and objectives of the watershed management council, it is necessary to put in place by-laws of the council for its operations and management.

### (1) Objectives

The main objective of this step is to assist members of the watershed management council in developing a set of managerial rules of the council, which should also constitute a resolution on formation of the watershed management council.

### (2) Expected Participants

All members of the watershed management council, especially local leaders, shall participate in the meeting.

### (3) Timeframe and Venue

A one-day meeting shall be held at the sub-municipal office.

### (4) Proposed Agenda of the Session

The following table shows the standard agenda for the meeting.

<b>Standard Agenda for Development of By-laws of the Watershed Management Council</b>		
<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-11:00	Session 2: Introduction of the by-laws of the Noru watershed management council	Facilitators/NGO
11:00-11:15	Coffee break	-
11:15-12:30	Session 3: Discussions of by-laws	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Discussions of by-laws (including coffee break)	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

### (5) Guidelines for the Meeting

The meeting and discussions shall be conducted in accordance with the following procedures.

- Session 1: Explain the purpose, timeframe, and expected outputs of the meeting to the participants.
- Session 2: Introduce to the participants the by-laws of the Noru watershed management council, which are shown in **Appendix-3.6**.
- Session 3 (1): Introduce to the participants the results of discussions in Step 4, which can be used for the section of “membership” in by-laws.
- Session 3 (2): Ask the participants to check the sample by-laws one line by one line whether or not they would accept or revise them to draft those of the council.

#### **Tips on discussion**

- a. *The results of discussions in Step 4, especially a structure of the council and roles and responsibilities of the members, shall be transcribed on flipcharts so that the participants could recapture what they discussed and decided before.*

*b. You should transcribe the by-laws of the Noru watershed management council shown in **Appendix-3.6** prior to the meeting.*

All the discussions made by the participants shall be noted down in flipcharts and memos.

**(6) Inputs (Human Resources and Materials) needed**

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Premade explanatory materials (i.e., i) flipcharts with the results of discussions in Step 4 and ii) flipcharts with the by-laws of the Noru watershed management council)
- c. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- d. Snack, water and lunch for the participants

**(7) Expected Outputs**

By-laws or a set of managerial rules of the watershed management council will be developed and agreed on by members of the council in a participatory manner.

**[Step 7] Finalization of a Resolution of the Watershed Management Council**

In the end of the process, all the results, such as vision statements, missions, objectives, functions, and by-laws of the watershed management council, shall be put together into a resolution of the watershed management council with signatures of its members.

**(1) Objectives**

The main objective of this step is to finalize a resolution on the set-up of the watershed management council, which spell outs i) members, ii) vision statements, missions, objectives, and functions, and iii) by-laws of the watershed management council with a unanimous consent from its members.

**(2) Expected Participants in the Meeting**

All members of the watershed management council shall participate in the meeting.

**(3) Timeframe and Venue**

A one-day meeting shall be held at the sub-municipal office.

**(4) Proposed Agenda of the Session**

The following table shows the standard agenda for the meeting.

**Standard Agenda for Finalization of a Resolution of the Council**

<b>Timeframe</b>	<b>Activity</b>	<b>Resource person</b>
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-11:00	Session 2: Introduction of a draft resolution of the watershed management council	Facilitators/NGO
11:00-11:15	Coffee break	-
11:15-12:30	Session 3: Discussions and finalization of the resolution	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-14:00	Session 4: Signing of the resolution	Facilitators/NGO
14:30-15:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

**(5) Preparatory Work**

Prior to the meeting, a resolution which contains i) vision statements, missions, functions, and objectives and ii) by-laws of the council shall be drafted by NDFWM officers and/or MAF municipal officers with the technical assistance from facilitators/NGO based on the results of discussions in the previous step. A sample of the resolution on the set-up of the watershed management council shown in **Appendix-3.7** shall be fully referred for making a draft resolution. The draft resolution shall be transcribed on flipcharts prior to the meeting with members of a council.

**(6) Guidelines for the Meeting**

The meeting and discussions shall be conducted in accordance with the following procedures.

- Session 1: Explain the purpose, timeframe, and expected outputs of the meeting to the participants.

Session 2: Introduce and explain to the participants the draft resolution with its attachments.

Session 3 (1): Ask the participants to scrutinize the draft resolution and its attachments by checking one line by one line whether or not they would accept or revise them.

Session 3 (2): Finalize the resolution based on comments and feedbacks from the participants.



**Tips on discussion**

a. You should bring a laptop computer with a portable printer in the meeting so that you can finalize the resolution while having discussions with members.

Session 4: Ask the participants to sign the resolution.

**(7) Inputs (Human Resources and Materials)**

needed The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Meeting materials (Copies of draft resolution on the watershed management council on its members, vision, missions, functions, and objectives, and by-laws)
- c. Premade explanatory materials (i.e., flipcharts with the draft resolution)
- d. A laptop computer and a printer
- e. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- f. Snack, water and lunch for participants

**(8) Expected Outputs**

A resolution on the set-up of the watershed management council will be finalized and issued with signatures of all its members.

**(9) Follow-up Activities**

Copies of the finalized resolution shall be prepared by the secretariat (NDFWM/MAF municipal office) with the assistance from facilitators/NGO to hand out the same to each member.



## 【Step 8】 Regular Meetings of the Watershed Management Council

After establishment of the watershed management council, the council shall have a meeting every quarter to monitor and discuss any issues on natural resource management in the area.

### (1) Objectives

The main objective of this step is to help the watershed management council have a meeting on a quarterly basis and coordinate their actions to solve any issues on natural resource management and improve livelihoods of communities living in the area.

### (2) Expected Participants in the Meeting

All members of the watershed management council shall participate in the meeting.

### (3) Timeframe and Venue

A one-day meeting shall be held at the sub-municipal office.

### (4) Proposed Agenda of the Session

The following table shows the standard agenda for the meeting.

**Standard Agenda for Regular Meeting of a Watershed Management Council**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Confirmation of participants, introduction of agenda, and opening remarks from Chairperson	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-12:00	Session 2: Reports on any issues on natural resource management from the members	Facilitators/NGO
12:00-12:30	Session 3: Discussions on any issues	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-14:00	Session 3: Discussions on any issues	Facilitators/NGO
14:00-15:00	Session 4: Any special topics	Facilitators/NGO
15:00-15:30	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

### (5) Guidelines for the Meeting

The regular meeting shall be conducted in accordance with the following procedures.

Session 1 (1): Count the number of members attending the meeting to check if the quorum is reached.

Session 1 (2): Introduce the agenda of the meeting and ask Chairperson to open the meeting.

Session 2 (1): Ask members, especially leaders of villages concerned with a target watershed, to report if there is any issue on natural resource management (e.g., occurrence of wildfire, illegal cutting, landslide, or crop damage caused by free



grazing) in their areas,.

Session 3 (1): Discuss any issues and concerns which cannot be solved/settled on the initiative of a single village and need to coordinate their efforts with other villages.

Session 3 (2): Assist members in developing an action plan/resolution/proposal for solving such issues and concerns.



Session 4: Discuss any other topics as needed.

All the discussions should be noted down in flipcharts and memos.

#### (6) Inputs (Human Resources and Materials) needed

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- c. Snack, water and lunch for the participants

#### (7) Expected Outputs

The watershed management council can function as a collaboration platform where local leaders can solve any inter-village issues, such as wildfires, illegal cutting, and animal grazing, in cooperation with each other.

#### (8) Follow-up Activities

A memo or minute of the meeting shall be prepared by the secretariat (NDFWM/MAF municipal office) with the assistance of facilitators/NGO. The memo shall be shared with members of the council in the next meeting.

#### **4. Process of Development of a Watershed Management Plan (only for Watersheds within the Laclo and Comoro River Basins)**

A watershed management plan is to be used as a guiding document by the watershed management council to manage forest and land resources in a target watershed in a proper and sustainable manner. It should be developed by the watershed management council in a participatory manner after its establishment, so that its members could enhance their awareness of current situations of a target watershed and necessary actions to be taken for improvement of watershed environment. It is, however, advisable that this process should be applied only to watersheds located within the Laclo and Comoro river basins, as the watershed management plan developed by the JICA Study<sup>1</sup> for the same river basins can be fully utilized as reference. In fact, it would not be easy to develop a management plan for those which have no existing plan at present, as it requires some surveys and studies for making a plan in general.

##### **4.1 Overall Process**

A watershed management plan shall be developed by taking the following four (4) steps together with members of the watershed management council.

- Step 1: Introduction of the process and objective of making a watershed management plan
- Step 2: Development of a draft watershed management plan for a target watershed in line with the management plan for the Laclo and Comoro river basins
- Step 3: Meetings with members of the council to review and revise the draft watershed management plan for a target watershed
- Step 4: Preparation and finalization of a resolution of the watershed management council on approval and submission of the finalized watershed management plan

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<sup>1</sup> The Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins in the Democratic Republic of Timor-Leste, 2010.

## 4.2 Procedures for Development of a Watershed Management Plan

### 【Step 1】 Introduction of the Process and Objective of Development of a Watershed Management Plan

Prior to the meetings, members of the watershed management council shall be given a clear explanation of the process and objective of making a watershed management plan so that they could accept the activities planned for this purpose.

#### (1) Objective

The main objective of the meeting is to obtain prior consent to the idea on development of a watershed management plan and its associated activities from members of the watershed management council.

#### (2) Target Groups

All members of the watershed management council, especially local leaders of villages, shall participate in the meeting, as a watershed management plan is expected to be used as a guiding document for them to manage lands and forests in a target watershed while improving livelihoods of local communities.

#### (3) Timeframe and Venue

A half-day meeting shall be held at the sub-municipal office.

#### (4) Proposed Agenda of the Meeting

The following table shows the standard agenda for the meeting.

**Standard Agenda for the Meeting**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction of the meeting	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-11:00	Session 2: Introduction and explanation of the objectives and process of making a watershed management plan	ditto
11:00-11:15	Coffee break	-
11:15-11:45	Session 3: Outline of the watershed management plan for the Laclo and Comoro river basins	NDFWM/Municipal Forest Officers Facilitators/NGO
11:45-12:30	Discussions and answers	ditto
12:30-	Lunch and closing	-

Source: JICA Project Team (2015)

#### (5) Guidelines for the Meeting/Workshop

The meeting shall be conducted as follows.

Session 1: Introduce the objectives and timeframe of the meeting to the participants.

Session 2: Explain the objectives and necessity of a watershed management plan using the material attached in **Appendix-4.1** to the participants.



Session 3: Explain to the participant the watershed management plan for the Laclo and Comoro river basins using a presentation material shown in **Appendix-4.2** stressing that the same must be used as a master plan for watersheds located within the same river basins.

**Tips on discussion**

- a. *Prior to the meeting, you should transcribe the material shown in **Appendix-4.1** on flipcharts.*
- b. *You should bring a laptop computer and a projector with you in the meeting for the presentation of the watershed management plan for the Laclo and Comoro river basins using the material shown in **Appendix-4.2**.*

During the meeting, the discussion shall be noted down in flipcharts and memos.

**(6) Inputs (Human Resources and Materials) needed**

The following inputs are required for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Pre-made explanatory materials (i.e., flipcharts with the objectives and process of making a watershed management plan)
- c. A laptop computer and a projector
- d. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- e. Snack, water and lunch for the participants

**(7) Expected Outputs**

Members of the watershed management council will accept an idea on development of a watershed management plan and agree to participate in a series of meetings planned for making the plan.

## **【Step 2】 Development of a Watershed Management Plan**

A watershed management plan for a target watershed shall be developed in line with the management plan for the Lacro and Comoro river basins, which is a master plan for management of lands and forests in the said river basins in an integrated and sustainable manner.

### (1) Objectives

The main objective of the step is to develop a watershed management plan for a target watershed referring the management plan developed for the Noru watershed by the JICA CB-NRM Project based on the master plan for the Lacro and Comoro river basins.

### (2) Persons/Groups responsible for the Step

NDFWM and MAF municipal office shall be responsible for development of a watershed management plan. The work can be contracted out to an external organization (e.g., NGO) or an/ expert/s who is/are capable to do so.

### (3) Timeframe and Venue

It would take one (1) to two (2) month/s to draft a watershed management plan.

### (4) Proposed Contents of the Watershed Management Plan

It is advisable to use the watershed management plan for the Noru watershed as a template for the same for a target watershed. The proposed contents of the plan are shown below.

**Proposed Contents of the Watershed Management Plan**

Chapter	Sections
Chapter 1 Introduction	1.1 Introduction 1.2 Objectives of the Document 1.3 Scope of the Watershed Management Plan 1.4 Composition of the Plan
Chapter 2 Present Conditions of the Watershed	2.1 Location and Administrative Situation of the Watershed 2.2 Natural Conditions 2.2.1 Climate (Rainfalls and Temperature) 2.2.2 Slopes 2.2.3 Elevation 2.2.4 Land Use and Vegetation Covers 2.2.5 Potential of Soil Erosion 2.3 Socio-economic Conditions 2.3.1 Demography 2.3.2 Agricultural Production 2.3.3 Animal Population 2.3.4 Food Security 2.3.5 Estimated Income Level 2.4 Vulnerability to Climate Changes 2.4.1 Projected Climate Changes 2.4.2 Potential Impacts on Communities in the Watershed 2.4.3 Vulnerability of the Watershed to Climate Changes
Chapter 3 Issues on Watershed Management and Stakeholders relevant to Watershed Management	3.1 Issues on Watershed Management 3.1.1 History of Forest Degradation 3.1.2 Current Issues in Watershed 3.2 Stakeholders relevant to Watershed Management 3.2.1 Major Stakeholders 3.2.2 Watershed Management Council
Chapter 4 Goal and Strategic Objectives of the Watershed Management Plan	4.1 Goal and Strategic Objectives 4.2 Overall Guidelines on Land Management in the Watershed
Chapter 5 Watershed Management	5.1 Overall Framework of the Watershed Management Plan

Chapter	Sections
Plan	5.2 Land Use Program 5.2.1 Objectives 5.2.2 Strategies 5.2.3 Participatory Land Use Planning Sub-program (PLUP-SP) 5.3 Farm and Livestock Management Program 5.3.1 Objectives 5.3.2 Strategies and Approaches 5.3.3 Sub-programs 5.4 Reforestation and Forest Protection Program 5.4.1 Objectives 5.4.2 Strategies and Approaches 5.4.3 Sub-programs 5.5 Livelihood Improvement Program 5.5.1 Objectives 5.5.2 Strategies and Approaches 5.5.3 Sub-programs 5.6 Public Awareness Raising Program 5.6.1 Objectives 5.6.2 Strategies and Approaches 5.6.3 Public Awareness Campaign Sub-program (PAC-SP) 5.7 Institutional Strengthening Program 5.7.1 Objectives 5.7.2 Strategies and Approaches 5.7.3 Actions to be Taken for Strengthening of the Watershed Management Council
Chapter 6 Implementation Plan	6.1 Basic Concept 6.2 Implementation Method 6.2.1 Process of Implementation of the Sub-programs 6.2.2 Grouping of the Sucos 6.3 Institutional Framework for Implementation 6.3.1 Organizations to be involved in the Implementation 6.3.2 Proposed Organizational Structure for Implementation 6.4 Necessary Support and Arrangements for Implementation 6.5 Implementation Schedule

Source: *Watershed Management Plan for the Noru Watershed (2015)*

### (5) Points of Discussions/Deliberation

Although the watershed management plans for the Noru watershed as well as the Laclo and Comoro river basins can be fully used as references for making the one for a target watershed, the following points shall be further deliberated to tailor the plan to the conditions of a target watershed.

#### Points of Discussions

Chapter and Sections	Points of discussions
Chapter 1 Introduction 1.1 Introduction 1.2 Objectives of the Document 1.3 Scope of the Watershed Management Plan 1.4 Composition of the Plan	◆ “1.1 Introduction” and “1.3 Scope of the watershed management plan” should be revised and adjusted with the conditions of a target watershed.
Chapter 2 Present Conditions of the Watershed 2.1 Location and Administrative Situation of the Watershed 2.2 Natural Conditions 2.2.1 Climate (Rainfalls and Temperature) 2.2.2 Slopes 2.2.3 Elevation 2.2.4 Land Use and Vegetation Covers 2.2.5 Potential of Soil Erosion	◆ “2.1 Location and Administrative Situation” should be revised based on the geographic and administrative data of a target watershed as well as villages concerned. ◆ Climate data in “2.2.1 Climate” should be updated with the latest ones or replaced with those of the nearest weather stations from a target watershed. ◆ Several types of map, namely slope map, elevation map, land use map, and soil erosion potential map, should be developed and prepared by using the master data (GIS data) of the watershed management plan for the Laclo and Comoro river basins. Data of slopes, elevation, land use, and soil erosion potential in 2.2.2~2.2.5 should be replaced with those newly developed for a target watershed.

Chapter and Sections	Points of discussions
2.3 Socio-economic Conditions 2.3.1 Demography 2.3.2 Agricultural Production 2.3.3 Animal Population 2.3.4 Food Security 2.3.5 Estimated Income Level 2.4 Vulnerability to Climate Changes 2.4.1 Projected Climate Changes 2.4.2 Potential Impacts on Communities in the Watershed 2.4.3 Vulnerability of the Watershed to Climate Changes	<ul style="list-style-type: none"> <li>◆ Data of demography, agricultural production, animal population, food security and estimated income level in 2.3.1~2.3.5 should be revised and replaced with those of villages concerned with a target watershed.</li> <li>◆ “2.4 Vulnerability to Climate Changes” can be basically used for a plan for a target watershed as they describe the general conditions in the mountainous areas in Timor-Leste.</li> </ul>
Chapter 3 Issues on Watershed Management and Stakeholders relevant to Watershed Management 3.1 Issues on Watershed Management 3.1.1 History of Forest Degradation 3.1.2 Current Issues in Watershed 3.2 Stakeholders relevant to Watershed Management 3.2.1 Major Stakeholders 3.2.2 Watershed Management Council	<ul style="list-style-type: none"> <li>◆ “3.1 Issues on Watershed Management” can be used for a plan for a target watershed as the causes of forest degradation are generally common in the Laclo and Comoro river basins.</li> <li>◆ “3.2 Stakeholders relevant to Watershed Management” should be replaced with the results of discussions in the process of forming the watershed management council, such as stakeholder analysis and vision statements, missions, functions, and objectives of the council.</li> </ul>
Chapter 4 Goal and Strategic Objectives of the Watershed Management Plan 4.1 Goal and Strategic Objectives 4.2 Overall Guidelines on Land Management in the Watershed	<ul style="list-style-type: none"> <li>◆ Descriptions in Chapter 4 can be used for a plan for a target watershed since the goal, strategies, and guidelines employed for the Noru watershed are based on the same for the Laclo and Comoro river basins, which could be commonly shared by watersheds within the river basins.</li> </ul>
Chapter 5 Watershed Management Plan 5.1 Overall Framework of the Watershed Management Plan 5.2 Land Use Program 5.3 Farm and Livestock Management Program 5.4 Reforestation and Forest Protection Program 5.5 Livelihood Improvement Program 5.6 Public Awareness Raising Program 5.7 Institutional Strengthening Program	<ul style="list-style-type: none"> <li>◆ The objectives, strategies, approaches, and sub-programs proposed in Chapter 5 can be basically used for a plan for a target watershed.</li> <li>◆ The programs/sub-programs should be reviewed and verified in terms of their adaptability and applicability to the situations of a target watershed.</li> </ul>
Chapter 6 Implementation Plan 6.1 Basic Concept 6.2 Implementation Method 6.2.1 Process of Implementation of the Sub-programs 6.2.2 Grouping of the Sucos 6.3 Institutional Framework for Implementation 6.3.1 Organizations to be involved in Implementation 6.3.2 Proposed Organizational Structure for Implementation 6.4 Necessary Support and Arrangements for Implementation 6.5 Implementation Schedule	<ul style="list-style-type: none"> <li>◆ “6.2 Implementation Method” should be revised and adjusted with the conditions of a target watershed.</li> <li>◆ Likewise, “6.3 Institutional Framework for Implementation” should be revised and adjusted with the structure and organization of the watershed management council.</li> <li>◆ “6.4 Necessary Support and Arrangement for Implementation” and “6.5 Implementation Schedule” can be used for those of the plan for a target watershed.</li> </ul>

Source: *Watershed Management Plan for the Noru Watershed (2015)*

**Tips on discussion**

a. *The two (2) watershed management plans, the plan for the Laloc and Comoro river basins and the other for the Noru watershed, shall be fully referred for making a plan for a target watershed.*



*b. You do not necessarily make a whole set of chapters of the plan at once. In fact, you can make one chapter after the other simultaneously with consultations with members of the watershed management council as explained in Step 3.*

(6) Inputs (Human Resources and Materials) needed

The following inputs are required for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, and facilitators/NGO)
- b. A laptop/desktop computer and a printer

(7) Expected Outputs

A watershed management plan similar to the one for the Noru watershed, which is shown in **Appendix-4.3**, will be drafted.

**【Step 3】 Review and Revision of the Draft Watershed Management Plan**

The draft plan shall be introduced to members of the watershed management council for their review and deliberation. It is important to involve them in the process of finalizing a watershed management plan to foster a sense of ownership of the plan among members.

**(1) Objectives**

The main objective of this step is to discuss and deliberate the draft version of a watershed management plan with members of the watershed management council and obtain their feedbacks, opinions, and ideas for finalization.

**(2) Expected Participants**

All members of the watershed management council shall participate in the meetings.

**(3) Timeframe and Venue**

Four (4) sets of one-day workshop/meeting shall be held at the sub-municipal office.

**(4) Proposed Agenda of the Session**

The following tables show the standard agendas for the meetings

**Standard Agenda for Introduction of the Draft Watershed Management Plan**

**a. 1<sup>st</sup> meeting**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-12:30	Session 2: Presentation of a summaries of Chapters 1 and 2	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Discussions on Chapters 1 and 2	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

**b. 2<sup>nd</sup> meeting**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	Facilitators/NGO
10:30-12:30	Session 2: Presentation of summaries of Chapters 3 and 4	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Discussions on Chapters 3 and 4	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

**c. 3<sup>rd</sup> meeting**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	Facilitators/NGO
10:30-12:30	Session 2: Presentation of a summary of Chapter 5	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Discussions on Chapter 5	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

**d. 4<sup>th</sup> meeting**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	Facilitators/NGO
10:30-12:30	Session 2: Presentation of a summary of Chapter 6	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-15:30	Session 3: Discussions on Chapter 6	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

**(5) Guidelines for the Meetings**

Discussions in the respective meetings shall be conducted in accordance with the following procedures.

Session 1: Explain the purpose, timeframe, and expected outputs of the meetings to the participants.

Session 2: Introduce summaries of the respective chapters using presentation materials prepared before the meetings. Samples of the materials are shown in **Appendix-4.4**.



**Tips on discussion**

a. Prior to the meeting, you should prepare presentation materials which are summaries of the respective chapters of the draft version of a watershed management plan. The materials used for introduction of the draft watershed management plan for the Noru watershed are shown in **Appendix-4.4**.

b. You should also hand out the draft version of each chapter to the participants so that they could go over a whole content of the respective chapters.

Session 3 (1): Ask the participants for their opinions, ideas, and comments on the draft versions.

Session 3 (2): If there are opinions and comments given by the participants, discuss how to revise and improve the draft versions.

All the discussions made in the meetings shall be noted down in flipcharts and memos.

**(6) Inputs (Human Resources and Materials) needed**

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Premade presentation materials (i.e., i) summaries of chapters of the draft watershed management plan)
- c. Meeting materials (i.e., copies of chapters of the draft watershed management plan)
- d. A Laptop computer and a projector
- e. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- f. Snack, water and lunch for participants

**(7) After the Meetings with the Council**

The draft watershed management plan shall be revised by NDFWM with the technical assistance of NGO/facilitator on the basis of discussions in the meetings.

**(8) Expected Outputs**

The draft watershed management plan will be finalized in a participatory manner.

**【Step 4】 Preparation and Finalizations of a Resolution on the Watershed Management Plan**

The finalized watershed management plan shall be approved by the watershed management council as a guiding document and also submitted to relevant offices which might be able to help the council implement the plan in future.

**(1) Objectives**

The main objective of this step is to help the watershed management council approve the final version of a watershed management plan and submit the same to relevant offices/organizations for implementation.

**(2) Expected Participants**

All members of a watershed management council shall participate in the meeting.

**(3) Timeframe and Venue**

A one-day meeting will be held at the sub-municipal office.

**(4) Proposed Agenda of the Session**

The following table shows the standard agenda for the meeting.

**Standard Agenda for Preparation of a Resolution on the Watershed Management Plan**  
**a. 1<sup>st</sup> day**

Timeframe	Activity	Resource person
10:00-10:30	Session 1: Introduction	NDFWM/Municipal Forest Officers Facilitators/NGO
10:30-11:30	Session 2: Presentation of the finalized watershed management plan (including coffee break)	Facilitators/NGO
11:30-12:30	Session 3: Discussion on f a draft resolution on approval and submission of the watershed management plan	Facilitators/NGO
12:30-13:30	Lunch	-
13:30-14:30	Session 3: Discussion on f a draft resolution on approval and submission of the watershed management plan	Facilitators/NGO
14:30-15:30	Session 4: Discussion on submission of the watershed management plan	Facilitators/NGO
15:30-16:00	Wrap up of the discussions and closing	NDFWM/Municipal Forest Officers Facilitators/NGO

Source: JICA Project Team (2015)

**(5) Guidelines for the Meeting**

The meeting and discussions shall be conducted in accordance with the following procedures.

- Session 1: Explain the purpose, timeframe, and expected outputs of the meeting to the participants.
- Session 2: Introduce the final version of a watershed management plan stressing revisions made in the draft version.

**Tips on discussion**

- a. You shall bring a laptop computer with a projector and make a presentation showing the parts revised in the draft version of a watershed management plan to the participants in the meeting.

*b. At the same time, you should circulate one copy of the watershed management plan in the meeting so that the participants could have a clear image of the final version which will be submitted to relevant organizations.*

Session 3(1): Introduce a draft resolution of the council on approval and submission of the watershed management plan.

**Tips on discussion**

*a. You should prepare a draft resolution referring the same of the Noru watershed management council shown in **Appendix-4.5** prior to the meeting.*

*b. The draft resolution should be preferably transcribed on flipcharts so that all the participants/members could catch up the discussions. In addition to the flipcharts, you should hand out a copy of the draft resolution to the participants in the meeting.*

Session 3 (2): Ask the participants for their opinions, ideas, and comments on the draft resolution.

Session 3 (3): If there are opinions and comments given by the participants, discuss how to revise and improve the resolution.

Session 3 (4): Finalize the resolution and ask members of the watershed management council to sign the resolution.

Session 4: Assist the participants in i) determining offices/ organizations to which the council should submit the plan and ii) developing an action plan for submission of the watershed management plan using the following format.



**Sample Format for an Action Plan**

Activities	Organizations	Timelines	Persons responsible
Printing of the watershed management plan	/		
Finalization of the resolution with signatures of the members	/		
Submission of the watershed management plan with the resolution	1.		
	2.		
	3.		

Source: JICA Project Team (2015)

**Tips on discussion**

*a. You should transcribe a format shown above on a flipchart prior to the meeting.*

*b. You should add a few more lines in the format in case the members would identify other activities to be done after finalization of the resolution.*

All the discussions made in the meeting shall be noted down in flipcharts and memos.

#### (6) Inputs (Human Resources and Materials) needed

The following inputs are needed for this step.

- a. Human resources (e.g., NDFWM officer/s, municipal forest officer/s, forest guard/s, and facilitators/NGO)
- b. Meeting materials (i.e., i) a copy of the finalized watershed management plan and ii) copies of a draft resolution on approval and submission of the watershed management plan)
- c. Pre-made explanatory materials (i.e., i) flipcharts with descriptions of the draft resolution and ii) flipchart with a format for an action plan)
- d. A Laptop computer and a projector
- e. Stationary (e.g., flipcharts, felt-type pen, and masking tape)
- f. Snack, water and lunch for participants

#### (7) Expected Outputs

A watershed management plan will be approved as guidelines for the watershed management council and submitted to relevant organizations for further support.

#### (8) Follow-up Activities

The secretariat (NDFWM and MAF municipal office concerned) shall assist the council in the production and submission of the watershed management plan according to the action plan, as it would not be easy for the council to do so without any external support.

## 5. Framework for Implementation

### 5.1 Organizations and Persons responsible for the Works

The National Directorate of Forest and Watershed Management (NDFWM) shall be the principal agency who initiates the formation of the watershed management council. MAF municipal offices concerned and the National Directorate of Nature Conservation (NDNC) shall function as co-implementing agencies as their tasks closely relate to sustainable watershed management. Like in the cases of other CB-NRM activities, NGOs will play an important role over the course of the works, since they would have competent facilitators who have long experience in working with communities.

The expected roles and responsibilities of key players involved in the process of forming the watershed management council and making a watershed management plan are shown below.

#### **Expected Roles and Responsibilities of the Key Players**

Key players	Expected roles and responsibilities
<b>1. Central Level</b>	
(1) NDFWM (NDFWM officers)	<ol style="list-style-type: none"> <li>1. Develop a work plan for formation of the watershed management council with development of a watershed management plan for a target watershed.</li> <li>2. Secure necessary budget to implement the work plan.</li> <li>3. Provide necessary administrative and technical support to the officers (including those working in the municipal office concerned) responsible for the work.</li> <li>4. Hire facilitators/NGO for the field works.</li> <li>5. Monitor and supervise facilitators'/NGO's works with municipal forest officers and forest guards.</li> </ol>
(2) NDNC (NDNC officers)	<ol style="list-style-type: none"> <li>1. Assist the NDFWM in the conducts of field activities for formation of the watershed management council and development of a watershed management plan.</li> <li>2. Provide necessary administrative and financial support to its officers who would work with the NDFWM.</li> </ol>
<b>2. District Level</b>	
(1) MAF municipal office (District Director)	<ol style="list-style-type: none"> <li>1. Assist the NDFWM in the conducts of field activities for formation of the watershed management council and development of a watershed management plan.</li> <li>2. Provide necessary administrative and financial support to municipal forest officer/s and forest guard/s who would work with the NDFWM.</li> </ol>
(2) Municipal forest officer	<ol style="list-style-type: none"> <li>1. Work together with facilitators/NGO over the course of the work.</li> <li>2. Monitor facilitators'/NGO's activities together with NDFWM officers and forest guards.</li> <li>3. Provide guidance and orientation to local leaders together with facilitators/NGO.</li> </ol>
(3) Forest guards	<ol style="list-style-type: none"> <li>1. Provide guidance and orientation to local leaders together with municipal forest officer/s and facilitators/NGO</li> <li>2. Monitor facilitators'/NGO's activities together with NDFWM and municipal forest officer/s</li> </ol>
(4) Facilitators/NGO	<ol style="list-style-type: none"> <li>1. Be responsible for the field works as a contractor.</li> <li>2. Perform as a main facilitator throughout the field works.</li> <li>3. Arrange and organize a series of meetings with local leaders and facilitate their discussions in the meetings.</li> <li>4. Provide necessary guidance and orientation to local leaders in coordination with NDFWM/MAF municipal officers in the meetings.</li> </ol>

Source: JICA Project Team (2015)

### 5.2 Necessary Supports

In order for the key players to fulfill their responsibilities, it is necessary to ensure the following arrangements:

- a. The necessary budget enough to carry out field activities should be allocated for the works;
- b. Transportation means should be secured for the officers responsible for the works;
- c. An NGO or a group of facilitators should be hired to assist the NDFWM in the conducts of field activities; and
- d. Sufficient guidance should be given to the officers responsible and facilitators/NGO hired for the work by using this manual.

### 5.3 Standard Implementation Schedule

The following table shows the standard implementation schedule of the whole processes of forming the watershed management council and making a watershed management plan.

Steps: Activities		Year 1												Year 2			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
<b>1. Formation of the Watershed Management Council</b>																	
Step 1	Consultation with local leaders	■															
Step 2	Meeting with the Noru Watershed Management Council	■															
Step 3	Study tour to the JICA project village		■														
Step 4	Stakeholder Analysis and Selection of Members		■														
Step 5	Determination of Vision Statements, Missions, Functions, and Objectives of the Watershed Management Council			■													
Step 6	Determination of By-laws of the Watershed Management Council				■												
Step 7	Finalization of a Resolution of the Watershed Management Council					■											
Step 8	Regular Meetings of the Watershed Management Council						■			■							■
<b>2. Development of a Watershed Management Plan</b>																	
Step 1	Introduction of the Process and Objective of making a Watershed Management Plan					■											
Step 2	Development of a Watershed Management Plan						■										
Step 3	Review and Revision of the Draft Watershed Management Plan						■	■	■	■							
Step 4	Preparation and Finalizations of a Resolution on the Watershed Management										■						

**Standard Implementation Schedule for Formation of the Watershed Management Council  
and Development of a Watershed Management Plan**

Source: JICA Project Team (2015)



## ***Appendix-3.1***

***Process of Forming a Collaboration  
Platform/Framework on a Watershed  
Scale (or the Watershed Management  
Council)***



## Appendix-3.1: Process of Forming a Collaboration Platform/Framework on a Watershed Scale (or the Watershed Management Council)

### 1. Objectives

The main objective of forming the watershed management council is to develop and institutionalize a collaboration platform/framework where local leaders concerned with a target watershed can work together on sustainable management of forests and other natural resources and improvement of local livelihoods in a target watershed.

### 2. Target Groups

Local leaders concerned with a target watershed, namely sub-municipal administrator/s and village leaders, shall be involved in the entire process as they would be key members of the watershed management council.

### 3. Overall Timeframe

The total length of the process is expected to be about one and a half year (1.5 year). More details of the activities and their timelines are shown in the following sections.

### 4. Major Activities

The following three (3) types of the activities shall be carried out for the works:

- i) Meetings with local leaders, namely, sub-municipal administrators, village leaders, and representatives of relevant government offices to form the watershed management council
- ii) Meeting with members of the watershed management council to develop a watershed management plan for a target watershed
- iii) Meetings with members of the watershed management council to monitor and solve any issues on natural resource management in a target watershed

#### 4.1 Meetings for Formation of the Watershed Management Council

The following meetings with local leaders and other relevant stakeholders shall be arranged and held to form the watershed management council.

No.	Meetings	Participants	Venue	Timeframe
1	Meeting to introduce the idea of a watershed management council to the Sub-district Administrative Office	Sub-district Administrator, Representative of MAF municipal office, Representative of NDFWM, Facilitators/NGO	Sub-municipal Administrative Office	One day in xxx (month), xxxx (year)
2	Consultation with village leaders of sucos concerned	Chiefs de sucos, Sub-municipal Administrator, Representative of MAF municipal office, Representative of NDFWM, Facilitators/NGO	v	One day in xxx (month), xxxx (year)
3	Meeting with the Noru watershed management council	ditto	Sub-municipal Administrative Office of Remexio	One day in xxx (month), xxxx (year)
4	Study tour the JICA CB-NRM Project village	ditto	One of the JICA CB-NRM Project villages	1~3 day in xxx (month), xxxx (year)
5	Meeting to analyze stakeholders, select members of the council and discuss roles/responsibilities of members	ditto	Sub-municipal Administrative Office	1~2 day in xxx (month), xxxx (year)

No.	Meetings	Participants	Venue	Timeframe
6	Meeting to assess the current situations of a target watershed and discuss vision, missions, functions, and objectives of the council	Chiefs de sucos, Sub-municipal Administrator, Representative of MAF municipal office, Representative of NDFWM, Representatives of other government offices selected as members, Facilitators/NGO	Sub-municipal Administrative Office	Two day in xxx (month), xxxx (year)
7	Meeting to develop and determine by-laws of the council	ditto	ditto	One day in xxx (month), xxxx (year)
8	Meeting to develop and finalize a resolution of the council on the establishment of the council	ditto	ditto	One day in xxx (month), xxxx (year)

#### 4.2 Meetings for Development of a Watershed Management Plan

On the other hand, the following activities shall be carried out for development of a watershed management plan by referring the ones developed for the Laclo and Comoro river basins and the Noru watershed.

No.	Activities	Participants	Venue	Timeframe
1	Meeting to introduce the process and objective of development of a watershed management plan	Members of the watershed management council, Facilitators/NGO	Sub-municipal Administrative Office	One day in xxx (month), xxxx (year)
2	Development of a watershed management plan	Secretariat (NDFWM and MAF municipal office concerned), Facilitators/NGO, etc.	NDFWM office	A / month/s in xxxx (year)
3	Meetings to review and revise the draft watershed management plan 1 <sup>st</sup> meeting 2 <sup>nd</sup> meeting 3 <sup>rd</sup> meeting 4 <sup>th</sup> meeting	Members of the watershed management council, Facilitators/NGO Deliberation of Chapters 1 and 2 Deliberation of Chapters 3 and 4 Deliberation of Chapter 5 Deliberation of Chapter 6	Sub-municipal Administrative Office	One day each in xxx (month), xxxx (year)
4	Meeting to finalize a resolution of the council on the watershed management plan	Members of the watershed management council, Facilitators/NGO	ditto	One day in xxx (month), xxxx (year)

#### 4.3 Meetings for Monitoring and Solution of Issues in a Target Watershed

After the set-up of the watershed management council, members of the council shall have a plenary meeting on a quarterly basis to monitor the situations of a target watershed and discuss/solve any issues/concerns on natural resource management in the area in a collaborative manner.

No.	Activities	Participants	Venue	Timeframe
1	Regular meeting on a quarterly basis	Members of the watershed management council, Facilitators/NGO	Sub-municipal Administrative Office	One day every three months
2	Annual meeting at the end of the year to review its activities and make a plan for the following year	ditto	ditto	One day at the end of the year

End of document

## ***Appendix-3.2***

***Results of the Analysis of  
Stakeholders relevant to  
Management of the Noru Watershed  
(Results of the Stakeholder Analysis)***



### Appendix-3.2 Results of the Analysis of Stakeholders relevant to Management of the Noru Watershed (Results of the Stakeholder Analysis)

No.	Name	Relevance to (Involvement in) watershed management	Importance in the management of watershed
1.	District Administrative Office	- Not directly involved in watershed management	- Highly important as its tasks are to give approval for the sub-district administrative offices to work on watershed management and to provide guidance for the same on relevant activities for watershed management.
2.	Sub-district offices of Remexio & Liquidoe	- High relevant - Directly involved in watershed management because of location	- Highly important as they have authority over activities in the watershed.
3.	Sucos located inside the watershed	- High relevant - Directly involved in watershed management because communities in sucos are the landowners of the area.	- High important as chef de suco is responsible for activities at suco level and communities are the actual managers of lands and forests in the watershed.
4.	District MAF/NDF	- Not directly involved in watershed management	- Highly important as District Administrative Office is.
5.	Extensionists	- High relevant - Directly involved in watershed management as they work in the watershed.	- Highly important as they work with communities.
6.	Forest Guard	<u>FG in Remexio</u> - High relevant - Directly involved in watershed management as he lives in the watershed. <u>FG in Liquidoe</u> - Not directly involved in watershed management as he does not live in the watershed and not easy to commute to the watershed.	- Highly important as they are the ones who orient communities towards sustainable forest and watershed management.
7.	District MOH (Health)	- Less relevant - Not directly involved	- Less important
8.	Clinic	- Less relevant - Likely involved directly.	- Less important
9.	Education	- Less relevant - Not directly involved	- Less important
10.	Teachers/principles	- Less relevant	- Less important
11.	ND for Environment	- Not directly involved as there is no branch office at the sub-district level.	- Highly important as the ND for environment is also working for forest conservation.
12.	PNTL	- Directly involved in watershed management as PNTL is working with communities to prevent illegal activities including forest fires.	- Less important as the watershed management is not the task of PNTL.
13.	SAS sub-district in Remexio & Liquidoe	- High relevant as one of SAS tasks is to protect water sources. - Directly involved as the branch offices are located in the respective sub-districts.	- Highly important as SAS would advise and help communities to protect forests and areas around water sources.
14.	Church	- High relevant as its task is to orient local communities.	- Less important as Church has nothing to do with watershed management.
15.	NGO (AMAR, WV, Plan, Haburas, RAEBIA)	- Not directly or continuously involved in watershed management as they are not based in the watershed.	- High important as the NGOs have implemented some activities relevant to watershed management.





## ***Appendix-3.3***

***Structure of the Noru Watershed  
Management Council and  
Roles/Responsibilities of the  
Members of the Council***



### Appendix-3.3 Structure of the Noru Watershed Management Council and Roles/Responsibilities of the Members of the Council

#### 1. Identification of Members of the Watershed Management Council

Based on the discussions of the stakeholder analysis, the participants determined that the following organizations should be the members of the council.

- ▶ Sub-district administrative offices of Remexio and Liquidoe
- ▶ 12 sucos in Remexio and Liquidoe
- ▶ NDF
- ▶ District MAF
- ▶ District office of National Directorate for Environment (NDE)
- ▶ Sub-district offices of National Directorate for Water Supply and Sanitation (NDWSS) in Remexio and Liquidoe

Among the organizations selected as members of the council, it was agreed that the possibility of the involvement of the offices of NDE and NDWSS in the council should be confirmed with the district offices of the relevant NDs prior to finalization of the membership of the council.

On the other hand, the participants decided that the following organizations should be treated as observers at this moment.

- ▶ District representative (District administrator & Focal point)
- ▶ District MOH (Health)
- ▶ Clinic
- ▶ Education
- ▶ Church (Sub-district)
- ▶ NGOs (AMAR, Worldvision, Plan, Haburas, and RAEBIA)

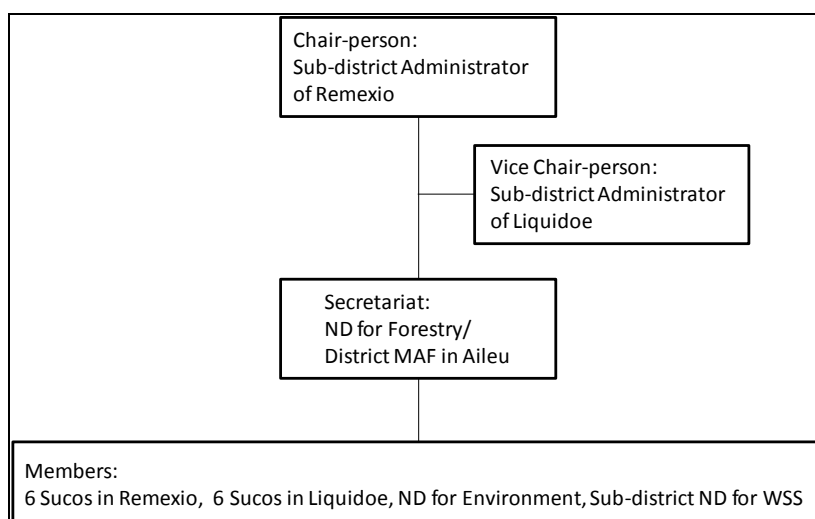
#### 2. Structure of the Watershed Management Council

It was also agreed that the watershed management council was composed of Chair-person, Vice Chair-person, Secretariat, and other members. The members decided to share the responsibilities among the members as follows.

**Framework of the Council and Organizations Appointed to Key Positions**

Position	Name of organization
Chair person	Sub-district administrator of Remexio
Vice Chair person	Sub-district administrator of Liquidoe
Council members	12 chefe de sucos Environment (Optional) SAS sub-district in Remexio & Liquidoe (Optional)
Secretariat	NDF /District MAF

The following chart shows the organizational structure of the watershed management council.



**Organizational Structure of the Noru Watershed Management Council**

### 3. Roles and Responsibilities of the Members

The members determined the roles and responsibilities of the respective members/positions of the watershed management council as follows.

#### **Roles of Responsibilities of the Members of the Watershed Management Council**

<b>Position</b>	<b>Roles/Responsibilities</b>
Chair person (Sub-District Administrator of Remexio)	<ul style="list-style-type: none"> <li>● Convene the regular meeting and ad hoc meeting by the request from the members;</li> <li>● Issue an invitation to the members;</li> <li>● Chair the meeting of the council by facilitating and directing discussions, ensuring basic rules in discussions, putting a question to the vote, and announcing decisions.</li> <li>● Set agenda of the meeting in coordination with Secretariat;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management;</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management; and</li> <li>● Communicate with other agencies, ministries, national directorates, and other organizations for ensuring of proper watershed management.</li> </ul>
Vice Chair person (Sub-District Administrator of Liquidoe)	<ul style="list-style-type: none"> <li>● Support chair person in fulfilling his/her duties;</li> <li>● Act as chairperson when chairperson is not aviable;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management in collaboration with Chairperson; and</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management in collaboration with Chairperson.</li> </ul>
Secretariat (NDF/District MAF)	<ul style="list-style-type: none"> <li>● Assist Chairperson/Vice Chairperson in convening the meeting. issuing and delivering invitation letters to members, and handling the meeting;</li> <li>● Draft agenda of the meeting in coordination with Chairperson and Vice Chairperson;</li> <li>● Be responsible for documentation activities, such as note taking, preparation of resolution/decision,, etc.; and</li> <li>● Help Chairperson and Vice Chairperson communicate with other agencies, ministries, national directorates, and organizations for ensuring of proper watershed management.</li> </ul>
Council members (Chefs de Sucos)	<ul style="list-style-type: none"> <li>● Participate in activities arranged by the council, such as meetings and study tours;</li> <li>● Share ideas and exchange opinions actively in the meetings of the council to solve and settle any issues/problems that would obstruct the achievement of sustainable watershed management;</li> <li>● Follow the rules and regulations agreed upon by the members;</li> <li>● Guide communities in the respective villages to ensure that they would follow</li> </ul>

Position	Roles/Responsibilities
	agreements made by the council; and <ul style="list-style-type: none"> <li>● Encourage communities in the respective villages to protect and manage forest and natural resources in a sustainable manner.</li> </ul>
Council members (Environment)	<ul style="list-style-type: none"> <li>● Same as the roles and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the conducts of environmental protection activities, such as Tara Bandu ceremony, seedling production &amp; reforestation, and environmental education.</li> </ul>
Council members (SAS)	<ul style="list-style-type: none"> <li>● Same as the role and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the protection of sources of water in the respective villages.</li> </ul>
Observer (NGOs, etc.)	Observers can possess rights to: <ul style="list-style-type: none"> <li>● Participate in the meetings/activities organized by the council;</li> <li>● Give advise/suggestion to the members of the council; and</li> <li>● Assist the members of the council in carrying out activities related to watershed management.</li> </ul> Observers might be able to be a member of the council in the future when the council extends its functions and missions aside from forest and natural resource management in the future. Being a member is subject to approval of the council.



## ***Appendix-3.4***

***Results of the Situation Analysis  
(Natural Conditions) of the Watershed***





## Appendix-3.4 Results of the Situation Analysis (Natural Conditions) of the Watershed

### a. Natural Conditions

Suco	Forest	Soil Fertility	Landslide	Water	Others
Asumau	Fully covered with the dense forest in the Portuguese era. Progress of deforestation during the Indonesian times due to large scale tree cutting	Decline of soil fertility due to shifting cultivation	Occurrence of many landslide	Reduction of volume of water	Decrease of wild animals, such as deer and cockatoo
Faturasa	Expansion of dense forests as medium forests have recovered and become dense forest.	Increase of soil fertility because of land conservation	Occurrence of landslide (still)	Increase of water sources and water volume	Same as above
Fahisoi	Reduction of forest coverage in the area	Decline of soil fertility	Increase of occurrence of landslides	No change in terms of volume and quality	No wild animals
Maumeta	Decrease of medium forests in the area	Same as above	Increase of occurrence of landslides due to cutting trees and shifting cultivation	Same as above	Same as above
Hautoho	Expansion of dense forests owing to the village regulations	Same as suco Faturasa	Decrease of landslide because of less tree cutting	Same as above	Same as above
Fadabloco	Same as above.	Same as above	Decrease of landslide	Same as above	Decrease of wild animals
Fahisoi	Increase of forest cover owing to reduction of shifting cultivation	Increase of soil fertility owing to introduction of soil conservation measures introduced by NGOs.	Some landslides	Increase of volume of water volume Good quality of water during the rainy season	Existence of the village regulations developed in 2003 with the one-month support from World Vision
Manucasa	Increase of forest cover	Same as above	Reduction of occurrence of landslide	No change in volume of water in the 10 major sources in the village	Existence of the village regulations developed in 2013 with the support from World Vision and PNTL
Namoleso	Same as above	Some improvement of soil fertility owing to application of soil conservation measures with the support from WV	Occurrence of landslides, which caused damage to the sources of water in the village	There are 7 sources in the village, which are currently used by the communities.	Existence of the village regulations developed in 2009 with the support from World Vision
Bereleu	Decrease of forest cover due to illegal cutting and shifting cultivation	Decline of soil fertility due to no application of soil conservation measures	Occurrence of landslides	Decrease of volume of water	No village regulations
Asubilitoho	Some improvement of forest conditions because of seedlings distributed by MAF	Some improvement of soil fertility	Increase of landslides	No significant change in water in terms of volume and quality	Village regulations were developed this year.
Fatrilau	Decrease of forest cover due to lack of	Decrease of soil fertility	Occurrence of landslides close to	No significant change in water,	No village regulations

Suco	Forest	Soil Fertility	Landslide	Water	Others
	village regulations		the river,	but more water facilities are needed	

#### b. Socio-economic Conditions

Sub-district	Living condition	Livelihood
Remexio	<ul style="list-style-type: none"> <li>- Improvement of accessibility to the sources of water</li> <li>- Changing of farming practice from shifting cultivation to fixed farming</li> <li>- Less free grazing</li> <li>- Less wild fire</li> </ul>	<ul style="list-style-type: none"> <li>- Reduction of time to fetch water</li> <li>- Increase of crop production</li> <li>- Reduction of the volume of trees cut for animal fences</li> <li>- Reduction of the incidence of landslide</li> <li>- Reduction of villagers' expenditure for farming</li> </ul>
Liquidoe	<ul style="list-style-type: none"> <li>- Improvement of living condition owing to the village regulations</li> <li>- Improvement of road conditions which facilitate the access to market</li> <li>- Improvement of accessibility to the sources of water</li> <li>- Reduction of shifting cultivation</li> <li>- Increase of soil fertility because of introduction of terrace</li> <li>- Reduction of the number of violence cases</li> </ul>	<ul style="list-style-type: none"> <li>- Increase in the selling prices of animals</li> <li>- Increase of production of crops owing to soil conservation</li> <li>- Increase of vegetable production</li> <li>- Increase of income from vegetable roduction</li> </ul>

## ***Appendix-3.5***

***Vision, Missions, Objectives, and  
Functions of the Watershed  
Management Council of the Noru  
Watershed***



## **Appendix-3.5 Vision, Missions, Objectives, and Functions of the Watershed Management Council of the Noru Watershed**

### **Section 1: Vision Statement**

The Noru watershed management council is a non-profit alliance comprising sucos and sub-district administrative offices concerned and relevant government agencies with an aim to properly protect and manage forests, lands, and water resources in the Noru watershed to improve living conditions and livelihoods of residents in the watershed and stabilize water supply to the downstream areas.

### **Section 2: Missions**

The missions of the Watershed Management Council are set as follows:

- 2-1 to provide guidance and orientation to village leaders in the sucos concerned toward sustainable management of forests and forest-related natural resources (e.g., NTFPs, lands, and water) in the watershed;
- 2-2 to provide leadership in harmonizing the interests and activities of sucos in the watershed to achieve sustainable forests and forest-related natural resource management in the watershed;
- 2-3 to take initiative in planning, implementing, and evaluating a watershed management plan to manage forests and forest-related natural resources in a proper and sustainable manner while improving local livelihoods in the watershed;
- 2-4 to help village leaders in the sucos concerned enhance awareness of sustainable forest and forest-related natural resource management among communities in the respective sucos;
- 2-5 to promote necessary actions for sustainable forest and forest-related natural resource management in the watershed in coordination with relevant government and non-government organizations as well as international organizations;
- 2-6 to help village leaders in the sucos concerned hand over the valuable forests and forest-related natural resources to the future generations in the respective villages; and
- 2-7 to share the experiences in the watershed with local government units (sucos, sub-districts, and districts) in other watersheds in Timor-Leste to promote sustainable forest and forest-related natural resource management at the watershed level.

### **Section 3: Objective**

The Watershed Management Council shall fulfill the missions listed in the preceding section to achieve the following objectives:

- 3-1 to reduce the incidence of environmental degradation events, such as forest/wild fire, illegal exploitation, and free grazing in the watershed;
- 3-2 to improve the conditions of forests and forest-related natural resources, namely, forests, lands/soils, and water, in the watershed;

- 3-3 to maintain and improve livelihoods of local communities in the watershed; and
- 3-4 to enhance the capacity of village leaders as well as communities in the respective villages to manage forests and forest-related natural resources in a proper and sustainable manner.

#### **Section 4: Functions**

The Watershed Management Council shall perform the following functions necessary for proper management of the Noru watershed.

- 4-1 to formulate a watershed management plan with the assistance from relevant government and non-government organizations;
- 4-2 to prepare an annual action plan to implement the watershed management plan at the beginning of the year;
- 4-3 to monitor and evaluate the implementation of the annual action plan at the end of the year;
- 4-4 to coordinate the implementation of the watershed management plan with relevant government and non-government organizations;
- 4-5 to convene a regular meeting every quarter to monitor the situations of the watershed and discuss any issues relevant to sustainable management of forests and forest-related natural resources in the watershed;
- 4-6 to adopt a resolution that would encourage all the sucos in the watershed to work on sustainable forest and forest-related natural resource management in the watershed;
- 4-7 to call a meeting whenever circumstances require it; and
- 4-8 to organize a working group (or a committee) to tackle any important issues that would affect the management of the watershed.

## ***Appendix-3.6***

***By-Laws of the Watershed  
Management Council of the Noru  
Watershed***





## **Appendix-3.6 By-Laws of the Watershed Management Council of the Noru Watershed**

### **Section 1: Name of the Council**

- 1.1 The name of the watershed management council of the Noru watershed shall be “the Noru Watershed Management Council.”

### **Section 2: Scope and Definition**

- 2.1 The Watershed Management Council shall be a non-profit alliance which comprises sub-district administrative offices and sucos whose jurisdictions fully or partly overlap with the coverage of the Noru watershed located in Sub-district Remexio and Liquidoe, District Aileu.
- 2.2 The following terms used in this document, unless otherwise specified herein, shall have the meanings described below.
  - (1) “CB-NRM” stands for community-based natural resource management, which is an approach introduced by the JICA and MAF joint project to sustainable forest and forest-related natural resource management in Timor-Leste;
  - (2) “Chef de Suco” means the person officially elected as a head of village according to Decree No. 20/II on the Community Leadership and the Election;
  - (3) “Chair-person” means the person who shall be in charge of meetings of the Council and give directions to the members of the Council.
  - (4) “Forest-related natural resources” means the natural resources closely relating to forests, such as water, lands, and non-timber forest products.
  - (5) “Secretariat” means the person or a group of people which shall function to serve as a secretary for the Council.
  - (6) “Watershed” means the hydrological boundaries of the secondary or tertiary tributary of the main river.

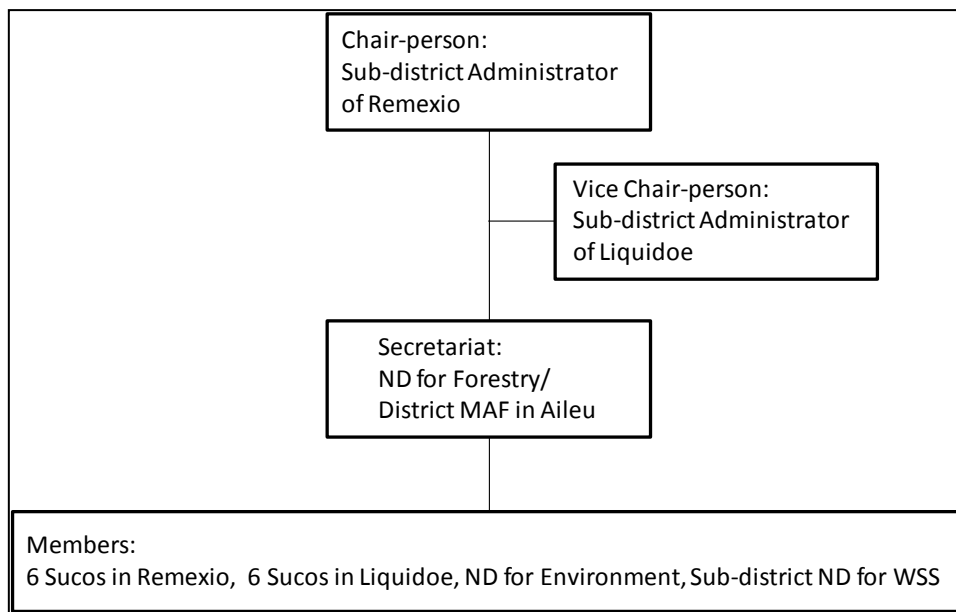
### **Section 3: Membership**

- 3.1 All the sucos of which territories overlap with the coverage of the Noru watershed shall be the members of the Noru Watershed Management Council.
- 3.2 Sub-district Administrators of Remexio and Liquidoe and the district/sub-district branches of the relevant National Directorates, namely the National Directorate of Forestry (NDF), the National Directorate of Environment (NDE), and the National Directorate of Water Supply and Sanitation (NDWSS), should be involved in the Council as the members.
- 3.3 The Council shall be composed of the following members:
  - (1) Sub-district Administrators of Sub-districts Remexio and Liquidoe;
  - (2) Chef de Suco of Six (6) Susos in Sub-district Remexio;
  - (3) Chef de Suco of Six (6) Susos in Sub-district Liquidoe;
  - (4) Representative of the National Directorates of Forestry (NDF), MAF;

- (5) Representative of the District Office in District Aileu, MAF;
  - (6) Representative of the District Office of National Directorate of Environment (NDE) in District Aileu; and
  - (7) Representatives of Sub-District Offices of National Directorate of Water Supply and Sanitation (DNWSS) in Sub-district Remexio and Liquidoe.
- 3.4 When any of the members are replaced with the successors as a result of suco election and organizational changes in the Government of Timor-Leste, The membership shall be renewed in response to the changes.
- 3.5 If Anyone deemed to be relevant to or have a stake in management and protection of forests and forest-related resources in the Noru watershed express an interest in being a member of the Watershed Management Council, the Council shall examine his/her eligibility and decide if the membership should be granted.

**Section 4: Organization**

4.1 The Watershed Management Council shall be composed of one (1) Chair-person, one (1) Vice Chair-person, one (1) Secretariat and other members. The organizational structure of the Council is shown in **Figure 1**.



**Figure 1 Organizational Structure of the Noru Watershed Management Council**

- 4.2 Sub-district Administrator of Remexio shall function as a chair person of the Council, while Sub-district Administrator of Liquidoe shall function as a vice chair person of the same.
- 4.3 NDF and MAF, or its district office in Aileu, shall perform as a secretariat of the Council.
- 4.4 Chefs de Suco of the 12 sucos (e.g., six (6) sucos in Remexio and another six (6) sucos in Lequidoe), sub-district branch offices of NDWSS, and district branch office of NDE shall be other members of the Council.
- 4.5 In case Chair-person cannot fulfill his/her responsibilities for any reason, Vice Chair-person shall take over its roles.

4.6 All members of the Council shall fulfill the roles and responsibilities of the designated positions to which they are appointed. The roles and responsibilities of the respective positions of the Watershed Management Council are presented in **Table 1**.

**Table 1 Roles of Responsibilities of the Members of the Watershed Management Council**

<b>Position</b>	<b>Roles/Responsibilities</b>
Chair person (Sub-District Administrator of Remexio)	<ul style="list-style-type: none"> <li>● Convene the regular meeting and ad hoc meeting by the request from the members;</li> <li>● Issue an invitation to the members;</li> <li>● Chair the meeting of the council by facilitating and directing discussions, ensuring basic rules in discussions, putting a question to the vote, and announcing decisions.</li> <li>● Set agenda of the meeting in coordination with Secretariat;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management;</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management; and</li> <li>● Communicate with other agencies, ministries, national directorates, and other organizations for ensuring of proper watershed management.</li> </ul>
Vice Chair person (Sub-District Administrator of Liquidoe)	<ul style="list-style-type: none"> <li>● Support chair person in fulfilling his/her duties;</li> <li>● Act as chairperson when chairperson is not aviable;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management in collaboration with Chairperson; and</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management in collaboration with Chairperson.</li> </ul>
Secretariat (NDF/District MAF)	<ul style="list-style-type: none"> <li>● Assist Chairperson/Vice Chairperson in convening the meeting. issuing and delivering invitation letters to members, and handling the meeting;</li> <li>● Draft agenda of the meeting in coordination with Chairperson and Vice Chairperson;</li> <li>● Be responsible for documentation activities, such as note taking, preparation of resolution/decision,, etc.; and</li> <li>● Help Chairperson and Vice Chairperson communicate with other agencies, ministries, national directorates, and organizations for ensuring of proper watershed management.</li> </ul>
Council members (Chefs de Sucos)	<ul style="list-style-type: none"> <li>● Participate in activities arranged by the council, such as meetings and study tours;</li> <li>● Share ideas and exchange opinions actively in the meetings of the council to solve and settle any issues/problems that would obstruct the achievement of sustainable watershed management;</li> <li>● Follow the rules and regulations agreed upon by the members;</li> <li>● Guide communities in the respective villages to ensure that they would follow agreements made by the council; and</li> <li>● Encourage communities in the respective villages to protect and manage forest and natural resources in a sustainable manner.</li> </ul>
Council members (Environment)	<ul style="list-style-type: none"> <li>● Same as the roles and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the conducts of environmental protection activities, such as Tara Bandu ceremony, seedling production &amp; reforestation, and environmental education.</li> </ul>
Council members (SAS)	<ul style="list-style-type: none"> <li>● Same as the role and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the protection of sources of water in the respective villages.</li> </ul>

4.7 The Council, or Secretariat specifically, can be assisted by any competent organizations, such as NGOs, in the operations of the Council.

4.8 No member of the Council shall receive any compensation for the performance of his/her duties under the Council.

## **Section 5: Meetings**

- 5.1 The meetings of the Council shall be held at the Sub-district Administrative Offices in Remexio or Liquidoe alternately in principle. The members at the preceding meeting of the Council shall decide and agree with where the next meeting shall be convened.
- 5.2 The Council shall hold the following meetings with its members on a regular basis.
  - (1) Quarterly Meeting
  - (2) Annual Meeting
- 5.3 The quarterly meeting shall be held every quarter of the year (e.g., at the beginning of March, June, September, and December). At the meeting, the members of the Council shall discuss any issues and concerns to be addressed to properly manage forests and forest-related natural resources in the watershed and protect livelihoods of communities living in the same.
- 5.4 The annual meeting shall be held at the end of the year or beginning of the year (e.g., at the middle/end of December or beginning of January). At the meeting, the members of the Council shall review and evaluate the situation of the watershed and the activities conducted by the Council for a year.
- 5.5 Special meetings of the Council may be called at any time by Chairperson or a majority of the members if he/they deem/s it necessary to do for the interest of the members as well as the Council.
- 5.6 Notices of the meetings shall be distributed to all members at least one (1) week before the date set for the meetings. The notice shall state the objectives/purposes, time and venue of the meetings.
- 5.7 In case any of the members is not able to attend the meeting, he/she shall designate a proxy for the meeting.
- 5.8 At the meetings, the presence of more than 50% (or more than 9 persons) of the members and their proxies shall be necessary and sufficient to constitute a quorum for official discussions of the Council in addition to the presence of either Chairperson or Vice Chairperson. If the quorum is not present at any meeting, it may be adjourned by the members.

## **Section 6: Decision Making**

- 6.1 Resolutions and any decisions of the Council shall be made, adopted, and effective with the approval of more than 50 % (more than 9 persons) of the official members of the Council at the meeting sufficient to constitute a quorum and duly convened with the presence of Chairperson or Vice Chairperson.
- 6.2 Any decision made without the presence of Chairperson or Vice Chairperson shall be deemed invalid.

## **Section 7: Committee**

- 7.1 The Council, by resolution adopted by a majority of the members, may create a special committee which shall work on specific tasks delegated to it. The members of the special committee shall be appointed by the members of the Council in the meeting.
- 7.2 Meetings of the committee shall be held at such times and places as shall be fixed by the respective committee chairperson or by consensus of a majority of the members of

the committee. Prior notice shall be given to all members of the committee before each meeting.

- 7.3 Unless otherwise provided by resolution of the Council, more than half of the official members of the committee shall constitute a quorum for discussions of the committee.
- 7.4 Any decision of the committee shall be made with approval of a majority of the official members of the committee.

**Section 8: Amendments**

- 8.1 These bylaws may be altered, amended, repealed or added to with the approval of not more than 50 % of the official members..



## ***Appendix-3.7***

***Resolution of the Watershed  
Management Council of the Noru  
Watershed***





### **Appendix-3.7 Resolution of the Watershed Management Council of the Noru Watershed**

**Whereas**, the Noru watershed is one of the watersheds which constitute the Laclo river basin and has an important role in the watershed management of the same basin owing to its forest cover and topographic conditions;

**Whereas**, three (3) sucos in the Noru watershed have developed a mechanism to manage and protect forests and forest-related resources in a sustainable manner with the assistance from a joint project between the Ministry of Agriculture and Fisheries (MAF) and the Japan International Cooperation Agency (JICA);

**Whereas**, MAF/NDF and Sub-district Administrators of Remexio and Liquidoe have realized that forests and forests-related resources in the Noru watershed should be properly protected and managed by introducing and disseminating the same mechanism in all the sucos concerned with the watershed;

**Whereas**, All the 12 sucos of which territories fully or partly overlap with the coverage of the Noru watershed have confirmed with each other that sustainable management of forest and forest-related resource management, as well as watershed management are common goal of communities in the respective sucos; and

**Whereas**, Sub-district Administrators of Remexio and Liquidoe and village leaders of the same 12 sucos have agreed to establish a watershed management council to achieve the aforementioned goal for the future generations of the villages.

**NOW, THEREFORE, BE IT RESOLVED by the members of the Watershed Management Council of the Noru Watershed as follows:**

Section 1: The following persons are selected as members of the Watershed Management Council until their respective successors are appointed and qualified or until their earlier resignations:

- a. Sub-district Administrator of Sub-district Remexio
- b. Sub-district Administrator of Sub-district Liquidoe
- c. Chef de Suco of Suco Faturasa, Sub-district Remexio
- d. Chef de Suco of Suco Fadabloco, Sub-district Remexio
- e. Chef de Suco of Suco Hautoho, Sub-district Remexio
- f. Chef de Suco of Suco Maumeta, Sub-district Remexio
- g. Chef de Suco of Suco Fahisoi, Sub-district Remexio
- h. Chef de Suco of Suco Asumau, Sub-district Remexio
- i. Chef de Suco of Suco Fahisoi, Sub-district Liquidoe
- j. Chef de Suco of Suco Fatrilau, Sub-district Liquidoe
- k. Chef de Suco of Suco Bereleu, Sub-district Liquidoe
- l. Chef de Suco of Suco Acubili Toho, Sub-district Liquidoe
- m. Chef de Suco of Suco Namcleso, Sub-district Liquidoe
- n. Chef de Suco of Suco Manucasa, Sub-district Liquidoe

- o. Head of Department for Reforestation / Head of Department for Watershed Management, NDF
- p. District Director of MAF District Office in Aileu of MAF
- q. District Officer of National Directorate for Environment in Aileu
- r. Sub-district Officer of National Directorate for Water Supply and Sanitation (NDWSS) in Sub-district Remexio
- s. Sub-district Officer of NDWSS in Sub-district Liquidoe

Section 2: The members of the Watershed Management Council hereby declare and share the vision, missions, objectives, and functions of the Council as presented hereto as **“Vision Statement, Missions, Objectives, and Functions of the Watershed Management Council”** in **Annex-1**.

Section 3: The members of the Watershed Management Council hereby approve the By-laws of the Council, in the form attached hereto as **Annex -2**.

Section 4: These resolutions shall take effect immediately.

**Dated: XX XX, 201X**

**Chairperson**

**Vice Chairperson**

\_\_\_\_\_  
 xxxxxxxxx  
 Sub-district  
 Administrator of  
 Remexio

\_\_\_\_\_  
 xxxxxxxxx  
 Sub-district  
 Administrator of  
 Liquidoe

**Secretariat**

\_\_\_\_\_  
 xxxxxxxxx  
 District Director of  
 MAF District Office  
 in Aileu

\_\_\_\_\_  
 xxxxxxxxx  
 Chief of Department  
 of Reforestation,  
 NDF

\_\_\_\_\_  
 xxxxxxxxx  
 Chief of Department  
 of Soil and Water  
 Conservation, NDF

**Members**

\_\_\_\_\_  
 xxxxxxxxx  
 Chef de Suco  
 Asumau

\_\_\_\_\_  
 xxxxxxxxx  
 Chef de Suco  
 Fadabloco

\_\_\_\_\_  
 xxxxxxxxx  
 Chef de Suco  
 Fahiso

XXXXXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Faturasa

XXXXXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Hautoho

XXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Maumeta

XXXXXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Acubili

XXXXXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Bereleu

XXXXXXX  
\_\_\_\_\_  
Chef de Suco  
Fahisoi

\_\_\_\_\_  
Alberto Henrique  
Chef de Suco  
Fatrila

\_\_\_\_\_  
Manuel Mendonca  
Chef de Suco  
Manucasa

\_\_\_\_\_  
Aleixo da Costa  
Chef de Suco  
Namcleso

XXXXXXXXXX  
\_\_\_\_\_  
Representative  
District Office of  
NDE in Aileu

XXXXXXXXXX  
\_\_\_\_\_  
Representative  
Sub-district Office of  
NDWSS in Remexio

XXXXXXX  
\_\_\_\_\_  
Representative  
Sub-district Office of  
NDWSS in Liquidoe

# **Annex-1: Vision, Missions, Objectives, and Functions of the Watershed Management Council of the Noru Watershed**

## **Section 1: Vision Statement**

The Noru watershed management council is a non-profit alliance comprising sucos and sub-district administrative offices concerned and relevant government agencies with an aim to properly protect and manage forests, lands, and water resources in the Noru watershed to improve living conditions and livelihoods of residents in the watershed and stabilize water supply to the downstream areas.

## **Section 2: Missions**

The missions of the Watershed Management Council are set as follows:

- 2-1 to provide guidance and orientation to village leaders in the sucos concerned toward sustainable management of forests and forest-related natural resources (e.g., NTFPs, lands, and water) in the watershed;
- 2-2 to provide leadership in harmonizing the interests and activities of sucos in the watershed to achieve sustainable forests and forest-related natural resource management in the watershed;
- 2-3 to take initiative in planning, implementing, and evaluating a watershed management plan to manage forests and forest-related natural resources in a proper and sustainable manner while improving local livelihoods in the watershed;
- 2-4 to help village leaders in the sucos concerned enhance awareness of sustainable forest and forest-related natural resource management among communities in the respective sucos;
- 2-5 to promote necessary actions for sustainable forest and forest-related natural resource management in the watershed in coordination with relevant government and non-government organizations as well as international organizations;
- 2-6 to help village leaders in the sucos concerned hand over the valuable forests and forest-related natural resources to the future generations in the respective villages; and
- 2-7 to share the experiences in the watershed with local government units (sucos, sub-districts, and districts) in other watersheds in Timor-Leste to promote sustainable forest and forest-related natural resource management at the watershed level.

## **Section 3: Objective**

The Watershed Management Council shall fulfill the missions listed in the preceding section to achieve the following objectives:

- 3-1 to reduce the incidence of environmental degradation events, such as forest/wild fire, illegal exploitation, and free grazing in the watershed;
- 3-2 to improve the conditions of forests and forest-related natural resources, namely, forests, lands/soils, and water, in the watershed;

- 3-3 to maintain and improve livelihoods of local communities in the watershed; and
- 3-4 to enhance the capacity of village leaders as well as communities in the respective villages to manage forests and forest-related natural resources in a proper and sustainable manner.

#### **Section 4: Functions**

The Watershed Management Council shall perform the following functions necessary for proper management of the Noru watershed.

- 4-1 to formulate a watershed management plan with the assistance from relevant government and non-government organizations;
- 4-2 to prepare an annual action plan to implement the watershed management plan at the beginning of the year;
- 4-3 to monitor and evaluate the implementation of the annual action plan at the end of the year;
- 4-4 to coordinate the implementation of the watershed management plan with relevant government and non-government organizations;
- 4-5 to convene a regular meeting every quarter to monitor the situations of the watershed and discuss any issues relevant to sustainable management of forests and forest-related natural resources in the watershed;
- 4-6 to adopt a resolution that would encourage all the sucos in the watershed to work on sustainable forest and forest-related natural resource management in the watershed;
- 4-7 to call a meeting whenever circumstances require it; and
- 4-8 to organize a working group (or a committee) to tackle any important issues that would affect the management of the watershed.

**Annex-2: By-Laws  
of  
the Watershed Management Council of the Noru Watershed**

**Section 1: Name of the Council**

- 1.1 The name of the watershed management council of the Noru watershed shall be “the Noru Watershed Management Council.”

**Section 2: Scope and Definition**

- 2.1 The Watershed Management Council shall be a non-profit alliance which comprises sub-district administrative offices and sucos whose jurisdictions fully or partly overlap with the coverage of the Noru watershed located in Sub-district Remexio and Liquidoe, District Aileu.
- 2.2 The following terms used in this document, unless otherwise specified herein, shall have the meanings described below.
- (1) “CB-NRM” stands for community-based natural resource management, which is an approach introduced by the JICA and MAF joint project to sustainable forest and forest-related natural resource management in Timor-Leste;
  - (2) “Chef de Suco” means the person officially elected as a head of village according to Decree No. 20/II on the Community Leadership and the Election;
  - (3) “Chair-person” means the person who shall be in charge of meetings of the Council and give directions to the members of the Council.
  - (4) “Forest-related natural resources” means the natural resources closely relating to forests, such as water, lands, and non-timber forest products.
  - (5) “Secretariat” means the person or a group of people which shall function to serve as a secretary for the Council.
  - (6) “Watershed” means the hydrological boundaries of the secondary or tertiary tributary of the main river.

**Section 3: Membership**

- 3.1 All the sucos of which territories overlap with the coverage of the Noru watershed shall be the members of the Noru Watershed Management Council.
- 3.2 Sub-district Administrators of Remexio and Liquidoe and the district/sub-district branches of the relevant National Directorates, namely the National Directorate of Forestry (NDF), the National Directorate of Environment (NDE), and the National Directorate of Water Supply and Sanitation (NDWSS), should be involved in the Council as the members.
- 3.3 The Council shall be composed of the following members:
- (1) Sub-district Administrators of Sub-districts Remexio and Liquidoe;
  - (2) Chef de Suco of Sixx (6) Susos in Sub-district Remexio;
  - (3) Chef de Suco of Sixx (6) Susos in Sub-district Liquidoe;

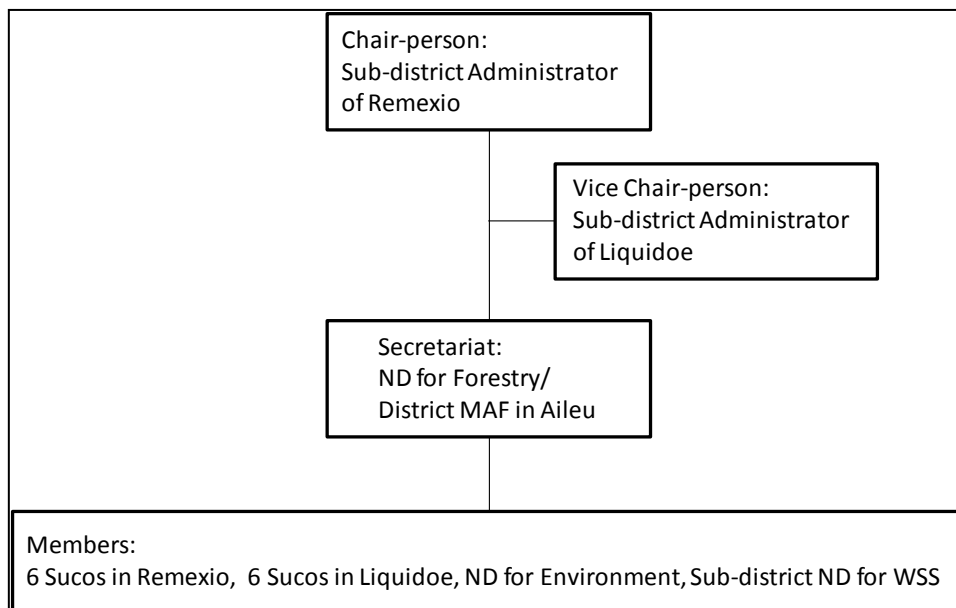
- (4) Representative of the National Directorates of Forestry (NDF), MAF;
- (5) Representative of the District Office in District Aileu, MAF;
- (6) Representative of the District Office of National Directorate of Environment (NDE) in District Aileu; and
- (7) Representatives of Sub-District Offices of National Directorate of Water Supply and Sanitation (DNWSS) in Sub-district Remexio and Liquidoe.

3.4 When any of the members are replaced with the successors as a result of suco election and organizational changes in the Government of Timor-Leste, The membership shall be renewed in response to the changes.

3.5 If Anyone deemed to be relevant to or have a stake in management and protection of forests and forest-related resources in the Noru watershed express an interest in being a member of the Watershed Management Council, the Council shall examine his/her eligibility and decide if the membership should be granted.

**Section 4: Organization**

4.1 The Watershed Management Council shall be composed of one (1) Chair-person, one (1) Vice Chair-person, one (1) Secretariat and other members. The organizational structure of the Council is shown in **Figure 1**.



**Figure 1 Organizational Structure of the Noru Watershed Management Council**

4.2 Sub-district Administrator of Remexio shall function as a chair person of the Council, while Sub-district Administrator of Liquidoe shall function as a vice chair person of the same.

4.3 NDF and MAF, or its district office in Aileu, shall perform as a secretariat of the Council.

4.4 Chefs de Suco of the 12 sucos (e.g., six (6) sucos in Remexio and another six (6) sucos in Lequidoe), sub-district branch offices of NDWSS, and district branch office of NDE shall be other members of the Council.

4.5 In case Chair-person cannot fulfill his/her responsibilities for any reason, Vice

Chair-person shall take over its roles.

4.6 All members of the Council shall fulfill the roles and responsibilities of the designated positions to which they are appointed. The roles and responsibilities of the respective positions of the Watershed Management Council are presented in **Table 1**.

**Table 1 Roles of Responsibilities of the Members of the Watershed Management Council**

<b>Position</b>	<b>Roles/Responsibilities</b>
Chair person (Sub-District Administrator of Remexio)	<ul style="list-style-type: none"> <li>● Convene the regular meeting and ad hoc meeting by the request from the members;</li> <li>● Issue an invitation to the members;</li> <li>● Chair the meeting of the council by facilitating and directing discussions, ensuring basic rules in discussions, putting a question to the vote, and announcing decisions.</li> <li>● Set agenda of the meeting in coordination with Secretariat;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management;</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management; and</li> <li>● Communicate with other agencies, ministries, national directorates, and other organizations for ensuring of proper watershed management.</li> </ul>
Vice Chair person (Sub-District Administrator of Liquidoe)	<ul style="list-style-type: none"> <li>● Support chair person in fulfilling his/her duties;</li> <li>● Act as chairperson when chairperson is not available;</li> <li>● Give guidance and orientation to the members of the council towards sustainable watershed management in collaboration with Chairperson; and</li> <li>● Encourage the members of the council to keep on making efforts to achieve sustainable watershed conservation and management in collaboration with Chairperson.</li> </ul>
Secretariat (NDF/District MAF)	<ul style="list-style-type: none"> <li>● Assist Chairperson/Vice Chairperson in convening the meeting, issuing and delivering invitation letters to members, and handling the meeting;</li> <li>● Draft agenda of the meeting in coordination with Chairperson and Vice Chairperson;</li> <li>● Be responsible for documentation activities, such as note taking, preparation of resolution/decision, etc.; and</li> <li>● Help Chairperson and Vice Chairperson communicate with other agencies, ministries, national directorates, and organizations for ensuring of proper watershed management.</li> </ul>
Council members (Chefs de Sucos)	<ul style="list-style-type: none"> <li>● Participate in activities arranged by the council, such as meetings and study tours;</li> <li>● Share ideas and exchange opinions actively in the meetings of the council to solve and settle any issues/problems that would obstruct the achievement of sustainable watershed management;</li> <li>● Follow the rules and regulations agreed upon by the members;</li> <li>● Guide communities in the respective villages to ensure that they would follow agreements made by the council; and</li> <li>● Encourage communities in the respective villages to protect and manage forest and natural resources in a sustainable manner.</li> </ul>
Council members (Environment)	<ul style="list-style-type: none"> <li>● Same as the roles and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the conducts of environmental protection activities, such as Tara Bandu ceremony, seedling production &amp; reforestation, and environmental education.</li> </ul>
Council members (SAS)	<ul style="list-style-type: none"> <li>● Same as the role and responsibilities for the council members (chefes de sucos); and</li> <li>● Support communities in sucos in the watershed in the protection of sources of water in the respective villages.</li> </ul>

4.7 The Council, or Secretariat specifically, can be assisted by any competent organizations, such as NGOs, in the operations of the Council.

4.8 No member of the Council shall receive any compensation for the performance of his/her duties under the Council.



## **Section 5: Meetings**

- 5.1 The meetings of the Council shall be held at the Sub-district Administrative Offices in Remexio or Liquidoe alternately in principle. The members at the preceding meeting of the Council shall decide and agree with where the next meeting shall be convened.
- 5.2 The Council shall hold the following meetings with its members on a regular basis.
  - (1) Quarterly Meeting
  - (2) Annual Meeting
- 5.3 The quarterly meeting shall be held every quarter of the year (e.g., at the beginning of March, June, September, and December). At the meeting, the members of the Council shall discuss any issues and concerns to be addressed to properly manage forests and forest-related natural resources in the watershed and protect livelihoods of communities living in the same.
- 5.4 The annual meeting shall be held at the end of the year or beginning of the year (e.g., at the middle/end of December or beginning of January). At the meeting, the members of the Council shall review and evaluate the situation of the watershed and the activities conducted by the Council for a year.
- 5.5 Special meetings of the Council may be called at any time by Chairperson or a majority of the members if he/they deem/s it necessary to do for the interest of the members as well as the Council.
- 5.6 Notices of the meetings shall be distributed to all members at least one (1) week before the date set for the meetings. The notice shall state the objectives/purposes, time and venue of the meetings.
- 5.7 In case any of the members is not able to attend the meeting, he/she shall designate a proxy for the meeting.
- 5.8 At the meetings, the presence of more than 50% (or more than 9 persons) of the members and their proxies shall be necessary and sufficient to constitute a quorum for official discussions of the Council in addition to the presence of either Chairperson or Vice Chairperson. If the quorum is not present at any meeting, it may be adjourned by the members.

## **Section 6: Decision Making**

- 6.1 Resolutions and any decisions of the Council shall be made, adopted, and effective with the approval of more than 50 % (more than 9 persons) of the official members of the Council at the meeting sufficient to constitute a quorum and duly convened with the presence of Chairperson or Vice Chairperson.
- 6.2 Any decision made without the presence of Chairperson or Vice Chairperson shall be deemed invalid.

## **Section 7: Committee**

- 7.1 The Council, by resolution adopted by a majority of the members, may create a special committee which shall work on specific tasks delegated to it. The members of the special committee shall be appointed by the members of the Council in the meeting.

- 7.2 Meetings of the committee shall be held at such times and places as shall be fixed by the respective committee chairperson or by consensus of a majority of the members of the committee. Prior notice shall be given to all members of the committee before each meeting.
- 7.3 Unless otherwise provided by resolution of the Council, more than half of the official members of the committee shall constitute a quorum for discussions of the committee.
- 7.4 Any decision of the committee shall be made with approval of a majority of the official members of the committee.

**Section 8: Amendments**

- 8.1 These bylaws may be altered, amended, repealed or added to with the approval of not more than 50 % of the official members..

## ***Appendix-4.1***

### ***Objective and Process of the Formulation of the Watershed Management Plan***



## Appendix-4.1 Objective and Process of the Formulation of the Watershed Management Plan

Day\_\_\_\_Month\_\_\_\_Year\_\_\_\_

### 1. Objective

The main objective of the formulation of a watershed management plan is to provide the watershed management council the guidelines for watershed management of the xxxxxxx watershed in a proper and sustainable manner. Furthermore, the watershed management plan is expected to be used as a basis of a proposal to be submitted to MAF, other ministries/national directorates, NGOs, and international funding institutions for further financial and technical support in the future.

### 2. Outlines of the Watershed Management Plan

The watershed management plan will comprise the following six (6) chapters:

- Chapter 1 Introduction
- Chapter 2 Present conditions of the watershed
- Chapter 3 Major issues on watershed management
- Chapter 4 Goals, objectives, and approaches
- Chapter 5 Action plan
- Chapter 6 System of and procedures for implementation

### 3. Process of the Formulation of the Watershed Management Plan

The watershed management councils will have the following meetings/sessions to discuss the content of the watershed management plan.

No.	Purpose of meeting	Participants	Venue	Timeframe
1	Introduction of the present conditions of the watershed	Members of the watershed management council, NDFWM, MAF Municipal office	Sub-municipal Administrative Office	One day
2	Discussion on the goal and guiding principles of the watershed management plan	ditto	ditto	One day
3	Discussion on major activities of the plan	ditto	ditto	One day
4	Discussion on institutional framework and implementation schedule of the plan	ditto	ditto	One day

### 4. Procedures for the Formulation/Finalization of the Plan

NDFWM with facilitators/NGO will draft the chapters of the watershed management plan. The watershed management council will discuss the chapters drafted by tn NDFWM in the meetings listed above. Having reflected feedbacks or comments from the members, the watershed management plan would be finalized.

End of document



## ***Appendix-4.2***

### ***Summary of the Watershed Management Plan for the Laclo and Comoro River Basins***





## Appendix-4-2: Summary of the Watershed Management Plan for the Laclo and Comoro River Basins

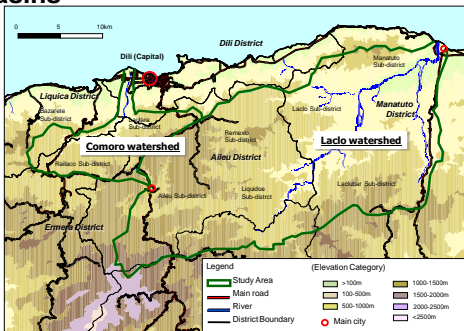
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### 1. Background

- JICA together with NDF had carried out the development study named "The Study on Community-Based Integrated Watershed Management in Laclo and Comoro River Basins from November 2005 to March 2010.
- As a result of the study, a community-based integrated watershed management plan (hereinafter referred to as "the watershed management plan") for the said river basins were developed.
- The watershed management plan is to be used as a master plan for management of forests and other natural resources in the said river basins.

2

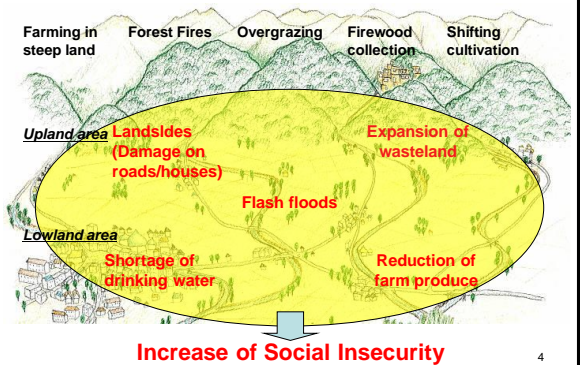
### 2. Location of Laclo and Comoro River Basins



Laclo River Basin (130,000 ha)  
Comoro River Basin (20,000 ha)

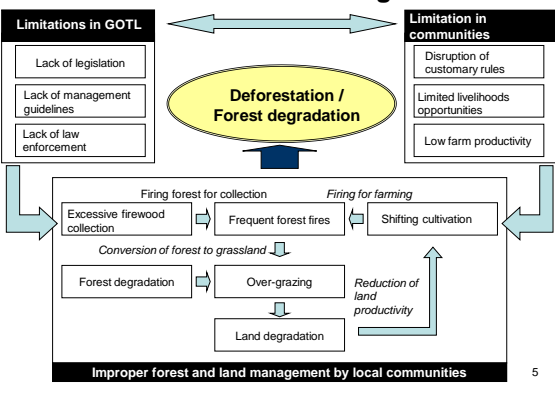
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### 3. Current Situations of the River Basins



4

### 4. Issues on Watershed Management



5

### 5. Basic Concepts of the Management Plan

#### 5.1 Goal and Objectives of the CBIWMP

##### Goal:

to protect and improve watershed environment of the target watersheds

##### Project Purpose:

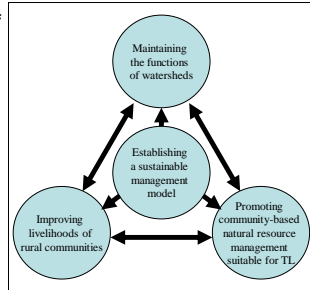
to attain sustainable and integrated watershed management by balancing proper land/forest management with poverty alleviation

6

## 5. Basic Concepts of the Management Plan

### 5.2 Basic Approaches to CBIWM

- (1) Maintaining the functions of watersheds
- (2) Improving livelihoods of rural communities
- (3) Promoting community-based natural resource management suitable for Timor-Leste
- (4) Establishing an institutional framework model for watershed management



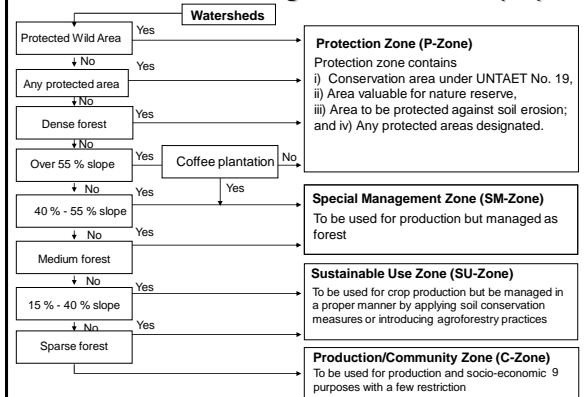
## 5. Basic Concepts of the Management Plan

### 5.3 Land Use and Management Guidelines (1/3)

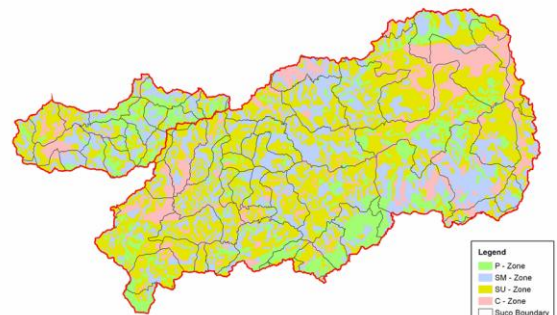
The CBIWMP proposes introducing "zonation" in the management of the target watersheds and classifying the area into four (4) zones according to the geographical features and present land use.

Zone	Possible land use
Protection Zone (P-Z)	Dense forest
Special Management Zone (SM-Z)	Medium forest, Coffee/Fruit tree plantation, Production forest
Sustainable Use Zone (SU-Z)	Coffee/Fruit tree plantation, Upland farm with soil conservation measures or agroforestry techniques, Grazing land under silvo-pastoral management
Community/ Production Zone (C-Z)	Any types of land use

### 5.3 Land Use and Management Guidelines (2/3)



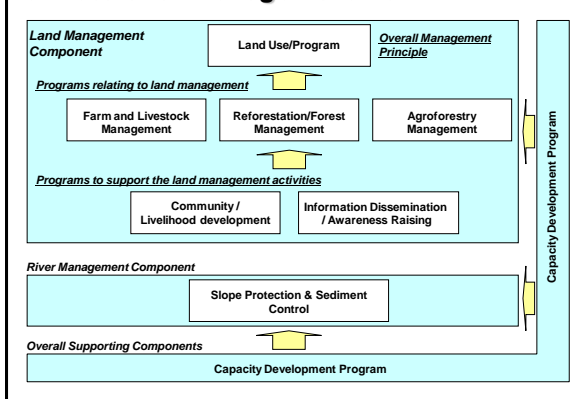
### 5.3 Land Use and Management Guidelines (3/3)



Results of Zonation of the River Basins

10

## 6. Watershed Management Plan



## 7. Priority Programs/Sub-programs

A total of 12 sub-programs were selected as priority ones among 21 sub-programs.

Program	Priority Sub-program
1. Land Use	1) Participatory Land Use Planning
2. Reforestation/Forest Management	2) Tree Planting Promotion 3) Seedling Production
3. Farm and Livestock Management	4) Community-based Seed Extension 5) Home Garden 6) Grazing Control
4. Agroforestry Management	7) Sustainable Upland Farming Promotion 8) Coffee Plantation Rehabilitation
5. Slope Protection and Sediment Control	9) Initial Gully Control
6. Livelihood Development	10) Income Generation/Cost Saving
7. Information Dissemination / Awareness Raising	11) Public Awareness Raising
8. Capacity Development	12) Capacity Development

**Potential CB-NRM Activities: Participatory Land Use Planning**



13

**Potential CB-NRM Activities: Seedling Production and Tree Plantation**



14

**Potential CB-NRM Activities: Community-Based Seed Extension**



15

**Potential CB-NRM Activities: Home Garden/Vegetable Production**



16

**Potential CB-NRM Activities: Sloping Agriculture Promotion**



17

**Potential CB-NRM Activities: Coffee Rehabilitation/Improvement**



18

**Potential CB-NRM Activities: Grazing Control**



Compost Making



Planting Fodder Crops



Fencing an area for grazing



Protein Bank (Fodder Crop Farm)

**Potential CB-NRM Activities: Initial Gully Erosion Control**



Gully erosion on a small scale (or at the initial stage)



Erosion control with wattles

**8. Implementation Order of the Priority Program/Sub-programs**

1st Step:

Participatory Land Use Planning Sub-program

2nd Step:

**Land Management-related Programs**

- Tree Planting Promotion
- Seedling Production Promotion
- Community-based Seed Extension
- Home Garden Sub-program
- Grazing Control with Protein Bank
- Sustainable Upland Farming Promotion
- Coffee Plantation Rehabilitation

**Supporting Programs**

- Income Generating/Cost Saving
- Public Awareness Campaign

Capacity Development Program

**END**

*Thank you!*

*Obrigada barak*

## ***Appendix-4.3***

***The Watershed Management Plan for  
the Noru Watershed***



**Appendix-4.3 The Watershed Management Plan for the Noru Watershed**

**Watershed Management Plan  
for the Noru Watershed in District Aileu,  
Timor-Leste**

**January 2015**

**Noru Watershed Management Council**

**with the Assistance with**

**The Project for Community-Based Sustainable Natural Resource  
Management jointly implemented by JICA and MAF**

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## Chapter 1 Introduction

### 1.1 Background

Forest degradation/deforestation has rapidly progressed in Timor-Leste. The recent study made by NDF with the assistance from JICS in 2013 indicates that approximately 184,000 ha of forests have been disappeared for the last decade. The same study also reports that about 170,000 ha of dense forests have been degraded into sparse forests for the same period. The rapid forest degradation and deforestation have caused the natural disasters, such as soil erosion, landslides and flash floods, and therefore, further affected the lives of people in the country, especially those living in the critically degraded river basins.

The Laclo river basin is one of the crucially deteriorated watersheds due to the prevalence of wildfire, illegal cutting, fuel wood collection, and cattle grazing in the upper part of the watershed. As it has a crucial function as a source of water to one of the major rice production areas in the country, the restoration of watershed's functions, namely, reduction of sedimentation and stabilization of river flow, is requisite to maintaining rice production in the country. Under such circumstances, the Government of Timor-Leste (GoTL), particularly the Ministry of Agriculture and Fisheries (MAF), has implemented a joint project to reduce the tendency of deforestation and degradation of forests introducing an approach of community-based forest/natural resource management with technical assistance from Japan International Cooperation Agency (JICA) since 2011.

MAF and JICA Project Teams selected the Noru watershed, which is a catchment of one of the 10 tributaries of the Lalco river, as one of the target watersheds for the project because of its importance for maintenance of river flow/water quality in the main stream of the Laclo river. The Project Teams have worked on development of a model for sustainable forest and natural resource management in collaboration with local communities in three (3) sucos located in the Noru watershed in partnership with the NGO, namely RAEBIA-Timor Leste.

Having confirmed that the model has been able to reduce the incidence of wildfire and illegal exploitation of forest resources in the three (3) villages; the MAF and JICA Project Teams decided to further assist other sucos concerned with the Noru watershed in the introduction of the same model in the respective villages to protect forests and natural resources in the watershed.

In May 2014, the MAF and JICA team started consultations with the parties concerned (i.e., sub-district administrative offices, sucos, and district offices in the relevant sectors) about the formation of the watershed management council of the Noru watershed. As a result of a series of discussions, the framework of the Noru Watershed Management Council, which consisted of its vision, missions, functions, and by-laws of the council, was finalized and resolved by the member organizations.

In order to protect and manage forests and its related natural resources in the Noru watershed in a proper and sustainable manner, the Noru watershed management council decided to develop a watershed management plan. The watershed management council with the assistance from the Project Teams and NGO has assessed the present natural and socio-economic conditions, especially vulnerability of the area to climate changes, and

causes of deforestation and forest degradation in the area. The council has also discussed the basic concepts of the watershed management plan, guiding principles for proper watershed management, and activities necessary for watershed management. In the end, the council formulated the watershed management plan described in this document.

## **1.2 Objectives of the Document**

The main objective of this document is to introduce and describe the watershed management plan with necessary actions to be taken and optimum procedures and system for implementation of the plan, so that the plan can be further used as a proposal to be submitted to the GoTL as well as any other funding institutions for financial and technical support in the future.

## **1.3 Scope of the Watershed Management Plan**

The plan targets the Noru watershed, which extends over about 12,000 ha in Sub-districts Remexio and Liquidoe in District Aileu. The main aim of the watershed management plan is to protect and manage forests and forest-related natural resources in a proper manner; therefore, its focus is put on agriculture and forestry works rather than engineering ones for sediment control/river control.

## **1.4 Composition of the Watershed Management Plan**

The Noru watershed management plan is composed of the following six (6) chapters:

- Chapter 1: Introduction
- Chapter 2: Present Conditions of the Noru Watershed
- Chapter 3: Current Issues on Watershed Management
- Chapter 4: Goal, Objectives, and Basic Approaches
- Chapter 5: Action plan
- Chapter 6: Procedures for and System of Implementation

As shown above, Chapter 1 introduces the background and overall scope of the watershed management plan. Chapter 2 describes the current situations of the watershed including its vulnerability to climate changes. Major difficulties in management of the watershed are analyzed in Chapter 3. Chapter 4 explain the overall framework of the watershed management plan (i.e., goal, objectives, and approaches to be taken), while Chapter 5 proposes the necessary actions/interventions to be taken for achievement of the goal of the watershed management plan. The last chapter, Chapter 6, give details of how the plan should be implemented.

## Chapter 2 Present Conditions of the Noru Watershed

### 2.1 Location and Administrative Situations of the Watershed

The Noru river is one of the tributaries of the Laclo river. It starts from the borders between Sub-district Aileu and Sub-districts Remexio as well as Liquidoe and flows along the border between Sub-district Remexio and Liquidoe up to the conjunction with another tributary of the Laclo river, the Eraibanaubere river, which is located at the border with Sub-district Laclo/Laclubar as shown in Figure 2-1. The total length of the Noru river is approximately 25 km and its catchment covers about 12,852 ha of the area.



Figure 2-1 Location of the Noru Watershed

Administratively, the catchment extends a total of 12 sucos in two (2) sub-districts, namely six (6) sucos in Sub-district Remexio and another six (6) sucos in Sub-district Liquidoe as tabulated below.

Table 2-1 Sucos related to the Watershed

Sub-district	Sucos	Total Area	Area under the watershed
Remexio	Acumau	3,875 ha	742 ha
	Fadabloco	1,766 ha	1,766 ha
	Fahisoi	1,404 ha	1,200 ha
	Faturasa	4,819 ha	3,334 ha
	Hautoho	1,528 ha	1,528 ha
	Maumeta	533 ha	533 ha
Liquidoe	Acubilitoho	1,272 ha	361 ha
	Belereu	2,685 ha	411 ha
	Fahisoi	803 ha	713 ha
	Faturilau	7,791 ha	1,700 ha
	Manucasa	784 ha	215 ha
	Nameloso	1,045 ha	338 ha
Remexio/Liquidoe	Others (Suco Saboria, etc)		11 ha
Total		28,316 ha	12,852 ha

Source:

## 2.2 Natural Conditions

### 2.2.1 Climate (Rainfalls and Temperature)

Like in other parts in Timor-Leste, the watershed is under the monsoon type climate characterized by clear distinction between wet and dry seasons. Northwest monsoon winds prevail from November to March, (4~5 months) bringing the principal wet season to the area. The dry season is caused by southeast trade winds which prevail from May until October (7~8 months).

As no rainfall measurement has been made in the area, even in the Indonesian time, there is no data of rainfalls in the watershed. The rainfall data collected at the stations in the vicinity of the watershed, namely Dili, Aileu, and Manatutu, are used for characterization of the rainfall pattern in the area.

**Table 2-2 Monthly Rainfall Distribution and Annual Average at District Capital**

(Unit: mm)

District central	Jan	Feb	Mar	April	May	June	July	Aug	Sept.	Oct.	Nov	Dec	Average	Elevation (m)
Dili	156	125	147	115	74	43	22	17	15	26	70	138	940	0~100
Aileu	326	248	179	108	3	33	7	8	5	190	184	225	1,514	900
Manatutu	116	118	84	57	38	23	12	1	6	11	27	80	573	0~60

Source: ALGIS, based on the data between 1962 and 1974 except for Dili (1953-1999) and Aileu (2004-2005).

Although there is available rainfall data at the rainfall stations of MAF between 2006 and 2009, it was not taken into consideration due to lack of reliability.

The data can suggest that the watershed might have the following characteristics in its rainfall pattern:

- ▶ The average annual rainfall may be more or less 1,000 mm ranging from 600 mm to 1,000 mm;
- ▶ The higher the elevation in the area is, the higher the rainfall has;
- ▶ The lower part close to the conjunction with the Eraibanaubere river may be the driest part in the watershed; and
- ▶ The rainfalls mainly concentrate on five (5) months from December to April.

Likewise, there is no other climate data collected in the area. The average temperature in the watershed is assumed rather hotter than the one in Aileu town, which is 21 °C, but lower than the one in Dili, which is 26 °C.

### 2.2.2 Slopes

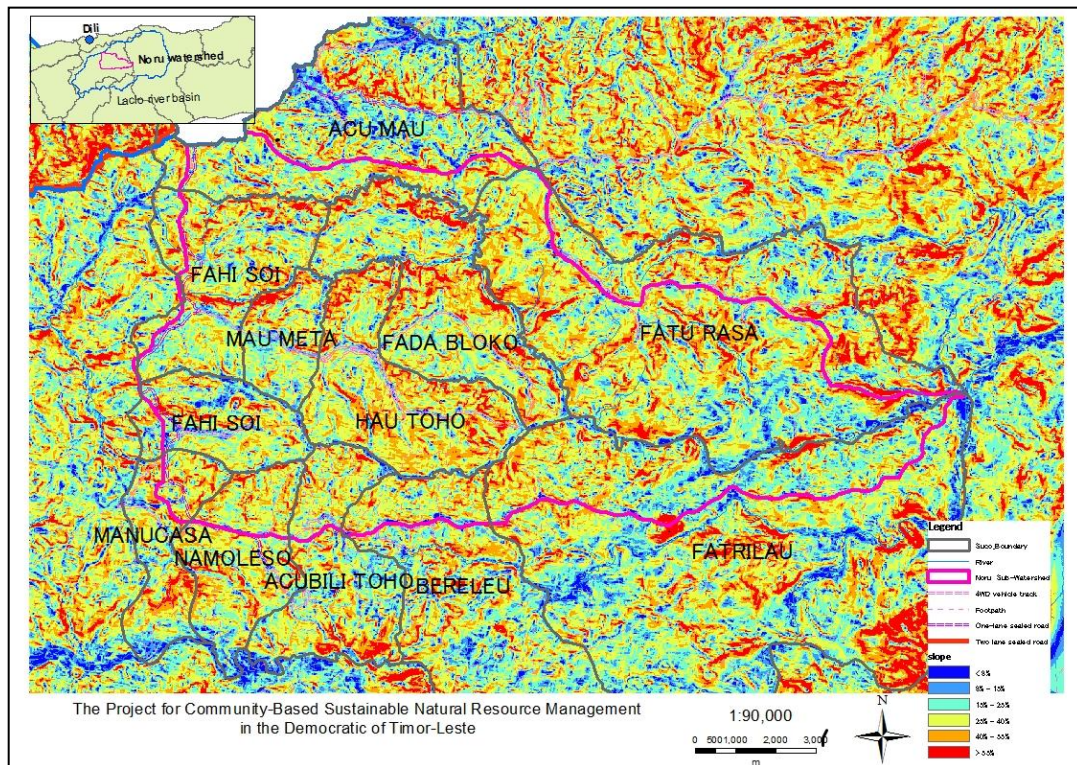
As the watershed is located in the upper to middle part of the Lacro river basin, the steep lands which have more than 25 % occupy more than 60 % of the total area of the watershed. The slope composition of the watershed is summarized as follows.

**Table 2-3 Degree of Slopes in the Noru Watershed**

Sloping ranges	Area (ha)	Ratio (%)
0-8 %	372	2.9
8-15%	990	7.7
15-25%	2,817	21.9
25-40%	5,122	39.9
40-55%	2,560	19.9
> 55%	991	7.7
<b>Total</b>	<b>12,852</b>	<b>100.0</b>

Source: JICA Study Team

Figure 2-2 shows the distribution of sloping areas in the watershed.



**Figure 2-2 Slope Map of the Noru Watershed**

### 2.2.3 Elevation

The elevation of the Noru watershed ranges from 330 m to 1,500 m above sea level. The ridge of the watershed runs along the borders between Sub-district Aileu and the two sub-districts, Remexio and Liquidoe, while the lowest part is located at the confluence of the Noru and Eraibanaubere rivers at the east end of Suco Faturasa (Remexio) and Faturirau (Liquidoe).

### 2.2.4 Land Use and Vegetation Covers

The results of the assessment made by the JICA and MAF joint study named “the Study on Community-Based Integrated Watershed Management in the Lacleo and Comoro River Basins,” which had been implemented from 2005 to 2010, were fully referred to determine the present land use and vegetation cover of the Noru watershed. The assessment of the said study was made by using the Landsat imageries taken in the different two seasons in 2003, which were further supplemented by the aerial photos taken in 2003. The results reveal that the vegetation cover and land use of the Noru watershed can be classified into the following eight (8) classes.

Table 2-4 category of Vegetation and Land Use

Category of Vegetation and Land use	Criteria of categorization
1. Forests	
1-1: Closed forest (natural)	Canopy closure : > 70%
1-2: Medium forest (natural)	Canopy closure : 30 - 70 %
1-3: Woodland (natural)	Canopy closure : 15 - 30 %
2. Shrub land	Dominated by shrubs
3. Grassland (including grazing lands and upland farms)	Dominated by grass (No woody vegetation)
4. Coffee plantation	Coffee with shade tree (Casuarina/Falcata)
5. Bare land (including grazing lands and upland farms)	No vegetation or burned grassland
6. Sandbar/River bed	

Source: Final Report of the Study on Community-Based Integrated Watershed Management in the Laco and Comoro River Basins, JICA, March 2010

Figure 2-3 shows the present land use and vegetation map covering the watershed. Areas distributed to each land use/vegetation class in the respective villages as well as the watershed are presented in Table 2-5.

Table 2-5 Areas of Each Land Use Class in the Watersheds

Land use class	Noru watershed	
	(ha)	(%)
1. Forests	5,005.4	38.9
1-1: Closed forest (natural)	600.5	4.7
1-2: Medium forest (natural)	2,705.3	21.1
1-3: Woodland (natural)	1,699.6	13.2
2. Shrub land	4,898.3	38.1
3. Grassland	1,065.4	8.3
4. Coffee plantation	95.1	0.7
5. Bare land	1,685.0	13.1
6. Sandbar/River bed	101.5	0.8
Total	12,851.3	100.0

Source: Final Report of the Study on Community-Based Integrated Watershed Management in the Laco and Comoro River Basins, JICA, March 2010

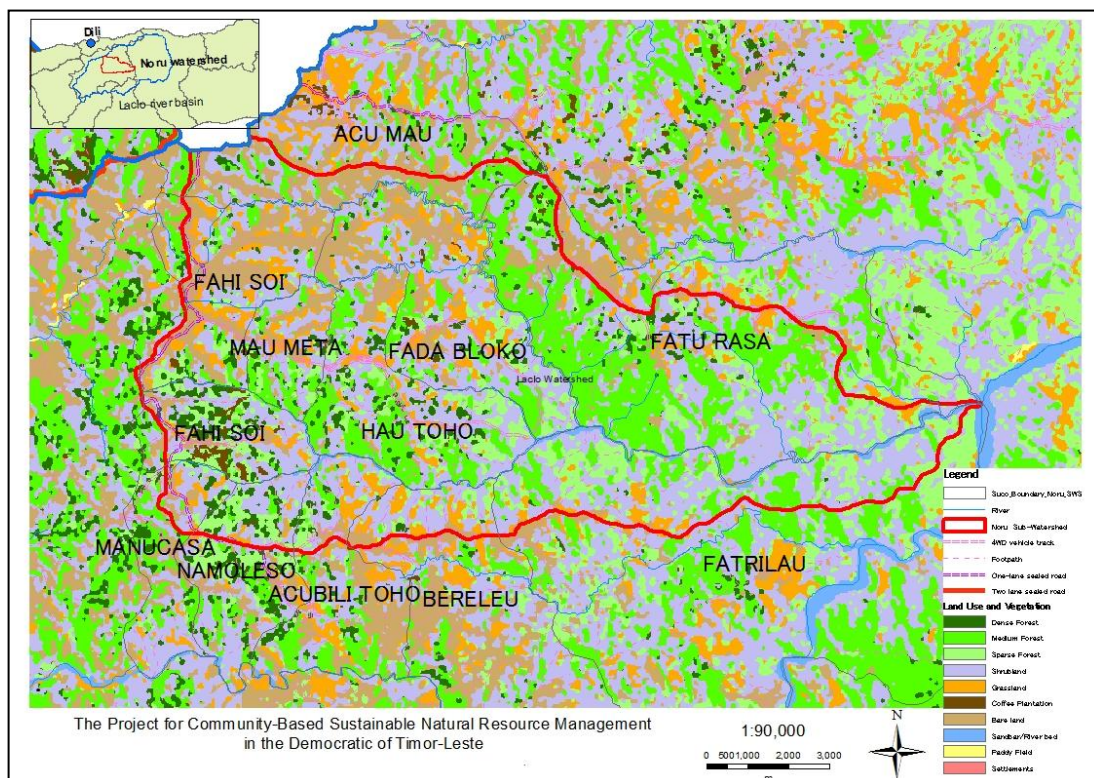


Figure 2-3 Present Land Use and Vegetation Map of the Noru Watershed

## 2.2.5 Potential of Soil Erosion

The same study made by JICA and MAF also assessed the potentials of soil erosion in the Laclo and Comoro river basins using the method of USEL. The study classified the villages in the river basins into five (5) grades based on the severity of potential risk, namely i) Severe, ii) High, iii) Moderate, iv) Low, and v) Very low. The following table shows the potential risks of soil erosion in the 12 sucos related to the Noru watershed.

**Table 2-6 Potentials of Soil Erosion in the Watersheds**

Part of Sucos	V. Low		Low		Moderate		High		Sever		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
Remexio	388	52%	19	3%	22	3%	23	3%	291	39%	742	100%
	1,029	58%	21	1%	26	1%	34	2%	657	37%	1,766	100%
	594	49%	26	2%	32	3%	38	3%	510	43%	1,200	100%
	1,587	48%	87	3%	108	3%	117	4%	1,434	43%	3,334	100%
	822	54%	22	1%	26	2%	35	2%	624	41%	1,528	100%
	296	56%	14	3%	23	4%	32	6%	168	31%	533	100%
Liquidoe	193	54%	10	3%	13	3%	16	4%	130	36%	361	100%
	221	54%	11	3%	15	4%	16	4%	148	36%	411	100%
	482	68%	24	3%	24	3%	28	4%	155	22%	713	100%
	921	54%	47	3%	60	4%	68	4%	604	36%	1,700	100%
	132	61%	7	3%	8	4%	8	4%	60	28%	215	100%
	199	59%	7	2%	10	3%	14	4%	108	32%	338	100%
		6,864	53%	295	2%	367	3%	429	3%	4,889	38%	12,841
Toral	388	52%	19	3%	22	3%	23	3%	291	39%	742	100%

Source: Final Report of the Study on Community-Based Integrated Watershed Management in the Laclo and Comoro River Basins, JICA, March 2010

As shown above, about 41 % of the watershed are considered highly susceptible to surface soil erosion. The watershed and the concerned sucos might be severely affected if forest degradation progresses as it is and the area has heavy rains during the rainy season.

## 2.3 Soico-Economic Conditions

### 2.3.1 Demography

It is difficult to identify the exact number of households and population living within the watershed, since no inventory survey focusing exclusively on the watershed has been made. However, the demographic data of the 12 sucos can be substituted for those of the watershed. The following table shows the demographic conditions of the 12 sucos related to the watershed in 2004 and 2010.

**Table 2-7 Population in the Sub-District in and around the Noru Watershed**

Sub-district	Suco	2004 Census <1		2010 Census <2		Population Increase (%)
		No. of family	Population	No. of family	Population	
Remexio	Acumau	315	1,775	357	2,491	6.72
	Fadabloco	186	927	323	2,214	23.14
	Fahisoi	249	1,265	184	1,190	-0.99
	Faturasa	295	1,538	148	1,083	-4.93
	Hautoho	302	1,555	137	931	-6.69
	Maumeta	87	362	87	500	6.35
	Sub-total		1,434	7,422	1,236	8,409
Liquidoe	Acubilitoho	228	975	206	839	-2.32
	Belereu	151	685	179	1,153	11.39
	Fahisoi	325	1,464	187	1,216	-2.82
	Faturilau	136	668	98	672	0.10
	Manucasa	103	443	92	440	-0.11
	Nameloso	279	1,209	187	1,072	-1.89



Sub-district	Suco	2004 Census <1		2010 Census <2		Population Increase (%)
		No. of family	Population	No. of family	Population	
	Sub-total	1,222	5,444	949	5,392	-0.16
Total	13 Sub-districts	2,656	12,866	2,185	13,801	1.21

Source: <1: The 2004 Census of Population and Housing (2004), DNS

<2: The Population and Housing Census (2010), NSD and UNEPA

As indicated in the table above, the population of the area has increased by 1.21 % per annum. If the population increase will be maintained as it is, the total population in the watershed would be twice for 58 years. Hence, the importance of proper land management would increase, as the population pressure on lands and forests will be also increasingly heightened

### 2.3.2 Agricultural Production

#### (1) Production of crop

There is no data specifically showing the agricultural production in the watershed as well as the 12 sucos concerned. As the homogeneity of agricultural conditions is high among the sucos in the watershed, the results of the household interview survey conducted by the JICA-MAF CB-NRM Project in three (3) sucos (i.e., Sucos Faturasa, Fadaboco, and Hautoho) in 2011 are used for clarification of the agricultural conditions in the watershed.

The major crops produced in the watershed are maize, cassava, sweet potato, and beans, which are generally planted in the same farm in a mixed planting manner. The average cropped area for the major crops is estimated at about 1 ha, while the average productivity of maize is less than 1 ton/ha. The average cropped areas and yields of the major crops in the three (3) sucos are shown below.

**Table 2-8 Average Cropped Areas and Volumes of Production of the Major Crops per Household in Three (3) Sucos (i.e., Suco Faturasa, Fadaboco, and Hautoho)**

Suco	Maize <1		Cassava <1		Sweet potato <1		Peanut / Beans <2		Coffee	
	Cropped area	Production	Cropped area	Production	Cropped area	Production	Cropped area	Production	Cropped area	Production
Faturasa	(ha/HH) 1.0	(ton/HH) 0.50	(ha/HH) 1.0	(ton/HH) 0.50	(ha/HH) 1.0	(ton/HH) 0.40	(ha/HH) 1.0	(ton/HH) 0.10	(ha/HH) 0.6	(ton/HH) 0.12
Fadaboco	1.0	0.50	1.0	0.40	0.9	0.27	0.3	0.03	0.9	0.18
Hautoho	1.0	0.50	1.1	0.66	1.1	0.55	0.4	0.04	0.9	0.18

Source: The Project for Community-Based Sustainable Natural Resource Management, November 2013, JICA

Note: <1 They are planted in the same plot in a mixed cropping way.

<2 Peanut is generally planted separately from other crops, while other beans such as red beans are generally mixed with other crops such as maize.

#### (2) Farming practices

In general, households in the watershed have one (1) or two (2) farm/s which is/are used for crop production every year and several farms which are used on a rotation basis. In some farms in the watershed, especially those in the said three (3) sucos, soil conservation measures, such as stone terraces, bench terraces, and contour compost terraces, have been already applied to parts of the permanent farms. However, the same techniques have not been introduced to the majority of the existing farms in the watershed.

Although the improved farming system has been introduced in the said three (3) sucos, the majority of farmers in the watershed have still followed the conventional way of farming. The following table explains the key features of both conventional and improved farming systems.

**Table 2-9 Comparison between Conventional Practice and Improved Farming System**

Farming practices	Conventional practice	Improved farming system
Clearing	◆ Slash and burning	◆ Slashing ◆ Collection of grasses for making compost or putting them into contour ditches
Compost application	◆ None	◆ Preparation of compost using grasses and animal dung
Land preparation	◆ No tillage (No plowing) ◆ Male holes for planting ◆ No application of compost	◆ Plowing (by manual) ◆ Application of compost as basal fertilizer
Seeding/planting	◆ Random sowing ◆ mix planting of several crops	◆ Line sowing ◆ Mix planting of two to three crops
Maintenance	◆ Weeding (Once) ◆ No additional fertilization	◆ Weeding (a few times) ◆ Application of liquid fertilizer
Post harvesting	◆ Hanging of maize cobs on trees	◆ Shelling grains after drying and storage of grains into a jerry can

Source: JICA Project Team

### 2.3.3 Animal Production

Livestock animals are literarily considered as assets which can be used as offerings for ceremonial evens (e.g., marriage, funeral, and ancestral worship) and for any emergent expenditures. Almost all the families in the watershed own some livestock animals, especially pigs and goats. Some families, especially those in Suco Faturasa, hold a number of heads of cattle and buffalo, but the majority of them hold a few heads of cattle/buffalo in addition to pigs/goats.

### 2.3.4 Food Security

The household interview survey made by the CB-NRM Project in Sucos Faturasa, Fadabloco, and Hautoho indicated that the majority of communities in the sucos have faced a seasonal shortage of food between November/December and February/March. The main reasons for food insecurity are considered low productivity, limited cropping area, high loss during storing, and lack of opportunities to earn cash income. This tendency seems to prevail almost all the hilly and mountainous areas in Timor-Leste, as the assessment report made by FAO/WFP in 2007 indicates that more than 40 % of population was considered as food insecure or highly vulnerable as shown below.

**Table 2-10 Food Security Classification among People in Timor-Leste (FAO/WFP, 2007)**

Food insecurity	Households with generally poor or borderline food consumption and very weak food access; or households with weak or very weak access and poor consumption.	20 %
Highly vulnerable	Food-access and/or food-consumption are so insufficient that these households are close to being food insecure.	23 %
Moderately vulnerable	Food-access and/ or consumption are not good enough to categorize them as food secure.	21 %
Moderately vulnerable	In general, fairly good to good food consumption and medium to good food access, includes also "good access + borderline consumption" and "good consumption"	36 %
Food security	In general, fairly good to good food consumption and medium to good food access, includes also "good access + borderline consumption" and "good consumption"	100 %

Source: Special Report by FAO/WFP Crop and Food Supply Assessment Mission to Timor-Leste (June 2007)

The following table shows the results of the assessment on the food balance in Timor-Leste in 2007.

**Table 2-11 Assessment of the Food Balance in Timor-Leste in 2007 (FAO/WFP, 2007)**

<b>1. Total Availability</b>	<b>70,820</b>	<b>26,740</b>	<b>26,909</b>	<b>124,469</b>
1-1 Opening stocks	1,000	0	0	1,000
1-2 Production	69,820	26,740	26,909	123,469
<b>2. Total Utilization</b>	<b>70,821</b>	<b>113,104</b>	<b>26,909</b>	<b>210,833</b>
2-1 Food Use	89,902	74,918	14,984	179,803
2-2 Seed, Feed & Losses	18,974	2,249	807	22,030
2-3 Closing Stocks	1,000	8,000	0	9,000
2-4 Cross-commodity substitution	39,055	27,937	11,118	0
<b>3. Import Requirements</b>	<b>0</b>	<b>86,364</b>	<b>0</b>	<b>86,364</b>
3-1 Anticipated Commercial Imports	0	71,000	0	71,000
<b>4. Uncovered deficit &lt;3</b>	<b>0</b>	<b>15,364</b>	<b>0</b>	<b>15,364</b>

Note: <1 Milling rate of paddy to rice is estimated at 60 percent.

<2 By Ministry of Development for Strategic Reserve

<3 Uncovered (through food aid)

<4 In cereal equivalent.

Source: Special Report by FAO/WFP Crop and Food Supply Assessment Mission to Timor-Leste (June 2007)

Communities in the watershed have taken the following strategies to cope with the shortage of food:

- i) reduction of the number of meals;
- ii) reduction of the amount of food;
- iii) consumption of alternative crops (e.g., cassava and sweet potato); and
- iv) consumption of emergency crops (e.g., kontas and wild yam).

### 2.3.5 Estimated Income Level

The interview survey made by the CB-NRM Project also estimated the average annual income per family in Suco Faturasa, Fadabloco, and Hautoho at US\$ 829, 954, and 760, respectively. These data suggest that the economic conditions in the watershed area are likely in poor conditions as compared to the national average. The household income and expenditure survey conducted by the National Directorate of Statistics in 2011 on a nationwide scale reported that the average monthly income per family in the rural area was estimated at about US\$ 310 including the saving of food expenditures. Both data can not necessarily be compared with one another directly as the targets of the surveys were different, but the data could suggest the tendency of the watershed as described above.

## 2.4 Vulnerability to Climate Changes

### 2.4.1 Projected Climate Changes

Climate change is considered as a foreseeable threat even in Timor-Leste. Recently the rainfall patterns not only in the watershed but also on a national level have varied from year to year; therefore, the agricultural production has drastically fluctuated. The climate condition seems to have been predictable in the country.

National Adaptation Programme of Action (NAPA) on Climate Change submitted by the GoTL to UNFCCC in December 2010 projected the climate changes in Timor-Leste for the next 30 years as outlined below.

**Table 2-12 Projected Climate Changes for the Next 30 Years**

Parameter	Changes																																	
Temperature	<p>Overall, the temperature will increase without significant variability across the seasons. Extreme temperature events are expected to increase in intensity and length. The following table shows the projected changes in temperature for the next 30 years.</p> <table border="1"> <thead> <tr> <th rowspan="2">Period</th> <th colspan="3">Projected changes (°C)</th> </tr> <tr> <th>2020</th> <th>2050</th> <th>2080</th> </tr> </thead> <tbody> <tr> <td>Annual</td> <td>+0.8</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Dec.- Feb.</td> <td>+0.7</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Mar. - May</td> <td>+0.8</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Jun. – Aug.</td> <td>+0.7</td> <td>+1.5</td> <td>+2.1</td> </tr> <tr> <td>Sep. – Nov.</td> <td>+0.9</td> <td>+1.5</td> <td>+2.1</td> </tr> </tbody> </table> <p>Source: Timor-Leste National Adaptation Programme of Action to Climate Change</p>	Period	Projected changes (°C)			2020	2050	2080	Annual	+0.8	+1.5	+2.2	Dec.- Feb.	+0.7	+1.5	+2.2	Mar. - May	+0.8	+1.5	+2.2	Jun. – Aug.	+0.7	+1.5	+2.1	Sep. – Nov.	+0.9	+1.5	+2.1						
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Rainfall	<p>The following changes are predicted in rainfalls in Timor-Leste.</p> <ul style="list-style-type: none"> <li>- The mean annual rainfalls are expected to increase;</li> <li>- Dry season is expected to become drier; and</li> <li>- The intensity of extreme rainfall events is expected to increase, but the frequency of the events will decline.</li> </ul> <p>Projected changes in rainfalls in the country for the next 30 years are tabulated below.</p> <table border="1"> <thead> <tr> <th rowspan="2">Period</th> <th colspan="3">Amount of rainfalls</th> <th rowspan="2">Rainfall intensity projections</th> </tr> <tr> <th>2020</th> <th>2050</th> <th>2080</th> </tr> </thead> <tbody> <tr> <td>Annual</td> <td>+ 2%</td> <td>+ 4%</td> <td>+ 6%</td> <td>+ 1-2%</td> </tr> <tr> <td>Dec.- Feb.</td> <td>+ 3%</td> <td>+ 5%</td> <td>+ 6%</td> <td>+ 2-4%</td> </tr> <tr> <td>Mar. - May</td> <td>+ 4%</td> <td>+ 5%</td> <td>+ 5%</td> <td>+ 2-4%</td> </tr> <tr> <td>Jun. – Aug.</td> <td>0%</td> <td>0%</td> <td>- 5%</td> <td>+ 6-8%</td> </tr> <tr> <td>Sep. – Nov.</td> <td>0%</td> <td>0%</td> <td>- 1%</td> <td>+ 4-6%</td> </tr> </tbody> </table> <p>Source: Timor-Leste National Adaptation Programme of Action to Climate Change</p>	Period	Amount of rainfalls			Rainfall intensity projections	2020	2050	2080	Annual	+ 2%	+ 4%	+ 6%	+ 1-2%	Dec.- Feb.	+ 3%	+ 5%	+ 6%	+ 2-4%	Mar. - May	+ 4%	+ 5%	+ 5%	+ 2-4%	Jun. – Aug.	0%	0%	- 5%	+ 6-8%	Sep. – Nov.	0%	0%	- 1%	+ 4-6%
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Sep. – Nov.	0%	0%	- 1%	+ 4-6%																														
Tropical cyclones	<p>The frequency and length of the event are expected to decrease, but its intensity is expected to become high.</p>																																	

Source: National Adaptation Programme of Action (NAPA) on Climate Change, GoTL, 2010

Hence, the climate conditions of the watershed are also expected to change in the following ways:

- ▶ In the dry season, the temperature might become high, while the precipitation in might become less;
- ▶ In the rainy season, the intensity of rainfalls, such as hourly rainfall intensity, might become high, and the length of rainfalls might be prolonged;
- ▶ The strength of wind might become high; and
- ▶ The rainfall patterns will fluctuate from year to year.

#### 2.4.2 Potential Impacts on Communities in the Watershed

Considering the possible climate changes in the watershed, the Noru Watershed Management Council assessed the potential impacts on the living and economic conditions in the watershed as follows.

**Table 2-13 Potential Impacts on the Living and Economic Condition of Communities in the Watershed**

Sector	Potential Impacts caused by Climate Changes <1
Agriculture	<ul style="list-style-type: none"> <li>◆ The yield of maize may be drastically reduced by high temperature effects on pollination and kernel set.</li> <li>◆ The yield of cassava may be increased as cassava requires high temperature and high solar radiation for optimal leaf development.</li> <li>◆ Warmer temperature may increase the incidence of pest and disease damage.</li> <li>◆ Crop damage caused by storm and strong wind might increase.</li> <li>◆ Some farms may be eroded due to the expansion of gully erosion during the rainy season.</li> <li>◆ The productivity of livestock animal may be reduced due to limited sources of food and lack of water during the dry season.</li> <li>◆ Soil fertility may drastically decline due to the progress of decomposition of soil organic matters during the dry season and frequent surface erosion during the rainy season.</li> </ul>
Forest and Agroforest	<ul style="list-style-type: none"> <li>◆ The incidence of forest fires may increase during the rainy season.</li> <li>◆ The incidence of landslides may increase especially in steep lands.</li> <li>◆ Some species may not grow well in the watershed due to the increase of temperature.</li> <li>◆ The growth of coffee and orange may be affected due to high heat in the dry season.</li> <li>◆ Forests along small streams may be washed out due to heavy rains during the rainy season.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>◆ Rural road networks may be damaged by heavy rainfalls and/or storms.</li> <li>◆ Natural springs being used as sources of water may be damaged by strong and heavy rains during the rainy season.</li> <li>◆ Risk of damage to houses and other infrastructure may increase due to the occurrence of strong wind/typhoons and increase of incidence of wildfires and landslides.</li> </ul>
Water, Sanitation, and Health	<ul style="list-style-type: none"> <li>◆ The access to water may be reduced as some existing sources may be dried up.</li> <li>◆ The volume of water may be reduced during the dry season, while the quality of water may be affected by contamination during the rainy season.</li> <li>◆ The incidence of respiratory and associated infections may increase in the dry season.</li> <li>◆ The incidence of water-borne diseases and infections may increase during the rainy season.</li> <li>◆ Risk of food contamination and poisoning may increase during the rainy season.</li> <li>◆ Risk of injuries and deaths by accidents caused by natural events may increase.</li> </ul>

Note: The potential impacts were first identified by the MAF and JICA Project Teams based on the “Timor-Leste National Adaptation Programme of Action to Climate Change (2010)” and “Climate Change and Population Growth in Timor-Leste: Implications for Food Security (2012)” and the identified potentials were reviewed and confirmed by the watershed management council.

### 2.4.3 Vulnerability of the Watershed to Climate Changes

As described above, the living and socio-economic conditions of communities in the watershed are considered highly vulnerable to climate changes. It is, therefore, necessary to strengthen the resilience of communities in the watershed, who heavily rely on conventional farming on sloping lands as their main livelihoods, use natural springs as main sources of drinking water, and have high risks of natural disasters and associated events, such as typhoons, strong winds, wildfires, and landslides.

## Chapter 3 Current Issues on Watershed Management and Stakeholders relevant to Watershed Management

### 3.1 Issues on Watershed Management

#### 3.1.1 History of Forest Degradation

Based on the discussions on the current situations of the Noru watershed among the members of the Noru watershed management council and the results of the village profile surveys conducted in some of the sucos concerned with the Noru watershed, it is judged that severe deforestation and forest degradation started in the Indonesian occupation and have continued until today as summarized below.

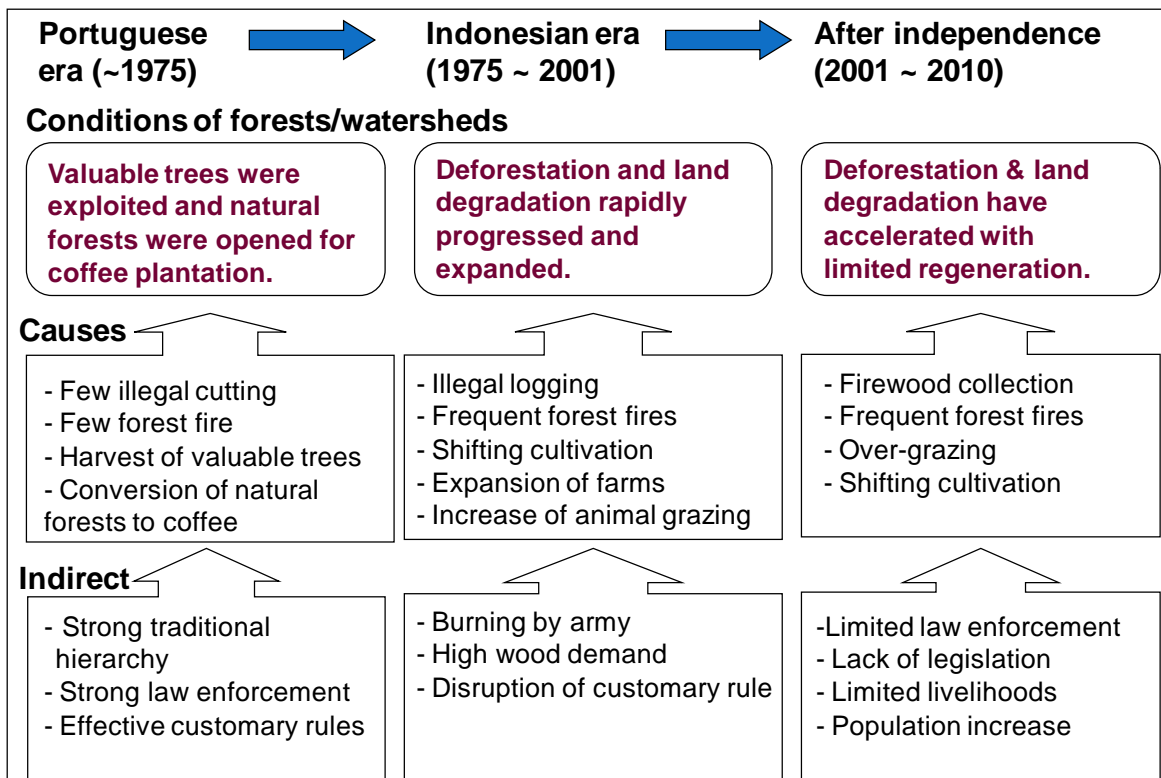


Figure 3-1: History of Forest Degradation in the Watershed

In the Portuguese era, the environmentally destructive activities, such as shifting cultivation and illegal exploitation, were not prevailing in the area because the tara bandu system was effective in regulating people's activities as the system was linked to the strong law enforcement. The effectiveness of the tara bandu system had gotten weak after the country was ruled by Indonesia from 1975. Deforestation has been further accelerated by the Indonesian army and logging companies during the same period. Since then, many people in the watershed have kept practicing the destructive activities.

#### 3.1.2 Current Issues in the Watershed

At present, the occurrence of forest fires caused by shifting cultivation and animal grazing is the major cause of deforestation and forest degradation in the watershed. Shifting cultivation has also led to surface soil erosion which has further caused land degradation of

farmlands. The cause and effect relationship on forest degradation in the watershed is summarized below.

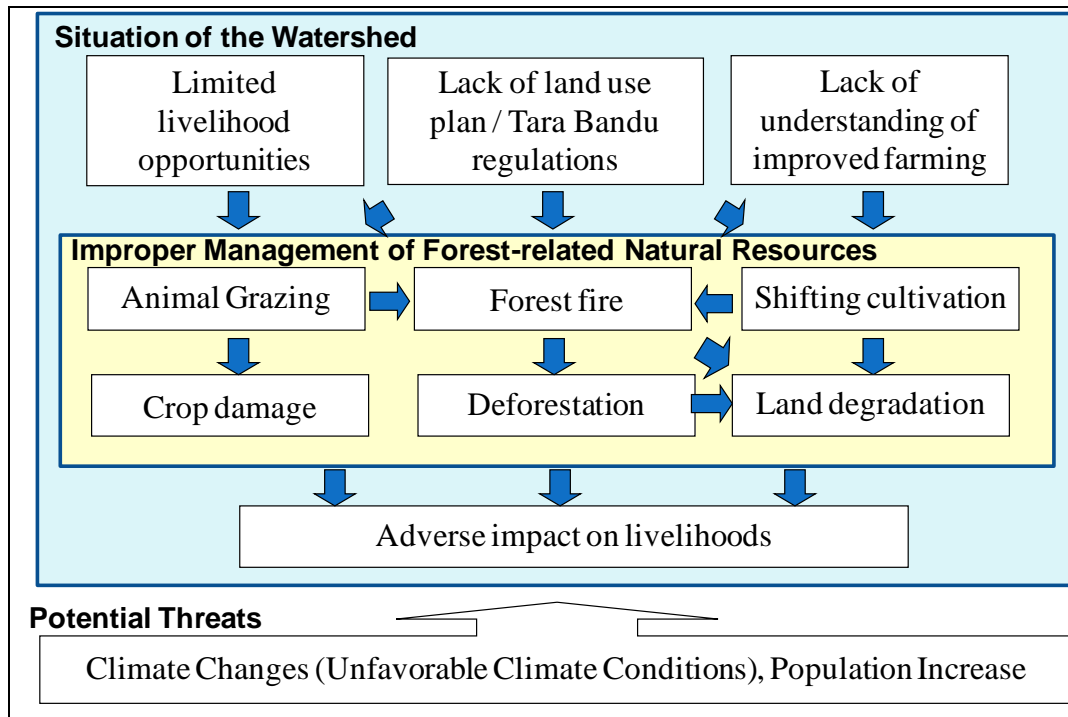


Figure 3-2: Cause and Effect Relationship on Forest Degradation

Deforestation and land degradation have adversely influenced livelihoods of local communities as shown above. The situation might get worse in case that the climate conditions will change unfavorably and the number of households who use lands in the sucos will increase as population increases.

### 3.2 Stakeholders related to the Noru Watershed

#### 3.2.1 Major Stakeholders

The following organizations and groups of people are considered as key stakeholders relating to the management of the Noru watershed.

- ▶ District Administrative Office
- ▶ Sub-district offices of Remexio & Liquidoe
- ▶ Sucos located inside the watershed
- ▶ District MAF/NDF
- ▶ Extension officers
- ▶ Forest Guard
- ▶ ND for Environment
- ▶ PNTL
- ▶ SAS sub-district in Remexio & Liquidoe
- ▶ Church
- ▶ NGO (AMAR, WV, Plan, Haburas, RAEBIA)

The importance of the stakeholders and their relationship to watershed management are analyzed as follows.

**Table 3-1: Results of the Stakeholder Analysis**

No.	Name	Importance in the management of watershed	Relevance to (Involvement in) watershed management
1.	District Administrative Office	- Highly important as its tasks are to give approval for the sub-district administrative offices to work on watershed management and to provide guidance for the same on relevant activities for watershed management.	- Not directly involved in watershed management
2.	Sub-district offices of Remexio & Liquidoe	- Highly important as they have authority over activities in the watershed.	- High relevant - Directly involved in watershed management because of location
3.	Sucos located inside the watershed	- High important as chef de suco is responsible for activities at suco level and communities are the actual managers of lands and forests in the watershed.	- High relevant - Directly involved in watershed management because communities in sucos are the landowners of the area.
4.	District MAF/NDF	- Highly important as District Administrative Office is.	- Not directly involved in watershed management
5.	Extensionists	- Highly important as they work with communities.	- High relevant - Directly involved in watershed management as they work in the watershed.
6.	Forest Guard	- Highly important as they are the ones who orient communities towards sustainable forest and watershed management.	- High relevant - Directly involved in watershed management, but it is difficult for one of them to commute regularly as he does not live in the watershed.
7.	ND for Environment	- Highly important as the ND for environment is also working for forest conservation.	- Not directly involved as there is no branch office at the sub-district level.
8.	PNTL	- Less important as the watershed management is not the task of PNTL.	- Directly involved in watershed management as PNTL is working with communities to prevent illegal activities including forest fires.
9.	SAS sub-district in Remexio & Liquidoe	- Highly important as SAS would advise and help communities to protect forests and areas around water sources.	- High relevant as one of SAS tasks is to protect water sources. - Directly involved as the branch offices are located in the respective sub-districts.
10.	Church	- Less important as Church has nothing to do with watershed management.	- High relevant as its task is to orient local communities.
11.	NGOs (AMAR, WV, Plan, Haburas, RAEBIA)	- High important as the NGOs have implemented some activities relevant to watershed management.	- Not directly or continuously involved in watershed management as they are not based in the watershed.

### 3.2.2 Noru Watershed Management Council

#### (1) Vision and Missions of the Watershed Management Council

The Noru Watershed Management Council was established in August 2014 with the assistance of the JICA-MAF Joint Project named “the Project for Community-Based Sustainable Natural Resource Management.” The members of the Council unanimously agreed that the vision of the Council is to properly protect and manage forests, lands, and water resources in the Noru watershed to improve living conditions and livelihoods of residents in the watershed and stabilize water supply to the downstream areas.

Specifically, the Council further approved the following missions to achieve the vision.

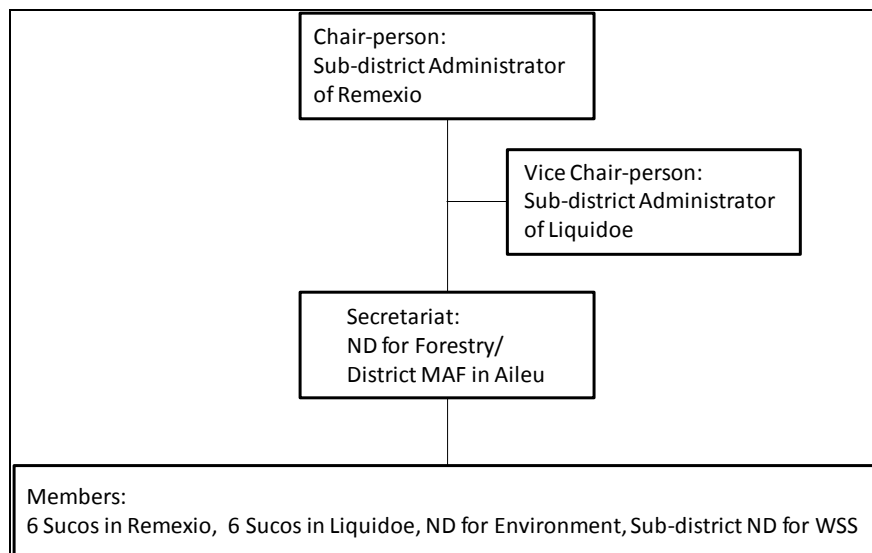
- to provide guidance and orientation to village leaders in the sucos concerned toward sustainable management of forests and forest-related natural resources (e.g., NTFPs, lands, and water) in the watershed;



- to provide leadership in harmonizing the interests and activities of sucos in the watershed to achieve sustainable forests and forest-related natural resource management in the watershed;
  - to take initiative in planning, implementing, and evaluating a watershed management plan to manage forests and forest-related natural resources in a proper and sustainable manner while improving local livelihoods in the watershed;
  - to help village leaders in the sucos concerned enhance awareness of sustainable forest and forest-related natural resource management among communities in the respective sucos;
- to promote necessary actions for sustainable forest and forest-related natural resource management in the watershed in coordination with relevant government and non-government organizations as well as international organizations;
- to help village leaders in the sucos concerned hand over the valuable forests and forest-related natural resources to the future generations in the respective villages; and
  - to share the experiences in the watershed with local government units (sucos, sub-districts, and districts) in other watersheds in Timor-Leste to promote sustainable forest and forest-related natural resource management at the watershed level.

(2) Members of the Watershed Management Council

The Council is composed of one (1) Chair-person, one (1) Vice Chair-person, one (1) Secretariat and other members as shown below.



**Figure 3-3: Organizational Structure of the Noru Watershed Management Council**

Sub-district Administrator of Remexio is to function as a chair person of the Council, while Sub-district Administrator of Liquidoe functions as a vice chair person of the same. NDF and MAF, or its district office in Aileu, are to play a role as a secretariat of the Council. Chefs de Suco of the 12 sucos (e.g., six (6) sucos in Remexio and another six (6) sucos in Lequidoe), sub-district branch offices of NDWSS, and district branch office of NDE constitute the members of the Watershed Management Council.

### (3) Functions of the Watershed Management Council

To achieve its vision and fulfill its missions, the Watershed Management Council is expected to perform the following functions:

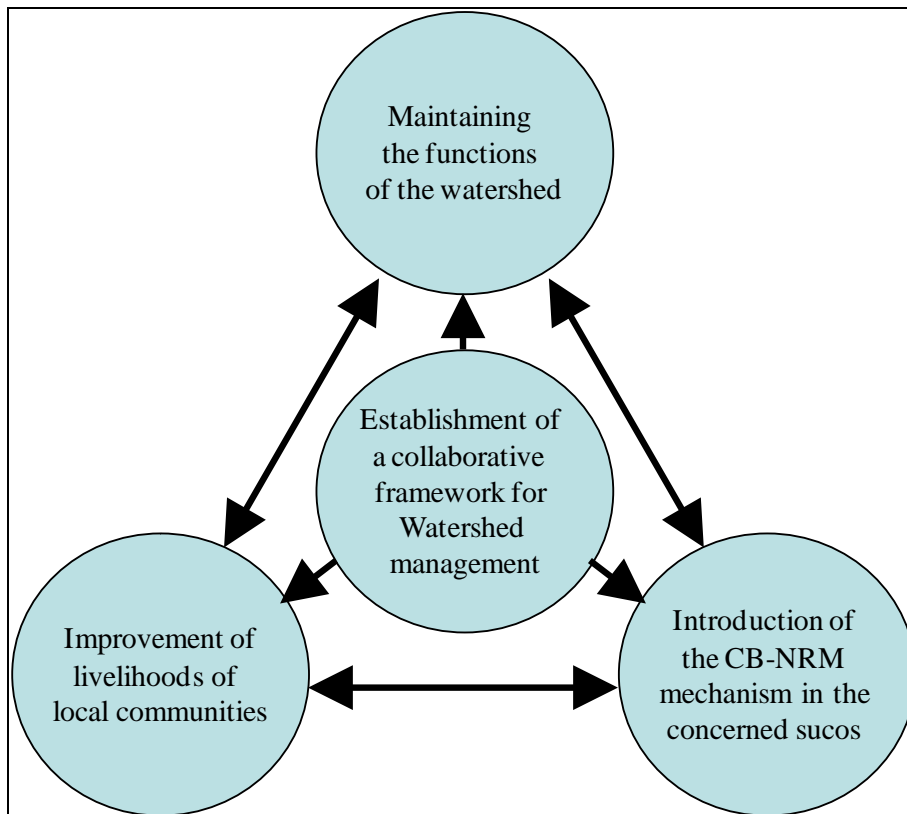
- to formulate a watershed management plan with the assistance from relevant government and non-government organizations;
- to prepare an annual action plan to implement the watershed management plan at the beginning of the year;
- to monitor and evaluate the implementation of the annual action plan at the end of the year;
- to coordinate the implementation of the watershed management plan with relevant government and non-government organizations;
- to convene a regular meeting every quarter to monitor the situations of the watershed and discuss any issues relevant to sustainable management of forests and forest-related natural resources in the watershed;
- to adopt a resolution that would encourage all the sucos in the watershed to work on sustainable forest and forest-related natural resource management in the watershed;
- to call a meeting whenever circumstances require it; and
- to organize a working group (or a committee) to tackle any important issues that would affect the management of the watershed.

## Chapter 4 Goal and Strategic Objectives of the Watershed Management Plan

### 4.1 Goal and Strategic Objectives

The main objective of the watershed management plan is to attain sustainable and integrated watershed management by balancing proper land and forest management with improvement of local livelihoods in a watershed. In order to achieve the main objective, four (4) strategic objectives are established as follows:

- a. Improvement and maintenance of the functions of watershed;
- b. Improvement of livelihoods of local communities;
- c. Introduction of the community-based natural resource management (CB-NRM) mechanism in the concerned sucos; and
- d. Establishment of a collaborative framework for watershed management.



**Figure 4-1: Strategic Objectives of the Watershed Management Plan**

More details of the respective strategic objectives are described below.

#### (1) Improvement and Maintenance of the Functions of Watershed

The watershed has played various functions important for the life of local communities not only in the watershed but also in the downstream area of the Laclo river, such as stable supply of clean water, control of river run-off, and provision of places for agriculture production and collection of forest resources. These functions are essential to human life; therefore, they should be maintained, or enhance whenever necessary, by protecting and restoring forests in the watershed.

Specifically, the watershed management plan shall address the following issues which have caused the degradation of the watershed functions.

- Sediment load to the rivers;
- Slope failure/landslides;
- Deforestation and forest degradation especially in critical catchments; and
- Improper land use/unsustainable land use in sloping lands.

## (2) Improvement of Livelihoods of Local People

As described in Chapter 2 of this watershed management plan, the average income of families in the watershed is obviously lower than the national average and many families have still faced a shortage of food for a part of the year. It would be difficult for local communities in the watershed to change the conventional farming practices, namely shifting cultivation, and environmentally destructive activities for livelihoods, such as animal grazing and harvesting of firewood, unless they can ensure the food security and cash income sufficient for their well-being.

Hence, one of the specific focuses of the watershed management plan shall be put on the improvement of livelihoods of local communities in the watershed, especially those who have limited opportunities other than shifting cultivation and exploitation of forest resources to secure daily food and cash income.

## (3) Introduction of the Community-Based Natural Resource Management (CB-NRM) Mechanism in the Sucos concerned

The CB-NRM mechanism, which has been introduced and demonstrated by the JICA-MAF joint project in partnership with RAEBIA, encompasses i) the process of enhancing the capacity of suco leaders and other communities to use and manage forest-related resources in a productive and sustainable manner and ii) the system to help suco leaders to protect forest-related resources from the environmentally destructive activities. Through the process of establishing the CB-NRM mechanism, suco leaders and other communities engage in i) formulation of a future land use plan with village regulations, ii) selection of priority agriculture and forestry extension services, iii) institutionalization of the village regulations, and iv) application of techniques/skills introduced by the priority forestry and agricultural extension services.

Three (3) sucos in the watershed, namely Suco Faturasa, Fadabloc, and Hautoho, have been assisted by the JICA-MAF joint project in establishing the CB-NRM mechanism. The occurrence of wildfires, illegal forest exploitation, and crop damage caused by animal grazing have been drastically reduced since the CB-NRM mechanism was in place. At the same time, many communities in the same sucos have introduced and applied the sustainable upland farming techniques in their own farms.

As the mechanism has been introduced in only three (3) sucos out of the concerned 12 sucos, one of the strategic objectives of the watershed management plan is to help the remaining nine (9) sucos introduce the CB-NRM mechanism in the respective sucos, so as to achieve sustainable management of forest-related resources on a watershed level.

**(4) Strengthening of the Collaborative Framework for Watershed Management**

One of the issues to be addressed in the watershed management in the Noru watershed is the incidence of wild fires in the border areas between/among the concerned sucos. In many cases, the border areas are used by communities from the surrounding sucos for animal grazing and hunting; therefore, communities have often burned the areas for generation of new grasses or smoking out wild animals. Thus, collaborative efforts by the concerned sucos are needed for reducing the incidence of wildfires in the border areas in parallel with the introduction of the CB-NRM mechanism in the concerned sucos.

To facilitate the coordination and collaboration between/among the concerned 12 sucos as described in Chapter 3, the Noru Watershed Management Council was established in September 2014. It is, therefore, important to help the Council maximize and strengthen its functions, especially as a platform where the concerned sucos and NDF/MAF can work on any issues on watershed management. The watershed management plan should put emphasize on the improvement of the collaborative framework in the course of the implementation of the plan.

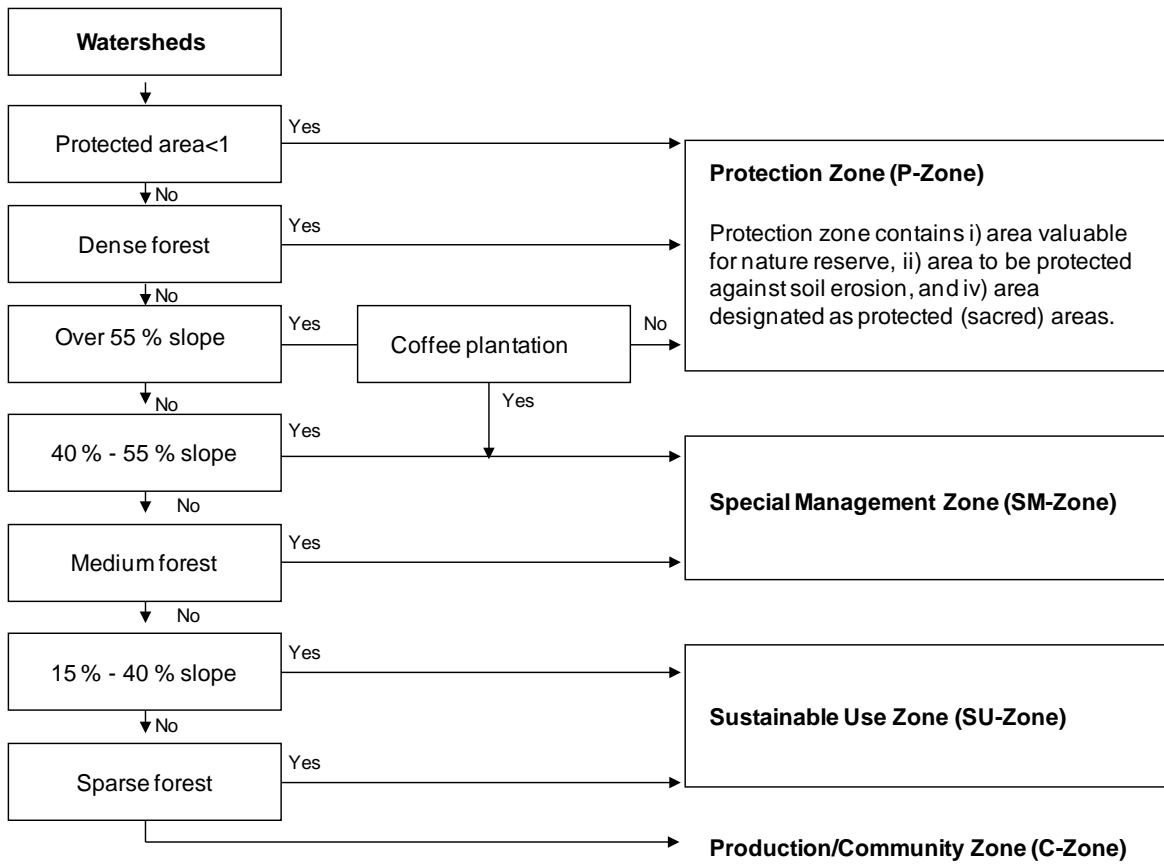
**4.2 Overall Guidelines on Land Management in the Watershed**

Proper land management is indispensable for maintenance and improvement of the functions of the watershed. Due consideration should be paid to the land coverage and slope in the determination of land uses for proper land management. To promote the proper land use and management, the Noru Watershed Management Council agreed with NDF/MAF on the adoption of the following guidelines on land use and management in the watershed.

**Table 4-1: Guidelines on Land Use and Management in the Watershed**

<b>Zone</b>	<b>Description</b>
P-Zone	Areas that have crucial functions the watershed and high environmental values shall be protected as Protection zone. (P-zone). Dense forests and steep sloping areas (over 55 %) but not used for coffee plantation are classified into P-zone. In the area under P-zone, any economic use and activities except those allowed by the government regulations (i.e., UNTEAT No. 19) shall not be allowed. Such areas shall be basically managed/protected as protected forests.
SM-Zone	Medium forests and areas with slopes between 40% and 55% are categorized as Special Management Zone (SM-Zone). Coffee plantations with more than 55% slopes are also classified under this zone. The areas under SM-zone can be used for production purposes but shall be simultaneously managed as forest lands to prevent adverse effect on lands and water sources. Hence, forest-based land uses, such as i) coffee plantation, ii) mixed forests of timber and fruit trees, iii) natural forests used for collection of NTFPs, are recommended for the areas under this zone.
SU-Zone	Areas with slopes ranging from 15% to 40% or those covered with sparse forests are categorized under Sustainable Use Zone (SU-Zone). The basic idea of this zone is to use the areas for production purposes while maintaining land productivity. Hence, the areas can be used for farming but shall be managed in a proper manner by applying soil conservation measures or introducing agroforestry techniques.
C-Zone	Areas that do not belong to the above-mentioned zones are categorized into Production/Community Zone (C-Zone). In general, areas in C-Zone have flat to gentle slopes and less vegetation cover (bushes, grasslands, and bare lands). Because of these features, the areas can be used for economic and social development purposes by local communities with a few restrictions. Upland farms, grazing lands, and paddy fields, to name a few, are possible land uses in this zone.

The following flowchart shows the process of classifying the Noru watershed into the respective zones described above.



<1 Protected areas: the area is designated as a protected area by communities.

**Figure 4-2: Flowchart for Classification of the Watershed into the Land Management Zones**

Figure 4-3 in the following page shows the distribution of the respective zones in the watershed.

The following chapter, Chapter 5, describes the key actions to be taken for sustainable watershed management following the land management guidelines described above

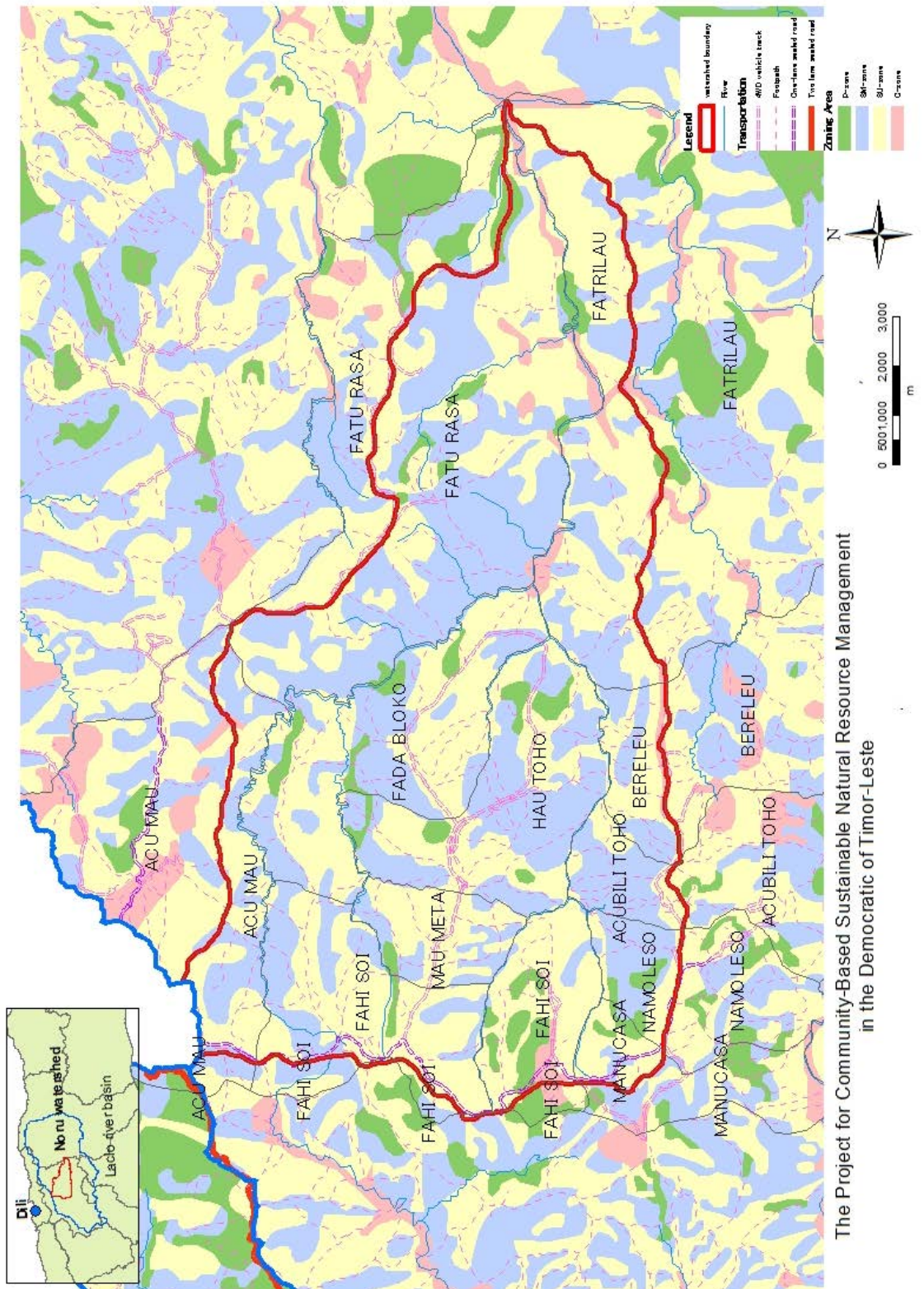
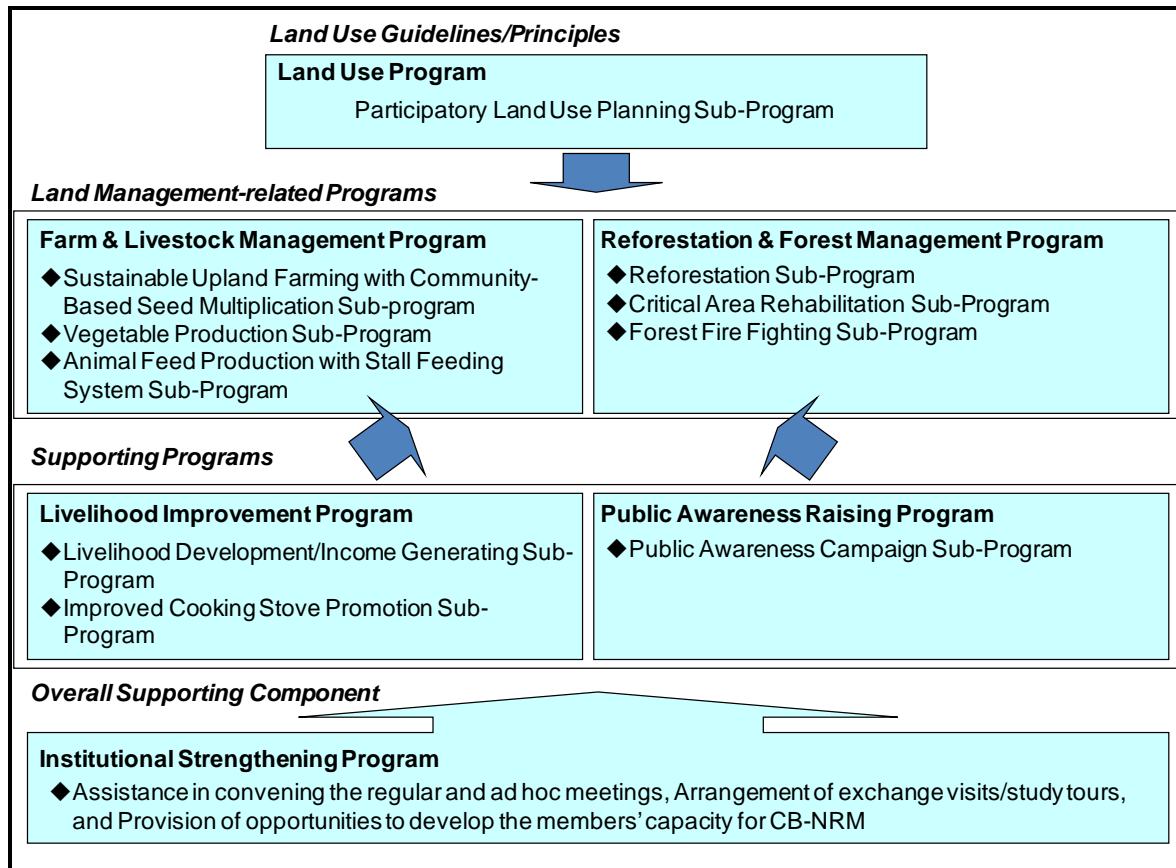


Figure 4-3: Zone Distribution in the Respective Sucos in the Watershed

## Chapter 5 Action Plan for Watershed Management

### 5.1 Overall Framework of the Action Plan

As illustrated below, a total of five (5) programs are proposed as key actions to achievement of the goal and strategic objectives of the watershed management plan described in Chapter 4. The five programs further encompass a total of 11 sub-programs as shown below.



**Figure 5-1: Overall Framework of the Watershed Management Plan**

Land Use Program is the core and overarching program to establish the CB-NRM mechanism at suco level helping suco leaders and local communities in concerned sucos properly manage forest-related natural resources in line with the land management principles described in Chapter 4. The land management-related programs, namely i) Farm and Livestock Management Program and ii) Reforestation and Forest Management Program, aim to assist local communities in materializing the land use plan prepared in the Land Use Program. The land management-related programs are supported by i) Livelihood Development Program and ii) Information Dissemination/Awareness Raising Program. As all the programs are implemented under the management and supervision of the Noru Watershed Management Council, a specific program to strengthen the functions of the Noru Watershed Management Council is to be implemented along with the other programs.



## 5.2 Land Use Program

### 5.1.1 Objectives

Although the land use and management principles in Chapter 4 indicate the guidelines/principles on land use and management in the watershed, there is still a need to develop a land use plan at suco level so as to enable local communities to translate the guidelines into practice on the ground. The main objective of Land Use Program is therefore to enable local communities to manage forest-related natural resources in the concerned sucos in line with the land use and management principles.

### 5.1.2 Strategies

Since local communities should be responsible for management of lands and forest-related natural resources in the localities under the concept of CB-NRM, the land use and management principles need to be translated into a land use plan prepared by the respective villages. The participatory land use planning (PLUP), which has been introduced and demonstrated in Sucos Faturasa, Fadabloco, and Hautoho to develop a future land use plan with village regulations in a participatory manner, is proposed as the sole activity (sub-program) to be undertaken under the Land Use Program. The PLUP has been proven as an effective method to enhance the capacity of suco leaders and other communities to manage lands and forest-related natural resources in a sustainable manner.

### 5.1.3 Participatory Land Use Planning Sub-program (PLUP-SP)

#### (1) Objective

The main objective of the sub-program is to help suco leaders and communities manage lands and forest-related natural resources in line with the land use and management principles in the concerned sucos. Specifically, the sub-program aims to:

- i) assist suco leaders and local communities in developing a future land use plan with village rules/regulations on natural resource management considering the land use/management principles, current land use, and traditional land ownership;
- ii) develop the capacity of suco leaders to manage forest-related natural resources in a proper and sustainable manner using the village regulations; and
- iii) assist local communities in selecting priority forestry and agricultural extension services effective in realization of the future land use plan.

#### (2) Target Area

Since the sucos supported by the JICA-MAF CB-NRM Project, namely Suco Faturasa, Fadabloco, and Hautoho, have already formulated the future land use plan with village regulations of the respective sucos, PLUP-SP should be implemented in the other nine (9) sucos in the watershed.

#### (3) Implementation Procedures

The PLUP-SP is to be implemented in accordance with the following steps:

Table 5-1: Activities of the PLUP-SP

Step	Outlines	Timeline
Formulation of a future land use plan with village regulations	<p>A future land use plan with village regulations shall be developed through a series of discussions listed below:</p> <ol style="list-style-type: none"> <li>1) Consultation with suco leaders and communities about the PLUP and CB-NRM mechanism;</li> <li>2) Formation of a working team composed of the members of suco council;</li> <li>3) Preparation of a work plan with the working team;</li> <li>4) Field visit to one of the sucos supported by the JICA-MAF CB-NRM Project;</li> <li>5) Preparation of a present land use map using an aerial photo map covering the suco (at a scale of 1/7,500~1/10,000);</li> <li>6) Discussion on the future land use options and preparation of a future land use map using the present land use map;</li> <li>7) Review of the village rules on natural resource management in the past and at present;</li> <li>8) Discussion on the village regulations;</li> <li>9) Review of the draft village regulations;</li> <li>10) Consultation with local communities about the draft village regulations;</li> <li>11) Preparation for the tara bandu ceremony; and</li> <li>12) Convening of the tara bandu ceremony.</li> </ol>	3 to 4 months (The tara bandu ceremony should be held by the beginning of September when communities start the land preparation.)
Selection of priority forestry and agriculture extension services	<p>Priority forestry and agriculture extension services effective in achievement of the future land use map shall be selected through the following steps:</p> <ol style="list-style-type: none"> <li>1) Discussions on the possible forestry and agriculture extension services and preliminary selection of the preferable services;</li> <li>2) Evaluation of the selected preferable forestry and agriculture extension services and identification of the priority ones; and</li> <li>3) Discussion on the priority forestry and agriculture extension services with village leaders and other communities and determination of the draft scopes of the extension services.</li> </ol>	1~2 months (The activities can start after the future land use planning in the PLUP process.)
Institutionalization of the village regulations	<p>In order to institutionalize the village regulations, the following meetings shall be arranged and held by suco council on a regular basis.</p> <ol style="list-style-type: none"> <li>1) Monthly meeting at suco level among the members of suco council to monitor if there are any issues and problems on natural resource management and discuss how such issues/problems could be solved/settled by using the village regulations;</li> <li>2) Bi-monthly or quarterly meeting at aldeia level to share with local communities at aldeia level the situation of the village and how suco leaders use the village regulations to solve/settle problems; and</li> <li>3) Annual plenary meeting at suco level with suco council and other communities to evaluate the effectiveness of the village regulations.</li> </ol>	3~4 years After 3~4 years, the monthly meeting can be changed to the bi-monthly, while the bi-monthly/quarterly can be held on a biannual basis.

#### (4) Necessary Inputs

The following inputs are needed to implement the sub-program.

##### PLUP

- a. Facilitators (Main facilitator, a few co-facilitators, and field assistance)
- b. Food for the meetings
- c. A0-sized aerial photo map which covers the suco (at a scale of 1: 7,500~1:10,000)

- d. Several transparent/plastic sheets at A0 size
- e. A large-sized wooden board (more than A0 size)
- e. Stationary (felt type pens, flipcharts, masking tapes, and tacks)
- f. Materials and expenses for the tara bandu ceremony
- g. Expenses for making booklets of the village regulations with a future land use map
- h. Transportation means for the facilitators and others

Selection of priority forestry and agriculture extension services

- a. Facilitators (Main facilitator, a few co-facilitators, and field assistance)
- b. Food for the meetings
- c. Stationary (felt type pens, flipcharts, and masking tapes)
- d. Transportation means for the facilitators and others

Institutionalization of the village regulations

- a. Facilitators (Main facilitator, a few co-facilitators, and field assistance)
- b. Food for the meetings
- c. Stationary (felt type pens, flipcharts, and masking tapes)
- d. Transportation means for the facilitators and others

(5) Expected Outputs

The following outputs are expected to be generated from the implementation of the sub-program.

Direct Results

- a. Village regulations with the future land use plan agreed upon by communities
- b. A list of priority forestry and agricultural extension services with their draft scopes

Direct Impacts

- a. Reduction of the incidence of forest fires, illegal logging, and animal grazing
- b. Improvement of land productivity in suco

## 5.2 Farm and Livestock Management Program

### 5.2.1 Objectives

The main aim of the Farm and Livestock Management Program is to change farming and livestock management practices into sustainable and productive forms, as the current practices have caused deforestation and forest degradation as described in Chapter 3. Particularly, the program shall put its focus on: i) sustainable use of sloping areas, ii) improvement of productivity of staple upland crops, iii) diversification of crops produced for cash income, and iv) semi-intensive management of livestock to effectively use animals.

### 5.2.2 Strategies and Approaches

In order to achieve the objectives of the Farm and Livestock Management Program, the following sub-programs are proposed as necessary actions to be taken.

- a. Sustainable Upland Farming with Community-Based Seed Multiplication Sub-program

- b. Vegetable Production Sub-program
- c. Animal Feed Production with Stall Feeding System Micro Sub-program

To convert the conventional practices into sustainable and productive forms, there is a need to change people’s perception of the current practices and build their capacity to introduce and apply such improved practices. Thus, the following strategies shall be adopted for implementation of the sub-programs.

- a. Introduction of techniques through continuous hands-on training in the form of farmer field schools (FFSs)
- b. Effective utilization of local resources and technologies
- c. Due consideration of the natural condition of the watershed

### 5.2.3 Sub-programs

#### (1) Sustainable Upland Farming with Community-Based Seed Multiplication Sub-program (SUF with CBSM-SP)

The outlines of the sub-program are described below.

**Table 5-2: Outlines of the SUF with CBSM-SP**

Items	Descriptions
Objectives	<p>The main objective of the sub-program is to enhance the capacity of communities to apply sustainable upland farming techniques to their permanent farms along with the introduction of improved seeds of major staple crops (i.e., maize, cassava, and sweet potato), so that they can reduce and stop the slash and burn farming practices. Specifically, the sub-program aims to:</p> <ol style="list-style-type: none"> <li>1) introduce and disseminate soil conservation measures easy-to-apply but effective in prevention of soil erosion;</li> <li>2) introduce and disseminate organic farming techniques suitable for the current situations of the sucos;</li> <li>3) introduce the improved seeds of maize, cassava, and sweet potato, which have performed well in Suco Fadabloco and Hautoho; and</li> <li>4) encourage communities to replicate the key techniques on sloping agriculture and organic farming in their own plots; and</li> <li>5) increase the production of the major staple crops (i.e., maize, cassava, and sweet potato) in the sucos and ensure sufficient seeds and planting materials for next cropping season.</li> </ol>
Target areas	All the concerned sucos except Suco Faturasa, Fadabloco, and Hautoho
Implementation procedures	<p>The sub-program is to be implemented for 3 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of potential target beneficiaries and organization of farmers’ groups (1 group per aldeia);</li> <li>2) Selection of leaders and key members of the group and determination of roles and responsibilities of the members;</li> <li>3) Development of a work plan in a participatory manner;</li> <li>4) Identification of the demonstration plot each for the beneficiaries groups;</li> <li>5) Conducts of hands-on training courses (farmer field schools: FFSs) at the demonstration plots, which cover the following topics: (compost making including maintenance, cleaning, A-frame making, contour line delineation, application of soil conservation measures (contour composting terrace), cultivation, compost application, sowing seeds, preparation of liquid fertilizer, maintenance of farms (weeding and application of liquid fertilizer), harvesting, and post-harvesting);</li> <li>6) Distribution of seeds and farm tools</li> <li>7) Evaluation of the training courses and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol>

Items	Descriptions
	<p><u>2<sup>nd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Division of the groups into sub-groups based on the existing traditional working system (halosan system) in suco;</li> <li>2) Selection of leaders of the sub-groups and identification of sub-group demonstration plots;</li> <li>3) Conducts of hands-on training courses (farmer field schools: FFSs) at the demonstration plots, which cover the following topics: compost making including maintenance, maintenance of soil conservation measures, cultivation, compost application, sowing seeds, preparation of liquid fertilizer, maintenance of farms (weeding and application of liquid fertilizer), harvesting, and post-harvesting;</li> <li>4) Conducts of hands-on training courses/FFSs on selected key techniques at the sub-group demonstration plot, namely, compost making including maintenance, A-frame making and contour line delineation, application of soil conservation measures (contour composting terrace), and preparation of liquid fertilizer;</li> <li>5) Encouragement of members of the sub-groups to help each other to apply the key techniques demonstrated in the sub-group demonstration plots; and</li> <li>6) Evaluation of the training courses.</li> </ol> <p><u>3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Assistance in the application of sustainable upland farming techniques to the demonstration plots and individual farms.</li> <li>2) Evaluation of the activities.</li> </ol>
Timeline	<p><u>Group organization and work planning</u> 2~3 months (in the rainy season)</p> <p><u>Hands-on training/FFSs</u> 12 months (after the end of the rainy season)</p> <p><u>Evaluation and planning</u> 1 month (at the end of the rainy season)</p>
Necessary inputs	<p><u>Group organization, work planning, and participatory evaluation</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Hands-on training/FFSs</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Farm tools</li> <li>3) Food for the training courses</li> <li>4) Improved seeds and planting materials</li> <li>5) Drum can or bucket for liquid fertilizer and water can</li> <li>6) Local materials (procured by local communities) for compost and liquid fertilizer</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) Sufficient volume of improved maize seeds and planting materials of cassava and sweet potato can be produced in the sucos.</li> <li>2) A number of communities will apply the sustainable upland farming techniques to their own farms.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Local livelihoods will be improved</li> <li>2) Surface soil erosion will be reduced.</li> </ol>

(2) Vegetable Production Sub-program (VP-SP)

The outlines of the sub-program are described below.

**Table 5-3: Outlines of the VP-SP**

Items	Descriptions
Objectives	<p>The main objective of the sub-program is to enhance the capacity of communities to produce quality vegetables so that they can earn additional cash income from sales of vegetables. Specifically, the sub-program aims to:</p> <ol style="list-style-type: none"> <li>1) introduce and disseminate organic vegetable farming techniques; and</li> </ol>

Items	Descriptions
	2) introduce several types of vegetables including those that local communities have not grown yet.
Target areas	Sucos where there are sources of water which can be used for vegetable production throughout a year
Implementation procedures	<p>The sub-program is to be implemented for 3 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of potential target beneficiaries and organization of farmers' groups (1 group per aldeia);</li> <li>2) Selection of leaders and key members of the group and determination of roles and responsibilities of the members;</li> <li>3) Development of a work plan in a participatory manner;</li> <li>4) Identification of the demonstration plot each for the beneficiaries groups;</li> <li>5) Conducts of hands-on training courses (farmer field schools: FFSs) at the demonstration plots, which cover the following topics: (compost making including maintenance, seed bed making, nursery production, ridge making, application of compost, preparation of liquid fertilizer and natural pesticide, maintenance of farms (weeding, application of liquid fertilizer and natural pesticide, and staking of poles), harvesting, and collection of seeds);</li> <li>6) Distribution of seeds and farm tools; and</li> <li>7) Evaluation of the training courses and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Conducts of the same hands-on training courses as those arranged for the 1<sup>st</sup> year;</li> <li>2) Distribution of seeds; and</li> <li>3) Evaluation of the training courses.</li> </ol> <p><u>3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Assistance in the continuation of vegetable production in the demonstration plots and individual farms.</li> <li>2) Evaluation of the activities.</li> </ol>
Timeline	<p><u>Group organization and work planning</u> 2~3 months (in the rainy season)</p> <p><u>Hands-on training/FFSs</u> 6~8 months (after the end of the rainy season)</p> <p><u>Evaluation and planning</u> 1 month (in the rainy season)</p>
Necessary inputs	<p><u>Group organization, work planning, and participatory evaluation</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Hands-on training/FFSs</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Farm tools</li> <li>3) Food for the training courses</li> <li>4) Seeds of vegetables</li> <li>5) Drum can or bucket for liquid fertilizer and water can</li> <li>6) Local materials (procured by local communities) for compost and liquid fertilizer</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) Vegetable production will increase in the sucos.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Local livelihoods will be improved.</li> </ol>

### (3) Animal Feed Production with Stall Feeding System Sub-program (AFP with SFS-SP)

The outlines of the sub-program are described below.

Table 5-4: Outlines of the AFP with SFS-SP

Items	Descriptions
Objectives	<p>The main objective of the sub-program is to enhance the capacity of communities to produce animal feeds and stall-fed animals so as to rear animals in pens instead of free grazing. Specifically, the sub-program aims to:</p> <ol style="list-style-type: none"> <li>1) Introduce fodder crops and encourage communities to plant fodder crops near farms; and</li> <li>2) Introduce and disseminate the techniques on stall feeding system including building of an animal pen.</li> </ol>
Target areas	All the concerned sucos except Suco Faturasa, Fadabloco, and Hautoho
Implementation procedures	<p>The sub-program is to be implemented for 3 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of potential target beneficiaries and organization of farmers' groups (1 group per aldeia);</li> <li>2) Selection of leaders and key members of the group and determination of roles and responsibilities of the members;</li> <li>3) Development of a work plan in a participatory manner;</li> <li>4) Identification of the demonstration plot each for the beneficiaries groups;</li> <li>5) Conducts of hands-on training courses (farmer field schools: FFSs) at the demonstration plots, which cover the following topics: (land preparation, planting of fodder trees/crops in farms as live fence or hedgerow, collection of materials for an animal pen, building of an animal pen, and rearing of animals in a pen);</li> <li>6) Distribution of seeds and planting materials of fodder trees/crops</li> <li>7) Evaluation of the training courses and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Division of the groups into sub-groups based on the existing traditional working system (halosan system) in suco;</li> <li>2) Selection of leaders of the sub-groups and identification of sub-group demonstration plots;</li> <li>3) Conducts of the same hands-on training courses (farmer field schools: FFSs) at the sub-group demonstration plots;</li> <li>4) Encouragement of members of the sub-groups to help each other to apply the key techniques demonstrated in the sub-group demonstration plots;</li> <li>5) Distribution of seeds and planting materials of fodder crops and farm tools; and</li> <li>6) Evaluation of the training courses.</li> </ol> <p><u>3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Assistance in the maintenance of fodder crops/trees and stall feeding system in the demonstration plots and individual farms.</li> <li>2) Evaluation of the activities.</li> </ol>
Timeline	<p><u>Group organization and work planning</u> 2~3 months (before the rainy season)</p> <p><u>Hands-on training/FFSs</u> 12 months (from the beginning of the rainy season)</p> <p><u>Evaluation and planning</u> 1 month (at the end of the dry season)</p>
Necessary inputs	<p><u>Group organization, work planning, and participatory evaluation</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Hands-on training/FFSs</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Farm tools</li> <li>3) Food for the training courses</li> <li>4) Seeds and planting materials of fodder crops/trees</li> <li>5) Local materials (procured by local communities) for compost and liquid fertilizer</li> <li>6) Transportation means for the facilitators and others</li> </ol>

Items	Descriptions
Expected outputs	<u>Direct Results</u> 1) The number of animals reared in pens will increase. 2) Health conditions of animals will be improved. <u>Direct Impact</u> 1) Crop damage caused by animals will be reduced. 2) Forest fire or illegal cutting for fencing will be reduced.

### 5.3 Reforestation and Forest Protection Program

#### 5.3.1 Objectives

The main aim of the Reforestation and Forest Protection Program is to increase forest cover in the watershed by planting value-added trees (i.e., industrial trees, shade trees for coffee, and fruit trees) in private lands and leguminous trees/casuarinas to rehabilitate degraded water catchments as well as other critical areas. In addition, the program will also encompass a sub-program for protection of forests from wild fires in collaboration with communities in the concerned sucos.

#### 5.3.2 Strategies and Approaches

In order to achieve the objectives of the Reforestation and Forest Management Program, the following sub-programs are proposed as necessary actions to be taken.

- a. Reforestation Sub-program
- b. Critical Areas Rehabilitation Sub-program
- c. Forest Fire Fighting Sub-program

Farmer field schools (FFSs) is to be adopted as a key strategy for the first sub-program as its target areas are private lands, while the rest of the sub-programs need an agreement between/among members involved in the sub-programs, the concerned villages, and MAF/NDF since the sub-programs are aimed at the improvement and maintenance of the watershed functions for the sake of not only communities in the respective sucos but also those in the downstream areas.

#### 5.3.3 Sub-programs

##### (1) Reforestation Sub-program (Rf-SP)

The outlines of the sub-program are described below.

**Table 5-5: Outlines of the Rf-SP**

Items	Descriptions
Objectives	The main objective of the sub-program is to enhance the capacity of communities to plant industrial trees, shade trees for coffee, and fruit trees, in right places in a proper manner. Specifically, the sub-program aims to: <ol style="list-style-type: none"> <li>1) provide industrial trees, shade trees, and fruit trees to communities who are willing to plant those seedlings in their own farms and maintain them properly after planting;</li> <li>2) introduce and disseminate the techniques on planting industrial trees, shade trees, and fruit trees in a proper manner; and</li> <li>2) introduce the proper designs of planting industrial trees, shade trees, and fruit trees.</li> </ol>
Target areas	All the concerned sucos



Items	Descriptions
Implementation procedures	<p>The sub-program is to be implemented for 2 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of potential target beneficiaries and organization of farmers' groups (1 group per aldeia);</li> <li>2) Selection of leaders and key members of the group and determination of roles and responsibilities of the members;</li> <li>3) Development of a work plan in a participatory manner;</li> <li>4) Identification of the demonstration plots for the respective types of trees;</li> <li>5) Conducts of hands-on training courses (farmer field schools: FFSs) at the demonstration plots, which cover the following topics: (compost making including maintenance, land preparation, staking, pitting, refilling with compost application, planting, and maintenance of seedlings (shading, weeding, and application liquid fertilizer for fruit seedlings));</li> <li>6) Distribution of seedlings and farm tools</li> <li>7) Evaluation of the training courses and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Division of the groups into sub-groups based on the existing traditional working system (halosan system) in suco;</li> <li>2) Selection of leaders of the sub-groups and identification of sub-group demonstration plots;</li> <li>3) Conducts of the same hands-on training courses (farmer field schools: FFSs) at the sub-group demonstration plots;</li> <li>4) Encouragement of members of the sub-groups to help each other to apply the key techniques demonstrated in the sub-group demonstration plots;</li> <li>5) Distribution of seedlings; and</li> <li>6) Evaluation of the training courses.</li> </ol> <p><u>3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Assistance in planting of seedlings distributed to the members in their own plots in a proper manner;</li> <li>2) Assistance in maintaining seedlings planted in the demonstration plots and individual plots in a proper manner.</li> <li>3) Evaluation of the activities.</li> </ol>
Timeline	<p><u>Group organization and work planning</u> 2~3 months (in the rainy season)</p> <p><u>Hands-on training/FFSs</u> 12 months (from the end of the rainy season)</p> <p><u>Evaluation and planning</u> 1 month (at the end of the rainy season)</p>
Necessary inputs	<p><u>Group organization, work planning, and participatory evaluation</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Hands-on training/FFSs</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Farm tools</li> <li>3) Food for the training courses</li> <li>4) Seedlings</li> <li>5) Local materials (procured by local communities) for compost and liquid fertilizer</li> <li>6) Transportation means for the facilitators and others</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) Areas planted with seedlings will increase.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Forest cover in the watershed will be expanded.</li> <li>2) Local livelihoods will be improved.</li> </ol>

## (2) Critical Area Rehabilitation Sub-program (CAR-SP)

The outlines of the sub-program are described below.

**Table 5-6: Outlines of the CAR-SP**

Items	Descriptions
Objectives	The main objective of the sub-program is to rehabilitate degraded forests, deforested areas, and degraded lands in critical water catchments and other important areas in the sucos by planting trees in a collaborative manner.
Target areas	All the concerned sucos
Implementation procedures	<p>The sub-program is to be implemented for 5 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of the target areas to be rehabilitated considering sloping conditions and importance of the respective areas;</li> <li>2) Select one or two site/s among the target areas;</li> <li>3) Determination of families who would get direct benefit from rehabilitation;</li> <li>4) Organization of the working team/s composed of the families who would get benefit;</li> <li>5) Development of a work plan with village leaders and the working team;</li> <li>6) Procurement of seedlings;</li> <li>7) Mobilization of communities to prepare the lands for planting, pitting, refilling with compost, and planting);</li> <li>8) Development of an agreement between/among the working team, suco council, and MAF/NDF on the maintenance of seedlings planted for two and a half (2.5) years;</li> <li>9) Maintenance (weeding and shading) of seedlings twice during the rainy season and once during the dry season; and</li> <li>10) Evaluation of the activities and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> ~ 3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Repeat the activities from 2) to 10).</li> </ol> <p><u>4<sup>th</sup> ~ 5<sup>th</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Repeat the activities from 9) and 10).</li> </ol>
Timeline	<p><u>Selection of the target sites, identification of beneficiaries, development of a work plan</u> 2~3 months (in the dry season)</p> <p><u>Land preparation, staking, pitting, refilling, and planting by all communities</u> 1 month (at the beginning of the rainy season)</p> <p><u>Maintenance of seedlings</u> 2.5 years (after planting)</p> <p><u>Evaluation and planning</u> 1 month (at the end of rainy season)</p>
Necessary inputs	<p><u>Selection of the target sites, identification of beneficiaries, development of a work plan</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Land preparation, staking, pitting, refilling, and planting by all communities</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Farm tools</li> <li>3) Food for the participants in reforestation activities</li> <li>4) Seedlings</li> <li>5) Transportation means for transportation of seedlings and the facilitators</li> </ol> <p><u>Maintenance of seedlings</u></p> <ol style="list-style-type: none"> <li>1) Incentives for the working team</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) Degraded forests and/or degraded areas will be rehabilitated.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Surface soil erosion will be reduced.</li> <li>2) Water flow of important water sources in the sucos will be stabilized.</li> </ol>

## (3) Forest Fire Fighting Sub-program (FFF-SP)

The outlines of the sub-program are described in the following table.

**Table 5-7: Outlines of the FFF-SP**

Items	Descriptions
Objectives	The main objective of the sub-program is to minimize the damage of forest fires when a wild fire happens in the concerned sucos in collaboration with communities living in the fire-prone areas.
Target areas	All the concerned sucos
Implementation procedures	<p>The sub-program is to be implemented under an five (5)-year agreement between the suco and NDF in the respective sucos.</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of the fire-prone areas in suco.</li> <li>2) Organization of a fire fighting team selecting communities who live close to the fire-prone areas or use the same areas for farming and other purposes and are willing to work for other communities.</li> <li>3) Selection of leaders and development of by-laws of the fire fighting team;</li> <li>4) Procurement and provision of simple fire fighting tools and equipment for the fire fighting team;</li> <li>5) Conducts of training in using the tools and equipment and fire fighting drills in July and August;</li> <li>6) Maintenance of the tools and equipment stored in suco office from time to time; and</li> <li>7) Evaluation of the activities and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> ~ 5<sup>th</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Conducts of a fire fighting drill in August;</li> <li>2) Maintenance of the tools and equipment stored in suco office from time to time; and</li> <li>3) Evaluation of the activities and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol>
Timeline	<p><u>Identification of fire-prone areas, organization of a working team, and development of a work plan</u> 2~3 months (in the rainy season)</p> <p><u>Procurement of tools and equipment, training, and fire-fighting drills</u> 2~3 months (before the end of dry season)</p> <p><u>Evaluation and planning</u> 1 month (in the rainy season)</p>
Necessary inputs	<p><u>Identification of fire-prone areas, organization of a working team, and development of a work plan</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Procurement of tools and equipment, training, and fire-fighting drills</u></p> <ol style="list-style-type: none"> <li>1) Trainers and assistants</li> <li>2) Fire fighting tools and equipment</li> <li>3) Food for training and fire-fighting drills</li> <li>4) Transportation means for transportation of seedlings and the facilitators</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) The capacity to extinguish a wild fire will be enhanced in the sucos.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Damage of wild fires will be minimized when a wild fire happens.</li> <li>2) The incidence of wild fires will be reduced.</li> </ol>

## 5.4 Livelihood Improvement Program

### 5.4.1 Objectives

The main aim of the Livelihood Improvement Program is to reduce the human pressure on forest-related natural resources by improving local livelihoods or developing additional source of income using locally available resources.

### 5.4.2 Strategies and Approaches

In order to achieve the objectives of the Livelihood Improvement Program, the following sub-programs are proposed as necessary actions to be taken.

- a. Livelihood Development/Income Generating Sub-program
- b. Improved Cooking Stove Promotion Sub-program

The former sub-program, the Livelihood Development/Income Generating Program, is to be implemented by using the method of FFSs so that local communities can acquire necessary techniques/skills on livelihood development. Furthermore, the use of locally available resources and techniques is to be another key strategy adopted for the same sub-program.

On the other hand, the latter sub-program, Improved Cooking Stove Promotion Sub-program, should be introduced after improvement of livelihood conditions by the former sub-program. The program is to procure and distribute improved cooking stove to communities who are willing to use and can afford to shoulder some costs of cooking stove.

### 5.4.3 Sub-programs

#### (1) Livelihood Development/Income Generating Sub-program (LD/IG-SP)

The outlines of the sub-program are described in the following table.

**Table 5-8: Outlines of the LD/IG-SP**

Items	Descriptions
Objectives	The main objective of the sub-program is to improve local livelihoods by increase of sources of cash income and quality foods using material locally available.
Target areas	All the concerned sucos except Suco Fadabloco and Hautoho
Implementation procedures	<p>The sub-program is to be implemented for 3 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification/selection of women members and organization of women's groups (1 group per aldeia);</li> <li>2) Selection of leaders and key members of the group and determination of roles and responsibilities of the members;</li> <li>3) Conduct of a participatory resource assessment and identification of potential livelihood development options</li> <li>4) Development of a work plan in a participatory manner;</li> <li>5) Conducts of hands-on training courses (farmer field schools: FFSs) on the potential livelihood development options, which should be based on natural resources locally available in principle;</li> <li>6) Procurement of tools and equipment necessary for training on the potential livelihood development options; and</li> <li>7) Evaluation of the training courses and preparation of the work plan for the 2<sup>nd</sup> year in a participatory manner.</li> </ol> <p><u>2<sup>nd</sup> and 3<sup>rd</sup> year</u></p>

Items	Descriptions
	<ol style="list-style-type: none"> <li>1) Continuation of hands-on training courses (farmer field schools: FFSs) on potential livelihood development options;</li> <li>2) Promotion of products/commodities produced by the women' groups in coordination with major markets;</li> <li>3) Assistance in marketing the products and running a small scale business based on the products/commodities by the women' s groups;</li> <li>5) Conducts of training on financial management and provision of daily coaching on book keeping; and</li> <li>6) Evaluation of the training courses.</li> </ol> <p><u>3<sup>rd</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Assistance in the continuation of the production of the commodities and running of the small scale business;</li> <li>2) Provision of daily coaching on book keeping and cash mngement; and</li> <li>3) Evaluation of the training courses.</li> </ol>
Timeline	<p><u>Resource assessment, group organization and work planning</u> 2~3 months (in the rainy season)</p> <p><u>Hands-on training/FFSs</u> 12 months (from the end of the rainy season)</p> <p><u>Evaluation and planning</u> 1 month (at the end of the rainy season)</p>
Necessary inputs	<p><u>Resource assessment, group organization and work planning</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Food for the meetings</li> <li>3) Stationary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportation means for the facilitators and others</li> </ol> <p><u>Hands-on training/FFSs</u></p> <ol style="list-style-type: none"> <li>1) Facilitators (Main facilitator, a few co-facilitators, and field assistance)</li> <li>2) Tools and equipment</li> <li>3) Food for the training courses</li> <li>4) Local materials</li> <li>5) Transportation means for the facilitators and others</li> </ol>
Expected outputs	<p><u>Direct Results</u></p> <ol style="list-style-type: none"> <li>1) Communities, specifically women, in the sucos will prouce products/commodities that can be sold at the market by using local materials.</li> </ol> <p><u>Direct Impact</u></p> <ol style="list-style-type: none"> <li>1) Local livelihoods will be improved.</li> <li>2) Natural resources in the sucos will be managed in a sustainable manner.</li> </ol>

## (2) Improved Cooking Stove Promotion Sub-program (ICSP-SP)

The outlines of the sub-program are described in the following table.

**Table 5-9: Outlines of the ICSP-SP**

Items	Descriptions
Objectives	The main objective of the sub-program is to reduce the use of fire wood so as to decrease human pressure on natural forests.
Target areas	All the concerned sucos
Implementation procedures	<p>The sub-program is to be implemented for 3 years in the respective sucos in the following manner:</p> <p><u>1<sup>st</sup> year</u></p> <ol style="list-style-type: none"> <li>1) Identification of communities who are willing to use and can afford to buy improved cooking stoves;</li> <li>2) Procurement of cooking stoves for those who can afford to buy;</li> <li>3) Conduct of guidance and training on the use and maintenance of cooking stoves; and</li> <li>4) Evaluation of the effectiveness of cooking stoves and identification of any communities who are willing to use and can afford to buy the same.</li> </ol> <p><u>2<sup>nd</sup> and 3<sup>rd</sup> year</u></p>

Items	Descriptions
	1) Repeat of the activities conducted in the 1 <sup>st</sup> year (except 1))
Timeline	<u>Identification of communities and procurement of cooking stove</u> 2~3 months (any time) <u>Conduct of guidance and training</u> 1 month (after procurement of cooking stoves) <u>Evaluation and identification of communities</u> 1 month (1 year after introduction of cooking stoves)
Necessary inputs	<u>Identification of communities and procurement of cooking stove</u> 1) Facilitators (Main facilitator, and field assistance) 2) Food for the meetings 3) Stationary (felt type pens, flipcharts, and masking tapes) 4) Improved cooking stoves 4) Transportation means for the cooking stoves and facilitators <u>Guidance and training</u> 1) Facilitators (Main facilitator, and field assistance) 2) Food for the guidance and training 3) Local materials (fire wood) 4) Transportation means for the facilitators and others
Expected outputs	<u>Direct Results</u> 1) The number of families who use improved cooking stoves will increase. <u>Direct Impact</u> 1) The volume of fire wood consumed in the sucos will be reduced. 2) The rate of forest degradation / deforestation will decline in the sucos.

## 5.5 Public Awareness Raising Program

### 5.5.1 Objectives

The main aim of the Public Awareness Raising Program is to heighten communities' consciousness of risks of the environmental destructive activities, namely, wild fires, illegal logging, and animal grazing, and simultaneously enhance their understanding of sustainable and proper management of forest-related natural resources, so that the incidence of forest fires, illegal logging and animal grazing could be reduced.

### 5.5.2 Strategies and Approaches

The sole sub-program, namely the Public Awareness Campaign Sub-program, is proposed as the necessary action to be taken to achieve the aforementioned objectives of the program.

The following are considered as key strategies for effective information dissemination under the current socio-economic context of the Noru watershed.

- a. to target both generations, adult and children, considering the rapid population increase;
- b. to prepare and use public awareness campaign materials easy-to-understand and visually-apparent to minimize the effect of language barrier; and
- c. to use human resources who are environmentally conscious in suco, such as suco leaders who are involved in the PLUP-SP, as resource persons in the campaign to help the messages of the campaign get across among communities.

### 5.5.3 Public Awareness Campaign Sub-program (PAC-SP)

The outlines of the sub-program are described in the following table.

Table 5-10: Outlines of the PAC-SP

Items	Descriptions
Objectives	The main objective of the sub-program is to enhance public awareness of risks of wild fires, illegal logging, and animal grazing, and simultaneously deepen the understanding of the importance of sustainable management of forest-related natural resources among communities.
Target areas	All the concerned sucos
Implementation procedures	The sub-program is to be implemented for 2 years for all the sucos in the following manner: <u>1<sup>st</sup> year</u> 1) Identification of key topics/messages to get across among communities in the sucos in consultation with suco leaders; 2) Development of a work plan of the awareness campaigns with materials; 3) Conduct of the awareness campaigns (workshops, meetings, and other information dissemination activities) at the sucos; and 4) Evaluation of the process and effectiveness of the awareness campaigns. <u>2<sup>nd</sup> year</u> 1) Repeat of the activities conducted in the 1 <sup>st</sup> year (except 1))
Timeline	<u>Identification of topics and development of a work plan with materials</u> 2~3 months (any time) <u>Conduct of the public awareness campaigns</u> 8 months (after the preparation of the work plan) <u>Evaluation and identification of communities</u> 1 month (after the end of the public awareness campaigns)
Necessary inputs	<u>Identification of communities and procurement of cooking stove</u> 1) Facilitators (Main facilitator, and field assistance) 2) Food for the meetings 3) Stationary (felt type pens, flipcharts, and masking tapes) 4) Transportation means for the cooking stoves and facilitators <u>Public awareness campaigns</u> 1) Facilitators (Main facilitator, and field assistance) 2) Food for the participants in the campaigns 3) Materials for the campaigns 4) Transportation means for the facilitators and others
Expected outputs	<u>Direct Results</u> 1) The materials for public awareness campaigns will be developed. 2) The public awareness of the necessity of forest protection will be enhanced. <u>Direct Impact</u> 1) The incidence of wild fires, illegal logging, and animal grazing will be reduced. 2) The rate of forest degradation / deforestation will decline in the sucos.

## 5.6 Institutional Strengthening Program

### 5.6.1 Objectives

The main objective of the Institutional Strengthening Program is to help the Noru Watershed Management Council keep operational to fulfill its missions even after the end of direct support from the JICA-MAF CB-NRM Project in August 2015.

### 5.6.2 Strategies and Approaches

The Watershed Management Council is the existing organizational framework established for protection of watershed functions through sustainable management of forest-related natural resources in the watershed. Thus, a key strategy to be adopted is to help the Council continue its key functions, namely as i) a platform where the concerned sucos can

coordinate their efforts for sustainable forest management, and ii) an advisory committee for the concerned sucos to take necessary actions.

The emphasis should also be put on the enhancement of the council members' capacity to enable the members of the Council to fulfill their roles and responsibilities for the operations of the Council even after the end of the support from the said CB-NRM Project. In particular, it is necessary to strengthen the capacity of suco leaders of the concerned sucos, especially the ability to govern the villages including forest-related natural resources effectively using the CB-NRM mechanism.

### 5.6.3 Actions to be Taken for Strengthening of the Noru Watershed Management Council

To strengthen the functions of the Noru Watershed Management Council, the following supporting activities are proposed as actions to be undertaken in the watershed management plan.

**Table 5-11: Outlines of the Strengthening of the Noru Watershed Management Council**

Activity	Outlines	Necessary inputs	Target	Timeframe
Assistance in convening the regular and ad hoc meetings	Help the Council convene the regular meeting every three months.	Facilitator with assistance Cost of food for the meeting Stationary	All the members of the Council	One day x 4 times/year (every three (3) months for 5 years)
	Help the Council convene any ad hoc meeting to discuss issues on natural resource management	Same as above	All the members of the Council	As needs arise (for 5 years)
Arrangement of exchange visits/ study tours	Help the members of the Council visit any sucos that have carried out activities similar to those introduced in the Noru watershed and arrange meetings with communities living in such sucos.	Facilitator with assistance Cost of food for the meeting Stationary Transportation means	All the members of the Council	2 days x 1 time/year (once a year for 5 years)
Provision of opportunities to develop the members' capacity for CB-NRM	Help the members of the Council enhance their capacity to properly manage forest-related natural resources using the future land use plan and village regulations of the respective villages.	Facilitator with assistance Cost of food for training Stationary Transportation means Venue for training	Village leaders of the concerned sucos	2 days x 1 time/year (once a year for 5 years)

By doing the above-listed activities, the Noru Watershed Management Council is expected to be capacitated to carry out its missions for sustainable management of the Noru Watershed in close coordination with NDF/MAF.



## **Chapter 6 Implementation Plan**

### **6.1 Basic Concept**

The action plan described in Chapter 5 shall be implemented with the support from MAF/NDF as well as other organizations, such as donor and/or international organizations. It is, however, speculated that it would not be easy for any organization to implement all the 11 sub-programs in all the concerned sucos for a short period of time due to the lack of human resources in the country and remoteness of the areas.

Thus, it is advisable to treat the watershed management plan as a long-term plan to be implemented over a few decades. This chapter indicates the process of implementation of the plan, a proposed organizational structure, and an implementation schedule for the next five (5) years.

### **6.2 Implementation Method**

#### **6.2.1 Process of Implementation of the Sub-programs**

##### **(1) Overall Process**

PLUP-SP shall be implemented ahead of the other sub-programs except PAC-SP and Strengthening of the Council as PLUP-SP will determine the future land use and priority agriculture and forestry extension services, which directly relate to the selection of the sub-programs to be implemented in the sucos. Following PLUP-SP, one or two sub-program/s selected by local communities among those under the land management-related and supporting programs will be implemented.

In parallel with PLUP-SP, PAC-SP and the Strengthening of the Council can be implemented to enhance the capacity of suco leaders as well as other communities in the concerned sucos. The following figure shows the flow of implementation of the sub-programs.

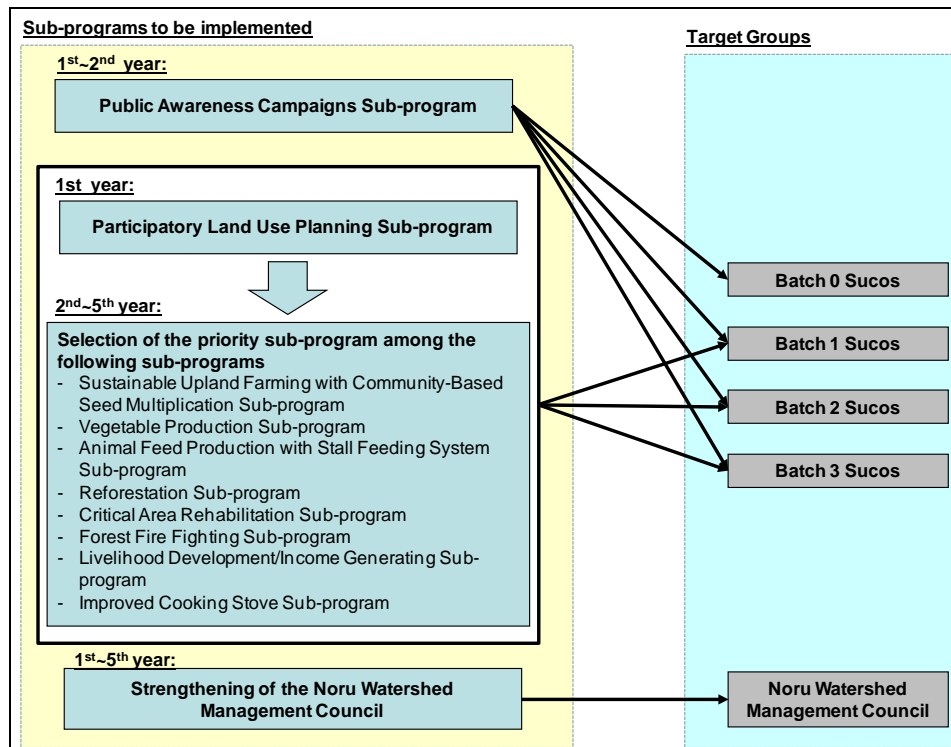


Figure 6-1: Overall Process of the Implementation of the Sub-programs

(2) Selection of the Sub-programs

The selection of the sub-programs in the respective sucos will be undertaken as a part of the process of PLUP-SP after the formulation of a future land use plan with village regulations, especially the preparation of a future land use plan. Considering the capacity of local communities as well as limitation of competent facilitators in the country, it is advisable to implement one (1) or two (2) sub-program/s in a suco at once, or it would be difficult to ensure the satisfactory results from the sub-programs.

As described in Chapter 5, all the sub-programs will not necessarily be suitable for all the concerned sucos. It is therefore important to consider and assess the current conditions of the sucos and check if the situations are suitable for the implementation of the respective sub-programs. The following table shows the potential target areas for the sub-programs as described in Chapter 5.

Table 6-1: Target Sucos and Project Periods of the Respective Sub-programs

Program	Sub-program	Possible target sucos	Period per suco
Land Use Program	PLUP-SP	12 sucos except Suco Faturasa, Fadabloco, and Hautoho	4 years
Farm and Livestock Management Program	SUF with CBSN-SP	12 sucos except Suco Faturasa, Fadabloco, and Hautoho	3 years
	VP-SP	Sucos where permanent water sources are available	3 years
	AFP with SFS-SP	Sucos where animal grazing is the prevailing practice among communities	3 years
	Rf-SP	12 sucos	3 years
Reforestation and Forest Protection Program	CAR-SP	Sucos where there are degraded water catchments and/or important areas	5 years
	FFF-SP	Sucos where the incidence of forest fire is high	5 years
	LD/IG-SP	12 sucos except Suco Fadabloco and Hautoho	3 years
Livelihood Improvement Program	ICSP-SP	12 sucos	3 years

Program	Sub-program	Possible target sucos	Period per suco
Public Awareness Raising Program	PAC-SP	12 sucos	3 years
Institutional Strengthening Program	Strengthening of the Council	Noru Watershed Management Council	5 years

### 6.2.2 Grouping of the Sucos

As pointed out in Section 6.1, it would be quite difficult to implement PLUP-SP and other sub-programs in all the concerned sucos simultaneously. Thus, the concerned sucos shall be grouped into four (4) batches so as to implement the action plan in a phased manner. The following table shows the number of sucos allocated to each batch and the concept of implementation.

**Table 6-2: Grouping of the Sucos and Implementation Concept**

Batch	Sucos	Implementation Concept
Batch 0	3 sucos (Suco Faturasa, Fadabloco, and Hautoho)	As the sucos have implemented PLUP-SP and other sub-programs from 2011 to 2015 with the assistance from the JICA-MAF CB-NRM Project, it is recommended that they mainly focus on the continuation of the activities introduced by the sub-programs for the next five years.
Batch 1	3 sucos (1 suco from Remexio and 2 sucos from Liquidoe)	Batch 1 sucos will start PLUP-SP after the situation analysis in the field in the first year. Following PLUP-SP, one or two (2) sub-program/s, selected by local communities as a/ priority sub-program/s, will be implemented in the following years.
Batch 2	ditto	Batch 2 suco will do the same activities in the same manner in the second year as what Batch 1 sucos do in the first year.
Batch 3	ditto	Batch 3 suco will start the activities in the 3 <sup>rd</sup> year.

An implementation scheduled for the next five (5) years will be prepared based on the implementation concepts described above.

## 6.3 Institutional Framework for Implementation

### 6.3.1 Organizations to be involved in the Implementation

The following organizations/groups of people might be involved in the implementation of the action plan.

- ◆ Sucos (suco council and communities);
- ◆ Sub-district Administrative Offices in Remexio and Liquidoe;
- ◆ MAF (District MAF Office in Aileu);
- ◆ NDF;
- ◆ NGOs that have worked in the field of forest management and agricultural development; and
- ◆ International organization or donor agencies

### 6.3.2 Proposed Organizational Structure for Implementation

Each organization/group listed in the previous sub-section should have different expected roles in the implementation of the sub-program, namely:

- ▶ Sucos will be the direct beneficiaries and field implementers of the sub-program activities at the same time;
- ▶ Sub-district Administrative Offices will support the implementation of the sub-programs by local communities in the sucos;
- ▶ MAF and NDF may provide funds to implement the action plan and/or function as implementing agencies particularly in the case of the government-funded project;
- ▶ NGOs will be the assisting organizations or external facilitators who will support the implementing agencies in the conducts of sub-program activities the field;
- ▶ International organizations or donor agencies may be another funding source for the implementation of the action plan and at the same time can be the joint implementers in collaboration with MAF/NDF as well as NGOs.

The proposed organizational structure for implementation of the action plan is shown below.

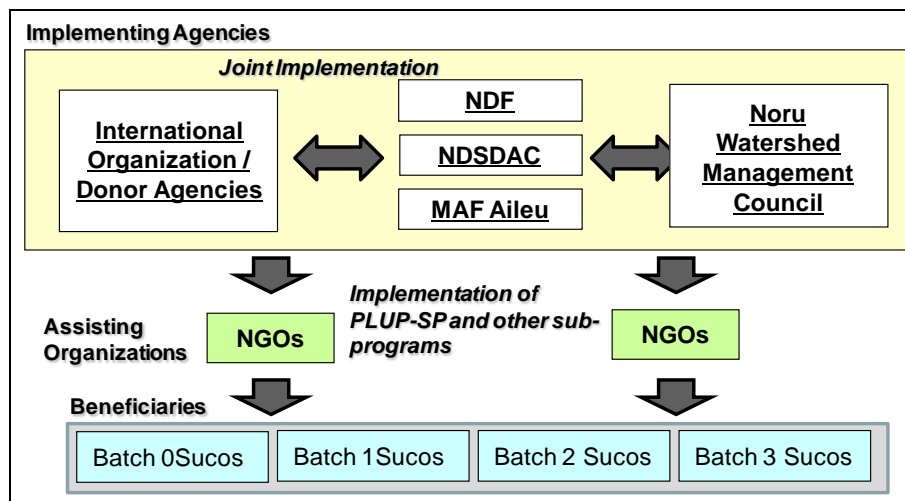


Figure 6-2: Proposed Organizational Structure for Implementation

#### 6.4 Necessary Support and Arrangements for Implementation

It is believed that the following support and arrangements are requisite to the implementation of the action plan.

- a. Financial support to cover the costs/expenses for implementation of the sub-programs (Coordination with any possible sources of financial assistance);
- b. Allocation of facilitators for meetings and training planned in the sub-programs (Arrangement of contracts with competent-cum-experienced NGOs);
- c. Arrangement of necessary tools/materials which need to be externally procured for the respective sub-programs as outlined below;

Table 6-3: Materials to be externally procured

Sub-program	Materials to be externally procured
PLUP-SP	<ul style="list-style-type: none"> <li>- Aerial photo maps at a scale of 1/7,500 ~10,000</li> <li>- Transparent plastic sheet (over A0 size)</li> <li>- A wooden board (over A0 size)</li> </ul>
SUF with CBSM-SP	<ul style="list-style-type: none"> <li>- Farm tools</li> <li>- Improved seeds of upland crops</li> </ul>

Sub-program	Materials to be externally procured
VP-SP	- Farm tools - Seeds of vegetables
AFP with SFS -SP	- Farm tools - Seeds and seedlings of fodder crops/trees
Rf -SP	- Farm tools - Seeds of trees (timber, fruits, and industrial plants) - Poly bags
CAR -SP	- Farm tools - Seedlings
FFF -SP	- Fire fighting tools and equipment
LD/IG -SP	- Tools and equipment for livelihood development
ICSP -SP	- Improved cooking stove
PAC -SP	- Materials for public awareness campaigns

- d. Arrangement of transportation means for facilitators and materials procured; and
- e. Maintenance of coordination between/among the organizations involved in the implementation of the action plan.

### 6.5 Implementation Schedule

An implementation schedule of the action plan for the next five (5) years is drafted as shown in the following figure. In the preparation of the draft implementation schedule, the following assumptions are taken into account.

- a. Batch 1~3 sucos will implement one or two sub-program/s after PLUP-SP;
- b. The sub-program will be implemented one year after PLUP-SP.
- c. PAC-SP and the strengthening of the Noru Watershed Management Council will be implemented in the first year separately from PLUP-SP.
- d. The sub-programs after PLUP-SP are not specified in the implementation schedule as the selection of the sub-program will be carried out in the process of PLUP-SP,
- e. The duration of the sub-program is tentatively set at three (3) years, although it ranges from three (3) to five (5) years.

Activity	Target Groups	1st year		2nd year		3rd year		4th year		5th year	
		1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half
1. Strengthening of the Noru WMC	Noru WMC	[Implementation bar]									
2. Public Awareness Campaign SP	All the 12 sucos	[Implementation bar]									
3. Assistance in continuation of the sub-program activities	Batch 0 Sucos	[Implementation bar]									
4. Participatory Land Use Planning SP	Batch 1 Sucos	[Implementation bar]									
	Batch 2 Sucos	[Implementation bar]									
	Batch 3 Sucos	[Implementation bar]									
5. Priority Sub-programs selected by communities in the sucos	Batch 1 Sucos	[Implementation bar]									
	Batch 2 Sucos	[Implementation bar]									
	Batch 3 Sucos	[Implementation bar]									

Figure 6-3: Tentative Implementation Schedule for the Next Five (5) Years (2015-2019)



## ***Appendix-4.4***

### ***Summaries of the Watershed Management Plan***





## Present Conditions of the Noru Watershed (Chapter 2 of the Management Plan of the Noru Watershed)

The Project for  
Community-Based Sustainable Natural Resource  
Management in Timor-Leste

October 10, 2014

JICA and MAF Project Teams

1

## Draft Contents of the Management Plan

- Chapter 1 Introduction
- Chapter 2 Present Conditions of the Noru Watershed
- Chapter 3 Current Issues on Watershed Management and Stakeholders relevant to Watershed Management
- Chapter 4 Goals and Strategic Objectives of the Plan
- Chapter 5 Watershed Management Plan / Ecosystem-based Management Plan for Adaptation to Climate Changes
- Chapter 6 Implementation Plan
- Chapter 7 Recommendations

2

## Contents of Chapter 2 (Present Conditions)

1. Location and Administrative Situations of the Watershed
2. Natural Conditions
  - 2.1 Climate
  - 2.2 Slopes
  - 2.3 Elevation
  - 2.4 Land Use and Vegetation Covers
  - 2.5 Potential of Soil Erosion
3. Socio-economic Conditions
  - 3.1 Demography
  - 3.2 Agricultural Production
  - 3.3 Animal Production
  - 3.4 Food Security
  - 3.5 Estimated Income Level
4. Vulnerability to Climate Changes

3

## 1. Location and Administrative Situation

### (1) Location Map



4

## 1. Location and Administrative Situation

### (2) Area Distribution in the Watershed

Sub-district	Sucos	Total Area	Area in the watershed
Remexio	Acumau	3,875 ha	742 ha
	Fadabloco	1,766 ha	1,766 ha
	Fahiso	1,404 ha	1,200 ha
	Faturas	4,819 ha	3,334 ha
	Hautoho	1,528 ha	1,528 ha
	Maumeta	533 ha	533 ha
Liquidoe	Acubilito	1,272 ha	361 ha
	Belereu	2,685 ha	411 ha
	Fahiso	803 ha	713 ha
	Faturilau	7,791 ha	1,700 ha
	Manucasa	784 ha	215 ha
	Nameloso	1,045 ha	338 ha
Remexio/Liquidoe	Others		11 ha
Total		28,316 ha	12,852 ha

5

## 2. Natural Conditions

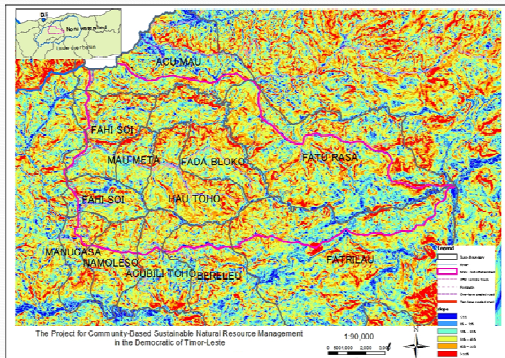
### 2.1 Climate

- (1) The average annual rainfall may be more or less 1,000 mm ranging from 600 mm to 1,500 mm.
- (2) The higher the elevation in the area is, the higher the rainfall has.
- (3) The lower part close to the conjunction with the Eraibanaubere river may be the driest part in the watershed.
- (4) The rainfalls mainly concentrate on five (5) months from December to April.
- (5) The average temperature in the watershed may range from 21 ~ 26 °C.

6

## 2. Natural Conditions

### 2.2 Slope



7

## 2. Natural Conditions

### 2.2 Slope

The steep sloping lands which have more than 40% slopes occupy about 30 % of the total area of the watershed.

Sloping ranges	Area (ha)	Ratio (%)
0-8 %	372	2.9
8-15%	990	7.7
15-25%	2,817	21.9
25-40%	5,122	39.9
40-55%	2,560	19.9
> 55%	991	7.7
<b>Total</b>	<b>12,852</b>	<b>100.0</b>

### 2.3 Elevation

The elevation of the watershed ranges from 330 m to 1,500 m above sea level. The highest ridge runs along the borders with Sub-district Aileu, while the lowest part is located at the confluence of the Noru and Eraibanauere rivrs at the borders with Sub-district Laco.

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## 2. Natural Conditions

### 2.4 Land Use and Vegetation Covers

#### (1) Present Land Use and Cover Map



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## 2. Natural Conditions

### 2.4 Land Use and Vegetation Covers

#### (2) Area Distribution

Land use class	Noru watershed	
	(ha)	(%)
1. Forests	5,005.4	38.9
1-1: Closed forest (natural)	600.5	4.7
1-2: Medium forest (natural)	2,705.3	21.1
1-3: Woodland (natural)	1,699.6	13.2
2. Shrub land/Farm land	4,898.3	38.1
3. Grassland	1,065.4	8.3
4. Coffee plantation	95.1	0.7
5. Bare land / Farm land	1,685.0	13.1
6. Sandbar/River bed	101.5	0.8
<b>Total</b>	<b>12,851.3</b>	<b>100.0</b>

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## 2. Natural Conditions

### 2.5 Potential of Soil Erosion

Suco	V. Low		Low		Moderate		High		Severe		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
<b>Remexio</b>												
Acumau	388	52%	19	3%	22	3%	23	3%	291	39%	742	100%
Fadabloco	1,029	58%	21	1%	26	1%	34	2%	657	37%	1,766	100%
Fahisoi	594	49%	26	2%	32	3%	38	3%	510	43%	1,200	100%
Faturasa	1,587	48%	87	3%	108	3%	117	4%	1,434	43%	3,334	100%
Hautoho	822	54%	22	1%	26	2%	35	2%	624	41%	1,528	100%
Maumeta	296	56%	14	3%	23	4%	32	6%	168	31%	533	100%
<b>Liquidoe</b>												
Acubitoho	193	54%	10	3%	13	3%	16	4%	130	36%	361	100%
Belereu	221	54%	11	3%	15	4%	16	4%	148	36%	411	100%
Fahisoi	482	68%	24	3%	24	3%	28	4%	155	22%	713	100%
Faturilau	921	54%	47	3%	60	4%	68	4%	604	36%	1,700	100%
Manucasa	132	61%	7	3%	8	4%	8	4%	60	28%	215	100%
Nomeleso	199	59%	7	2%	10	3%	14	4%	108	32%	338	100%
<b>Total</b>	<b>6,864</b>	<b>53%</b>	<b>295</b>	<b>2%</b>	<b>367</b>	<b>3%</b>	<b>429</b>	<b>3%</b>	<b>4,889</b>	<b>38%</b>	<b>12,841</b>	<b>100%</b>

About 40 % of the watershed area is considered highly susceptible to surface soil erosion.

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## 3. Socio-Economic Conditions

### 3.1 Demography

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### 3. Socio-Economic Conditions

#### 3.2 Agricultural Production

- ◆ The major crops produced are maize, cassava, sweet potato, and beans, which are generally planted in the same farm in a mixed planting manner.
- ◆ The average cropped area for the major crops is estimated at about 1 ha, while the average productivity of maize is less than 1 ton/ha.
- ◆ On average, households have one or two famr/s which is/are used for crop production every year.
- ◆ Soil conservation measures and improved farming system have been introduced in three (3) sucos, Faturasa, Fadabloco, and Hautoho.

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### 3. Socio-Economic Conditions

#### 3.3 Animal Production

- ◆ Almost all the families in the watershed own some animals, especially pigs and goats.
- ◆ Some, especially those in Faturasa, hold a number of heads of cattle and buffalo.
- ◆ But the majority of them hold a few heads of cattle/buffalo in addition to pigs and goats.
- ◆ A lack of animal feed during the dry season is the major constraint to the livestock management.

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### 3. Socio-Economic Conditions

#### 3.4 Food Security

- ◆ The majority of communities have faced a seasonal shortage of food between November/December and February/March.
- ◆ The main reasons for food insecurity are: i) low productivity, ii) limited cropping area, iii) high production loss during storing, and iv) limited opportunities to earn cash income.
- ◆ The coping strategies that communities have taken when facing a shortage of food are: i) reduction of the number of meals, ii) reduction of the amount of food, iii) consumption of alternative crops, and iv) collection and consumption of emergency crops.

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### 3. Socio-Economic Conditions

#### 3.5 Estimated Income Level

- ◆ The average household cash incomes in Suco Faturasa, Fadabloco, and Hautoho are estimated at US\$ 829, US\$ 954, and US\$ 760.
- ◆ Although there is no data on the average household income in the watershed, the data mentioned above likely represent the current economic conditions of households in the watershed.

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### 4. Vulnerability to Climate Changes

#### 4.1 Projected Climate Changes

- Climate change is considered as a foreseeable threat in Timor-Leste.
- National Adaptation Program of Action (NAPA) projected the climate changes in Timor-Leste for the next 30 years as outlined below.
  - ✓ In the dry season, the temperature might become high, while the precipitation in might become less;
  - ✓ In the rainy season, the intensity of rainfalls, such as hourly rainfall intensity, might become high, and the length of rainfalls might be prolonged;
  - ✓ The strength of wind might become high; and
  - ✓ The rainfall patterns will fluctuate from year to year.

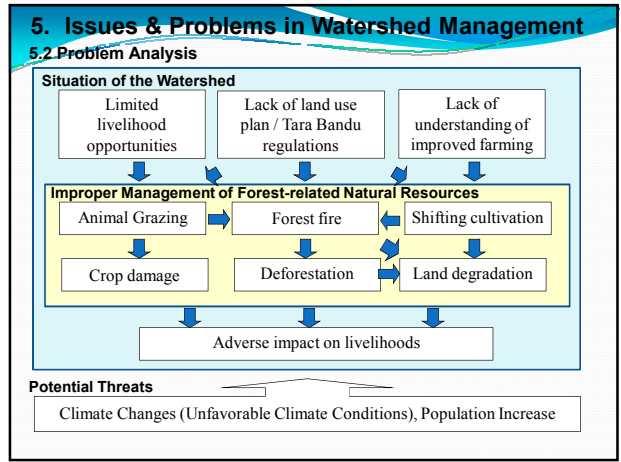
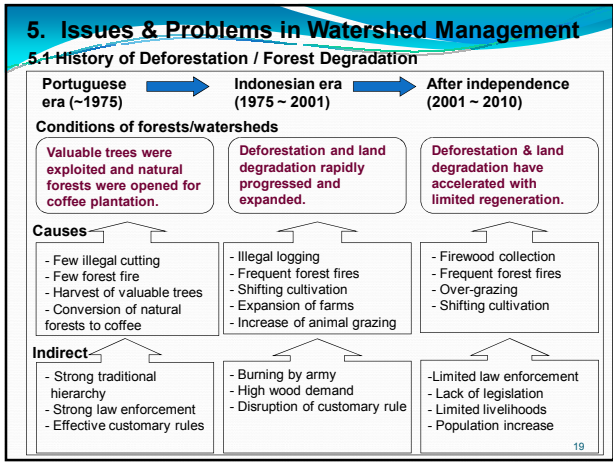
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### 4. Vulnerability to Climate Changes

#### 4.2 Potential Impacts on Communities

Sector	Potential Impacts caused by Climate Changes <1
Agriculture	<ul style="list-style-type: none"> <li>◆ The yield of maize may drastically decline, but the yield of cassava may increase.</li> <li>◆ The incidence of pest and disease damage may increase.</li> <li>◆ Crop damage caused by storm and strong wind might increase.</li> <li>◆ Some farms may be eroded due to the expansion of gully.</li> <li>◆ The productivity of livestock animal may be reduced.</li> <li>◆ Soil fertility may drastically decline.</li> </ul>
Forest and Agroforest	<ul style="list-style-type: none"> <li>◆ The incidence of forest fires may increase.</li> <li>◆ The incidence of landslides may increase in steep lands.</li> <li>◆ Some species may not grow well due to the increase of temperature.</li> <li>◆ The growth of coffee and orange may be affected due to high heat.</li> <li>◆ Forests along small streams may be washed out due to heavy rains.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>◆ Rural road networks may be damaged.</li> <li>◆ Natural springs used as sources of water may be damaged.</li> <li>◆ Risk of damage to houses and other infrastructure may increase.</li> </ul>
Water, Sanitation, and Health	<ul style="list-style-type: none"> <li>◆ The access to water may be reduced as some sources may be dried up.</li> <li>◆ The sources of water may be affected in terms of quality and quantity.</li> <li>◆ The incidence of water-borne diseases and infections may increase.</li> </ul>

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**END**

*Thank you!*

*Obrigada barak*

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## Goal and Strategic Objectives and Outlines of the Action Plan of the Watershed Management Plan (Chapter 3 & 4 and Outlines of Chapter 5 of the Management Plan)

The Project for  
Community-Based Sustainable Natural Resource  
Management in Timor-Leste

October 10, 2014

JICA and MAF Project Teams

1

## Draft Contents of the Management Plan

- Chapter 1 Introduction
- Chapter 2 Present Conditions of the Noru Watershed
- Chapter 3 Current Issues on Watershed Management and Stakeholders relevant to Watershed Management**
- Chapter 4 Goals and Strategic Objectives of the Plan**
- Chapter 5 Watershed Management Plan / Ecosystem-based Management Plan for Adaptation to Climate Changes**
- Chapter 6 Implementation Plan
- Chapter 7 Recommendations

2

## Contents of Chapter 3 and 4

**Chapter 3 Current Issues on Watershed Management and Stakeholders relevant to Watershed Management**

- 3.1 Issues on Watershed Management
  - 3.1.1 History of Forest Degradation
  - 3.1.2 Current Issues in the Watershed
- 3.2 Stakeholders related to the Noru Watershed
  - 3.2.1 Major Stakeholders
  - 3.2.2 Noru Watershed Management Council

**Chapter 4 Goals and Strategic Objectives of the Plan**

- 4.1 Goal and Strategic Objectives
- 4.2 Overall Guidelines on Land Management in the Watershed

3

## Chapter 3

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### 3.1 Current Issues on Watershed Management

#### 3.1.1 History of Deforestation / Forest Degradation

Portuguese era (~1975)	Indonesian era (1975 ~ 2001)	After independence (2001 ~ 2010)
<p><b>Conditions of forests/watersheds</b></p> <p>Valuable trees were exploited and natural forests were opened for coffee plantation.</p> <p><b>Causes</b></p> <ul style="list-style-type: none"> <li>- Few illegal cutting</li> <li>- Few forest fire</li> <li>- Harvest of valuable trees</li> <li>- Conversion of natural forests to coffee</li> </ul> <p><b>Indirect</b></p> <ul style="list-style-type: none"> <li>- Strong traditional hierarchy</li> <li>- Strong law enforcement</li> <li>- Effective customary rules</li> </ul>	<p><b>Conditions of forests/watersheds</b></p> <p>Deforestation and land degradation rapidly progressed and expanded.</p> <p><b>Causes</b></p> <ul style="list-style-type: none"> <li>- Illegal logging</li> <li>- Frequent forest fires</li> <li>- Shifting cultivation</li> <li>- Expansion of farms</li> <li>- Increase of animal grazing</li> </ul> <p><b>Indirect</b></p> <ul style="list-style-type: none"> <li>- Burning by army</li> <li>- High wood demand</li> <li>- Disruption of customary rule</li> </ul>	<p><b>Conditions of forests/watersheds</b></p> <p>Deforestation &amp; land degradation have accelerated with limited regeneration.</p> <p><b>Causes</b></p> <ul style="list-style-type: none"> <li>- Firewood collection</li> <li>- Frequent forest fires</li> <li>- Over-grazing</li> <li>- Shifting cultivation</li> </ul> <p><b>Indirect</b></p> <ul style="list-style-type: none"> <li>- Limited law enforcement</li> <li>- Lack of legislation</li> <li>- Limited livelihoods</li> <li>- Population increase</li> </ul>

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### 3.1 Current Issues on Watershed Management

#### 3.1.2 Problem Analysis

**Situation of the Watershed**

Limited livelihood opportunities

Lack of land use plan / Tara Bandu regulations

Lack of understanding of improved farming

↓

**Improper Management of Forest-related Natural Resources**

Animal Grazing

Forest fire

Shifting cultivation

↓

Crop damage

Deforestation

Land degradation

↓

Adverse impact on livelihoods

↓

**Potential Threats**

Climate Changes (Unfavorable Climate Conditions), Population Increase

### 3.2 Stakeholders related to the Noru Watershed

#### 3.2.1 Major Stakeholders

- District Administrative Office
- Sub-district offices of Remexio & Liquidoe
- Sucos located inside the watershed
- District MAF/NDF
- Extension officers
- Forest Guard
- ND for Environment
- PNTL
- SAS sub-district in Remexio & Liquidoe
- Church
- NGO (AMAR, WV, Plan, Haburas, RAEBIA)

Further analyses of the respective stakeholders are described in the report based on the results of the discussion of the Noru WMC.

### 3.2 Stakeholders related to the Noru Watershed

#### 3.2.2 Noru Watershed Management Council

(1) Vision and Missions of the Watershed Management Council

**Vision:**

*“Properly protect and manage forests, lands, and water resources in the Noru watershed to improve living conditions and livelihoods of residents in the watershed and stabilize water supply to the downstream areas.”*

**Missions (Summary):**

- ◆ Provide guidance and orientation on sustainable forest-related natural resource management (SFNRM) to village leaders;
- ◆ Provide leadership in harmonizing the interests and activities of sucos;
- ◆ Plan, implement, and evaluate a watershed management plan;
- ◆ Help village leaders enhance people’s awareness of SFNRM;
- ◆ Promote necessary actions for sustainable SFNRM;
- ◆ Hand over the valuable natural resources to the future; and
- ◆ Share the experiences with other sucos to promote sustainable forest-related natural resource management.

### 3.2 Stakeholders related to the Noru Watershed

#### 3.2.2 Noru Watershed Management Council

(3) Functions of the Watershed Management Council

**Functions (Summary):**

- ◆ to formulate a watershed management plan;
- ◆ to prepare an annual action plan to implement the watershed management plan;
- ◆ to monitor and evaluate the implementation of the annual action plan;
- ◆ to coordinate with relevant government offices and NGOs;
- ◆ to convene a regular meeting every quarter to monitor the situations of the watershed;
- ◆ to adopt a resolution that would encourage all the to work on sustainable forest and forest-related natural resource;
- ◆ to call a meeting whenever circumstances require it; and
- ◆ to organize a working group (or a committee) to tackle any important issues.

## Chapter 4

### 4.1 Goal and Strategic Objectives of the Plan

#### 4.1 Goal and Strategic Objectives

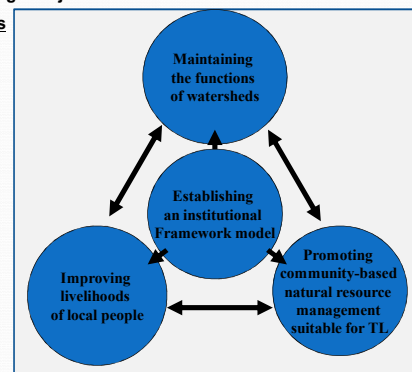
**Goal of the Watershed Management Plan**

*“to attain sustainable and integrated watershed management by balancing proper land and forest management with improvement of local livelihoods in a watershed.”*

### 4.1 Goal and Strategic Objectives of the Plan

#### 4.1 Goal and Strategic Objectives

**Strategic Objectives to achieve the Goal**



## 4.1 Goal and Strategic Objectives of the Plan

### 4.1 Goal and Strategic Objectives

#### (1) Improvement and Maintenance of the Functions of Watershed

- ◆ The watershed functions, e.g., stable supply of clean water, control of river run-off, and provision of places for agriculture and collection of forest resources are essential to human life; therefore, they should be maintained by protecting forests in the watershed.
- ◆ Specifically, the following issues should be addressed.
  - Sediment load to the rivers;
  - Slope failure/landslides;
  - Deforestation and forest degradation; and
  - Improper land use in sloping lands.

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## 4.1 Goal and Strategic Objectives of the Plan

### 4.1 Goal and Strategic Objectives

#### (2) Improvement of Livelihoods of Local People

- ◆ The average income of families in the watershed is obviously lower than the national average and many families have still faced a shortage of food for a part of the year.
- ◆ It would be difficult for local communities to change the conventional farming practices, unless they can ensure the food security and cash income sufficient for their well-being.
- ◆ One of the specific focuses of the watershed management plan shall be put on the improvement of livelihoods of local communities in the watershed, especially those who have limited livelihood opportunities.

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## 4.1 Goal and Strategic Objectives of the Plan

### 4.1 Goal and Strategic Objectives

#### (3) Introduction of the CB-NRM Mechanism in the Sucos concerned

- ◆ The CB-NRM mechanism encompasses i) the process of enhancing the capacity of communities and ii) the system to help communities to protect and wisely use forest-related resources in a sustainable manner.
- ◆ Three (3) sucos in the watershed, Suco Faturasa, Fadabloc, and Hautoho, have introduced the CB-NRM mechanism.
- ◆ The occurrence of wildfires, illegal cutting, and crop damage caused by animal grazing have been reduced since then.
- ◆ At the same time, many communities in the same sucos have applied the sustainable upland farming techniques to their own farms.
- ◆ One of the objectives is to help the remaining nine (9) sucos introduce the CB-NRM mechanism to achieve sustainable management of forest-related resources on a watershed level.

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## 4.1 Goal and Strategic Objectives of the Plan

### 4.1 Goal and Strategic Objectives

#### (4) Strengthening of the Collaborative Framework for Watershed Management

- ◆ One of the issues to be addressed in the Noru watershed management is the incidence of wild fires in the border areas between sucos.
- ◆ In many cases, the border areas are used by communities from the surrounding sucos for animal grazing and hunting.
- ◆ Collaborative efforts by the concerned sucos are needed for reducing the incidence of wildfires in parallel with the introduction of the CB-NRM mechanism in sucos.
- ◆ It is important to help the Council strengthen its functions, especially as a platform where the concerned sucos and NDF/MAF can work on issues on watershed management.

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## 4.2 Overall Guidelines on Land Management in the Watershed

- ◆ Proper land management is indispensable for maintenance and improvement of the functions of the watershed.
- ◆ Due consideration should be paid to the land coverage and slope in the determination of land uses for proper land management.
- ◆ To promote the proper land use and management, the Noru Watershed Management Council agreed with NDF/MAF on the adoption of the guidelines (which are given in the next slide) on land use and management in the watershed.

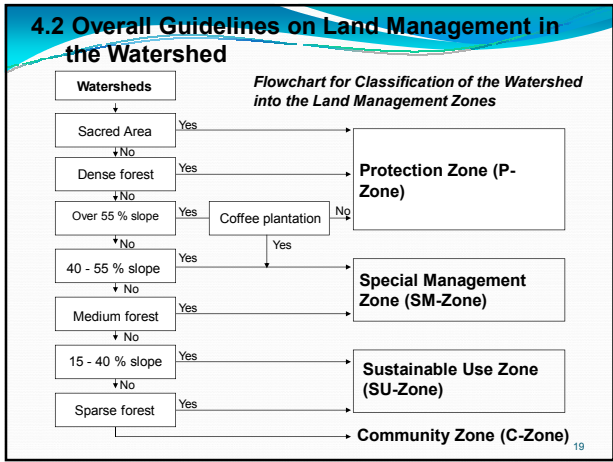
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## 4.2 Overall Guidelines on Land Management in the Watershed

### Guidelines on Land Use and Management in the Watershed

Zone	Description
P-Zone	Areas that have crucial functions the watershed and high environmental values shall be protected as Protection zone. (P-zone). Dense forests and steep sloping areas (over 55 %) but not used for coffee plantation are classified into P-zone. Such areas shall be protected as protected forests.
SM-Zone	Medium forests and areas with slopes between 40% and 55% are categorized as Special Management Zone (SM-Zone). Coffee plantations with more than 55% slopes are also classified under this zone. Forest-based land uses, such as i) coffee plantation, ii) mixed forests, iii) natural forests, are recommended for the areas under this zone.
SU-Zone	Areas with slopes ranging from 15% to 40% or those covered with sparse forests are categorized under Sustainable Use Zone (SU-Zone). The areas can be used for farming but shall be managed in a proper manner by applying soil conservation measures or agroforestry techniques.
C-Zone	Areas that do not belong to the above-mentioned zones are categorized into Community Zone (C-Zone). The areas can be used for economic purpose with a few restrictions.

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### 4.2 Overall Guidelines on Land Management in the Watershed

# IN PREPARATION

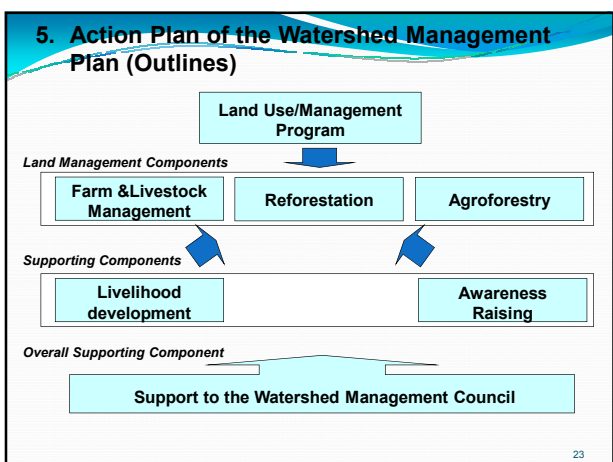
Zoning Map of the Noru Watershed

### 4.2 Overall Guidelines on Land Management in the Watershed

**Area Distribution of the Zones in the respective Sucos**

Suco	P-Zone		SM-Zone		SU-Zone		C-Zone		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%
<b>Remexio</b>										
Acumau										
Fadabloco										
Fahisoi										
Faturasa										
Hautoho										
Maumeta										
<b>Liquidoe</b>										
Acubillitoho										
Belereu										
Fahisoi										
Faturilau										
Manucasa										
Nameloso										
Total										

### Outlines of Chapter 5



### 5. Action Plan of the Watershed Management Plan

Program	Proposed Sub-programs (Draft Ideas)
<b>Land Use/Management Program</b>	<ul style="list-style-type: none"> <li>◆ Participatory land use planning sub-program (Future land use planning with village regulations, Selection of priority forestry and agriculture extension services, &amp; Institutionalization of the village regulations.)</li> </ul>
<b>Farm &amp; Livestock Management</b>	<ul style="list-style-type: none"> <li>◆ Animal feed production and stall feeding sub-program</li> <li>◆ Vegetable production sub-program</li> </ul>
<b>Reforestation</b>	<ul style="list-style-type: none"> <li>◆ Community plantation (with seedling distribution) sub-program</li> <li>◆ <b>School plantation sub-program</b></li> </ul>
<b>Agroforestry</b>	<ul style="list-style-type: none"> <li>◆ Sustainable upland farming promotion (including community-based seed multiplication) sub-program</li> <li>◆ Backyard farm plantation (with fruit seedling distribution) sub-program</li> </ul>



## 5. Action Plan of the Watershed Management Plan

Program	Proposed Sub-programs (Draft Ideas)
Livelihood development	<ul style="list-style-type: none"><li>◆ Food processing promotion sub-program</li><li>◆ Cooking stove promotion sub-program</li><li>◆ Other type of livelihood development sub-program</li></ul>
Awareness Raising	<ul style="list-style-type: none"><li>◆ Public awareness raising sub-program</li></ul>
Support to the WMC	<ul style="list-style-type: none"><li>◆ Support for regular meetings</li><li>◆ Support for study tours / exchange visits</li><li>◆ Information sharing with the members</li></ul>

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**END**

*Thank you!*

*Obrigada barak*

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# Action Plan and Implementation Plan of the Watershed Management Plan (Chapters 5 and 6 of the Management Plan)

The Project for  
Community-Based Sustainable Natural Resource  
Management in Timor-Leste

November 7, 2014

JICA and MAF Project Teams

1

## Draft Contents of the Management Plan

- Chapter 1 Introduction
- Chapter 2 Present Conditions of the Noru Watershed
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- Chapter 4 Goals and Strategic Objectives of the Plan
- Chapter 5 Action Plan**
- Chapter 6 Implementation Plan
- Chapter 7 Recommendations

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## Contents of Chapter 5 and 6

**Chapter 5 Action Plan for Watershed Management**

- 5.1 Overall Framework of the Action Plan
- 5.2 Land Use Program
- 5.3 Farm and Livestock Management Program
- 5.4 Reforestation and Forest Protection Program
- 5.5 Livelihood Improvement Program
- 5.6 Public Awareness Raising Program
- 5.7 Institutional Strengthening Program

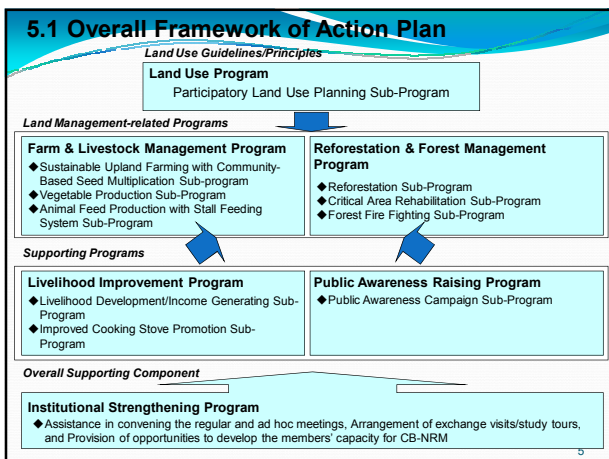
**Chapter 6 Implementation Plan**

- 6.1 Basic Concept
- 6.2 Implementation Methods
- 6.3 Institutional Framework for Implementation
- 6.4 Necessary Support and Arrangements
- 6.5 Implementation Schedule

3

## Chapter 5

4



### 5.2 Land Use Program

**5.2.1 Objectives**

To enable local communities to manage forest-related natural resources in the concerned sucos in line with the land use and management principles.

**5.2.2 Strategies**

- ◆ To translate the land use and management principles shown in Chapter 4 into a land use plan.
- ◆ To introduce/implement the participatory land use planning (PLUP) as the key action of the Land Use Program.
- ◆ To enhance the capacity of suco leaders and other communities to manage lands and forest-related resources in a sustainable manner.

**5.2.3 Sub-program (Action)**

To implement the Participatory Land Use Planning Sub-program (PLUP-SP) in the concerned sucos except for Suco Faturasa, Fadabloco, and Hautoho.

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## 5.2 Land Use Program

### PLUP-SP

Items	Description
Objective	to help suco leaders and communities manage lands and forest-related natural resources in line with the land use and management principles in the concerned sucos.
Target Area	All the sucos except Faturasa, Fadabloco & Hautoho
Procedures	(1) Formulation of a future land use plan with village regulations (12 steps for 3 ~5 months) (2) Selection of priority forestry and agriculture extension services (3 steps for 2 ~ 3 months) (3) Institutionalization of the village regulations (3 types of regular meetings for 3 ~ 5 years)
Necessary Input	Facilitators, Aerial photos, Cost for meetings, Transportation means, Stationary, Cost for Tara bandu
Expected Outputs	Future land use plan and village regulations (Output) Reduction of incidence of forest fires, illegal logging, and animal grazing

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## 5.3 Agriculture & Livestock Management Program

### 5.3.1 Objectives

To change farming and livestock management practices into sustainable and productive forms focusing on: i) sustainable use of sloping areas, ii) increase of staple crop production, iii) diversification of crops, and iv) semi-intensive management of livestock.

### 5.3.2 Strategies

- ◆ To introduce techniques through continuous hands-on training
- ◆ To effectively utilize local resources and technologies
- ◆ To pay due consideration to the natural conditions of the watershed

### 5.3.3 Sub-program (Action)

- a. Sustainable Upland Farming with Community-Based Seed Multiplication Sub-program
- b. Vegetable Production Sub-program
- c. Animal Feed Production with Stall Feeding System Sub-program

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## 5.3 Agriculture & Livestock Management Program

### (1) SUF with CBSM-SP

Items	Description
Objective	to enhance the capacity of communities to apply sustainable upland farming techniques to their permanent farms along with the introduction of improved seeds of major staple crops
Target Area	All the sucos except Faturasa, Fadabloco & Hautoho
Procedures	(1) Group formation and participatory planning (3 months) (2) Hands on training (FFSs) on sustainable upland farming techniques (1 year x 3 times) (3) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Farm tools, Improved seeds, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Individual application of sustainable upland farming techniques(Output) Increase of production of staple upland crops (Impact)

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## 5.3 Agriculture & Livestock Management Program

### (2) VP-SP

Items	Description
Objective	to enhance the capacity of communities to produce quality vegetables.
Target Area	All the sucos which have water sources that can be used for vegetable farming during the dry season
Procedures	(1) Group formation and participatory planning (3 months) (2) Hands on training (FFSs) on vegetable production (1 year x 3 times) (3) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Farm tools, vegetable seeds, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Production of several types of vegetables in suco (Output) Increase of cash income (Impact)

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## 5.3 Agriculture & Livestock Management Program

### (3) AFP with SFS-SP

Items	Description
Objective	to enhance the capacity of communities to produce animal feeds and stall-feed animals so as to rear animals in pens instead of free grazing.
Target Area	All the sucos where animal grazing is the prevailing practices
Procedures	(1) Group formation and participatory planning (3 months) (2) Hands on training (FFSs) on animal fodder production and animal pen building (1 year x 3 times) (3) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Farm tools, Fodder crops/trees seeds, Materials for animal pens, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Animal pen and fodder crops in the individual farms(Output) Reduction of animal grazing (Impact) Effective use of animal waste for farming (Impact)

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## 5.4 Reforestation and Forest Protection Program

### 5.4.1 Objectives

to increase forest cover in the watershed by planting value-added trees (i.e., industrial trees, shade trees for coffee, and fruit trees) in private lands and leguminous trees/casuarinas to rehabilitate degraded water catchments as well as other critical areas.

### 5.4.2 Strategies

- ◆ To adopt farmer field schools (FFSs)
- ◆ To make an agreement between/among suco council, beneficiaries of the sub-programs, and MAF/NDF since two of the proposed sub-programs are aimed at the improvement of the watershed functions.

### 5.4.3 Sub-program (Action)

- a. Reforestation Sub-program
- b. Critical Area Rehabilitation Sub-program
- c. Forest Fire Fighting Sub-program

12

## 5.4 Reforestation and Forest Protection Program

### (1) RF-SP

Items	Description
Objective	to enhance the capacity of communities to plant industrial trees, shade trees for coffee, and fruit trees, in right places in a proper manner.
Target Area	All the sucos
Procedures	(1) Group formation and participatory planning (3 months) (2) Hands on training (FFSs) on tree planting (1 year x 3 times) (3) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Farm tools, Seedlings, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Increase of trees (timber species, fruits, and industrial plants) planted in suco (Output) Expansion of forest cover in the watershed (Impact)

13

## 5.4 Reforestation and Forest Protection Program

### (2) CAR-SP

Items	Description
Objective	to rehabilitate degraded forests and degraded lands in critical water catchments and other important areas in the sucos by planting trees in a collaborative manner.
Target Area	All the sucos which have degraded catchments and others
Procedures	(1) Identification, determination of beneficiaries, formation of working teams, and planning (3 months) (2) Procurement of seedlings and mobilization of people for planting in the degraded areas. (1 month x 1 time x 3 years) (3) Maintenance of seedlings planted by the working teams (3 times/year x 3 years) (4) Evaluation (1 week x 1 time/year x 5 years)
Necessary Input	Facilitators, Farm tools, vegetable seeds, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Seedlings planted in the degraded areas (Output) Water flow of important sources is increased. (Impact)

14

## 5.4 Reforestation and Forest Protection Program

### FFF-SP

Items	Description
Objective	is to minimize the damage of forest fires when a wild fire happens in the concerned sucos in collaboration with communities living in the fire-prone areas.
Target Area	All the sucos where the incidence of forest fire is high
Procedures	(1) Formation of fighters team and procurement of fighting tools and equipment (3 months) (2) Conducts of training in using tools and equipment (2 months) (3) Maintenance of tools and equipment (4.5 years) (4) Conducts of fire fighting drills (1 month/year x 4 years) (5) Evaluation (1 week x 1 time/year x 5 years)
Necessary Input	Facilitators, Fire fighting tools and equipment, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Fire fighting teams equipped with skills and tools (Output) Minimization of forest damage (Impact)

15

## 5.5 Livelihood Improvement Program

### 5.5.1 Objectives

to reduce the human pressure on forest-related natural resources by improving local livelihoods or developing additional source of income using locally available resources.

### 5.5.2 Strategies

- ◆ To adopt farmer field schools (FFSs).
- ◆ To use resources locally available.
- ◆ To implement the sub-program (Improved Cooking Stove Promotion Sub-program) considering communities' willingness and affordability.

### 5.5.3 Sub-program (Action)

- a. Livelihood Development/Income Generating Sub-program
- b. Improved Cooking Stove Promotion Sub-program

16

## 5.4 Livelihood Improvement Program

### (1) LD/IG-SP

Items	Description
Objective	to improve local livelihoods by increase of sources of cash income and quality foods using material locally available.
Target Area	All the sucos except Suco Fadabloco and Hautoho
Procedures	(1) Group formation and participatory planning (3 months) (2) Resource assessment and selection of potential livelihood options (1 month) (3) Hands on training (FFSs) on livelihood options (1 year x 3 times) (4) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Utensils and other tools for livelihood options, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Increase of products/commodities that can be sold at market (Output) Improvement of local livelihoods (Impact)

17

## 5.4 Livelihood Improvement Program

### (2) ICSP-SP

Items	Description
Objective	The main objective of the sub-program is to reduce the use of fire wood so as to decrease human pressure on natural forests.
Target Area	All the sucos
Procedures	(1) Identification of families who are willing to use and affordable to buy an improved cooking stove (3 months x 3 years) (2) Procurement of cooking stoves (1 month x 3 years) (3) Conducts of guidance and training on use of cooking stove (1 month x 3 years) (4) Evaluation (1 week x 1 time/year x 3 years)
Necessary Input	Facilitators, Cooking stoves, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Increase of families who use the cooking stove (Output) Reduction of deforestation / forest degradation (Impact)

18

## 5.6 Public Awareness Raising Program

### 5.6.1 Objectives

to heighten communities' consciousness of risks of the environmental destructive activities, i.e., wild fires, illegal logging, and animal grazing, and simultaneously enhance their understanding of sustainable management of forest-related natural resources.

### 5.6.2 Strategies

- ◆ to target both generations, adult and children, considering the rapid population increase;
- ◆ to prepare and use public awareness campaign materials easy-to-understand and visually-apparent; and
- ◆ to use human resources who are environmentally conscious in suco, such as suco leaders, as resource persons in the campaign.

### 5.6.3 Sub-program (Action)

- a. Public Awareness Campaigns Sub-program

19

## 5.6 Public Awareness Raising Program

(1) PAC-SP

Items	Description
Objective	to enhance public awareness of risks of wild fires, illegal logging, and animal grazing, and deepen the understanding of the importance of sustainable management of forest-related natural resources among communities.
Target Area	All the sucos
Procedures	(1) Identification topics, work planning, and development of materials (3 months) (2) Conducts of the public awareness campaigns (8 months x 2 years) (3) Evaluation (1 week x 1 time/year x 2 years)
Necessary Input	Facilitators, Materials for campaigns, Cost for meetings/training, Transportation means, Stationary
Expected Outputs	Public awareness raising materials (Output) Increase of awareness of risks of wild, etc. (Output) Reduction of the incidence of wild fires, etc (Impact)

20

## 5.7 Institutional Strengthening Program

### 5.7.1 Objectives

to help the Noru Watershed Management Council keep operational to fulfill its missions even after the end of direct support from the JICA-MAF CB-NRM Project in August 2015.

### 5.7.2 Strategies

- ◆ to help the Council continue its key functions as, i.e. i) a platform that can coordinate their efforts for sustainable forest management, and ii) an advisory committee to take necessary actions.
- ◆ To enhance the council members' capacity so that they could fulfill their roles and responsibilities for the operations of the Council.
- ◆ to strengthen the capacity of suco leaders to govern the villages including forest-related natural resources using the CB-NRM mechanism.

### 5.7.3 Sub-program (Action)

- a. Strengthening of the Noru Watershed Management Council

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## 5.7 Institutional Strengthening Program

Strengthening of the Noru Watershed Management Council

Activities	Outlines	Inputs	Timeframe
Assistance in convening the regular and ad hoc meeting	Help the council convene the regular meeting every three months and any ad hoc meeting when needs arise.	Facilitators, Cost for the meetings Stationary, Transportation means	1 day x 4 times/year x 5 years As needs arise.
Arrangement of exchange visits/ study tours	Help the members visit any sucos that have carried out activities similar to those introduced in the Noru watershed.	Ditto	2 days x 1 time/year x 5 years
Provision of opportunities to develop the members' capacity	Help the members enhance their capacity to manage forest-related natural resources using the future land use plan and village regulations.	Trainers, Cost for training Stationary, Transportation means	2 days x 1 time/year x 5 years

22

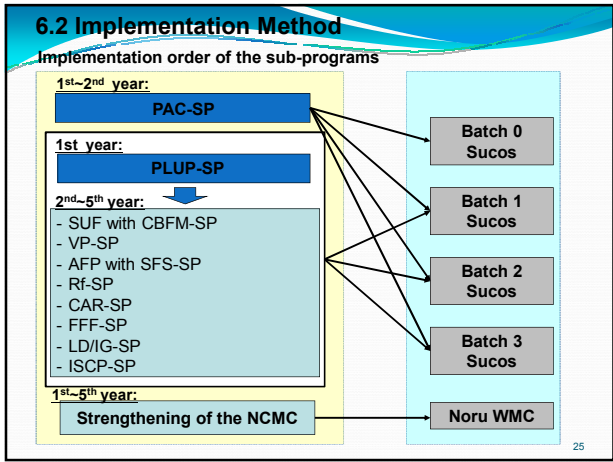
## Chapter 6

23

## 6.1 Basic Concept

- ◆ The action plan described in Chapter 5 shall be implemented with the support from MAF/NDF as well as other organizations, such as donor and/or international organizations.
- ◆ It is, however, speculated that it would not be difficult to implement all the 11 sub-programs in all the concerned sucos for a short period of time.
- ◆ It is advisable to treat the watershed management plan as a long-term plan to be implemented over a few decades.
- ◆ The implementation plan (Chapter 6) indicates the process of implementation of the plan, a proposed organizational structure, and an implementation schedule for the next five (5) years.

24



### 6.2 Implementation Method

Suitability of the Sub-programs and their duration

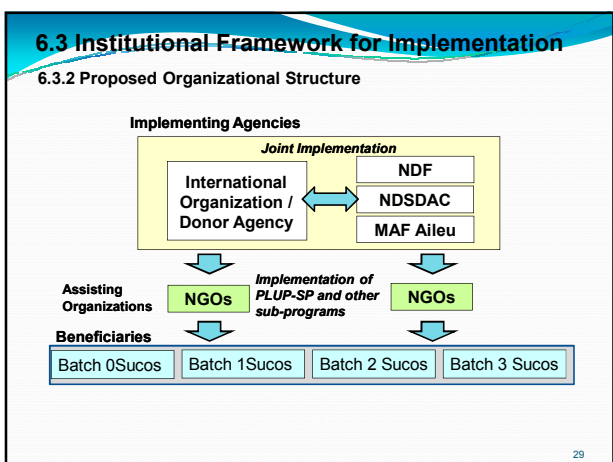
Sub-program	Possible target sucos	Period per suco
PLUP-SP	12 sucos except Suco Faturasa, Fadabloco, and Hautoho	4 years
SUF with CBSN-SP	12 sucos except Suco Faturasa, Fadabloco, and Hautoho	3 years
VP-SP	Sucos where permanent water sources are available	3 years
AFP with SFS-SP	Sucos where animal grazing is the prevailing practice among communities	3 years
RF-SP	12 sucos	3 years
CAR-SP	Sucos where there are degraded water catchments and/or important areas	5 years
FFF-SP	Sucos where the incidence of forest fire is high	5 years
LD/IG-SP	12 sucos except Suco Fadabloco and Hautoho	3 years
ICSP-SP	12 sucos	3 years
PAC-SP	12 sucos	3 years
Strengthening of the Council	Noru Watershed Management Council	5 years

### 6.2 Implementation Method

#### 6.2.2 Grouping of the Sucos

Batch	Sucos	Implementation Concepts
Batch 0	3 sucos (Suco Faturasa, Fadabloco, and Hautoho)	As the sucos have implemented PLUP-SP and other sub-programs from 2011 to 2015 with the assistance from the JICA-MAF CB-NRM Project, it is recommended that they mainly focus on the continuation of the activities introduced by the sub-programs for the next five years.
Batch 1	3 sucos (1 suco from Remexio and 2 sucors from Liquidoe)	Batch 1 sucos will start PLUP-SP after the situation analysis in the field in the first year. Following PLUP-SP, one or two (2) sub-program/s, selected by local communities as a/ priority sub-program/s, will be implemented in the following years.
Batch 2	ditto	Batch 2 suco will do the same activities in the same manner in the second year as what Batch 1 sucos do in the first year.
Batch 3	ditto	Batch 3 suco will start the activities in the 3rd year.

- ### 6.3 Institutional Framework for Implementation
- #### 6.3.1 Organizations to be involved
- ◆ Sucos (suco council and communities)
  - ◆ Sub-district Administrative Offices in Remexio and Liquidoe
  - ◆ MAF (District MAF Office in Aileu)
  - ◆ NDF
  - ◆ NGOs that have worked in the field of forest management and agricultural development; and
  - ◆ International organization or donor agencies



- ### 6.4 Necessary Support and Arrangement for Implementation
- Financial support to cover the costs/expenses for implementation of the sub-programs (Coordination with any possible sources of financial assistance)
  - Allocation of facilitators for meetings and training planned in the sub-programs (Arrangement of contracts with competent-cum-experienced NGOs)
- Arrangement of necessary tools/materials which need to be externally procured for the respective sub-programs
- Arrangement of transportation means for facilitators and materials procured; and
  - Maintenance of coordination between/among the organizations involved in the implementation of the action plan.

### 6.5 Implementation Schedule

Activity	Target Groups	1st year		2nd year		3rd year		4th year		5th year	
		1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
1. Strengthening of the Noru	Noru WMC	[Implementation period]									
2. Public Awareness Campaign SP	All the 12 sucos	[Implementation period]									
3. Assistance in continuation of the sub-program activities	Batch 0 Sucos	[Implementation period]									
4. Participatory Land Use Planning SP	Batch 1 Sucos	[Implementation period]									
	Batch 2 Sucos	[Implementation period]									
	Batch 3 Sucos	[Implementation period]									
5. Priority Sub-programs selected by communities in the sucos	Batch 1 Sucos	[Implementation period]									
	Batch 2 Sucos	[Implementation period]									
	Batch 3 Sucos	[Implementation period]									

**END**  
*Thank you!*  
**Obrigada barak**





## ***Appendix-4.5***

***Resolution of the Noru Watershed  
Management Council on the  
Watershed Management Plan***



## **Appendix-4.5: Resolution of the Noru Watershed Management Council**

Ref: \_\_\_\_\_ 2015

Date: \_\_\_\_\_ 2015

### **Subject; Proposed Watershed Management Plan for the Noru Watershed**

**Whereas**, the Noru Watershed Management Council was established on August 21, 2014 with the assistance from the Ministry of Agriculture and Fisheries (MAF) and the Japan International Cooperation Agency (JICA) to protect and manage forest and forest-related natural resources in the watershed in a proper and sustainable manners;

**Whereas**, the Council has had a series of discussions on relevant topics relating to management of the Noru watershed, namely, i) present conditions of the watershed, ii) history of deforestation and forest degradation in the watershed, iii) basic concepts and principles for watershed management, iv) action plans for watershed management, and v) implementation process of the watershed management plan in October and November 2014;

**Whereas**, a watershed management plan for the Noru watershed was drafted by the Project Teams composed of JICA Experts and MAF/NDF Officials in December 2014 based on the results of the discussions made by the Watershed Management Council; and

**Whereas**, the draft watershed management plan was presented to the members of the Noru Watershed Management Council in the 2<sup>nd</sup> regular meeting held at the Sub-district Administrative Office in Liquidoe on January 23, 2015.

**NOW, THEREFORE, BE IT RESOLVED by the members of the Watershed Management Council of the Noru Watershed as follows:**

Section 1: The Watershed Management Plan for the Noru watershed attached hereto is approved by the Council as guidelines for proper management of natural resources in the Noru watershed in general and in the respective sucos in particular.

Section 2: The Watershed Management Council hereby officially submits the Watershed Management Plan to the relevant agencies/organizations, such as MAF/NDF, MSS (Ministry of Society and Solidarity), MPW (Ministry of Public Works), NDE (National Directorate of Environment) and other national and international agencies/organizations, to seek their technical and financial assistance necessary for implementation of the Watershed Management Plan.

Section 3: The Watershed Management Council strongly requests MAF/NDF and District Administrative Office in Aileu to take necessary actions immediately to assist the Noru Watershed Management Council in implementing the Watershed Management Plan for sustainable management of forest and forest-related natural resources and improvement of local livelihoods in the watershed.

Section 4: These resolutions shall take effect upon signatures onto.

**Dated: XX XX, 201X**

**Chairperson**

**Vice Chairperson**

XXXXXXXXXX  
Sub-district  
Administrator of  
Remexio

XXXXXXXXXX  
Sub-district  
Administrator of  
Liquidoe

**Secretariat**

XXXXXXXXXX  
District Director of  
MAF District Office  
in Aileu

XXXXXXXXXX  
Chief of Department  
of Reforestation,  
NDF

XXXXXXXXXX  
Chief of Department  
of Soil and Water  
Conservation, NDF

**Members**

XXXXXXXXXX  
Chef de Suco  
Asumau

XXXXXXXXXX  
Chef de Suco  
Fadabloco

XXXXXXXXXX  
Chef de Suco  
Fahisoi

XXXXXXXXXX  
Chef de Suco  
Faturasa

XXXXXXXXXX  
Chef de Suco  
Hautoho

XXXXXXXXXX  
Chef de Suco  
Maumeta

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Chef de Suco  
Acubili

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Bereleu

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Fatrilau

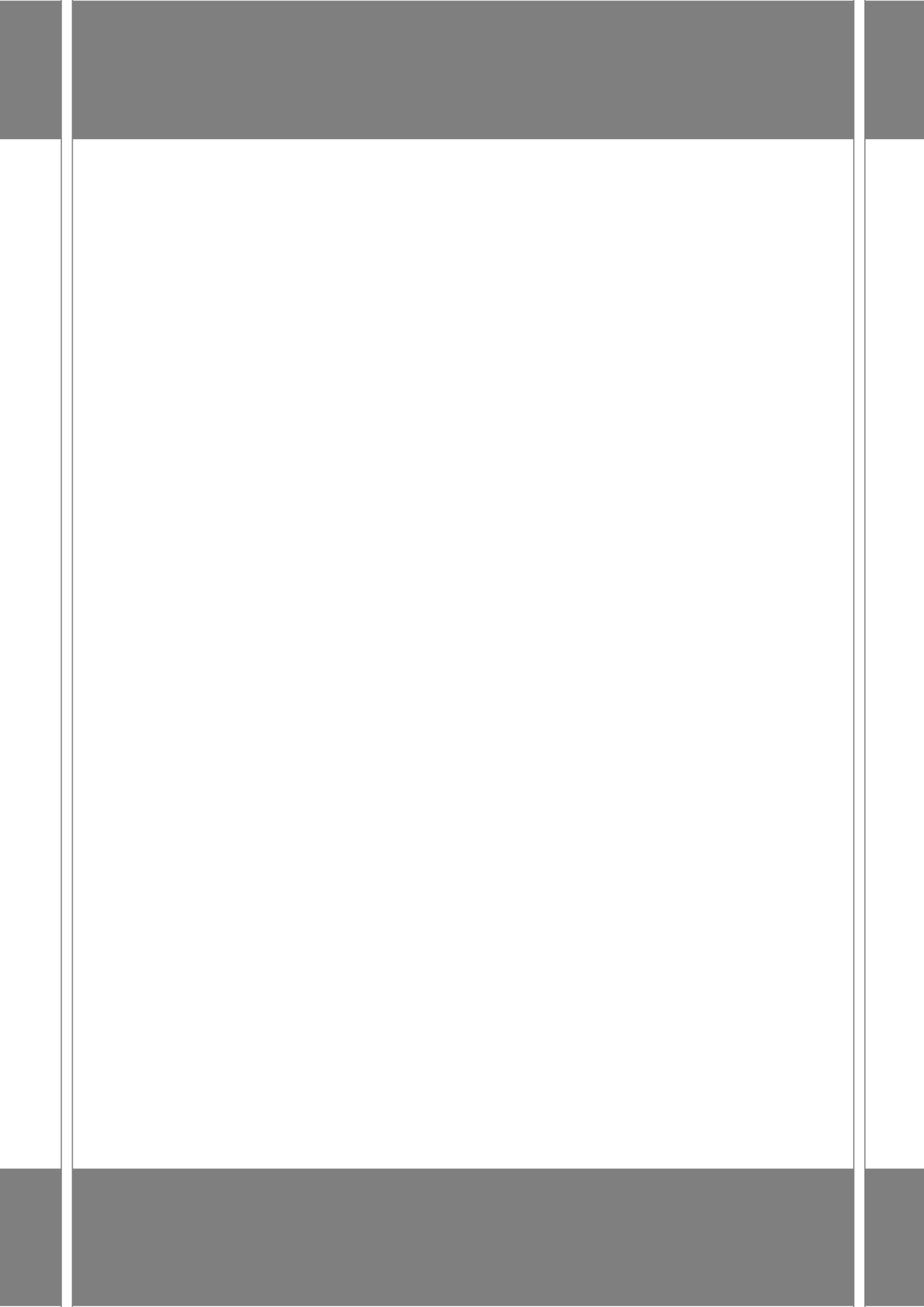
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Chef de Suco  
Manucasa

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Chef de Suco  
Namcleso

XXXXXXXXXX  
Representative  
District Office of  
NDE in Aileu

XXXXXXXXXX  
Representative  
Sub-district Office of  
NDWSS in Remexio

XXXXXXXXXX  
Representative  
Sub-district Office of  
NDWSS in Liquidoe



# Manuál ba Formasaun Konsellu Jestaun Bacias Hidrograficas



Prepara hosi

**Projetu Jestaun Rekursu Naturál Sustentável Bazeia ba Komunitade  
República Democrática Timor-Leste**





## Lian Makloke

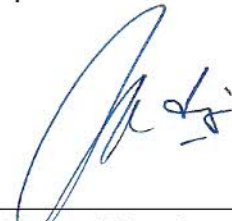
Degradasaun floresta no deforestasaun mak asuntu importante ida-ne'ebé Governu Timor-Leste (GoTL) preziza rezolve hodi atinje dezenvolvimentu sósiu-ekonómiku sustentável iha rai laran. Estudu ne'ebé hala'o iha tinan 2013 hatudu katak pelumenus 184.000 ha hosi floresta lakon ona entre tinan 2003 no 2012 no maizumenus 170.000 ha hosi floresta ho densidade nakonu hetan ona degradasaun sai floresta ho densidade uitoan iha períodu hanesan.

Jestaun Rekursu Naturál Bazeia ba Komunidade (CB-NRM) mak aprosimasaun ba konservasaun natureza ho rekoñese komunidade lokál sira-nia direitu atu benefisia sira hosi jestaun rekursu naturál sustentável (floresta, rai, bee, no biodiversidade) iha área ne'ebé termina ona. Ida-ne'e mak alternativu aprosimasaun reguladór hosi leten mai kraik, ne'ebé seidauk efetivu iha nasaun barak, liuliu bainhira regulamentu sira labele hatán hotu mudansa sosiál, kultura no kontestu ekonómiku iha rai laran.

Projetu Jestaun Rekursu Naturál Sustentável Bazeia ba Komunidade (Projetu CB-NRM) ne'ebé implementa hamutuk hosi Japan International Cooperation Agency (JICA) no Ministériu Agrikultura e Peska (MAP), partikulármente Diresaun Nasionál Floresta no Jestaun Bacias Hidrograficas (DNFGBH), dezenvolve tiha ona mekanizmu ne'ebé la'o daudaun ba CB-NRM iha Timor-Leste. Projetu ne'e mós hasai manuál tuirmai iha kursu projetu, atu ajuda MAP hodi habelar mekanizmu ne'ebé hanesan, iha mota prinsipál sira iha rai laran.

- ◆ Manuál Operasaun ba Estabelesimentu Mekanizmu CB-NRM iha nivel Suku
- ◆ Manuál Tékniku CB-NRM
  - Vol. 1: Produsaun Ai-oan no Promosaun Kuda ai
  - Vol. 2: Promosaun Toos Rai-lolon Sustentável
  - Vol. 3: Hasa'e Rendimentu/Dezenvolvimentu Vida-moris
- ◆ Manuál ba Formasaun Konsellu Jestaun Bacias Hidrograficas

Manuál ba Formasaun Konsellu Bacias Hidrograficas ne'e deskreve prosedimentu ba formasaun konsellu bacias hidrograficas, ne'ebé bele funsiona hanesan plataforma kolaborasaun ida ba lider lokál sira hodi koordena sira nia esforsu ba Jestaun rekursu naturál ho própriu iha bacias hidrograficas tarjetu. Kuadru Institusional hanesan ne'e prova ona efetivu hodi habelar mekanizmu CB-NRM hosi suku ba iha nivél bacias hidrograficas. Tanba ne'e, ami, hanaesan representativa MAP, rekomenda tebes atu aproxima ne'ebé hanesan tenke adopta ho mekanizmu CB-NRM iha mota inan prinsipál sira iha Timor-Leste.



Manuel Mendes  
Diretór Nasionál  
Diresaun Nasionál Floresta no  
Gestaun Bacias Hidrograficas  
(DNFGBH), MAP



Outobru 2015  
Raimundo Mau  
Diretór Gerál Floresta, MAP





## **Kona-ba Manuál CB-NRM**

Manuál CB-NRM sira-ne'e dezenvolve no públika hosi Projetu Konjunta JICA no MAP hanaran Jestaun Rekursu Naturál Sustentável Bazeia ba Komunitade, atu fornese ekipamentu prátiiku ne'ebé útil ba planeadór no pratikante sira iha setór floresta iha Timor-Leste, hodi fasilita sira atu proteje no maneja rekursu natural sira ho maneira ne'ebé kolaborativu no sustentável. Materiál sira-ne'e kompostu hosi tipu manuál tolu (3), hanesan hatudu iha kraik ne'e.

- i) Manuál Operasionál ba Estabelesimentu Mekanizmu CB-NRM iha Nivel Suku
- ii) Manuál Tékniku CB-NRM
  - Vol. 1: Produsaun Ai-oan no Kuda Ai
  - Vol. 2: Promosaun To'os Rai-lolon Sustentável
  - Vol. 3: Hasa'e Rendimentu/Dezenvolvimentu Vida-moris
- iii) Manuál ba Formasaun Konsellu Jestaun Bacias Hidrograficas

Manuál Operasionál ne'e mak komponente prinsipál ne'ebé espesifika prosedimentu Operasaun padraun ba introdusaun no estabelesimentu mekanizmu CB-NRM iha nivel suku. Manuál operasionál ida-ne'e dezeña atu planeadór, pratikante, no servisu hanesan peskizadór/estudante sira iha setór floresta iha Timor-Leste bele uza, liuliu sira-ne'ebé envolve iha protesau floresta, konsersaun bacias hidrograficas, no floresta komunitária iha Diresaun Nasionál Floresta no Gestaun Bacias Hidrograficas (DNFGBH).

Manuál Tékniku CB-NRM sira suplementa Manuál Operasionál, introdús tékniku no abilidade relevante sira-ne'ebé bele ajuda komidade rurál, hodi bele uza no maneja rekursu naturál sira, liuliu rai no floresta, ho maneira ne'ebé produtivu maibé mós sustentável. Manuál sira-ne'e tenke uza, prinsipalmente hosi servisu estensaun terrenu sira, hanesan funsionáriu MAP munisípiu (ezemplu, funsionáriu munisípiu, estensionista, no guarda floresta sira) no mós funsionáriu ONG sira, hanesan referénsia tékniku ba sira-nia servisu iha terrenu.

Manuál ba formasaun Konsellu Jestaun Bacias Hidrograficas, introdús prosesu dezenvolvimentu kolaborasaun plataforma/kuadru servisu ba jestaun rekursu naturál sustentável iha nivel postu-administrativu ka sub-bacias hidrograficas, ne'ebé bele mós hanesan servisu baze ba espansaun mekanizmu CB-NRM iha eskala bacias hidrograficas. Tanba manuál ida-ne'emak aprosimasaun esensíal ida, hodi hadi'a governasaun ambiente iha nivel bacias hidrograficas, liu hosi hametin koordinasaun no rede servisu entre parseiru lokál sira. Manuál ida-ne'e bele uza hodi ajuda sira-ne'ebé envolve iha jestaun bacias hidrograficas.

Liután, Projetu Konjunta JICA no MAP mós dezenvolve no públíka tiha ona manuál sira-ne'e iha versaun simples, atu ajuda uza na'in sira fasil halo tuir prosedimentu sira ka aplíka tékníku sira-ne'ebé deskreve iha manuál sira-ne'e, iha terrenu.

Ne'e duni espera katak, manuál sira-ne'e ho sira-nia versaun simples bele serbí hanesan referénsia prátikú ba parseiru roioin iha setór floresta iha Timor-Leste.

## Manuál ba Formasaun hosi Konsellu Jestaun Bacias Hidrograficas

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## **1. Introdusaun**

### **1.1 Funamentu**

Entre tinan 1972 no 1999, Repúblika Demokrátika Timor-Leste (Timor-Leste) nia floresta redús ona 1,1% kada tinan, ka total maizumenus 24% durante períodu ne'e. Avaliasaun ikus liu ne'ebé hala'o hosi JICS (Japan International Cooperation System)<sup>1</sup> hatudu katak, maizumenus 184.000 ha hosi floresta lakon ona entre tinan 2003 no 2012, no maizumenus 170.000 ha hosi floresta ho densidade nakonu, hetan ona degradasaun sai floresta ho densidade uitoan iha períodu hanesan. Tan dezflorestasaun ne'ebé lapara, total floresta sai maizumenus 50% iha rai-laran tomak (740.000 ektare) iha tinan 2012.

Dezflorestasaun no degradasaun floresta prinsipalmente kauza hosi ema nia atividade ekonomia, hanesan i) sunu floresta, ii) tesi ai ba koleasaun ai-sunu, iii) toos muda ba mai, no iv) esplorasau ai (*logging*) ne'ebé la kontroladu. Dezflorestasaun no degrasaun floresta mós kauza erozaun rai, rai halai no bee sa'e, ne'ebé ikusmai afeta ema nia moris ne'ebé hela, la'ós de'it iha área rai-lolon no foho, maibé iha rai tetuk mós. Maski Governu Timor-Leste (GoTL) halo tiha ona esforsu atu redús progresu hosi dezflorestasaun no degradasaun floresta, situasaun seidak muda sai di'ak, satán sai aat liután, tanba GoTL seidak bele foti medida ne'ebé efetivu, tanba estabelesimentu institusionál ne'ebé ladún adekuaudu no falta rekursu umanu iha governu.

Japan International Cooperation Agency (JICA) asiste ona GoTL iha jestaun rekursu floresta ne'ebé sustentável iha Mota-ninin Lacro no Comoro, introdús konseitu Jestaun Rekursu Naturál Sustentável Bazeia ba Komunidade (CB-NRM) dezde fulan-novembru 2005. Ministériu Agrikultura no Pesca (MAP) no Diresaun Nasionál Floresta (DNF), ne'ebé fahe ba diresaun nasional rua (hanesan Diresaun Nasionál Floresta no Gestaun Bacias Hidrograficas (DNFGBH) no Diresaun Nasionál Conservasaun Natural (DNCN)) iha fulan-outubru 2014, servisu ona ho JICA atu hatán kestaun difisil ida-ne'e dezde tempu ne'e. Rezultadu hosi esforsu ne'ebé kontinua, projetu konjunta JICA no MAP, hanaran "Projetu Jestaun Rekursu Naturál Sustentável Bazeia ba Komunidade" (depois ida-ne'e refere ba "Projetu JICA CB-NRM"), dezenvolve no demonstra tiha ona mekanizmu kona-ba jestaun rekursu naturál ne'ebé sustentável bazeia ba comunidade (depois ida-ne'e refere ba "mekanizmu CB-NRM") ne'ebé comunidade lokal bele maneja no proteje rekursu naturál bazeia ba floresta ho maneira ne'ebé sustentável.

Projetu JICA CB-NRM mós dezenvolve ona manuál balu ne'ebé útil ba introdusaun no promosaun mekanizmu CB-NRM iha mota-ninin prinsipál sira iha Timor-Leste, liuliu iha Mota-ninin Lacro no Comoro. Ida-ne'e mak manuál ida, ne'ebé dezenvolve hosi projetu hanesan, ne'ebé deskreve prosedimentu ba formasaun hosi kuadru servisu/plataforma kolaborativu ne'ebé organizasaun relevante lokal, hanesan edifísiu postu-administrativu no suku sira bele servisu hamutuk kona-ba jestaun rekursu naturál sustentável iha eskala bacias hidrograficas (ka sub-bacias hidrograficas). Manuál ida-ne'e bazeia ba esperiénsia ne'ebé hetan hosi Projetu JICA CB-NRM iha prosesu formasaun konsellu jestaun bacias hidrograficas iha Bacias hidrograficas Noru iha tinan 2014/2015.

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<sup>1</sup> Estudu avaliasaun floresta ne'ebé hala'o hosi konsultór sira ne'ebé kontrata hosi JICS ho apoiu hosi Programa Ajuda Fundus Japaun nian hanaran Programa Konservasaun Floresta iha Repúblika Demokrátika Timor-Leste iha tinan 2012.

## **1.2 Objektivu hosi Manuál**

Objetivu prinsipál hosi manuál ne'e mak atu gia funcionáriu terrenu no planeadór iha MAP, liuliu DNFGBH, kona-ba oinsá atu forma plataforma kolaborativu eskala bacias hidrograficas (ka sub-bacias hidrograficas) iha koordinasaun ho lider lokál iha nivel postu-administrativu no suku, no halo plataforma operasionál, hanesan konsellu ba jestaun bacias hidrograficas (depois ida-ne'e refere ba 'konsellu jestaun bacias hidrograficas'). Liuliu, manuál ida-ne'e espesifika prosedimentu kona-ba:

- i) Identifikasaun no analiza *stakeholder* relevante sira iha jestaun rekursu floresta/naturál iha bacias hidrograficas tarjetu;
- ii) Analiza kondisaun atuál hosi bacias hidrograficas tarjetu ho maneira ne'ebé partisipativu;
- iii) Determinasaun vizaun, misaun, objetivu, no funsaun hosi konsellu jestaun bacias hidrograficas ne'ebé sei forma; no
- iv) Preparasaun planu jestaun bacias hidrograficas iha kolaborasaun ho stakeholder lokál sira.

## **1.3 Área servisu/Tarjetu hosi Manuál**

Manuál ida-ne'e nia tarjetu mak funcionáriu tékniku MAP, liuliu DNFGBH no funcionáriu MAP Munisípiu, no planeadór/funconáriu terrenu sira hosi organizasaun sira-ne'ebé servisu iha setór floresta iha Timor-Leste. Partikulármente, manuál ne'e sei útil ba sira-ne'ebé servisu iha jestaun floresta sustentável no konservasaun bacias hidrograficas iha rai-laran.

Iha parte seluk, bacias hidrograficas ne'ebé define iha manuál ne'e, limitadu ba área ne'ebé bele maneja, ne'ebé zona bee-suli hamutuk, barak liu mak iha postu-administrativu rua. Iha realidade, sei difisil atu maneja zona bee-suli ne'ebé luan liu hosi postu-administrativu rua, tanba menus asesibilidade. Tanba ne'e, jerálmente, zona bee-suli sekundáriu ka terseiru hosi mota-ninin prinsipál iha rai-laran bele sai tarjetu hosi manuál ne'e.

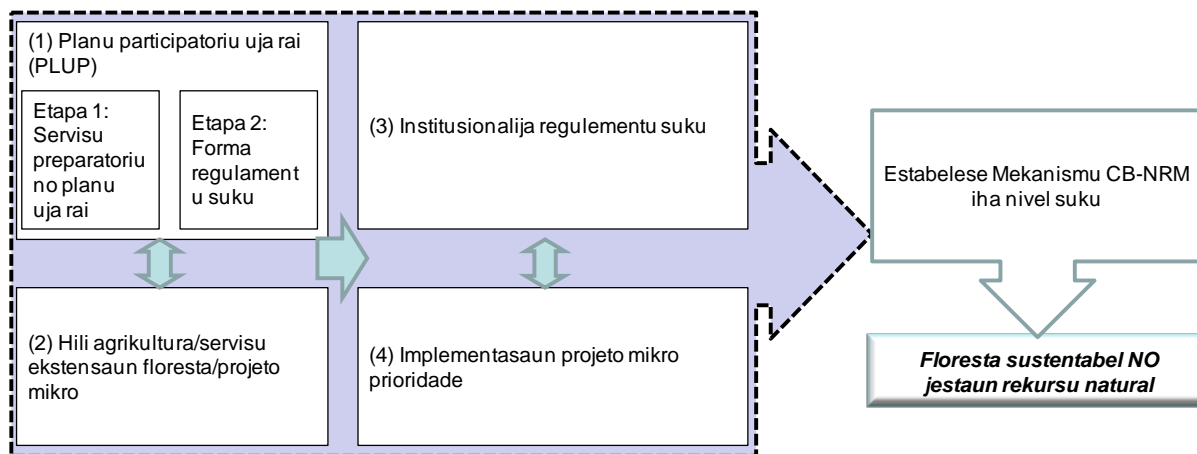
## **1.4 Kompozisaun hosi Manuál**

Manuál ne'e kompostu hosi kapitulu lima (5). Kapitulu 1 kona-ba *background* no objetivu hosi manuál, no kapitulu 2 introdús rasionál ba formasaun konsellu jestaun bacias hidrograficas. Prosesu jerál hosi prosedimentu detallu kona-ba formasaun konsellu jestaun bacias hidrograficas deskreve iha Kapitulu 3. Kapitulu 4 kona-ba liña jerál hosi prosesu halo planu jestaun bacias hidrograficas iha bacias hidrograficas ne'ebé lokaliza iha mota-ninin Lacro no Comoro. Kapitulu ikus, Kapitulu 5 deskreve quadru servisu institusionál ne'ebé propoin ba implementasaun manuál ne'e, ho oráriu padraun ba formasaun konsellu jestaun bacias hidrograficas no halo planu jestaun bacias hidrograficas.

## 2. Rasionál ba Formasaun Konsellu Jestaun Bacias Hidragraficas

### 2.1 Rasionál

Mekanizmu CB-NRM dezenvolve hosi Projetu JICA CB-NRM ho objetivu atu hadi'a governasaun lokál liuhosi haforsa regulamentu/sistema tradisionál iha suku, hamutuk ho introdusaun hadi'a tékniku agrikultura no floresta hanesan ne'ebé ilustra tuirmai.



Kuadru Servisu Mekanizmu CB-NRM ne'ebé dezenvolve hosi Projetu JICA CB-NRM

Fonte: Ekipa Projetu JICA (2015)

Mekanizmu ne'e prova tiha ona efetivu, la'ós de'it redús atividade ilegal ne'ebé kauza degradasaun floresta no rai, maibé mós hasa'e produsaun agrikultura no floresta iha suku. Maski mekanizmu ne'e bele hamoris impaktu pozitivu ne'ebé significativu iha nivel suku, limitasaun tuirmai mós konfirma ona iha kursu Projetu CB-NRM.

- Mekanizmu iha jerál efetivu de'it iha territóriu suku laran; tan ne'e, ladún influénsia atividade/atitude comunidade lokál hosi suku viziñu sira.
- Maioria kazu ilegal, hanesan sunu rai arbiru, tesi ilegal, no estraga ai-han ne'ebé kauza hosi animál husik arbiru, akontese ona iha baliza ho suku viziñu sira.
- Presiza atu introdús mekanizmu seluk hodi rezolve kestaun ne'ebé akontese entre suku iha koordinasaun ho lider lokál iha nivel postu administrativu, no mós atu introdús mekanizmu CB-NRM iha nivel suku.

Tanba ne'e, importante atu introdús no dezenvolve kuadru servisu ne'ebé lider lokál suku sira preokupa ba, ho bacias hidragraficas, bele servisu hamutuk iha jestaun floresta no rekursu naturál ne'ebé sustentável iha área tarjetu. Espera mós katak kuadru servisu hirak-ne'e bele aselera espansaun hosi mekanizmu CB-NRM iha eskala bacias hidragraficas.

Iha realidade, Projetu CB-NRM asiste tiha ona lider lokál sira iha Postu-administrativu Remexio no Liquidoe iha Aileu iha formasaun konsellu jestaun bacias hidragraficas ba bacias hidragraficas Noru. Konsellu Jestaun Bacias hidorgrafikas funciona hanesan plataforma kolaborativu ne'ebé lider lokál sira bele koopera malu, hodi hadi'a ambiente naturál no mós kondisaun moris comunidade lokál iha bacias hidragraficas. Kazu seluk hosi konsellu Jestaun Bacias Hidragraficas iha Munisípiu Lautem mós hatudu rezultadu pozitivu, hosi koordinasaun entre suku iha jestaun floresta ne'ebé sustentável.



## **2.2 Relevánsia ba Polítika Setór Floresta**

Konservasaun bacias hidragráficas mak objetivu polítika ida hosi Polítika Setór Floresta iha Timor Leste, tanba kontribui ba manutensaun kualidade bee nian, estabilizasaun lala'ok bee nian, no redúsaun risku bee sa'e iha área tetuk parte mota-ninin prinsipál sira nian. Formasaun Konsellu Jestaun bacias hidragráficas espera atu kontribui ba susesu hosi objetivu polítika, tanba ida-ne'e bele hadi'a lider lokál sira-nia konsiénsia kona-ba protesaun floresta no jestaun area rai-lolon sustentável no hanesan baze ba introdusaun mekanizmu CB-NRM nivel suku. Iha realidade, “relasaun públiku,” “hametin komunitade rurál atu proteje no jere floresta rai,” “edukasaun ba komunitade rurál no urbana sira,” no “enkoraja kooperasaun entre komunitade rurál sira no governu, liuhosi servisu estensaun tékniku,” ne'ebé mak enumera estratéjia iha polítika ba konservasaun bacias hidragráficas, mós elementu sira hosi atividade ne'ebé propoin ba formasaun hosi konsellu jestaun bacias hidragráficas.

## **2.3 Rezultadu ne'ebé Espera hosi Formasaun**

Rezultadu tuirmai ne'ebé espera atu hadi'a hosi formasaun konsellu jestaun bacias hidragráficas bazeia ba esperiénsia iha terrenu.

### Tempu Naruk

- i) Insidente sunu rai no tesi ai ilegal sei redús iha bacias hidrográficas tarjetu.
- ii) Disputa entre suku ne'ebé kauza hosi husik animál arbiru sei redús iha bacias hidragráficas tarjetu.
- iii) Kobertura vejetasaun iha bacias hidragráficas tarjetu sei hadi'a.
- iv) Produsaun ai-han iha bacias hidragráficas tarjetu bele estabiliza tanba menus erozaun iha to'os.
- v) Insidente rai monu no bee sa'e sei menus iha bacias hidragráficas tarjetu.

### Tempu Badak

- i) Lider lokál sira iha bacias hidragráficas tarjetu (hanesan xefe suku no funcionáriu postu-administrativu sira) hasa'e sira-nia konsiénsia kona-ba nesesidade hosi jestaun floresta no rekursu naturál sustentável iha jerál no efetividade hosi mekanizmu CB-NRM iha partikulár.
- ii) Komunikaun entre lider lokál sira bele hadi'a, atu nune'e lider lokál sira bele servisu hamutuk atu rezolve kestaun entre suku.
- iii) Lider lokál sira bele kolabora ho DNFGBH, edifísiu MAP Munisípiu, no SAS (Diresaun Nasionál Agua no Saneamentu) ba protesaun floresta, reflorestasaun, no hadi'a vida-moris lokál.
- iv) Lider lokál sira sei prontu atu aseita no introdús mekanizmu CB-NRM iha sira-nia Suku.

### 3. Processu no Procedura hodi Forma Koncellu Jestaun Bacias Hidrograficas

#### 3.1 Processu em Jeral

Tuir mai passu walu (8) nebe tengki foti atu forma koncellu jestaun bacias hidrograficas hó koordinasaun hosi lider lokal iha tarjetu bacias hidrograficas.

Etapa 1: Konsultasaun ho lider lokal hare ba iha tarjetu bacias hidrograficas kona ba idea forma koncelho jestaun bacias hidrograficas

Etapa 2: Enkontru hó membru hosi koncellu jestaun bacias hidrograficas Noru

Etapa 3: Halaó estudu ba suku ida nebe Projetu JICA CB-NRM assiste iha estabeselese mekanismu CB-NRM

Etapa 4: Enkontru ho lider lokal hare ba iha tarjetu bacias hidrograficas atu analija parceiru, hili membru sira hosi koncellu jestaun bacias hidrograficas, no diskuti sira nia funsaun no responsabilidade

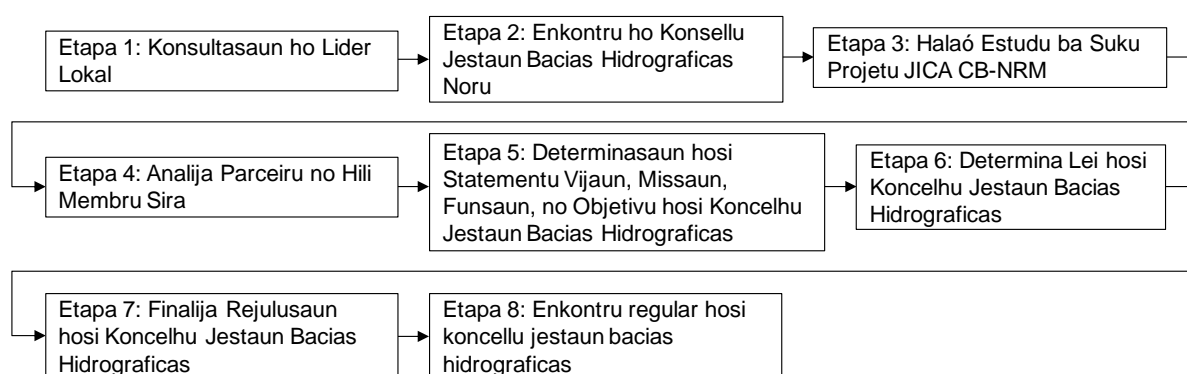
Etapa 5: Enkontru ho membru sira hosi koncellu jestaun bacias hidrograficas (parceiru hili hanesan membru hosi koncellu jestaun bacias hidrograficas) atu avalia situasaun agora hosi tarjetu bacias hidrograficas no diskuti vijaun, missaun, no funsaun hosi koncellu

Etapa 6: Enkontru ho membru sira hosi koncellu jestaun bacias hidrograficas atu desenvolve no determina lei hosi koncellu

Etapa 7: Enkontru hó membro sira hosi koncellu jestaun bacias hidrograficas atu desenvolve no finalija rejulusaun hosi koncellu jestaun bacias hidrograficas ho ninia membru sira, tuir lei, vijaun, missaun, no funsaun

Etapa 8: Enkontru regular hosi koncellu jestaun bacias hidrograficas kada fulan tolu

Processu hotu hosi passu nebe lista iha leten mak ninia sumariu hanesan tuir mai.



#### Processu hotu Hosi Forma Koncellu Jestaun Bacias Hidrograficas

Seksaun tuir mai hatudu processu hotu hosi atividade ba forma koncellu jestaun bacias hidrograficas.

### 3.2 Procedura ba Forma Koncellu Jestaun Bacias Hidrograficas

#### **【Etapa 1】 Konsultasaun ho Lider Lokal**

Antes enkontru no diskussaun hó parceiru importante (esemplu, lider suku) iha tarjetu bacias hidrograficas, enkontru konsultasaun tengki halaó ho lider lokal iha administrasaun ne'ebé refere, ho naran municipiu, postu administrativu, nivel suku.

#### (1) Objetivu

Objetivu importante hosi enkontru konsultasaun mak atu mantein akordu hosi lider lokal iha nivel ne'ebé diak kona ba formasaun koncellu jestaun bacias hidrograficas no buka assistencia ba processu hotu.

#### (2) Grupu tarjetu

Administrador Municipiu no postu administrativu tengki sai parceiru hosi enkontru iha nivel municipu no postu administrativu, no lider suku tengki sai tarjetu importante hosi enkontru iha nivel suku.

#### (3) Tempu no Fatin

Enkontru lora sorin ou lora ida tengki halaó iha nivel tarjetu ne'ebé refere. Karik tarjetu bacias hidrograficas barak liu hó postu administrativu rua (2), enkontru tengki halaó iha kada postu administrativu. Enkontru ho lider suku tengki halaó iha edeficiu postu administrativu/ ne'ebé suku ne'e iha ba.

#### (4) Ajenda ne'ebé Propin hosi Enkontru

Enkontru ho administrador tengki halaó separadu no halaó iha edeficiu municipal no postu administrativu. Iha enkontru, topiku tuir mai nebe tengki esplika.

- a. Objetivu hosi koncellu jestaun bacias hidrograficas
- b. Summariu hosi resultadu hosi mekanismu CB-NRM nebe introdus hosi Projeto JICA CB-NRM iha suku tarjetu
- c. Oorario enkontru ne'ebé halaó ba formasaun koncellu jestaun bacias hidrograficas
- d. Ema/grupu envolve iha processu
- e. Resultadu ne'ebé espera hosi formasaun hosi koncelhu jestaun bacias hidrograficas

Iha parte seluk, enkontru hó lider suku tengki halaó iha palestra iha edeficiu municipal ne'ebé refere. Standar ajenda hosi enkontru mak hanesan tuir mai.

**Standar Ajenda ba Enkontru Konsultasaun**

Tempo	Atividade	Rekursu Ema
10:00-10:30	Sessaun 1: Introdusaun (Objetivu no tempu hosi enkontru, objetivu hosi forma koncellu jestaun bacias hidrograficas)	DNFGBH/Officias Floresta Municipiu Facilitador/ONG
10:30-11:00	Sessaun 2: Explika conceitu no sumariu hosi resultadu hosi mekanismu CB-NRM (inklui deskansa)	ditto
11:00-12:45	Sessaun 3: Introdusaun processo formasaun koncellu no participante importante iha enkontru	DNFGBH/Officias Floresta Municipiu Facilitador/ONG
12:00-13:00	Sessaun 4: konfirmasaun hosi intensaun hosi lider suku sira	ditto
13:00-	Han meudia no taka	-

Fonte: Ekipa Projeto JICA (2015)

Enkontru tengki halaó iha lideransa hosi administrador postu administrativu atu facilita sira nia participasaun iha enkontru.

## (5) Matadalan ba Enkontru/Workshop

Enkontru ho lider suku tengki tuir procedur hanesan tuir mai.

Sessaun 1(1): Introdus membru sira ne'ebé participa iha enkontru no esplika objetivu hosi enkontru ba participante sira.

Sessaun 1 (2): Introdus objetivu, konceitu no necessidade hosi formasaun hosi koncellu jestaun bacias hidrograficas ba participante sira.

Sessaun 2: Explika konceitu hosi mekanismu CB-NRM desenvolve hosi Projeto JICA-CBNRM no resultadu/esperiencia iha suku projetu neen (6) ne'ebé Projeto JICA CB-NRM assiste ona.

Sessaun 3 (1): Eexplika processu hosi forma koncellu jestaun bacias hidrograficas hatudu iha lista no orariu hosi enkontru ne'ebé halao.



### **Tip ba Diskussau**

Hare ba iha enkontru, ita bot tengki prepara lista hosi enkontru/palestra ho topikulu ba iha diskussau no tempo ho **Appendice 3-1** iha manual neel.

Sessaun 3 (2): Fo' o hanoin ba participante sira katak sira tengki participa iha enkontru tamba sira mak parceiru importante ba iha jestaun hosi tarjetu bacias hidrografias.

Sessaun 4: Konfirma participante sira nia hakarak atu forma koncellu jestaun bacias hidrograficas depois diskussau.

Durante enkontru, diskussau tengki hakerek iha suratahan bot no memo.

## (6) Input (Rekursu Humanu no Material) nebe precisa

Input tuir mai ne'ebe precisa ba etapane'e.

- Rekursu humanu (esemplu, Officiais DNFBGH, Officiais Floresta Municipiu, guarda floresta, no facilitador/ONG)
- Halo uluk material esplikaun (flipchart ho horariu hosi enkontru/workshop nebe sei halao iha processo)
- Stasionariu (esemplu, flipchart, lapijeira no fita kola)
- Merenda, bee, no han meudia ba participante sira

## (7) Resultadu ne'ebé Espera

Konsentu unanimous ba formasaun hosi koncellu jestaun bacias hidrograficas ba parceiru relevante.

## **[Etapa 2] Enkontru ho Koncellu Jestaun Bacias Hidrograficas Noru**

Importante atu ajuda lider local haklean sira nia komprensaun hosi koncellu jestaun bacias hidrograficas atu halo sira nia diskussaun iha procesu ne'ebé eficiente no efetivu.

### (1) Objektivu

Objektivu importante hosi enkontru mak atu ajuda lider local iha figura ne'ebé klaru hosi koncellu jestaun bacias hidrograficas, in termus hosi ninia funsaun, efetividade, no funsaun/responsabilidade hosi ninia membru sira, liu hosi dialog direta ho membru sira hosi koncellu jestaun bacias hidrograficas Noru, koncellu jestaun bacias hidrograficas ida ne'ebé esiste iha rai laran.

### (2) Participante ne'ebé Espera

Administrador Postu Administrativu no lider suku hakarak tarjetu bacias hidrograficas tengki konvida hotu ba iha enkontru ho koncellu jestaun bacias hidrograficas Noru.

### (3) Tempu no Fatin

Enkontru loron balun ou loron ida tenki halaó iha edeficiu postu administrativu Remexio. Loron ida seluk (1) ou rua (2) precisa ba viajen hosi tarjetu bacias hidrograficas ba Remexio.

### (4) Ajenda ne'ebé Propoin iha Sessaun

Tabela tuir mai ne'ebé hatudu standar ajenda ba enkontru.

**Standar Ajenda ba Enkontru ho Koncellu Jestaun Bacias Hidrograficas Noru**

<b>Tempu</b>	<b>Atividade</b>	<b>Rekursu</b>
10:00-10:15	Sessaun 1: Introdusaun (Participante no objetivu hosi enkontru)	DNFGBH/Oficias Floresta Municipal /ONG
10:15-11:15	Sessaun 2: Esplikasaun badak kona-ba koncellu jestaun bacias hidrograficas Noru - Processu hosi formasaun hosi koncellu jestaun bacias hidrograficas - Membru sira hosi koncellu - Vijaun, missaun, no funsaun hosi koncellu - Liná jeral hosi planu jestaun bacias hidrograficas - Atividade importante ne'ebé koncellu halo ona (inclui deskansa)	Facilitador/ONG Representate hosi koncellu jestaun bacias hidrograficas Noru
11:15-12:15	Loke diskussaun (perguntas no resposta)	-
12:15-12:30	Remata	DNFGBH/Oficias Floresta Municipi/ Facilitador/ONG

Fonte: Ekipa Projeto JICA (2015)

### (5) Matadalan ba Enkontru

Enkontru hó koncellu jestaun bacias hidrograficas Noru tenki halaó tuir procedura hanesan tuir mai.

Sessaun 1 (1): Introdus participante tarjetu bacias hidrograficas ba membru sira/representante hosi koncellu jestaun bacias hidrograficas Noru no vice versa.

Sessaun 1 (2): Explika objetivu, tempu, no resultadu ne'ebé espera hosi



enkontru ba participante sira.

Sessaun 2: Husu representante/membru sira hosi koncelhu jestaun bacias hidrograficas Noru atu introdus koncelhu Jestaun bacias hidrografikas ba hirak ne'ebé hosi tarjetu bacias hidrograficas ho pontu hirak tuir mai ne'e:

- Processu hosi forma koncelhu jestaun bacias hidrograficas;
- Vijaun, missaun, no funsaun hosi koncelhu;
- Atividade importante ne'ebé koncellu halo ona; no
- Liná jeral hosi planu jestaun bacias hidrograficas.

Sessaun 3: Facilita diskussaun entre participante iha enkontru.

Durante enkontru, diskussaun tengki hakerek iha flipchart no memo.

(6) Input (Rekursu Humanu no Material) ne'ebé precisa

Input tuir mai ne'ebé precisa ba etapa tuir mai.

- a. Rekursu humanu (esemplu, Officiais DNFGBH, officias floresta municipiu, guarda floresta, no facilitador/ONG)
- b. Material enkontru (esemplu kopia hosi i) rejulusaun hosi koncellu jestaun bacias hidrograficas Noru kona membru sira no tuir lei no ii) planu jestaun bacias hidrograficas ba bacias hidrograficas Noru)
- c. Meius Transporte ba participante sira
- d. Merenda, bee no han meudia ba participante sira
- e. Hela fatin ba participante sira, karik necessariu

(7) Resultadu ne'ebé Espera

Lider local, administrador postu administrative no lider suku, bele iha idea klaru kona ba saida mak koncellu jestaun bacias hidrograficas ne'e.

**【Etapa 3】 Halaó Estudu ba Suku Projeto JICA CB-NRM**

Lider lokal husu atu tarjetu bacias hidrograficas tengki lori ba suku ida ne'ebé Projeto JICA CB-NRM assiste ona atu nune sirabele aprende mekanismu CB-NRM, ne'ebé karik bele introdus iha suku depois estabelese koncellu jestaun bacias hidrograficas.

**(1) Objektivu**

Objektivu importante hosi vijita mak atu ajuda lider lokal atu iha hanoin ne'ebé klaru kona ba oinsa mekanismu CB-NRM muda ona situasaun lokal no hadia vida moris komunitade ho halo dialogo hó komunitade iha suku refere no observa atividade CB-NRM iha terrenu.

**(2) Participante ne'ebé Espera**

Lider lokal sira (esemplu; administrador postu administrativu no lider suku) ne'ebé besik ba iha tarjetu bacias hidorgrafikas tengki sai grupu tarjetu importante hosi vijita.

**(3) Tempu no Fatin**

Loron ida (1) halo vijita iha terrenu no dialog ho komunitade iha suku refere. Loron ida seluk (1) ou rua (2) bele halo ba viajen hosi tarjetu bacias hidrograficas ba iha suku refere.

**(4) Ajenda ne'ebé Propoin hosi Sessaun**

Tabela tuir mai hatudu starndar ajenda ba enkontru.

**Standar Ajenda ba Vijita**

<b>Tempu</b>	<b>Atividade</b>	<b>Rekursu</b>
10:00-10:30	Sessaun 1: Introdusaun (Participante no bjetivu hosi vijita)	DNFGBH/Oficias FLoresta Municipal Facilitador/ONG
10:30-12:30	Sessaun 2: Fahe esperiencia hosi atividade CB-NRM - Liná jeral no processu hosi introdusaun hosi mekanismu - Atividade importante ne'ebé halaó iha processu - Funsauun no responsabilidade hosi lider suku - Lissaun ne'ebé aprende (inklui merenda)	Facilitador/ONG Ema hosi suku nebe refere
12:30-13:30	Han meudia	-
13:30-14:30	Sessaun 3: Perguntas no respostas	Facilitador/ONG
14:30-15:30	Sessaun 4: Observasaun terrenu	Ditto
15:30-16:00	Remata	DNFGBH/Oficias FLoresta Municipal Facilitador/ONG

Fonte: Ekipa Projeto JICA (2015)

**(5) Matadalan ba Enkontru**

Enkontru hó komunitade iha suku tengki halaó tuir ho procedura hanesan tuir mai.

Sessaun 1 (1): Introdus participante sira hosi suku tarjetu no vice versa.

Sessaun 1 (2): Esplika objetivu, tempu, no resultadu ne'ebé espera hosi vijita ba participante sira.

Sessaun 2: Husu lider suku ou komunitade iha suku atu esplika ba hirak ne'ebé hosi tarjetu bacias hidrograficas kona ba liná jeral no resultadu hosi mekanismu CB-NRM ne'ebéfoka ba pontus hirak tuir mai:

- Atividade importante ne'ebe halo ba estabelementu hosi mekanismu CB-NRM;
- Efetividade hosi regulamentu suku no tekniku CB-NRM (esemplu reforestasaun no tekniku jestaun agrikultura rai lolon, ba jestaun rekursu naturál sustentável no desenvolve vida moris) introdus iha suku;
- Funsau importante hosi lider suku no ema seluk iha suku iha processu hosi estabelese mekanismu CB-NRM; no
- Lissaun ne'ebé aprende no pratika ne'ebé hetan hosi atividade CB-NRM.



Sessaun 3: Facilita diskussaun entre participante hosi tarjetu bacias hidrograficas suku halao ba.

Sessaun 4: Lori participante sira ba to'os no/ou plantasaun ne'ebé pratika tekniku CB-NRM.

## (6) Input (Rekursu Humanu no Material) ne'ebé precisa

Input tuir mai ne'ebé precisa ba etapa ne'e.

- Rekursu humanu (Esemplu, oficias DNFGBH, Officias floresta municipaiu, guarda floresta, no facilitador /ONG)
- Material Enkontru (kopia hosi regulamentu suku ho mapa uja rai futuru hosi suku ne'ebé halaó hela)
- Meius transporte ba participante sira
- Kadeira no fatin ba enkontru iha suku ne'ebé halao ba
- Merenda, bee no han meudia ba participante sira
- Fatin hela ba participante sira, karik necessariu

## (7) Resultadu ne'ebé Espera

Lider local, administrador postu administrativu no lider suku, bele komprende ho klean mekanismu CB-NRM, in termus hosi ninia atividade, resultadu, no funsau hosi komunitade ne'ebé estabelese mekanismu CB-NRM.



## [Etapa 4] Analija Parceiru no Hili Membru Sira

Ne'e importante atu analija relevancia hosi parceiru local ba iha jestaun rekursu naturál iha tarjetu bacias hidrograficas no hili membru ne'ebe appropriadu hosi koncelhu jestaun bacias hidrograficas baseia ba analija parceiru(analija parceiru) atu nune koncelhu jestaun bacias hidrograficas bele funsiona hanesan plataforma kolaborasaun ne'ebé efetivu.

### (1) Objetivu

Objetivu importante hosi etapane'e atu assiste lider local iha i) analija perukupasaun parceiru hó tarjetu bacias hidrograficas, ii) hili membru sira hosi koncelhu jestaun bacias hidrograficas baseia ba analija parceiru, no iii) determina funsaun no responsabilidade hosi membru sira ne'ebé hili.

### (2) Resultadu ne'ebé Espera

Lider lokal espera katak tarjetu bacias hidrograficas tengki envolve iha enkontru. No mos sujere atu envolve officias governu relevante iha nivel municipiu/postu administrativu (esemplu, edeficiu MAP Municipiu, Edeficiu Municipiu hosi Diresaun Nasional Jestaun Desastre, no Municipiu/Postu administrativu hosi Diresaun Nasional Fornesementu Bee & Saniamentu) iha enkontru, tamba sira konsidera hanesan membru potensial hosi koncelhu jestaun bacias hidrograficas.

### (3) Tempu no Fatin

Enkontru loron rua tengki halaó iha edeficiu Postu Administrativu.

### (4) Ajenda ne'ebé Propoin iha Sessaun

Tabela tuir mai hadutu standar ajenda ba enkontru.

#### Standar Ajenda ba Analija Parceiru no Hili membru sira

##### a. Loron dahuluk

Tempu	Atividade	Rekursu ema
10:00-10:30	Sessaun 1: Introdusaun	DNFGBH/Officias Floresta Municipiu Facilitador/ONG
10:30-12:30	Sessaun 2: Analija parceiru (inklui merenda)	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 3: Identifikasaun membru hosi koncelhu (inklui merenda)	Facilitador/ONG
15:30-16:00	Remata diskussaun no taka	DNFGBH/Officias Floresta Municipiu Facilitador/ONG

##### b. Loron daruak

Tempu	Atividade	Rekursu Ema
10:00-10:30	Hare fali diskussaun ne'ebé halo iha loron premeiru	Facilitador/ONG
10:30-12:30	Sessaun 4: Diskussaun kona ba funsaun no responsabilidade hosi membru sira (inklui merenda)	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 4: Diskussaun kona ba funsaun no responsabilidade hosi membru sira (inklui merenda)	Facilitador/ONG
15:30-16:00	Remata diskussaun no taka	DNFGBH/Officias Floresta Municipiu Facilitador/ONG

Fonte: Ekipa Projeto JICA (2015)

(5) Matadalan ba Enkontru

Enkontru no diskussaun tengki halaó tuir procedura hanesan tuir mai.

- Sessaun 1: Esplika objetivu, tempu, no resultadu ne'ebé espera hosi enkontru ba participante sira.
- Sessaun 2(1): Husu participante sira atu identifika no hili ema/grupu/organijasaun relevante atu halo jestaun ba tarjetu bacias hidrografias, hanesan suku/komunitade, edeficiu administrativu municipiu, NPTL, MAP, no seluk tan.
- Sessaun 2 (2): Husu participante atu avalia relevancia no i ema/grupo/organijasaun ne'ebé identifika iha leten ho uja formatu hanesan tuir mai.

**Formatu ba Diskussaun**

Naran	Relevancia (oinsa parceiru sira nia relasaun ba iha jestaun hosi bacias)	Importancia (to'o iha ne'ebé parceiru importante ba jestaun bacias hidrograficas?)
	-	-
	-	-
	-	-
	-	-

**Tip ba diskussaun**

- a. Hare ba enkontru, ita bot tengki prepara formatu ba diskussaun iha sessaun 2. **Appêndise-3.2** hatudu sampel resultadu hosi diskussaun.
- b. Karik ne'e dificil ba participante sira atu hetan pontus hosi diskussaun, ita bot tenki fo'o sira esemplu, hanesan "Guarda Floresta ne'ebe relevante ba jestaun bacias hidrograficas tamba ninia servisu bot ida mak atu proteje floresta iha bacias hidrograficas, no nia iha funsaun importante iha jestaun bacias hidorgraficas tamba nia lolos atu orienta no guia comunidade lokal ba iha jestaun floresta ne'ebé sustentável."

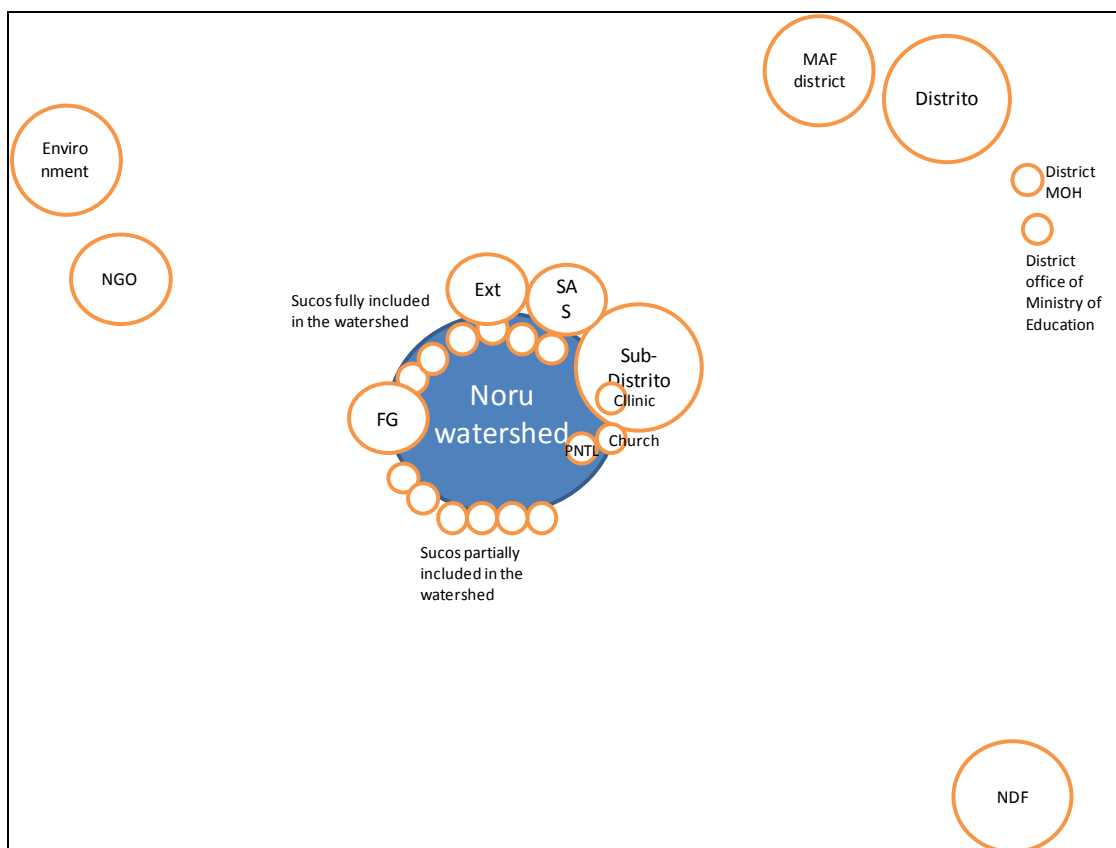
Sessaun 2 (3): Husu participante atu hare relsaun/importancia hosi ema/grupu/organijasaun uja metodu diagram venn, hó naran:

- Pinta sirklu bot ida hó naran hosi tarjetu bacias hidrografikas iha centru flipchart;
- Husu participante sira atu pinta sirklu ema ida nia/organijasaun iha flipchart hanesan no fo'o instrusaun hanesan ba sira atu i) halo sirklu bot karik ema/organijasaun ne'e importante no ii) tau sirklu besik liu ba iha bacias hidrograficas karik ema/organijasaun relevante, sirklu bot, no besik liu ba iha sentru, relasaun bot ho jestaun bacias hidrograficas.); no
- Halo hanesan ba ema/organijasaun sira seluk ne'ebé identifika.



**Tip ba diskussau**

- a. Ita bot bele uja medida diferente hosi papel sirklu duke pinta sirklu direita iha flipchart. Tamba ne'e, uja papel sirklu mak facil liu atu muda fatin ou medida hosi sirklu no diskuti importancia no relasaun hosi organijasaun ho participante sira. Maibe, ita bot tengki prepara medida diferente hosi papel sirklu antes enkontru.
- b. Resultadu esempu hosi diagram venn hatudu iha okos.



**Esemplu hosi Diagram Venn**

Sessaun 3: Husu participante sira atu kategorija ema/grupu/organijasaun ne'ebé identifika iha sessaun 2 (1) hanesan “membru” ou “laos membro” baseia ba resultadu hosi diskussau iha Sessaun 2 (2) no (3).

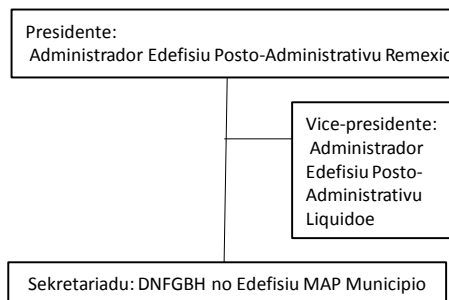
**Tip ba diskussau**

- a. Em principiu, lider lokal (esemplu administrador postu administrativu no lider suku) tenki sai membru hosi koncelhu no ba DNFGBH no Edeficiu MAP Municipiu ne'ebé refere.
- b. DNFGBH no edeficiu MAP Municipiu tengki sai sekretariadu hosi koncellu
- c. Atu nune bele facilita diskussau, ita bot bele introdus kaju hosi koncelhu jestaun bacias hidrograficas Noru ba sira hanesan esemplu, ho naran:

Membru sira: administrador hosi edeficiu Postu administrativu Remexio no Laulara, lider hosi suku 12, DNF, MAP Municipiu Aileu, Departamentu Ambiente Aileu, no Edeficiu Municipiu Fornecementu Agua no Saniamentu iha Remexio no Laulara.

**Laos membru (Observador):** Edeficiu Munisipiu Aileu, Edeficiu Municipiu MOH, klinika, edeficiu MOE iha Aileu, Representante hosi igreija iha Remexio, no ONG.

Sessaun 4 (1): Husu participante sira atu determina strutura hosi koncellu jestaun bacias hidrograficas introdus buat balun ne'ebé diak hatudu hosi koncelhu jestaun bacias hidrograficas Noru.



Sessaun 4 (2): Husu participante sira karik sirabele aumenta posisaun ruma ba iha esemplu ne'e ou muda hanesan.

Membru sira:  
Xefi de Suku hosi suku nen (6) iha Remexio no xefi de suku hosi suku nen (6) seluk iha Liquidoe

Sessaun 4 (3) Husu participante sira atu diskuti no determina i) membru sira ne'ebé tengki iha fatin iha posisaun ne'ebé refere no ii) funsaun no responsabilidade hosi membru sira.

### **Tip hosi Diskussau**

- Atu facilita diskussau, ita bot bele introdus strutura hosi koncelhu jestaun bacias hidrograficas Noru ho funsaun/responsabilidade hosi membru sira ne'ebé hatudu iha **Appendise-3.3**. Tabela hatudu iha **Appendise-3.3** tengki hakerek iha flipchart kuandu enkontru remata.
- Ita bot tengki husu participante karik sira hakarak atu reve ou aumenta funsaun seluk balun/responsabilidade ba sira depois introdusaun buat ne'ebé hato'o hosi koncelhu jestaun bacias hidrograficas Noru.

Durante enkontru, diskussau tengki hakerek iha flipchart no memo.

(6) Input (Rekursu Humanu no Material) ne'ebé precisa

Tuir mai input nebe precisa ba etpa ne'e.

- Rekursu humanu (esemplu officias DNFGBH, officias floresta municipiu, guarda floresta, no facilitador/ONG)
- Halo uluk material esplikasaun (esemplu, i) flipcharts ho formatu ba analija parceiru, ii) flipcharts ho strutura hosi koncelhu jestaun bacias hidrograficas Noru, no iii) flipcharts ho diskrisaun hosi funsaun no responsabilidade hosi membru sira)
- Papel sirklu ho medida diferente (karik precisa)
- Stasionariu (esemplu, flipcharts, lapijeira, no fita fkola)
- merenda, bee no han meudia ba participante sira

(7) Resultadu ne'ebé Espera

Lider lokal, ne'ebé sai membru importante hosi koncelhu jestaun bacias hidrograficas, sei desenvolve strutura organijasaun hosi koncelhu no konkorda kona ba funsaun no responsabilidade hosi membru sira.

**[Etapa 5] Determinasaun hosi Statementu Vijaun, Missaun, Funsauun, no  
Objetivu hosi Koncelhu Jestaun Bacias Hidrograficas**

Vijaun, missaun, no objetivu tengki desenvolve no akordu hosi membru sira hosi koncelhu jestaun bacias hidrograficas desde sira bele iha matadalan principal ba koncelhu.

**(1) Objetivu**

Objetivu importante hosi etapa ne'e atu assiste lider lokal, ne'ebé lolos hili hanesan membru sira hosi koncelhu jestaun bacias hidrograficas iha Etapa4, ba determina statementu vijaun, missaun, objetivu, no funsauun hosi koncelhu.

**(2) Participante ne'ebé Espera**

Parceiru ne'ebé hili hanesan membru sira hosi koncelhu jestaun bacias hidrograficas, hanesan administrador postu administrativu, lider suku, no representante hosi edeficiu governu municipiu ninia perukupasaun mak participante importante sira iha enkontru.

**(3) Tempu no Fatin**

Enkontru ba loraun daruak tengki halaó iha edeficiu postu administrativu.

**(4) Ajenda ne'ebé Propoin hosi Sessaun**

Tabela tuir mai hatudu ajenda standar ba enkontru.

**Standar ajenda hodidetermina Vijaun, Missaun, Objetivu, no Funsauun hosi Koncelhu**

**a. Loraun dahuluk**

Tempu	Atividade	Rekursu
10:00-10:30	Sessaun 1: Introdusaun	DNFGBH/Oficias Floresta Municipiu Facilitador/ONG
10:30-12:30	Sessaun 2: Analija situasaun hosi tarjetu bacias hidrograficas (inklui merenda)	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 3: Vijaun ba kondisaun futuru hosi bacias hidrograficas (inklui merenda)	Facilitador/ONG
15:30-16:00	Remata diskusaun no taka	DNFGBH/Oficias Floresta Municipiu Facilitador/ONG

**b. Loraun daruak**

Tempo	Atividade	Rekursu
10:00-10:30	Hare fali diskussaun halo iha loraun dahuluk	Facilitador/ONG
10:30-12:30	Sessaun 4: Diskussaun kona ba statementu vijaun no missaun hosi koncelhu jestaun bacias hidrograficas (inklui merenda)	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 5: Diskussaun kona ba objetivu no funsauun hosi koncelhu (inklui merenda)	Facilitador/ONG
15:30-16:00	Remata diskussaun no taka	DNFGBH/Oficias FLOresta Municipiu Facilitador/ONG

Fonte: Ekipa Projeto JICA (2015)

**(5) Matadalan ba Enkontru**

Enkontru no diskussaun tenki halaó tuir procedura hanesan tuir mai.

Sessaun 1: Esplika objetivu, tempu, no resultadu ne'ebé espera hosi enkontru ba participante sira.

Sessaun 2 (1): hatudu ba participante sira mapa foto aerial hosi tarjetu bacias hidrograficas hó balija hosi bacias hidrograficas no mos suku refere atu ajuda sira komprende kobertura vejetasaun agora hosi bacias hidrograficas.



Iha tempo hanesan, hatudu ba participante sira kobertura vejetasaun/mapa uja rai no mos mapa kona ba rai lolon, karik iha no esplika ba sira implikasaun hosi mapa atu nune sira bele hatene situasaun agora hosi tarjetu bacias hidrograficas.

**Tip ba Diskussaun**

- a. Antes enkontru, ita bot tengki hetan no processa dadus digital hosi foto aerial ne'ebé tau iha ALGIS no halo medida mapa foto aerial A-0 kobre tarjetu bacias hidrograficas.
- b. Iha tempo hanesan, ita bot tengki halo kobertura vejetasaun/mapa uja rai no mapa rai lolon hosi tarjetu bacias hidrograficas ho uja ida ne'ebé mak desenvolve hosi JICS.
- c. Atividade ne'ebé hakerek iha leten precisa abilidade kona ba uja software GIS no mos dadus hosi foto aerial, mapa usa rai agora/kobertura vejetasaun, no mapa rai lolon iha rai laran.
- d. Mapa tengki print sai ho papel medida A-0 (ou material seluk ne'ebé tenki baratu) antes enkontru.

Sessaun 2 (2): Ajuda participante sira avalia: i) oinsa floresta no rekursu naturál iha tarjetu bacias hidrograficas hahu muda ona no ii) oinsa kondisaun sosio ekonomiku influencia ona mudansa ne'e iha floresta no rekursu naturál husu sira atu diskuti situasaun hosi tarjetu bacias hidrograficas hosi pontus de vista hanesan tuir mai.

**Pontus kona ba rekursu naturál**

- Progressu hosi deforestasaun no degradasaun floresta;
- akontesementu rai halai no rai monu;
- Deteriorasaun rai bokur kauja hosi erosaun rai;
- Mudansa iha rekursu bee in termus hosi volume no qualidade; no
- incidente seluk hosi eventu degradasaun ambiente.

**Pontus kona ba kondisaun socio ekonomiku**

- mudansa ruma iha kondisaun moris hosi komunitade lokal;



- impaktu ruma kona ba vida moris lokal; no
- Problema social balun ou perukupasaun kauja hosi mudansa iha rekursu naturál iha tarjetu bacias hidrograficas.

Tuir mai formatu ne'ebé bele uja ba diskussaun esplika iha leten.

**Formatu ba Diskussaun**

**a. Rekursu Naturál**

Suku	Degrasaun floresta	Rai halai	Erosaun rai	Infulencia ba bee	Seluk

**b. Kondisaun Sosio Ekonomiku**

Suku	Kondisaun Moris	Vida Moris	Seluk

**Tip iha diskussaun**

- a. Ita bot tengki hakerek formatu hatudu iha flipcharts antes enkontru, atu nune itabele halo diskussaun hó diak.
- b. Ita bot tengki asegura spasu suficiente ba kada topik iha formatu atu hakonu komentariu hotu ne'ebé hato'o hosi participante sira iha formatu ne'ebé hatudu iha **Appêndise-3.4.**

Sessaun 3 (1): Esplika objetivu no linã jeral hosi sessaun katak participante sira sei hatudu ou espressa futuru ne'ebé ideal hosi sira nia suku.

Sessaun 3 (2): Husu participante atu hó livre atu hare ba futuru kona ba sira nia suku sem iha duvidas kona-ba rekursu, osan, ou tempu, maibe keta husu sira atu konsidera sira nia rasik ou futuru pessoal.

**Tip ba diskussaun**

- a. Ita bot bele guia sira kona-ba oinsa atu hare ba futuru hosi sira nia suku ho uja frase hanesan tuir mai:
  - “i) Favor imajina katak ita bot husik hela tiha ona suku ba tinan 10, no depois tinan 10 la iha kontaktu, ita bot fila hetan katak buat hirak ne'e lão diak ona.
  - ii) No mos imajina katak ita bot lão iha suku laran no observa suku no mos comunidade.
  - iii) Favor imajina ho silenciu iha ita bot nia ulun oinsa buat hirak ne'e bele sai diak liu:
    - Kondisaun moris iha suku;
    - Panorama hosi suku;
    - infrastrutura hosi suku, hanesan estrada, uma, bee, no eskola;
    - To'os, floresta, no rekursu bee; no
    - buat seluk ne'ebé bele iha sinal ba mudansa.”

Sessaun 3 (3): Husik participante sira imajina futuru ne'e ba minutu 10, no husu sira atu pinta buat hirak ne'ebé representa ba sira nia vijaun.



Sessaun 3 (4): Fo'ó ba sira papel hó medida A-5/A-4 no lapis no husu sira atu marka iha papel leten. Husu sira uja lapis kores karik necessariu.

**Tip ba diskussau**

- a. Bele lori minutu 30 ou liu ba participante sira atu pinta karik participante sira ne'ebé lais sei pinta ho lais.
- b. Ita bot tengki hein no permite sira atu decide oinsa sira kompleta servisu sem iha intervensaun ruma.

Sessaun 3 (5): Tau mapa foto aerial hosi tarjetu bacias hidrograficas no husu participante sira tau sira nia figura iha fatin ne'ebé suku refere iha mapa.



Sessaun 3 (6): Husu participante sira atu introdus sira nia vijaun ba malu.

Sessaun 3 (7): Husu participante sira atu diskuti vijaun ba futuru hosi tarjetu bacias hidrograficas.

**Tip ba Diskussau**

- a. karik participante balun la pinta, ita bot bele sujere sira atu halo statementu kona ba vijaun futuru hosi sira nia fatin.
- b. Ita bot hakerek diskussau, liuliu sira nia vijaun hosi sira nia suku no mos bacias hidrograficas.

Sessaun 4 (1): Hare fali vijaun futuru ne'ebé halo no diskuti hosi participante sira iha Sessaun 3 tamba sessaun ne'e bele halaó iha lora segundu.



Sessaun 4 (2): Husu participante sira atu diskuti no determina statementu vijaun hosi koncelhu jestaun bacias hidrograficas refere ba koncelhu jestaun bacias hidrograficas Noru.



**Tip ba diskussaun**

a. Ita bot bele introdus ba sira statementu vijaun tuir mai hosi koncelhu jestaun bacias hidrograficas Noru hanesan esemplu atu facilita sira nia diskussaun.

**Statementu vijaun hosi koncellu jestaun bacias hidrograficas**

Koncelhu jestaun bacias hidrograficas Noru mak aliansa ne'ebé la buka lukru kompostu hosi edefciu suku no postu administrativu ne'ebé refere no ajencia governu ne'ebé relevante hó objetivu atu proteje hó propriu no maneija floresta, rai, no rekursu bee iha bacias hidrograficas Noru atu hadia kondisaun moris no vida moris hosi ema ne'ebé hela iha bacias hidrograficas no hadia fornecementu bee ba iha area tetuk.

b. Statementu vijaun esplika iha leten tengki hakerek uluk iha flipchart antes enkontru.

Sessaun 4 (3): Diskuti no finalija statementu vijaun hosi koncelhu refere ba sampel ne'ebé introdus ba sira iha sessaun 4 (2).

Sessaun 4 (4): Depois determinasaun hosi statementu vijaun hosi koncelhu, husu ba sira dala ida tan atu diskuti no determina missaun hosi koncelhu. No mos, hanesan hosi koncelhu jestaun bacias hidrograficas Noru bele uja ba sira nia diskussaun.



**Tip ba diskussaun**

a. No mos, ita bot bele introdus ba iha missaun hosi koncelhu jestaun bacias hidrograficas ba participante sira hanesan esemplu atu facilita sira nia diskussaun.

**Missaun hosi Koncelhu Jestaun Bacias Hidrograficas**

- atu fornese matadalan no orientasaun ba lider suku sira iha suku ne'ebé refere ba iha jestaun floresta ne'ebé sustentável no rekursu naturál ne'ebé relaciona ba floresta (esemplu, NTFP, rai, no bee) iha bacias hidrograficas;
- atu fornese lideransa hodi harmonija interese no atividade hosi suku iha bacias hidrograficas atu atinji floresta ne'ebé sustentável no jestaun rekursu naturál ne'ebé relaciona ba floresta iha bacias hidrograficas;
- atu foti iniciativa iha planu, implementa, no avalia planu jestaun bacias hidrografias atu maneija floresta no rekursu naturál relaciona ba floresta tuir dalan ne'ebé propriu no sustentável banhira hasae vida moris lokal iha bacias hidrograficas;
- atu ajuda lider suku iha suku refere hodi hasae konsiencian ba floresta sustentável no jestaun rekursu naturál relaciona ba floresta entre komunitade iha suku refere;
- atu promove assaun necessariu ba floresta sustentável no jestaun rekursu naturál relaciona ba floresta iha bacias hidrograficas iha koordenasaun ho governu relevante no organijasaun nongovermentais no mos organijasaun internacional;
- atu ajuda lider suku iha suku refere fo'o floresta ne'ebé iha valor no rekursu naturál relaciona ba floresta ba jersaun futuru iha suku refere; no
- atu fahe esperiencian iha bacias hidrograficas ho unidade governu lokal (suku, postu administrativu, no municipiu) iha bacias hidrograficas seluk iha Timor Leste atu

**promove floresta ne'ebé sustentável no jestaun rekursu naturál relasiona ba floresta iha nivel bacias hidrograficas.**

*b. Missaun ne'ebé esplika iha leten tengki hakerek iha flipchart antes enkontru.*

Sessaun 4 (5): Diskuti no finalija missaun koncelhu nian ne'ebé introdus ba sira iha sessaun 4 (4).

Sessaun 5 (1): No mos, ajuda sira diskuti no determina objetivu no funsaun hosi koncelhu jestaun bacias hidrograficas uja hirak ne'ebé hosi koncelhu jestaun bacias hidrograficas Noru.

**Tip ba diskussaun**

*a. Iha inisiu hosi sessaun 5 (1), objetivu funsaun hosi koncelhu jestaun bacias hidrograficas Noru tengki fahe ho participante sira hanesan sampel atu facilita sira atu iha idea ba hirak ne'ebé hosi sira nia koncelhu.*

**Objetivu hosi Koncelhu Jestaun Bacias Hidrograficas**

- atu redus incidente hosi eventu degradasaun ambiente, hanesan floresta/sunu rai, explotasaun ilegal, no husik animal arbiru iha bacias hidrograficas;
- atu hadia kondisaun floresta no rekursu naturál relasiona ba floresta, ho naran, floresta, rai, no bee, iha bacias hidrograficas;
- atu mantein no hadia vida moris hosi comunidade lokal iha bacias hidrograficas; no
- atu hasae kapacidade lider suku no mos comunidade iha suku refere atu maneija floresta no rekursu naturál relasiona ba floresta iha maneira ne'ebé diak no sustentável.

**Funsaun hosi Koncelhu Jestaun Bacias Hidrograficas Noru**

- atu formula planu jestaun bacias hidrograficas ho assistencia hosi governu relevante no organijasaun nongovermental;
- atu prepara planu assaun annual atu implementa planu jestaun bacias hidrograficas iha inisiu hosi tinan;
- atu monitor no avalia implementasaun hosi planu assaun annual iha fim do ano;
- atu koordena implementasaun hosi planu jestaun bacias hidrograficas ho governu relevante no organijasaun non-govermental;
- atu halaó enkontru regular kada fulan tolu atu monitor situasaun hosi bacias hidrograficas no diskuti issu relevante ruma ba jestaun sustentabel hosi floresta no rekursu naturál relasiona ba floresta iha bacias hidrograficas;
- atu adopta resulusaun nebe bele enkorajen suku hotu iha bacias hidrograficas atu servisu ba floresta sustentabel no jestaun rekursu natural relasiona ba floresta iha bacias hidrograficas;
- atu halao enkontru banhira sirkumstancia precisa; no
- atu organija servisu grupu (ou komite) atu hare issu importante ne'ebé affeta ba jestaun bacias hidrograficas.

*b. Objetivu no funsaun ne'ebé esplika iha leten tengki hakerek uluk iha flipchart antes enkontru.*

Sessaun 5 (2): Finaliza objetivu no funsaun hosi koncelhu refere ba sample hatudu iha leten.

Durante enkontru, diskussaun tengki hakerek iha flipcharts no memo.

(6) Input (Rekursu Humanu no material) ne'ebé precisa

Input ne'ebé precisa ba passu nee.

- a. Rekursu Humanu (esemplu, officias DNFGBH, officias Municipiu Floresta, guarda floresta, no facilitador/ONG)
- b. Mapa foto aerial hosi tarjetu bacias hidrograficas
- c. Uja rai/mapa kobertura vejetasaun no rai lolon hosi tarjetu bacias hidrograficas (karik disponivel)
- d. suratahan ho media A-5
- e. halo uluk esplikasaun material (esemplu, i) flipcharts hó formatu ba diskussaun kona ba situasaun agora hosi tarjetu bacias hidrograficas no ii) flipcharts ho statementu vijaun, missaun, objetivu, no funsaun hosi koncelhu jestaun bacias hidrograficas Noru)
- f. Stasionariu (esemplu, lapis, lapis kores, flipcharts, lapijeira, no fita kola)
- g. Merenda, bee no han meudia ba participante sira

(7) Resultadu ne'ebé Espera

Lider lokal, n'eebé sai hanesan membru importante hosi koncelhu jestaun bacias hidrograficas, sei determina no konkorda kona ba statementu vijaun, missaun, objetivu, no funsaun hosi koncelhu.

(8) Atividade Tuir mai

Sekretariadu (DNFGBH no Edeficiu MAP Municipiu) ho assistencia hosi facilitador/ONG halo esbosu ba dokumentu kona ba statementu vijaun, missaun, objetivu, no funsaun hosi koncelhu bacias hidrograficas baseia ba resultadu hosi diskussaun ne'ebé halo iha Etapa 5. Appêndise-3.5 hatudu dokumentu hanesan ba koncelhu jestaun bacias hidrograficas Noru, ne'ebé bele uja hanesan referencia ba halo dokumentu ne'e.

**[ Etapa 6 ]      Determina Lei hosi Koncelhu Jestaun Bacias Hidrograficas**

Adisaun ba vijaun, missaun, funsaun no objetivu hosi koncelhu jestaun bacias hidrograficas, ne'e necessariu tau iha fatin hanesan regulamentu hosi koncelhu ba ninia operasaun no jestaun.

**(1)      Objektivu**

Objetivu importante hosi etapane'e mak atu assiste membru sira hosi koncelhu jestaun bacias hidrograficas ba desenvolve regulamentu manajerial hosi koncelhu, ne'ebé tenki konstitui rejulusaun kona ba forma koncelhu jestaun bacias hidrograficas.

**(2)      Participante ne'ebé Espera**

Membru sira hotu hosi koncelhu jestaun bacias hidrograficas, liuliu lider lokal sira, tengki participa iha enkontru.

**(3)      Tempu no Fatin**

Enkontru lora ida tengki halao iha edeficiu postu administrativu.

**(4)      Ajenda ne'ebé Propin hosi Sessaun**

Tabela tuir mai ne'ebé hatudu standar ajenda ba enkontru.

**Standar Ajenda ba Desenvolve Lei ba Koncelhu Jestaun Bacias Hidrograficas**

<b>Tempu</b>	<b>Aktividade</b>	<b>Rekursu Humanu</b>
10:00-10:30	Sessaun 1: Introdusaun	DNFGBH/Officias Floresta Municipiu Facilitador/ONG
10:30-11:00	Sessaun 2: Introdusaun lei hosi koncelhu jestaun bacias hidrograficas Norul	Facilitador/ONG
11:00-11:15	Merenda	-
11:15-12:30	Sessaun 3: Diskussaun lei	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 3: Diskussaun lei (inklui merenda)	Facilitador/ONG
15:30-16:00	Remata diskussaun no taka	DNFGBH/Officias Floresta Municipiu Facilitador/ONG

**(5)      Matadalan ba Enkontru**

Enkontru no diskussaun tengki halaó tuir procedura hanesan tuir mai.

- Sessaun 1:            Esplika objetivu, tempu, no resultadu ne'ebé espera hosi enkontru ba participante sira.
- Sessaun 2:            Introdus ba participante sira lei koncelhu jestaun bacias hidrograficas Noru, ne'ebé hatudu iha **Appéndise-3.6**.
- Sessaun 3 (1):        Introdus ba participante sira resultadu hosi diskussaun iha Etapa 4, ne'ebé bele uja ba seksaun hosi "membru sira" iha lei.
- Sessaun 3 (2):        Husu participante sira atu cek sampel lei kada liná karik sira aceita ou lae ou reve sira ba esbosu hirak ne'ebé iha koncellu.

**Tip ba diskussaun**

- a. Resultadu hosi diskussaun iha Etapa 4, liuliu strutura hosi koncellu no funsaun no responsabilidade hosi membru sira, tengki hakerek iha flipcharts atu nune participante sira bele hare saida mak sira diskuti no decide ona.
- b. Ita bot tengki hakerek lei hosi koncelhu jestaun bacias hidrograficas Noru ne'ebé hatudu iha **Appêndise-3.6** antes enkontru.

Diskussaun hotu halo hosi participante sira tengki hakerek iha flipcharts no memo.

(6) Input (Rekursu Humanu no Material) precisa

Input tuir mai ne'ebe precisa ba etapane'e.

- a. Rekursu humanu (esemplu, Officias DNFGBH, officias floresta municipiu, no facilitador/ONG)
- b. Prepara uluk material esplikasaun (esemplu, i) flipchart ho resultadu hosi diskussaun iha Etapa 4 no ii) flipchart hó lei hosi koncelhu jestaun bacias hidrograficas
- c. Stasionariu (esemplu, flipchart, lapijeira, no fita kola)
- d. Merenda, bee no han meudia ba participante sira

(7) Resultadu ne'ebé Espera

Lei ou regulamentu manejerial hosi koncelhu jestaun bacias hidrograficas sei desenvolve no konkorda hosi membru sira hosi koncelhu iha maneira participatoriu.

**[Etapa 7] Finalija Rejulusaun hosi Koncelhu Jestaun Bacias Hidrograficas**

Iha processu nia rohan, hanesan statementu vijaun, missaun, objetivu, funsaun, lei hosi koncellu jestaun bacias hidrograficas, tengki tau hamutuk ba iha rejulusaun hosi koncellu jestaun bacias hidrograficas ho assinatura hosi ninia membru sira.

(1) **Objetivu**

Objetivu importante hosi etapa ne'e mak atu finalija rejulusaun kona ba estabesementu koncelhu jestaun bacias hidrograficas, ne'ebé hanesan i) membru sira, ii) statementu vijaun, missaun, objetivu, no funsaun, no iii) lei hosi koncelhu jestaun bacias hidrograficas hó koncentu unanimous hosi ninia membru sira.

(2) **Participante ne'ebé Espera**

Membru hotu hosi koncelhu jestaun bacias hidrograficas tengki participa iha enkontru.

(3) **Tempu no Fatin**

Enkontru lora ida tengki halaó iha edeficiu postu administrativu.

(4) **Ajenda Propoin iha Sessaun**

Tabela tuir mai hatudu ajenda standar ba enkontru.

**Standar Ajenda ba finalija Resulusaun hosi Koncellu**

<b>Tempo</b>	<b>Aktividade</b>	<b>Rekursu</b>
10:00-10:30	Sessaun 1: Introdusaun	DNFGBH/Officias Floresta Municipiu Facilitador/ONG
10:30-11:00	Sessaun 2: Introdusaun esbosu resulusaun hosi koncelhu jestaun bacias hidrograficas	Facilitador/ONG
11:00-11:15	Merenda	-
11:15-12:30	Sessaun 3: Diskussaun no finalija rejulusaun	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sessaun 3: assina rejulusaun	Facilitador/ONG
15:30-16:00	Remata diskussaun no taka	DNFGBH/Officias Floresta Municipiu Facilitador/ONG

(5) **Servisu Preparatoriu**

Antes enkontru, rejulusaun ne'ebé kontein i) statementu vijaun, missaun, funsaun, no objetivu no ii) lei hosi koncellu tengki iha esbosu hosi officias DNFGBH no/ou officias MAP Municipiu hó assistencia tekniku hosi facilitador/ONG baseia ba resultadu hosi diskussaun iha etapa ida uluk. Sampel hosii rejulusaun kona ba estabesementu hosi koncelhu jestaun bacias hidrograficas hatudu iha Appéndise-3.7 tengki refere diak ba iha esbosu rejulusaun. Esbosu rejulusaun tengki hakerek iha flipchart antes enkontru ho membru koncelhu sira

(6) **Matadalan ba Enkontru**

Enkontru no diskussaun tengki halaó tuir procedura hanesan tuir mai.

Sessaun 1: Esplika objetivu, tempu, no resultadu ne'ebé espera hosi enkontru ba participante sira.

Sessaun 2: Introdus no esplika ba participante sira esbosu rejulusaun ho ninia aneksu.

Sessaun 3 (1): Husu participante sira atu hare esbosu resulusaun no ninia aneksu ho cek kada linã karik sira aceita ou atu reve sira.

Sessaun 3 (2): Finalija rejulusaun baseia ba komentariu no feedback hosi participante sira.



**Tip kona ba diskussaun**

*a. Ita tengki lori laptop hó printer iha enkontru atu nune ita bot bele finalija rejulusaun ho diskussaun ho membru sira.*

Sessaun 4: Husu participante sira atu assina rejulusaun.

(7) Input (Rekursu humanu no Material) ne'ebé precisa

Input tuir mai ne'ebé precisa ba iha etapa ne'e.

- a. Rekursu humanu (esemplu Officiais DNFGGBH, officias Floresta Municipiu, guarda floresta, no facilitador/ONG)
- b. Material ba enkontru (kopia resulusaun kona ba koncelhu jestaun bacias hidrograficas ho membru sira, vijaun, missaun, funsaun, no objetivu, no lei)
- c. Halo uluk material esplikasaun (esemplu; flipchart ho esbosu rejulusaun)
- d. Laptop no printer
- e. Stasionariu (esemplu; flipchart, lapijeira no fita kola)
- f. Merenda, bee, no han meudia ba participante sira

(8) Resultadu ne'ebe Espera

Rejulusaun kona ba estabese koncellu jestaun bacias hidrograficas sei finalija no hasai ho assinatura hosi membru sira hotu.

(9) Aktividade tuir mai

Kopia hosi rejulusaun ne'ebe finalija ona tengki prepara hosi sekretariadu (Edeficiu Municipiu DNFGGBH/MAP) ho assistencia hosi facilitador/ONG atu fo'o ba membru sira.

## **[Etapa 8] Enkontru regular hosi koncellu jestaun bacias hidrograficas**

Depois estabelementu koncellu jestaun bacias hidrograficas, koncellu tengki iha enkontru kada fulan tolu atu monitor no diskuti issu ruma kona ba jestaun rekursu naturál iha area.

### (1) Objektivu

Objektivu importante hosi etapa ne'e mak atu ajuda koncellu jestaun bacias hidrograficas iha enkontru kada fulan tolu no koordena hó sira nia assaun atu resolve issu ruma kona ba jestaun rekursu naturál no hadia vida moris komunitade ne'ebé hela iha area refere.

### (2) Participante ne'ebé Espera iha Enkontru

Membro hotu hosi koncellu jestaun bacias hidrograficas tengki participa iha enkontru.

### (3) Tempu no Fatin

Enkontru loron ida tengki halaó iha edeficiu Postu Administrativu.

### (4) Ajenda ne'ebé Propoin iha Sessaun

Tabela tuir mai hatudu standar ajenda ba enkontru.

Standar ajenda ba Enkontru regular hosi Koncelho Jestaun bacias Hidrograficas

Tempu	Atividade	Rekursu Ema
10:00-10:30	Sessaun 1: Konfirmasaun hosi participante sira, introdusaun ajenda, no abertura hosi Presidente	DNFGBH/Floresta Municipiu Facilitador/ONG
10:30-12:00	Sessaun 2: Relatoriu kona ba issu ruma kona ba jestaun rekursu naturál hosi membro sira	Facilitador/ONG
12:00-12:30	Sessaun 3: Diskussaun issu ruma	Facilitador/ONG
12:30-13:30	Han meudia	-
13:30-14:00	Sessaun 3: Diskussaun issu ruma	Facilitador/ONG
14:00-15:00	Sessaun 4: topik special ruma	Facilitador/ONG
15:00-15:30	Remata diskussaun no taka	DNFGBH/Floresta Municipiu Facilitador/ONG

### (5) Matadalan ba Enkontru

Enkontr regular tengki halaó tuir ho procedura hanesan tuir mai.

Sessaun 1 (1): Konta numeru membru sira ne'ebé attende enkontru atu cek karik atinji ona quorum.

Sessaun 1 (2): Introdus ajenda enkontru no husu Presidente atu loke enkontru.

Sessaun 2 (1): Husu membru sira, liuliu lider iha suku refere ho tarjetu bacias hidrografikas, atu relata, karik iha issu ruma kona ba jestaun rekursu naturál (esemplu, akontese sunu rai, tesi ilegal, rai monu, ou estraga ai han kauja hosi husik





animal) iha sira nia area.

Sessaun 3 (1): Diskuti issu ruma no perukupasaun ne'ebé la bele resolve kona ba iniciativa hosi suku ida no precisa atu koordena sira nia esforsu ho suku seluk.

Sessaun 3 (2): Assiste membru sira iha desenvolve planu assaun/rejulusaun/proposta hodi resolve issu no perukupasaun.

Sessaun 4: Diskuti topiku seluk ne'ebé precisa.

Diskussaun hotu tengki hakerek iha flipchart no memo.



#### (6) Input (Rekursu Humanu no Material) ne'ebé precisa

Input tuir mai ne'ebé precisa ba etapa ne'e.

- a. Rekursu Humanu (esemplu officias DNFGBH, officias Floresta Municipiu, guarda floresta, no facilitador/ONG)
- b. Stasionariu (esemplu, flipcharts, lapijeira, no fita kola)
- c. Merenda, bee no han meudia ba participante sira

#### (7) Resultadu ne'ebé Espera

Koncelhu Jestaun Bacias hidorgraficas bele funsiona hanesan plataforma kobalobarasun ne'ebé lider lokal bele resolve issu ruma entre suku, hanesan sunu, tesi illegal, no husik animal, iha kooperasaun ba malu.

#### (8) Atividade Tuir mai

Memo ou minutas hosi enkontru tengki prepara hosi sekretariadu (DNFGBH/edificiu municipiu MAP) ho assistencia hosi facilitador/ONG. Memo tengki fahe ba membru sira hosi koncelhu iha enkontru tuir mai.

#### **4. Prosesu Dezenvolvimentu hosi Planu Jestaun Bacias Hifrograficas (Ba deit Bacias Hidrograficas iha Mota Lacro no Comoro nia laran)**

Planu jestaun bacias hidrograficas ne'e sei uza hanesan dokumentu matadalan ida hosi konsellu jestaun bacias hidrograficas hodi jere floresta no rekursu rai iha tarjetu bacias hidrograficas tuir maneira ne'ebé prôpriu no sustentável. Planu ida ne'e tenke dezenvolve hosi konsellu jestaun bacias hidrograficas iha maneira partisipatoriu depois konsellu ne'e hari'i, atu nune'e membru konsellu sira bele hasae sira nia konsiensia ba situasaun atúal hosi tarjetu bacias hidrograficas no asaun nesesáriu ne'ebé presija foti hodi hadiak ambiente bacias hidrograficas. Maibé, fó hanoin katak prosesu ida ne'e tenke aplika ba deit bacias hidrograficas ne'ebé lokaliza iha Mota Lacro no Comoro nia laran, tanba planu jestaun bacias hidrograficas dezenvolve hosi estudu JICA<sup>1</sup> ne'e bele utiliza ho kompletu hanesan referencia ba area sira iha mota sira seluk ne'ebé hanesan. Iha realidade, sei la fasil atu dezenvolve planu jestaun ba area sira ne'ebé sidauk iha planu ba tempu agora, tanba ida ne'e presija peskiza no estudu balun hodi halo planu jerál ida.

##### **4.1 Presesu Hotu**

Planu jestaun bacias hidrograficas tenke dezenvolve liu husi etapa hat (4) tuir mai hamutuk ho membru sira hosi konsellu jestaun bacias hidrograficas.

- Etapa 1: Introdusaun hosi prosesu no objetivu hosi halo planu jestaun bacias hidrograficas
- Etapa 2: Dezenvolvimentu esbosu planu jestaun bacias hidrograficas ba tarjetu bacias hidrograficas tuir planu Jestaun ba mota Lacro no Comoro
- Etapa 3: Enkontru ho membru sira hosi konsellu hodi reve no halo revizaun esbosu planu jestaun bacias hidrograficas ba tarjetu bacias hidrograficas
- Etapa 4: Preparasaun no finalizasaun rezulusaun hosi konsellu Jestaun bacias hidrograficas ba aprovasaun no submisaun hosi planu Jestaun bacias hidrograficas finál

## 4.2 Prosedimentu hosi Dezenvolvimentu Planu Jestaun Bacias Hidrograficas

### 【Etapa 1】 Introdusaun Prosesu no Objektivu hosi Dezenvolvimentu Planu Jestaun Bacias Hidrograficas

Antes halo enkontru, membru sira hosi konsellu jestaun bacias hidrograficas sei hetan esplikasaun klaru kona-bá proseu no objektivu hosi halo planu Jestaun bacias hidrograficas atu nune'e sira bele simu atividade sira ne'ebé planeadu ona ba intensaun ne'e.

#### (1) Objektivu

Objektivu prinsipál hosi enkontru ne'e mak atu hetan konkordansia ba idea kona-bá dezenvolvimentu planu jestaun bacias hidrograficas no ninia atividade asosiadu sira hosi membru sira hosi konselhu jestaun bacias hidrograficas.

#### (2) Grupu Tarjetu

Membru hotu hosi konselhu bacias hidrograficas, liuliu lider lokál hosi suku sira, sei participa iha enkontru ne'e, tanba planu jestaun bacias hidrograficas espera sei uza hanesan dokumentu matadalan ba sira hodi maneja rai no floresta iha bacias hidrograficas tarjetu no hodi hadia vida moris komunitade lokál

#### (3) Durasau Tempu no Fatin

Enkontru lora sorin sei halaó iha edefisiu Postu-Administrativu.

#### (4) Ajenda Propoin ba Enkontru

Tabela tuir mai hatudu padraun ajenda ba enkontru.

Padraun Ajenda ba Enkontru

Tempu	Atividade	Rekursu humanu
10:00-10:30	Sesaun 1: Introdusaun hosi enkontru	DNFGBH/Ofisiais Floresta Municipiu, Fasilitador/ONG
10:30-11:00	Sesaun 2: Introdusaun no esplikasaun objektivu no prosesu halo planu jestaun bacias hidrograficas	Ditto
11:00-11:15	Kafe dader	-
11:15-11:45	Sesaun 3: Liña jerál hosi planu Jestaun bacias hidrograficas ba mota Laço no Comoro	DNFGBH/Ofisial Floresta Municipiu/ONG
11:45-12:30	Diskusaun no Resposta	Ditto
12:30-	Han Meudia no taka	-

Fonte: Ekipa Projetu JICA (2015)

#### (5) Matadalan ba Enkontru/Palestra

Enkontru sei halaó hanesan tuir mai ne'e.

Sesaun 1: Introdus objektivu no durasaun tempu hosi enkontru ba partisipante sira.

Sesaun 2: Esplika objektivu no nesesidade hosi planu jestaun bacias hidrograficas uza material sira aneksu iha **Apêndice-4.1** ba partisipante sira.



Sesaun 3: Esplika ba partisipante sira planu jestaun bacias hidrograficas ba mota Laclo no Comoro uza material apresentasaun sira hatudu iha **Apêndice-4.2** haforsa katak material ne'ebé hanesan sei uza ba *master plan* ba bacias hidrograficas lokaliza iha mota sira seluk nebe hanesan.

**Tip ba diskusaun**

- a. Antes enkontru, ita tenke hakerek material ne'ebé hatudu iha **Apêndice-4.1** ba iha flipcharts.
- b. Ita tenke lori komputador laptop ida no projetor iha enkontru ba apresentasaun planu Jestaun bacias hidrograficas ba mota Laclo no Comoro uza material hatudu iha **Apêndice-4.2**.

Durante enkontru, tenke hakerek diskusaun ne'ebé halo iha flipcharts no iha minutos enkontru.

(6) Input (Rekursu Humanu no Material sira) ne'ebé presija

Input tuir mai presija ba etapa ida ne'e.

- a. Rekursu Humanu (ezemplu., ofisiais DNFGBH, ofisiais floresta municipiu, guarda floresta, no fasilitador (ONG))
- b. Halo uluk material esplikasaun (hanesan., flipcharts ho objetivu no prosesu halo planu jestaun bacias hidrograficas)
- c. Komputador laptop no projetor ida
- d. Estasionáriu (hanesan., flipcharts, markador, no fita kola)
- e. Merenda, bee no han meudia ba partisipante sira

(7) Rezultadu ne'ebé Espera

Membru sira hosi konsellu jestaun bacias hidrograficas sei simu idea ida ba desenvolvimentu planu jestaun bacias hidrograficas no konkorda atu partisipa iha enkontru oi-oin ne'ebé planea hodi halo planu jestaun ne'e.

**[Etapa 2]      Dezenvolvimentu hosi Planu Jestaun Bacias Hidrograficas**

Planu jestaun bacias hidrograficas ba tarjetu bacias hidrograficas tenke dezenvolve tuir planu jestaun ba mota Lacro no Comoro, ne'ebé mak hanesan planu prinsipál ba jestaun rai no floresta iha mota hirak ne'ebé refere tuir maneira ne'ebé integradu no sustentável.

**(1)      Objektivu**

Objetivu prinsipál hosi etapa ne'e mak atu dezenvolve planu jestaun bacias hidrograficas ida ba tarjetu bacias hidrograficas t refere ba planu jestaun ne'ebé dezenvolve ba bacias hidrograficas Noru hosi Projetu JICA CB-NRM bazeia ba planu prinsipál ba mota Lacro no Comoro.

**(2)      Pesoal/Grupu responsabel ba Etapa ne'e**

DNFGBH no edefisiu MAP municipiu sei responsabilija ba dezenvolvimentu hosi planu jestaun bacias hidrograficas. Servisu ne'e bele halo kontratu ba organizasaun esternál ida (ezenplu., ONG) ka peritu (sira) ne'ebé iha kapasidade atu halo servisu ne'e.

**(3)      Durasaun Tempu no Fatin**

Sei presija fulan ida (1) ka rua (2) atu halo esbozu planu jestaun bacias hidrograficas ida.

**(4)      Konteúdu ne'ebé propoin hosi Planu Jestaun Bacias Hidrograficas**

Sujere atu uza planu jestaun bacias hidrograficas ba bacias hidrograficas Noru hanesan modelu ka padraun ba atividade hanesan ba tarjetu bacias hidrograficas ida. Konteúdu propoin hosi planu mak hanesan tuir mai ne'e.

**Konteúdu Propoin hosi Planu Jestaun Bacias Hidrograficas**

<b>Kapítulu</b>	<b>Seksaun</b>
Kapítulu 1 Introdusaun	1.1 Introdusaun 1.2 Objektivu hosi Dokumentu ne'e 1.3 Area Servisu ka lalaok hosi planu Jestaun Bacias Hidrograficas 1.4 Kompozisaun hosi Planu ne'e
Kapítulu 2 Kondisaun agora hosi bacias hidrograficas	2.1 Fatin no situasaun Administrativu hosi Bacias Hidrograficas 2.2 Kondisaun Naturál 2.2.1Klima (Udan no Temperatura) 2.2.2Rai lolon 2.2.3Elevasaun 2.2.4Uza rai no kobertura vejetasaun 2.2.5Potensial Erosaun Rai 2.3 Kondisaun Socio-economico 2.3.1Demografi 2.3.2Produsaun Agrikola 2.3.3Habitante animal 2.3.4Seguransa Aihan 2.3.5 Estimasaun Nivel Rendimentu 2.4 Vulnerabilidade ba Mudansa Klimátika 2.4.1Projetadu mudansa Klimátika 2.4.2Impaktu potensial ba Komunitade sira iha Bacias Hidrograficas 2.4.3Vulnerabilidade hosi bacias hidrograficas ba mudansa klimátika
Kapítulu 3 Problema sira ba jestaun bacias hidrograficas no parseiru relevante sira ba Jestaun Bacias Hidrograficas	3.1 Problema ba Jestaun Bacias Hidrograficas 3.1.1Historia hosi Degradasaun Floresta 3.1.2Problema Atúal iha Bacias Hidrograficas 3.2 Parseiru relevante sira ba Jestaun Bacias Hidrograficas 3.2.1Parseiru importante sira 3.2.2 Konsellu Jestaun Bacias Hidrograficas
Kapítulu 4 Meta no Objektivu Stratejiku	4.1 Meta no Objektivu Stratejiku

Kapítulu	Siksaun
hosi Planu Jestaun Bacias Hidrograficas	4.2 Matadalan jerál ba Jestaun Rai iha Bacias Hidrograficas
Kapítulu 5 Planu Jestaun Bacias Hidrograficas	5.1 Kuadru Servisu Jerál hosi Planu Jestaun Bacias Hidrograficas 5.2 Programa Uza Rai 5.2.1 Objétivu 5.2.2 Stratejia 5.2.3 Sub-Programa Planiamentu Uza Rai Parsipatoriu (PLUP-SP) 5.3 Programa Halo To'os no Jestaun Hakiak Animal 5.3.1 Objétivu 5.3.2 Stratejia no Aproximasaun 5.3.3 Sub-programa sira 5.4 Programa Reflorestasaun no Protesaun Floresta 5.4.1 Objétivu 5.4.2 Stratejia no Aproximasaun 5.4.3 Sub-programa 5.5 Programa Hadia Vida Moris 5.5.1 Objétivu 5.5.2 Stratejia no Aproximasaun 5.5.3 Sub-programa sira 5.6 Programa Sensibilasaun Konsensia 5.6.1 Objétivu 5.6.2 Stratejia no Aproximasaun 5.6.3 Sub-Programa Kampanha sensibilasaun konsensia (PAC-SP) 5.7 Programa Hametin Institusaun 5.7.1 Objétivu 5.7.2 Stratejia no Aproximasaun 5.7.3 Asaun foti hodi hametin Konselu Jestaun Bacias Hidrograficas
Kapítulu 6 Implementasaun Planu	6.1 Konseitu Baziku 6.2 Metódu Implementasaun 6.2.1 Prosesu Implementasaun hosi Sub-Programa sira 6.2.2 Forma grupu hosi suku sira 6.3 Kuadru Servisu Institucional ba Implementasaun 6.3.1 Organizasaun ne'ebé sei envolve iha Implementasaun 6.3.2 Strutura Organizasiaun ne'ebé propoin ba Implementasaun 6.4 Apoiu no Preparasaun nesesáriu ba implementasain 6.5 Orariu Implementasaun

Fonte: Planu Jestaun Bacias Hidrograficas ba Bacias Hidrograficas Noru (2015)

### (5) Pontus Diskusaun/Konsiderasaun

Mesmu planu jestaun bacias hidrograficas ba bacias hidrograficas Noru no mós mota Lacro no Comoro bele ho kompletu uza hanesan referencia hodi halo planu ba tarjetu bacias hidrografikas ida, pontus sira tuir mai tenke konsidera liutan hodi halo planu tuir kondisaun tarjetu bacias hidrografikas.

#### Pontus diskusaun

Kapítulu no seksaun sira	Pontus diskusaun
Kapítulu 1 Introdusaun 1.1 Introdusaun 1.2 Objétivu hosi Dokumentu 1.3 Area Servisu ka Lalaok hosi planu Jestaun Bacias Hidrograficas 1.4 Kompozisaun hosi Planu	♦ “1.1 Introdusaun” no “1.3 Lalaok hosi planu Jestaun bacias hidrograficas” tenke reve no ajusta ho kondisaun tarjetu bacias hidrograficas ida
Kapítulu 2 Kondisaun agora hosi bacias hidrograficas 2.1 Fatin no Situsaun Administrativu hosi bacias hidrograficas 2.2 Kondisaun Natural 2.2.1 Klima (Udan no Temperatura) 2.2.2 Railolon	♦ “2.1 Fatin no Situsaun Administrativu” tenke reve bazeia ba geografika no dadus administrativu hosi bacias hidrograficas tarjetu no mós suku tarjetu sira . ♦ Dadus Klima iha “2.2.1 Klima” tenke atualija tuir dadus atúal ka troka ho sira ne'ebé besik ho stasaun klima hosi tarjetu bacias hidrograficas . ♦ Iha tipu mapa oi-oin, hanesan, mapa rai lolon, mapa elevasaun, mapa uza rai, mapa potensial erosaun rai, tenke dezenvolve no prepara liuhusi uza

Kapítulu no seksaun sira	Pontus diskusaun
2.2.3Elevasaun 2.2.4Uza rai no kobertura vejetasaun 2.2.5Potensial Erosaun Rai 2.3 Kondisaun Socio-economico 2.3.1Demografi 2.3.2Produsaun Agrikola 2.3.3Habitat Animál 2.3.4Seguransa Aihan 2.3.5Estimasaun Nivel Rendimentu 2.4 Vulnerabilidade ba Mudansa Klimátika 2.4.1Projetadu Mudansa Klimátika 2.4.2Impaktu potensial ba Komuidade sira iha bacias hidrograficas 2.4.3Vulnerabilidade hosi bacias hidrograficas ba mudansa klimátika	master data (dadus GIS ) hosi planu jestaun bacias hidrograficas ba Mota Laclo no Comoro. Dadus rai lolon, elevasaun, uza rai no potensial erosaun iha 2.2.2~2.2.5 tenke troka hoi da ne'ebé foun dezenvolve ba tarjetu bacias hidrograficas . ◆ Dadus demografika, Produsaun agrikola, habitante animal, seguransa aihan no estimasaun nivel rendimentu iha 2.3.1~2.3.5 tenke reve no troka ho suku tarjetu sira iha tarjetu bacias hidrograficas . ◆ “2.4 Vulnerabilidade ba Mudansa Klimátika” bazikamente bele uza ba planu ba tarjetu bacias hidrograficas tanba sira deskreve kondisaun jerál iha area foho iha Timor-Leste.
Kapítulu 3 Problema ba Jestaun Bacias Hidrograficas no Parseiru relevante ba Bacias Hidrograficas 3.1Problema ba Jestaun bacias hidrograficas 3.1.1Historia hosi degradasaun Floresta 3.1.2Problema atúal iha bacias hidrograficas 3.2 Parseiru relevante ba Jestaun Bacias Hidrograficas 3.2.1Parseiru Importante sira 3.2.2 Konselhu Jestaun Bacias hidrograficas	◆ “3.1 Problema ba Jestaun Bacias Hidrograficas” bele uza ba planu ba tarjetu bacias hidrograficas tanba kauza hosi degradasaun Floresta jeralmente komum iha mota Laclo no Comoro. ◆ “3.2 parseiru relevante sira ba Jestaun Bacias Hidrograficas” tenke troka ho rezultadu diskusaun iha prosesu forma Konselu Jestaun bacias hidrograficas, hanesan analiza parseiru no vizaun, misaun, funsaun no objetivu hosi konsehlu.
Kapítulu 4 Meta no Objetivu stratejiku hosi Planu Jestaun Bacias Hidrograficas 4.1 Meta no Objetivu stratejiku 4.2 Matadalan jerál ba Jestaun Rai iha Bacias Hidrograficas	◆ Deskrisaun iha Kapítulu 4 bele uza ba planu ba bacias hidrograficas desde meta, stratejia, no Matadalan uza ba bacias hidrograficas Noru bazeia ba ida ne'ebé hanesan ho Mota Laclo no Comoro, ne'ebé mak bele jeralmente fahe ho bacias Hidrograficas sira ne'ebé iha mota ne'e laran.
Kapítulu 5 Planu Jestaun Bacias Hidrograficas 5.1 Kuadru Servisu Jerál hosi Planu Jestaun Bacias Hidrograficas 5.2 Programa Uza Rai 5.3 Programa Halo To'os no Jestaun Hakiak Hakiak 5.4Programa Reflorestasaun no Protesaun Floresta 5.5 Programa Hadia Vida Moris 5.6 Programa Sensibilasaun konsensia 5.7 Programa Hametin Institusaun	◆ Objetivu, stratejia, aproximasaun, no sub-programa sira propoin iha Kapítulu 5 bazikamente bele uza ba planu ba tarjetu bacias hidrograficas . ◆ Programa/sub-programa sira tenke reve no verifika in termus sira nia adaptabilidade no aplikabilidade ba situasaun hosi tarjetu bacias hidrograficas .
Kapítulu 6 Planu Implementasaun 6.1 Konceitu Baziku 6.2 Metódu Implementasaun 6.2.1Prosesu Implementasaun hosi Sub-Programa sira 6.2.2Forma Grupu hosi Suku sira 6.3 Institucionalizasaun Kuadru Servisu ba Implementasaun 6.3.1Organizasaun sei envolve iha Implementasaun 6.3.2Strutura Organizasional ne'ebé propoin ba Implementasaun 6.4 Apoiu no preparasaun nesésáriu ba Implementasaun 6.5 Orariu Implementasaun	◆ “6.2 Metódu Implementasaun” tenke reve no ajusta ho kondisaun hosi tarjetu bacias hidrogricas. ◆ Hanesan mós, “6.3 Kuadru Institucional ba Implementasaun” tenke reve no ajusta ho Strutura no Organizasaun hosi Konsehlu Jestaun bacias hidrograficas. ◆ “6.4 Apoiu no preparasaun nesésáriu ba Implementasaun” no” 6.5 Orariu Implementasaun” bele uza ba sira ne'ebé halo planu ba tarjetu bacias hidrograficas .

Fonte: *Planu Jestaun Bacias Hidrograficas ba Bacias Hidrograficas Noru (2015)*

**Tip ba diskusaun**

- a. *Planu Jestaun Bacias Hidrograficas rua (2), planu ba mota Laçlo no Comoro no seluk tan ba Bacias Hidrograficas Noru, sei uza ho kompletu hodi refere ba bainhira halo planu ba tarjetu bacias hidrograficas .*
- b. *La nesésáriu atu halo kapitulu sira hotu hosi planu ne'e dala ida deit. Iha realidade, ita bele halo kapitulu ida depois de kapitulu ida hotu ona simultaneamente ho konsultasaun ho membru sira hosi konsellu bacias hidrograficas hanesan esplika iha Etapa 3.*

(6) Input (Rekursu Humano no Material sira) ne'ebé presija

Input sira tuir mai ne'e presija ba etapa ida ne'e.

- a. Rekursu Humano (ezemplu., oficiais DNFGBH, oficiais floresta municipiu, guarda Floresta, no Fasilitador (ONG)
- b. Komputador laptop no printer ida

(7) Rezultadu ne'ebé Espera

Planu jestaun bacias hidrograficas ida atu hanesan ho ida ne'ebé bacias hidrograficas Noru nian, ne'ebé hatudu iha **Apêndise-4.3**, sei esbozu ona.



**【Etapa 3】 Reve no halo Revizaun fali ba Esbozu Planu Jestaun Bacias Hidrograficas**

Esbozu planu tenke introdus ba membru sira hosi konselhu bacias hidrograficas hodi sira bele reve no halo konsiderasaun. Ida ne'e importante atu envolve sira iha prosesu finalizasaun planu jestaun bacias hidrograficas atu nune'e hametin sira nia sentimentu hanesan nain ba planu ne'e entre membru sira.

**(1) Objetivu**

Objetivu prinsipal hosi etapa ne'e mak atu diskuti no konsidera versaun esbozu hosi planu jestaun bacias hidrograficas ho membru sira hosi konselhu jestaun bacias hidrograficas no hetan sira nia sujestaun, opiniaun, no idea ba finalizasaun.

**(2) Partisipante sira ne'ebé Espera**

Membru hotu hosi konselhu jestaun bacias hidrograficas tenke partisipa iha enkontru sira.

**(3) Durasau Tempu no Fatin**

Pakote hat (4) hosi workshop/enkontru loron-ida sei halao iha edefisiu posto-administrativu

**(4) Ajenda ne'ebé Propoin iha Sesaun**

Tabela tuir mai hatudu padraun ajenda ba enkontru

**Padraun ajenda ba introdusaun hosi Esbozu Planu Jestaun Bacias Hidrograficas**

**a. Enkontru ba dahuluk**

Tempu	Atividade	Rekursu humanu
10:00-10:30	Sesaun 1: Introdusaun	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG
10:30-12:30	Sesaun 2: Apresentasaun sumariu sira hosi Kapítulu 1 no 2	Fasilitador sira/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sesaun 3: Diskusaun ba Kapítulu 1 no 2	Fasilitador sira/ONG
15:30-16:00	Konkluzau ba diskusaun no taka	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG

**b. Enkontru ba daruak**

Tempu	Atividade	Rekursu humanu
10:00-10:30	Sesaun 1: Introdusaun	Fasilitador sira/ONG
10:30-12:30	Sesaun 2: Apresentasaun sumariu sira hosi Kapítulu 3 no 4	Fasilitador sira/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sesaun 3: Diskusaun ba Kapítulu 3 no 4	Fasilitador sira/ONG
15:30-16:00	Konkluzau ba diskusaun no taka	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG

**c. Enkontru ba datoluk**

Tempu	Atividade	Rekursu HUMANU
10:00-10:30	Sesaun 1: Introdusaun	Fasilitador sira/ONG
10:30-12:30	Sesaun 2: Apresentasaun sumariu sira hosi Kapítulu 5	Fasilitador sira/ONG
12:30-13:30	Han meudia	-
13:30-15:30	Sesaun 3: Diskusaun ba Kapítulu 5	Fasilitador sira/ONG
15:30-16:00	Konkluzau ba diskusaun no taka	DNFGBH/Oficiaisl Floresta Municipiu Fasilitador sira/ONG

**d. Enkontru ba dalahat**

Tempu	Atividade	Rekursu humanu
10:00-10:30	Sesaun 1: Introdusaun	Fasilitador sira/ONG
10:30-12:30	Sesaun 2: Apresentasaun sumariu sira hosi Kapítulu 6	Fasilitador sira/ONG
12:30-13:30	Han meudia	-

Tempu	Atividade	Rekursu humanu
13:30-15:30	Sesaun 3: Diskusaun ba Kapítulu 6	Fasilitador sira/ONG
15:30-16:00	Konkluzau ba diskusaun no taka	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG

Fonte: Ekipa Projetu JICA (2015)

### (5) Matadalan ba Enkontru sira

Diskusaun iha enkontru respetivu sei halao tuir konkordansia ho prosedimentu sira hanesan tuir mai ne'e.

Sesaun 1: Esplika intensaun, tempu, rezultadu espera hosi enkontru ba partisipante sira.

Sesaun 2: Introdus sumariu sira hosi respetivu kapítulu uza material apresentasaun sira prepara molok enkontru. Amostra hosi material sira mak hatudu iha **Apêndise-4.4**.



#### **Tip ba diskusaun**

- a. *Antes enkontru, ita tenke prepara material apresentasaun sira ne'ebé sumariu hosi respetivu kapítulu sira hosi versaun esbozu hosi planu jestaun bacias Hidrograficas. Material sira ne'ebé uza ba introdusaun hosi esbozu planu jestaun bacias hidrograficas ba bacias hidrograficas Noru mak hatudu iha **Apêndise-4.4**.*
- b. *Ita tenke mós fahe kopia versaun esbozu hosi kada kapítulu ba partisipante sira atu nune'e sira bele le'e konteúdu hotu hosi respetivu kapítulu sira.*

Sesaun 3 (1): Husu partisipante sira nia opiniaun, idea, no komentariu kona-bá versaun esbozu.

Sesaun 3 (2): Se iha opiniaun no komentariu fó hosi partisipante sira, diskuti oinsá atu reve no hadiak versaun esbozu.

Diskusaun hotu ne'ebé halo iha enkontru tenke hakerek iha flipcharts no iha minutos enkontru.

### (6) Input (Rekursu Humanu no Material sira) ne'ebé presija

Input sira tuir mai ne'e presija ba etapa ida ne'e.

- a. Rekursu Human (ezemplu., oficiais DNFGBH, oficiais floresta municipiu, guarda Floresta no Fasilitador (ONG)
- b. Halo uluk material apresentasaun (hanesan.,sumariu hosi kapítulu sira hosi esbozu planu jestaun bacias hidrograficas)
- c. material enkontru (ezemplu., kopia hosi kapítulu Esbosu planu jestaun bacias hidrograficas
- d. Computador laptop no projetor ida
- e. Estasionáriu (hanesan., flipcharts, markador, no fita kola)
- f. Merenda, bee no han meudia ba partisipante sira

(7) Depois de Enkontru ho Konsehu

Esbozu planu jestaun bacias hidrograficas tenke reve fali hosi DNFGBH ho assistensia tékniku hosi ONG/Fasilitador bainhira halo diskusaun iha enkontru sira.

(8) Rezultadu ne'ebé Espera

Esbozu planu jestaun bacias hidrograficas sei finaliza iha maneira parsipatoriu.

## **【Etapa 4】 Preparasaun no Finalizasaun hosi Rezulusaun ba Planu Jestaun Bacias Hidrograficas**

Planu jestaun bacias hidrograficas final tenke hetan aprova hosi konselhu jestaun bacias hidrograficas hanesan dokumentu matadalan ida no mós submete ba edefisiu relevante sira ne'ebé karik bele ajuda konselhu hodi implementa planu ne'e iha futuru.

### (1) Objektivu

Objektivu prinsipal hosi etapa ida ne'e mak atu ajuda konsellu jestaun bacias hidrograficas aprova versaun final hosi planu jestaun bacias hidrograficas no submete planu ne'e ba edefisiu/organizasaun relevante sira ba Implementasaun.

### (2) Partipante sira ne'ebé Espera

Membru hotu hosi konselhu jestaun bacias hidrograficas sei partisipa iha enkontru ne'e.

### (3) Durasaun no Fatin

Enkontru loron-ida sei halao iha edifisiu postu-administrativu.

### (4) Ajenda ne'ebé Propoin iha Sesaun ne'e

Tabela tuir mai hatudu padraun ajenda ba enkontru.

#### **Padraun Ajenda ba Preparasaun hosi Rezulusaun ba Planu Jestaun Bacias Hidrograficas**

##### **a. Loron dahuluk**

<b>Tempu</b>	<b>Atividade</b>	<b>Rekursu humanu</b>
10:00-10:30	Sesaun 1: Introdusaun	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG
10:30-11:30	Sesaun 2: Apresentasaun hosi planu jestaun bacias hidrograficas final (inklui kafe dader)	Fasilitador sira/ONG
11:30-12:30	Sesaun 3: Diskusaun kona-bá esbozu rezulusaun ba aprovasaun no submisaun hosi planu jestaun bacias hidrograficas	Fasilitador sira/ONG
12:30-13:30	Han Meudia	-
13:30-14:30	Sesaun 3: Diskusaun kona-bá esbozu rezulusaun ba aprovasaun no submisaun hosi planu jestaun bacias hidrograficas	Fasilitador sira/ONG
14:30-15:30	Sesaun 4: Diskusaun ba submisaun planu jestaun bacias Hidrograficas	Fasilitador sira/ONG
15:30-16:00	Konkluzoan diskusaun no taka	DNFGBH/Oficiais Floresta Municipiu Fasilitador sira/ONG

Fonte: Ekipa Projeto JICA (2015)

### (5) Matadalan ba Enkontru

Enkontru no diskusaun sei halao ho konkordansia ho prosedimentu sira tuir mai ne'e.

Sesaun 1: Esplika intensaun, durasaun tempu, no rezultadu ne'ebé espera hosi enkontru ba partipante sira.

Sesaun 2: Introdus versaun final hosi planu jestaun bacias hidrograficas haforsa revizaun halo iha versaun esbozu.

#### **Tip ba diskusaun**

a. Ita tenke lori komputador laptop ida ho projetor ida no halo apresentasaun hatdu parte ne'ebé reve iha versaun esbozu hosi planu jestaun bacias hidrograficas ba partipante sira iha enkontru.

b. Iha tempu hanesan, ita tenke sirkula kopia ida hosi planu jestaun bacias hidrograficas iha enkontru atu nune'e partisipante sira bele hatene ho diak versaun final ne'ebé sei submete ba organizasaun relevente sira.

Sesaun 3(1): Introdus esbozu rezulusaun hosi konselhu ba aprovasaun no submisaun planu jestaun bacias hidrograficas.

**Tip ba diskusaun**

a. Ita tenke prepara esbozu rezulusaun refere ba dokumentu hanesan hosi Konselhu jestaun bacias hidrograficas hatudu iha **Apêndise-4.5** antes atu enkontru.

b. Esbozu rezulusaun diak liu hakerek iha flipchart atu nune'e partisipante/membru hotu bele apar ho diskusaun. Iha adisaun ba flipcharts, ita tenke fahe kopia hosi esbozu rezulusaun ba partisipante sira iha enkontru.

Sesaun 3 (2): Husu partisipante sira nia opiniaun, idea, no komentariu kona-bá esbozu rezulusaun.

Sesaun 3 (3): Se'e partisipante sira fó opiniaun no Komentariu ruma, diskuti oinsá atu reve no hadiak rezulusaun ne'e.

Sesaun 3 (4): Finaliza rezulusaun ne'e no husu membru sira hosi konselhu jestaun bacias hidrograficas hodi asina rezulusaun ne'e.

Sesaun 4: Ajuda partisipante sira iha i) determina edefisiu/organizasaun ne'ebé mak konselhu tenke submete planu ne'e no ii) desenvolve planu asaun ida ba submisaun planu jestaun bacias hidrograficas uza format tuir mai ne'e.



Amostra format ba planu asaun ida

Atividade	Organizasaun	Tempu	Ema ne'ebe responsabel
Print planu jestaun bacias hidrograficas	/		
Finalizasaun hosi rezulusaun ho asinatura hosi membru			
Submisaun planu jestaun bacias hidrograficas ho rezulusaun		1.	
	2.		
	3.		

Fonte: Ekupa Projetu JICA(2015)

**Tip ba diskusaun**

a. Ita tenke hakerek format ne'ebé hatudu iha leten iha flipchart antes halo enkontru.

*b. Ita tenke aumenta tan liña balun iha formatu atu nune'e karik membru sira identifika tan atividade seluk ne'ebé presija halo depois halofinalizasaun bai rezulusaun ne'e.*

Diskusaun hotu ne'ebé halo iha enkontru tenke hakerek iha flipchart no minutos enkontru

(6) Input (Rekursu Humanu no Material sira) ne'ebé Presija

Input tuir mai presija ba etapa ida ne'e.

- a. Rekursu Humanu (ezemplu., oficiais DNFGBH, oficiais floresta municipiu, guarda Floresta, no Fasilitador (ONG)
- b. material enkontru (ezemplu., i)kopia hosi kapítulu Esbosu planu jestaun bacias hidrograficas no ii) kopia hosi esbozu rezulusaun ba aprovasaun no submisaun hosi planu jestaun bacias hidrograficas)
- c. Halo uluk material apresentasaun (hanesan.,i) flipchart ho deskrisaun esbozu rezulusaun no ii) flipchart ne'ebé hakerek ona format ba planu asaun)
- d. Komputador laptop no projetor ida
- e. Estasionáriu (hanesan.,flipcharts, markador, no fita kola)
- f. Merenda, bee no han meudia ba partisipante sira

(7) Rezultadu ne'ebé Espera

Planu jestaun bacias hidrograficas ida sei aporva hanesan Matadalan ba konselhu jestaun baias hidrograficas no submete ba organizasaun releventa sira hodi hetan apoiu liutan.

(8) Atividade Tuir Mai

Sekretariadu (DNFGBH no edefisiu MAP municipiu) sei ajuda konselhu iha Produsaun no submisaun hosi planu jestaun bacias hidrograficas tuir planu asaun ne'ebé iha, tanba sei la fasil ba konselhu atu halo ativade ne'e bainhira laiha apoiu esternál.

## 5. Kuadru Servisu ba Implementasaun

### 5.1 Organizaasaun no Pesoal sira ne'ebé responsabel ba Servisu sira ne'e

Diresaun Nacional Floresta no Gestaun Bacias Hidrograficas (DNFGBH) tenke sai ajente principal ne'ebé inisia formasaun hosi konselhu jestaun bacias hidrograficas. Edefisiu MAP Municipiu no Diresaun Nacional Conservasaun Natureza (DNCN) sei funsiona hanesan Ajensia co-implementasaun tanba sira nia servisu ne'ebé iha relasaun besik ho jestaun bacias hidrograficas sustentável. Hanesan mós atividade CB-NRM sira seluk, ONG sei halo kna'ar importante durante halaó servisu sira ne'e, tanba sira iha fasilitador sira ne'ebé kompetente ne'ebé iha ona esperiensa lubun servisu ho komunitade sira.

Papel no responsabilidade ne'ebé espera hosi parte xave sira ne'ebé envolve iha prosesu forma konselhu jestaun bacias hidrograficas no halo planu jestaun bacias hidrograficas mak hanesan tuir maine'e.

#### **Papel no Responsabilidade ne'ebé Espera hosi Parte Importante sira**

Parte Importantee	Papel no Responsabilidade ne'ebé Espera
<b>1. Nivel Central</b>	
(1) DNFGBH (Ofisial DNFGBH)	<ol style="list-style-type: none"> <li>1. Dezenvolve planu servisu ida ba formasaun konselhu jestaun bacias hidrograficas ho desenvolvimentu planu jestaun bacias hidrograficas ba tarjetu bacias hidrograficas.</li> <li>2. Asegura orsamentu nesesáriu hodi implementa planu servisu.</li> <li>3. Fó apoiu administrativu no tékniku ne'ebé nesesáriu ba ofisial sira (inklui sira ne'ebé servisu iha edefisiu tarjetu Municipiu ne'e) hodi responsabilijal ba servisu ne'e.</li> <li>4. Kontratu Fasilitador sira/ONG ba servisu terrenu.</li> <li>5. Monitor no supervizona servisu Fasilitador sira/ONG ho ofisial floresta municipiu no guarda floresta.</li> </ol>
(2) DNCN (Ofisial DNCN)	<ol style="list-style-type: none"> <li>1. Ajuda DNFGBH halao atividade terrenu ba formasaun konselhu jestaun bacias hidrograficas no dezenvolve planu jestaun bacias hidrograficas.</li> <li>2. Fó apoiu administrativu no tékniku ne'ebé nesesáriu ba ninia ofisial sira ne'ebé servisu ho DNFGBH.</li> </ol>
<b>2. Nivel Municipiu</b>	
(1) Edefisiu MAP Municipiu (Diretór Municipiu)	<ol style="list-style-type: none"> <li>1. Ajuda DNFGBH halao atividade terrenu ba formasaun konselhu jestaun bacias hidrograficas no dezenvolve planu jestaun bacias hidrograficas.</li> <li>2. Fó apoiu administrativu no tékniku ne'ebé nesesáriu ba ofisial floresta municipiu (sira) no guardafloresta (sira) ne'ebé servisu ho DNFGBH.</li> </ol>
(2) Ofisial Floresta Municipiu	<ol style="list-style-type: none"> <li>1. Servisu Hamutuk ho Fasilitador sira/ONG durante period servisu.</li> <li>2. Monitor atividade Fasilitador sira/ONG Hamutuk ho oficias sira hosi DNFGBH no guarda floresta.</li> <li>3. Fó Matadalan no orientasaun ba lider lokál sira Hamutuk ho Fasilitador sira/ONG.</li> </ol>
(3) Guarda Floresta	<ol style="list-style-type: none"> <li>1. Fó matadalan no orientasaun ba lider lokál sira Hamutuk ho ofisial floresta municipiu sira no Fasilitador sira (ONG)</li> <li>2. Monitor atividade Fasilitador sira/ONG Hamutuk ho DNFGBH no ofisial florestamunicipiu (sira)</li> </ol>
(4) Fasilitador/ONG	<ol style="list-style-type: none"> <li>1. Responsabel ba servisu terrenu hanesan kontrator ida.</li> <li>2. Performa hanesan Fasilitador prinsipál durante servisu terrenu.</li> <li>3. Aranja no organiza enkontru oi-oin ho lider lokál sira no fasilitadiskusaun iha enkontru.</li> <li>4. Fó matadalan no orientasaun nesesariu ba lider lokál sira iha koordinasaun ho DNFGBH/Oficiais MAP Municipiu sira iha enkontru.</li> </ol>

Fonte: Ekipa Projetu JICA (2015)

### 5.2 Apoiu Necessariu

Atu parte xave sira kompleta sira nia responsabilidade, Necessariu atu asegura preparasaun sira hanesan tuir mai ne'e:

- a. Orsamentu suficiente nebe precisa atu halao atividade terrenu tenke aloka ba servisu ne'e;
- b. Meius transporte tenke asegura ba oficiais sira ne'ebé responsabel ba servisu ne'e;
- c. Tenke halo kontratu ba ONG ka grupu fasilitador ida ajuda DNFBH atu halao servisu terrenu; no tenke
- d. Tenke fó Matadalan suficiente ba oficiais sira ne'ebé responsabel no ONG ne'ebé hetan kontratu atu halo servisu uza manual ne'el.

### 5.3 Padraun Orariu Implementasaun

Tabele tuir mai kona ba padraun orariu implementasaun hosi prosessu hotu ba forma konselhu jestaun bacias hidrograikas no halo planu jestaun bacias hidrograficas.

Steps: Activities		Year 1												Year 2		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
<b>1. Formation of the Watershed Management Council</b>																
Step 1	Consultation with local leaders	■														
Step 2	Meeting with the Noru Watershed Management Council	■														
Step 3	Study tour to the JICA project village		■													
Step 4	Stakeholder Analysis and Selection of Members		■													
Step 5	Determination of Vision Statements, Missions, Functions, and Objectives of the Watershed Management Council			■												
Step 6	Determination of By-laws of the Watershed Management Council			■												
Step 7	Finalization of a Resolution of the Watershed Management Council				■											
Step 8	Regular Meetings of the Watershed Management Council					■			■			■			■	
<b>2. Development of a Watershed Management Plan</b>																
Step 1	Introduction of the Process and Objective of making a Watershed Management Plan				■											
Step 2	Development of a Watershed Management Plan					■										
Step 3	Review and Revision of the Draft Watershed Management Plan					■	■	■	■							
Step 4	Preparation and Finalizations of a Resolution on the Watershed Management										■					

**Padraun Orariu Implementasaun ba Formasaun Konselhu Jestaun Bacias Hidrograficas no  
Dezenvolvimentu Planu Jestaun Bacias Hidrograficas**

Fonte: Ekipa Projetu JICA (2015)





## ***Apéndice-3.1***

***Prosesu hosi Forma Plataforma  
Kolaborasaun/Kuadru Servisu ba  
Skala Bacias Hidrograficas (ka  
Konsellu Jestaun Bacias  
Hidrograficas)***



## Apêndise-3.1: Prosesu hosi Forma Plataforma Kolaborasaun/Kuadru Servisu ba Skala Bacias Hidrograficas (ka Konsellu Jestaun Bacias Hidrograficas)

### 1. Objetivu

Objetivu prinsipál hosi forma konsellu jestaun bacias hidrograficas mak atu dezenvolve no institucionaliza plataforma kolaborasaun ida/kuadru servisu ne'ebé lider lokál interesadu sira ho bacias hidrograficas tarjetu bele servisu hamutuk ba jestaun floresta sustentável no rekursu naturál sira seluk no hadiak vida moris lokál iha bacias hidrograficas tarjetu.

### 2. Grupu Tarjetu sira

Lider lokál interesadu ho bacais hidrograficas tarjetu, hanesan administrador hosi posto-administrativu sira no lider suku sira, sei involve iha prosesu hotu tanba sira mak membru xave hosi konsellu jestaun bacias hidrograficas ne'e.

### 3. Durasaun Tempu hotu

Durasaun total hosi prosesu ne'e mak espera pelumenus tinan ida ho balun (tinan 1.5). Detallu liutan hosi ativadade no sira nia durasaun tempu hatudu iha seksaun tuir mai ne'e.

### 4. Atividade Prinsipál sira

Tipu ativadade tolu (3) tuir mai sei halao ba servisu ne'e:

- i) Enkontru ho lider lokál sira, hanesan, administrador sira hosi posto-administrativu, lider suku sira, no representativa hosi edefisiu governu nian ne'ebé relevante hodi forma konsellu jestaun bacias hidrograficas
- ii) Enkontru ho membru sira hosi konsellu jestaun bacias hidrograficas hodi dezenvolve planu jestaun bacias hidrograficas ba bacias hidrograficas tarjetu
- iii) Enkontru ho membru sira hosi konsellu jestaun bacias hidrograficas hodi monitor no rezolve problema ruma kona-bá jestaun rekursu naturál iha bacias hidrograficas tarjetu

#### 4.1 Enkontru ba Formasaun Konsellu Jestaun Bacias Hidrograficas

Enkontru tuir mai ho lider lokál sira no parseiru relevante seluk tenke aranja no halao hodi forma konsellu jestaun bacias hidrograficas.

No.	Enkontru	Partisipante	Fatin	Tempu
1	Enkontru hodi introdus idea kona-bá konsellu jestaun bacias hidrograficas ba Edefisu posto-administrativu	Administrador posto-administrativu, Representativa hosi edefisiu MAP municipio, Representativa hosi DNFGBH, Fasilitador sira/ONG	Edefisiu posto-administrativu	Loron ida ihaxxx(fulan), xxxx (tinan)
2	Konsultasaun ho lider suku sira hosi suku interadu sira	Xefi de suku sira, Administrador, posto administrativu, Representativa hosi MAP municipio, Representativa hosi DNFGBH, Fasilitador sira/ONG	Edefisiu posto-administrativu	Loron ida ihaxxx(fulan), xxxx (tinan)
3	Enkontru ho konsellu jestaun bacias hidrograficas Noru	Ditto	Edefisiu posto-administrativu of Remexio	Loron ida ihaxxx(fulan), xxxx (tinan)
4	Visita ba Suku Projetu JICA CB-NRM	Ditto	Suku ida hosi Projetu JICA CB-NRM	Loron 1~3 iha xxx (fulan), xxxx (tinan)
5	Enkontru hodi analiza parseiru sira, hili Membru konsellu no diskuti papel no responsabilifade hosi	ditto	Edefisiu posto-administrativu	Loron 1~2 iha xxx (fulan), xxxx (tinan)

No.	Enkontru	Partisipante	Fatin	Tempu
	Membru sira			
6	Enkontru hodi avalia situasaun atual hosi bacias hidrograficas tarjetu no diskuti vizaun, misaun, no funsaun hosi konsellu	Xefi de suku sira, Administrador posto-administrativu, Representativa hosi edefisiu MAP municipio, Representativa hosi DNFGBH, Representativa hosi edefisiu governu sira seluk hili hanesan Membru, Fasilitador sira/ONG	Edefisiu posto-administrativu	Loron 2 iha xxx (fulan), xxxx (tinan)
7	Enkontru hodi dezenvolve no determina regulamentu konsellu nian	Ditto	ditto	Loron ida ihaxxx(fulan), xxxx (tinan)
8	Enkontru hodi dezenvolve no finaliza rezolusaun hosi konsellu ba estabesimentu konsellu	Ditto	ditto	Loron ida ihaxxx(fulan), xxxx (tinan)

#### 4.2 Enkontru ba Dezenvolvimentu Planu Jestaun Bacias Hidrograficas

Iha parte seluk, atividade sira tuir mai ne'e sei halao ba dezenvolvimentu planu jestaun bacias hidrograficas refere ba ida ne'ebé dezenvolve ona ba mota inan Lacro no Comoro no bacias Hidrograficas Noru.

No.	Atividade	Partisipante	Fatin	Tempu
1	Enkontru hodi introdus prosesu no objetivu hosi dezenvolve planu jestaun bacias hidrograficas	Membru sira hosi konsellu jestaun bacias hidrograficas, Fasilitador sira/ONG	Edefisiu posto-administrativu	Loron ida ihaxxx(fulan),xxxx (tinan)
2	Dezenvolve planu jestaun bacias hidrograficas	Sekretariadu (DNFGBH no edefisiu MAP municipio interessadu) Fasilitador sira/ONG, nst	NDFWM office	loron / Fulan/ iha xxxx (tinan)
3	Enkontru hodi reviu no halo revizaun ba planu jestaun bacias hidrograficas Enkontru dahuluk Enkontru daruak Enkontru datoluk Enkontru dahaat	Membru sira hosi konsellu jestaun bacias hidrograficas. Fasilitador sira/ONG Konsiderasaun ba Kapítulu 1 no 2 Konsiderasaun ba Kapítulu 3 no 4 Konsiderasaun ba Kapítulu 5 Konsiderasaun ba Kapítulu 6	Edefisiu posto-administrativu	Loron ida kada xxx (fulan), xxxx (tinan)
4	Enkontru hodi finaliza rezolusaun hosi konsellu ba planu jestaun bacias hidrograficas	Membru sira hosi konsellu jestaun bacias hidrograficas. Fasilitador sira/ONG	ditto	Loron ida ihaxxx(fulan),xxxx (tinan)

#### 4.3 Enkontru ba Monitorizasaun no buka Solusaun ba Problema sira iha Bacias Hidrograficas Tarjetu

Depois de estabesele ona konsellu jestaun bacias hidrograficas, membru konsellu sira sei iha enkontru plenaria ida kada fulan tolu hodi monitor situasaun iha bacias hidrograficas tarjeu ho diskuti/rezolve problema/prekupasaun ruma kona-bá jestaun rekursu natural iha area ne'e ho maneira ne'ebé kolaborativu.

No.	Atividade	Partisipante	Fatin	Tempu
1	Enkontru regular kada fulan tolu	Membru hosi konsellu jestaun bacias hidrograficas, Fasilitador sira/ONG	Edefisiu posto-administrativu	Loron 1 kada fulan 1
2	Enkontru annual iha fin de tinan hodi reviu atividade sira no planu ba tinan tuir mai	ditto	ditto	Loon 1 kada tinan 1

Fin de dokumentu

## ***Apéndice-3.2***

***Rezultadu hosi Analiza Parseiru  
relevante ba Jestaun Bacias  
Hidrograficas Noru (Rezultadu hosi  
Analiza Parseiru)***



## Apêndice-3.2 Resultadu hosi Analiza Parseiru relevante sira ba Jestaun Bacias Hidrograficas Noru (Resultadu hosi Analiza Parseiru)

No.	Naran	Relevansia ba (Involvimento iha) jestaun bacias hidrograficas	Importancia iha jestaun bacias hidrograficas
1.	Edefisiu Administrativo Municipio	- La direktamente envolve iha jestaun bacias hidrograficas	- Importante tebes tanba nia servisu mak aprova edefisiu administrativo postu-administrativu hodi halo servisu jestaun bacias hidrograficas no fornese matadalan iha atividade relevante ba jestaun bacias hidrograficas.
2.	Edefisiu Postu-administrativu Remexio & Liquidoe	- Relevante tebes - Involve direktamente iha jestaun bacias hidrograficas tanba iha nia lokalidade	- Importante tebes tanba sira iha autoridade/poder ba atividade iha bacias hidrograficas.
3.	Suku sira ne'ebé lokaliza iha bacias hidrograficas	- Relevante tebes - Involve direktamente iha jestaun bacias hidrograficas tanba comunidades iha suku sira ne'e mak nain iha area refere.	- Importante tebes tanba xefi de suku mak responsabel ba atividade iha nivel suku no comunidades mak jestór atúal hosi rai no floresta iha bacias hidrograficas.
4.	Distrito MAF/NDF	- La direktamente envolve iha bacias hidrograficas	- Importante tebes hanesan Edefisiu Administrativo Distrito.
5.	Estensionista sira	- Relevante tebes - Involve direktamente iha jestaun bacias hidrograficas tanba sira servisu iha bacias hidrograficas.	- Importante tebes tanba sira servisu ho comunidade sira.
6.	Guarda Floresta	<u>GF iha Remexio</u> - Relevante tebes - Involve direktamente iha bacias hidrograficas tanba nia hela iha area bacias hidrograficas . <u>GF iha Liquidoe</u> - La direktamente envolve iha jestaun bacias hidrograficas tanba nia la hela iha area bacias hidrograficas no la fasil atu viagem ba mai iha area bacias hidrograficas	- Importante tebes tanba sira make ma nebe orienta comunidades ba floresta sustentabel no jestaun bacias hidrograficas.
7.	MS (Saude) Municipio	- Ladun relevante - La invove direktamente	- Ladun importante
8.	Klinika	- Ladun importante - Karik sei envolve direktamente.	- Ladun importante
9.	Edukasaun	- Ladun relevante - La envolve direktamente	- Ladun importante
10.	Profesores/direitos da escola	- Ladun relevante	- Ladun importante
11.	DN meu ambiente	- La direktamente envolve tanba laiha edefisiu sanak iha nivel postu-administrativu.	- Importante tebes tanba DN meu ambiente mos servisu ba konservasaun floresta.
12.	PNTL	- Involve direktamente iha jestaun bacias hidrograficas tanba PNTL mak servisu ho comunidade hodi prevene atividade ilegal inklui sunu rai.	- Menus importante tanba jestaun bacias hidrograficas laos servisu PNTL nian.
13.	SAS Postu-administrativu iha Remexio & Liquidoe	- Relevante tebes tanba servisu SAS nian ida mak atu proteje bee matan sira. - Involve direktamente tanba edefisiu sanak lokaliza iha respetiva postu-administrativu.	- Importante tebes tanba SAS sei fô hanoin no ajuda comunidade hodi proteje floresta no areas besik be matan.
14.	Igreja	- Relevante tebes tanba nia servisu mak orienta comunidades lokál.	- Menus importante tanba igreja la servisu ba jestaun bacias hidrograficas.
15.	ONG (AMAR, WV, Plan, Haburas, RAEBIA)	- La direktamente ou kontinuaamente envolve iha jestaun bacias hidrograficas tanba sira la baze iha bacias hidrograficas.	- Importante tebes tanba ONG implementa ona atividade relevante ba jestaun bacias hidrograficas.





## ***Apéndice-3.3***

***Strutura hosi Konsellu Jestaun***

***Bacias Hidrograficas no***

***Papel/Responsabilidade hosi***

***Membru Konsellu sira***



### **Apêndise-3.3 Strutura hosi Konsellu Jestaun Bacias Hidrograficas no Papel/Responsabilidade hosi Membru Konsellu sira**

#### **1. Identifikasaun membru konsellu jestaun bacias hidrograficas**

Bazeia ba diskusaun hosi analiza stakeholders, partisipante sira determina katak organizasaun sira tuir mai mak tenke sai membru konsellu.

- ▶ Edefisiu Administrativo Posto-Administrativu hosi Remexio no Liquidoe
- ▶ Suku 12 iha Remexio no Liquidoe
- ▶ DNF
- ▶ MAP Municipio
- ▶ Edefisiu Municipio hosi Diresaun Nasional Meu Ambiente (NDE)
- ▶ Edefisiu Posto-Administrativu hosi Diresaun Nasional Fornesemento bee mos no Sanitasaun (NDWSS) iha Remexio no Liquidoe

Entre organizasaun sira ne'ebé hili hanesan membru hosi konsellu, konkorda katak iha possibilidade involvimentu hosi edefisiu NDE no NDWSS iha konsellu tenke konfirmadu ho edefisiu municipio hosi Diresaun Nasional relevante hodi finaliza ne'ebé mak sai membru ba konsellu.

Iha parte seluk, partisipante sira desidi katak organizasaun tuir mai tenke trata hanesan observador iha momentu ida ne'e.

- ▶ Representativu municipio (Administrador municipio & Pontu fokál)
- ▶ Ministério Saude (Saude)
- ▶ Klinika
- ▶ Edukasaun
- ▶ Igreja (Posto-Administrativu)
- ▶ ONG sira (AMAR, World vision, Plan, Haburas, no RAEBIA)

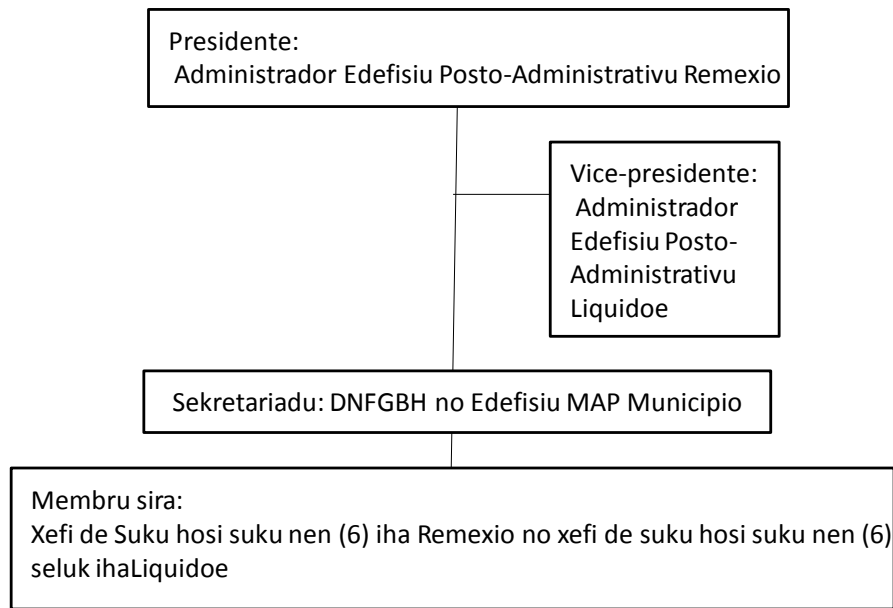
#### **2. Strutura hosi Konsellu Jestaun Bacias Hidrograficas**

Konkorda mós ona katak konsellu jestaun bacias hidrograficas mak komposto hosi Presidente, vice-presidente, Sekretariadu, no membru sira seluk. Membru sira desidi ona atu fahe responsabilidade entre membru sira hanesan tuir mai ne'e.

**Kuadru Servisu hosi Konsellu no organizasaun ne'ebé aponta ba pozisaun xave**

<b>Pozisaun</b>	<b>Naran organizasaun</b>
Presidente	administrador Posto-Administrativu Remexio
Vice-presidente	Administrador Posto-Administrativu Liquidoe
Membru konsellu	xefi de suku 12 Meu-ambiente (Opsional) SAS postu-administrativu iha Remexio & Liquidoe (Opsional)
Sekretariadu	DNF /MAP municipio

Figura tuir mai hatudu strutura organizasional hosi konsellu jestaun bacias hidrograficas.



**Strutura Organizacional hosi Konsellu Jestaun Bacias Hidrograficas Noru**

### 3. Papel no Responsabilidade Membru nian

Membru sira diskuti no determina ona papel no responsabilidade hosi respetiva membru/pozisaun hosi konsellu jestaun bacias hidrograficas hanesan tuir mai ne'e.

#### **Papel no Responsabilidade hosi membru Konsellu Jestaun Bacias hidrograficas**

<b>Posizasaun</b>	<b>Papel no Responsabilidade</b>
Presidente (Administrador Posto-Administrativu Remexio)	<ul style="list-style-type: none"> <li>● Halao enkontru regular no enkontru ad hoc requijasaun hosi membru sira;</li> <li>● Hasai konvite ba membru sira;</li> <li>● Lidera enkontru konsellu nian liuhusi fasilita no halao diskusaun, aseguira papel baziku iha diskusan, halo pergunta ba votantes, no anuncia desizaun ne'ebé mak foti.</li> <li>● Estabelese ajenda enkontru kordenasaun ho sekretariadu;</li> <li>● Fó matadalan no orientasaun ba membru konsellu sira ba jestaun bacias hidrograficaas sustentável;</li> <li>● Enkoraja membru konsellu sira atu nafatin halo esforsu hodi atinji konservasaun bacias hidrograficas ne'ebé sustentável; no</li> <li>● Komunika ho ajensia, ministériu, dirasaun nasional no organizasaun sira seluk hodi aseguira jestaun bacias hidrograficas ho própriu.</li> </ul>
Vice-presidente (Administrador posto-administrativu Liquidoe)	<ul style="list-style-type: none"> <li>● Suporta presidente halao nia obrigasaun;</li> <li>● Servisu hanesan presidente bainhira presidente la disponível;</li> <li>● Fó matadalan no orientasaun ba membru sira hosi konsellu ba jestaun bacias hidrograficas ne'ebé sustentável kolaborasaun ho presidente; no</li> <li>● Enkoraja membru konsellu sira atu mantein halo esforsu hodi atinji konservasaun bacias hidrograficas no jestaun kolaborasaun ho presidente.</li> </ul>
Sekretariadu (DNF/MAP municipio)	<ul style="list-style-type: none"> <li>● Asisti vice-presidente konvoka enkontru, hasai no fahe karta konvite ba membru sira no organiza enkontru;</li> <li>● Halo Ezbosu ajenda enkontru kordenasaun ho Presidente no Vice-presidente;</li> <li>● Responsabel ba dokumentu sira, hanesan foti minutas, preparasaun rezolusaun/desizaun,, nst; no</li> <li>● Ajuda presidente no vice-presidente komunika ho ajensia seluk, diresaun nasional no organizasaun sira hodi aseguira jestaun bacias hidrograficas ho própriu.</li> </ul>
Membru konsellu(Xefi de	<ul style="list-style-type: none"> <li>● Partisipa iha atividade organiza husi konsellu,hanesan enkontru no estudu komparativu ;</li> </ul>

<b>Posizasaun</b>	<b>Papel no Responsabilidade</b>
suku sira)	<ul style="list-style-type: none"> <li>● Fahe ideas no troka hanoin ativamente iha enkontru ho konsellu sira hodi rezolve issue/problema sira ne'ebé difikulta susesu jestaun bacias hidrograficas ne'ebé sustentável.</li> <li>● Halo tuir lei no regulamentu ne'ebé konkorda husi membru sira;</li> <li>● Fó matadalan ba comunidade sira iha respetiva suku hodi asegura sira halo tuir akordu ne'ebé halo husi konsellu; no</li> <li>● Enkoraja comunidade sira iha respetiva suku sira hodi proteje no jere floresta no rekursu naturais ho maneira ne'ebé sustentável.</li> </ul>
Membru konsellu (meu ambiente)	<ul style="list-style-type: none"> <li>● Hanesan papel no responsabilidades ba membru konsellu sira (xefe de suku); no</li> <li>● Suporta comunidade sira iha suku sira iha bacias hidrograficas halao atividade protesaun ba ambiente, hanesan, seremonia Tara bandu, produsaun aioan &amp; reflorestasaun no edukasaun ambiental.</li> </ul>
Membru konsellu (SAS)	<ul style="list-style-type: none"> <li>● Hanesan papel no responsabilidades ba membru konsellu sira (xefe de suku); no</li> <li>● Suporta comunidade iha suku sira iha bacias hidrograficas ba protesaun be matan iha respetivas suku sira.</li> </ul>
Observador (ONG sira, nst.)	<p>Observadór bele iha direitu ba:</p> <ul style="list-style-type: none"> <li>● Partisipa iha enkontru/atividade organiza husi konsellu;</li> <li>● Fó hanoin /sujestaun ba membru konsellu; no</li> <li>● Asisti membru konsellu halao atividade relasioana ho jestaun bacias hidrograficas.</li> </ul> <p>Observador bele sai membru konsellu iha futuru wainhira konsellu habelar nia funsaun no misaun aparte husi jestaun floresta no rekursu naturais iha futuru. Sai membru ida tenke hetan aprovasaun husi konsellu.</p>



## ***Apéndice-3.4***

***Rezultadu hosi Analiza situasaun  
(Kondisaun Naturál) hosi Bacias  
Hidrograficas***





## Apêndise-3.4 Rezultadu hosi Analiza Situaun (Kondisaun Naturál) hosi Bacias Hidrografikas

### a. Kondisaun Naturál

Suku	Ai-laran	Rai bokur	Rai monu	Bee	Seluk-seluk
Asumau	Area tomak kobre ho ailaran tuan iha tempu portuguesa. Deflorestasaun akontese iha tempu Indonesia tanba tesi ai iha skala bo'ot	Rai bokur sai menus tanba to'os muda ba mai	Akontese rai monu barak	Volume bee redus	Menus animal fuik, hanesan bibi rusa no kakatua
Faturasa	Espansaun ailaran tuan sai ailaran naton rekopera fali no agora sai ailaran tuan	Rai bokur aumenta tanba konservasaun rai	Sei akontese rai monu	Aumenta bee matan no volume bee	Hanesan iha leten
Fahisoi	Redusaun kobertura floresta iha area ne'e	Rai bokur sai menus	Akontesementu rai monu aumenta	Laiha mudansa iha volume bee no kualidade	Laiha animal fuik
Maumeta	Ailaran tuan naton menus iha area ne'e	Hanesan iha leten	Rai monu aumenta tanba tesi ai no to'os muda ba mai	Hanesan iha leten	Hanesan iha leten
Hautoho	ailaran tuan aumenta tanba regulamentu suku	Hanesan ho suku Faturasa	Rai monu menus tanba menus tesi ai	Hanesan iha leten	Hanesan iha leten
Fadabloco	Hanesan iha leten	Hanesan iha leten	Rai monu menus	Hanesan iha leten	Animal fuik menus
Fahisoi	Kobertura ailaran tuan aumenta tanba redusaun to'os muda ba mai	Rai bokur aumenta tanba introdusaun sasukat konservasaun rai introdus hosi ONG.	Sei iha rai monu (balun)	Volume bee aumenta, bee kualidade diak durante tempu udan	Ezistencia Regulamentu suku dezenvolve iha 2003 ho fulan ida suporta hosi
Manucasa	Kobertura ailaran aumenta	Hanesan iha leten	Akontesementu rai monu sai menus	Laiha mudansa iha volume bee hosi bee matan 10 iha suku ne'e	Ezistencia Regulamentu suku dezenvolve iha 2013 ho apoiu hosi World vision no PNTL
Namoleso	Hanesan iha leten	Iha mudansa balun iha rai bokur tanba aplikasaun sasukat konservasaun rai ho suporta hosi WV	Akontesementu rai monu ne'ebé estraga mos bee matan iha suku ne'e	Iha bee mantan 7 ne'ebé mak atúalmente comunidade sira uza.	Ezistencia hosi Regulamentu suku dezenvolve iha 2009 ho suporta hosi WV
Bereleu	Menus kobertura ailaran tanba tesi ai illegal no to'os muda ba mai	Rai bokur sai menus tanba laiha aplikasaun sasukat konservasaun rai	Akontese rai monu	Volume bee sai menus	Laiha Regulamentu suku
Asubilitoho	Iha mudansa balun ba kondisaun ailaran tanba ai-oan distribui hosi MAP	Iha mudansa balun ba fertilidade rai	Rai monu aumenta	Laiha mudansa bo'ot ba bee in termus volume no kualidade	Regulamentu dezenvolve iha tinan ne'e
Fatrilau	Kobertura ailaran menus tanba laiha Regulamentu suku	Rai bokur sai menus	Akontese rai monu besik iha mota	Laiha mudansa bo'ot ba bee maibé presija fasilidade bee matan nian	Laiha Regulamentu suku

### b. Kondisaun Socio-ekonómiku

Posto-Administrativu	Kondisaun Moris	Vida Moris
Remexio	<ul style="list-style-type: none"> <li>- Iha mudansa ba asesibilidade ba bee matan</li> <li>- Mudansa ba pratika halo to'os hosi to'os muda ba mai ba to'os permanente</li> <li>- Husik animal livre menus</li> <li>- Sunu rai menus</li> </ul>	<ul style="list-style-type: none"> <li>- Uza tempu uituan deit atu ba kuru bee</li> <li>- Produsaun aihan aumenta</li> <li>- Volume tesi ai ba halo lutu animal redus</li> <li>- Insidente rai monu redus</li> <li>- Redus to'os nain sira nia gastus ba halo to'os</li> </ul>
Liquidoe	<ul style="list-style-type: none"> <li>- Iha mudansa ba kondisaun moris tanba Regulamentu suku</li> <li>- Iha mudansa ba kondisaun Estrada ne'ebé fasilita asesu ba merkadu</li> <li>- Iha mudansa asesu ba bee matan</li> <li>- To'os muda ba mai redus</li> <li>- Rai bokur aumenta tanba introdus teras</li> <li>- Numeru kazu violensia domestika redus</li> </ul>	<ul style="list-style-type: none"> <li>- Presu faan animal aumenta</li> <li>- Produsaun aihan aumenta tanba konsersasaun rai</li> <li>- Produsaun modo aumenta</li> <li>- Rendimentu hosi Produsaun modo aumenta</li> </ul>

## ***Apéndice-3.5***

***Vizaun, Misaun, Objetivu, no Funsaun  
hosi Bacias Hidrograficas hosi  
Bacias Hidrograficas Noru***



## **Apêndise-3.5 Vizaun, Misaun, Objetivu, no Funsau hosi Konsellu Jestaun Bacias Hidrograficas hosi Baciais Hidrograficas Noru**

### **Seksaun 1: Vizaun**

Konsellu jestaun baciais hidrograficas Noru ne'e kompostu hosi aliansa ne'ebé la buka lukru kompostu hosi administrasaun postu-administrativu sira ne'ebé refere no ajensia governo sira ne'ebé relevante ho objetivu atu proteje no maneija floresta, rai, no rekursu bee ho diak iha bacias hidrograficas Noru hodi hadia kondisaun moris no vida moris ema ne'ebé hela iha area bacias hidrograficas no hadia forneseментu bee ba area rai tetuk.

### **Seksaun 2: Misaun**

Misaun hosi Konsellu Jestaun Bacias Hidrograficas mak hanesan tuir mai:

- 2-1 atu fornese matadalan no orientasaun ba lider suku iha suku ne'ebé refere ba jestaun floresta ne'ebé sustentável hosi floresta no rekursu naturál sira ne'ebé relasiona ba floresta (ezemplu PFLA, rai, no bee) iha bacias hidrgraficas;
- 2-2 atu fornese lideransa hodi harmoniza interese no atividade hosi suku iha bacias hidrograficas hodi atinji floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta iha bacias hidrograficas;
- 2-3 atu foti inisiativu iha planu, implementa, no avalia planu jestaun bacias hidrograficas atu maneija floresta no rekursu naturál sira ne'ebé relasiona ba floresta iha maneira ne'ebé diak no sustentável hadia vida moris comunidade iha area bacias hidrograficas;
- 2-4 Atu ajuda lider suku sira iha suku ne'ebé refere hasae konsiensia hosi floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta entre comunidade iha suku ne'ebé refere;
- 2-5 atu promove asaun ne'ebé nesáriu ba floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta iha bacias hidrograficas iha koordinasaun ho governo relevante no organijasaun non govermentál sira no mós organijasaun internasional;
- 2-6 atu ajuda lider suku iha suku ne'ebé refere fó rekurse floresta ne'ebé iha valor no rekursu naturál sira ne'ebé relasiona ba floresta ba jersaun tuir mai iha suku ne'ebé refere; no
- 2-7 atu fahe esperiensa iha bacias hidrograficas ho unidade governo lokál (suku, postu-administrativu, no municipio sira) iha bacias hidrograficas iha Timor-Leste atu promove jestaun floresta ne'ebé sustentável no rekursu naturál sira ne'ebé relasiona ba floresta iha nivel bacias hidrograficas.

### **Seksaun 3: Objetivu**

Konsellu Bacias Hidrograficas tenke hakonu misaun ne'ebé lista iha seksaun uluk hodi atinji objetivu sira hanesan tui rmai:

- 3-1 atu redus insidente hosi eventu degradasaun ambiente, hanesan ailaran/sunu, eksploitasaun ilegal, no husik animal arbiru iha bacias hidrograficas;
- 3-2 atu hadia kondisaun hosi ai laran no rekursu naturál sira ne'ebé relasiona ba ai laran,

hanesan; ai laran, rai, no bee, iha bacias hidrograficas;

- 3-3 atu mantein no hadia vida moris komunidadade iha area bacias hidrograficas; no
- 3-4 atu hasae kapasidade lider suku sira no mós komunidadade iha suku ne'ebé refere atu maneija floresta no rekursu naturál sira ne'ebé relasiona ba ai laran tuir dalan ne'ebé própriu no sustentável.

#### **Seksaun 4: Funsau**

Konsellu Bacias Hidrograficas tenke hatudu funsau nesesáriu ba jեսтаun ne'ebé diak hosi Bacias Hidrograficas Noru.

- 4-1 atu prepara planu jեսтаun bacias hidrograficas ho assistensia hosi governo relevante no organijasaun non governmentál sira;
- 4-2 atu prepara planu asaun annual hodi implementa planu jեսтаun bacias hidrograficas iha inisiu;
- 4-3 atu monitor no avalia implementasaun planu assaun annual iha tinan ikus/fim do ano;
- 4-4 atu koordena implementasaun hosi planu jեսтаun bacias hidrograficas ho governo relevante no organijasaun non governmental sira;
- 4-5 atu organija enkontru regular kada fulan tolu hodi monitor situasaun hosi bacias hidrograficas no diskuti problema balun ne'ebé relevante ba jեսтаun ne'ebé sustentável hosi floresta no rekursu naturál sira relasiona ba floresta iha bacias hidrograficas;
- 4-6 atu adopta rezolusaun ne'ebé bele enkoraja suku hotu iha bacias hidrograficas atu hare ba floresta ne'ebé sustentável no jեսтаun rekursu naturál sira relasiona ba floresta iha bacias hidrograficas;
- 4-7 halo enkontru banhira deit kuandu situasaun presija; no
- 4-8 atu organija ekipa traballu (ka komite) hodi resolve issu/problema importante balun ne'ebé bele afeita jեսтаun hosi bacias hidrograficas.

## ***Apéndice-3.6***

***Regulamentu hosi Konsellu Jestaun***

***Bacias Hidrograficas hosi Bacias***

***Hidrograficas Noru***





## **Apéndice-3.6 Regulamentu Hosi Konsellu Jestaun Bacias Hidrograficas hosi Bacias Hidrograficas Noru**

### **Seksaun 1: Naran Konsellu**

- 1.1 Naran Konsellu Jestaun bacias hidrograficas hosi Bacias Hidrograficas Noru tenke “Konsellu Jestaun Bacias Hidrograficas Noru.”

### **Seksaun 2: Skop no Definisaun**

- 2.1 Konsellu Jestaun Bacias Hidrograficas tenke iha aliansa ne'ebé la buka lukru ne'ebé kompostu hosi administrasaun postu-administrativu no suku ne'ebé ninia jurisdisaun kobre hotu ka balun hosi bacias hidrograficas lokaliza iha Postu-administrativu Remexio no Liquidoe, Municipio Aileu.
- 2.2 Termus tuir mai ne'ebé uza iha dokumentu ne'e, karik espesifika iha ne'e, tenke iha ninia signifikadu hanesan ne'ebé esplika tuir mai.
  - (1) “CB-NRM” signifika katak jestaun rekursu naturais ne'ebé sustentável bazeia ba comunidade, ne'ebé nia aproximasaun introdus hosi Projetu hamutuk JICA no MAP ba floresta ne'ebé sustentável no jestaun rekursu naturál ne'ebé relasiona ba floresta iha Timor-Leste;
  - (2) “Xefi de suku” signifika katak ema ne'ebé oficialmente hili hanesan xefi de suku tuir Dekreitu Lei No. 20/II kona-ba Lideransa comunidade no Elisaun;
  - (3) “Presidente” signifika katak ema ne'ebé tenke tomakonta enkontru Konsellu no fó instrusaun ba membru sira hosi Konsellu.
  - (4) “Rekursu naturál sira ne'ebé relasiona ba floresta” signifika katak rekursu naturál sira ne'ebé iha relasaun besik ba floresta, hanesan bee, rai, no produto floresta laos ai.
  - (5) “Sekretariadu” signifika katak ema ka grupo ne'ebé iha funsaun atu serbí hanesan sekretariadu ba Konsellu.
  - (6) “Bacias Hidrograficas” signifika katak baliza hidrolojikal hosi sekundariu ou tertiaru tributariu hosi mota nian.

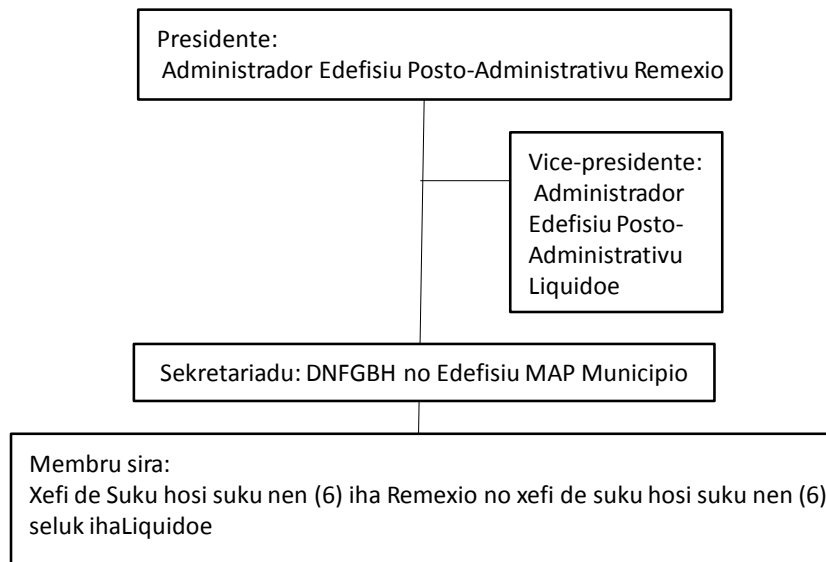
### **Seksaun 3: Membru**

- 3.1 Suku hotu ne'ebé kobre tomak hosi bacias hidrograficas Noru tenke sai membru hosi Konsellu Jestaun Bacias Hidrograficas Noru.
- 3.2 Administrador Postu-administrativu Remexio no Liquidoe no Diresaun Nasional relevante iha postu-administrativu/municipio, ho naran Diresaun Nasional Floresta (DNF), Diresaun Nasional Ambiente (DNA), no Diresaun Nasional Agua no Saniamentu (DNSAS), tenke involve iha Konsellu hanesan membru sira.
- 3.3 Konsellu tenke kompostu hosi membru sira hanesan tuir mai:
  - (1) Administrador Postu-administrativu hosi Remexio no Liquidoe;
  - (2) Xefi de suku hosi suku ne'en (6) iha Postu-administrativu Remexio;
  - (3) Xefi de suku hosi suku ne'en (6) iha Postu-administrativu Liquidoe;
  - (4) Representante Diresaun Nasional Floresta (DNF), MAP;

- (5) Reprerzentante MAP Municipio Aileu;
  - (6) Reprerzentante Diresaun Nasional Ambiente (DNA) iha Municipio Aileu; no
  - (7) Reprerzentante Diresaun Nasional Fornesementu Bee no Saniamentu (DNWSS) iha Postu-administrativu Remexio no Liquidoe.
- 3.4 Banhira membru balun troka ho ema seluk liu hosi elisaun suku no organizasaun muda iha Governo Timor Leste, membru tenke hafoun hodi responde ba mudansa.
- 3.5 Karik ema ruma hanoin relevante ba ka iha risku iha jestaun no proteje floresta no rekursu ne'ebé relasiona ba floresta iha Basias Hidrograficas Noru ekspresa nia interese sai membru Konsellu Jestaun bacias Hidrograficas, Konsellu tenke hare ninia elijibilidade no desidi karik bele aseita.

**Seksaun 4: Organizasaun**

- 4.1 Konsellu Jestaun Bacias Hidrograficas tenke kompostu hosi presidente ida (1) Vice presidente ida (1), sekretariadu ida (1) no membru sira seluk. Strutura Organijasaun hosi Konsellu hatudu iha **Figura 1**.



**Figura 1 Strutura Organijasaun hosi Konsellu Jestaun Bacias Hidrograficas Noru**

- 4.2 Administrador Postu-administrativu hosi Remexio tenke funsiona hanesan presidente konsellu, no Administrador Postu-administrativu Liquidoe funsiona hanesan vice presidente.
- 4.3 DNF no MAP, ka ninia edefisiu iha Aileu, tenke sai hanesan sekretariadu hosi Konsellu.
- 4.4 Xefi de Suku hosi suku 12 (ezemplu suku ne'en (6) iha Remexio no suku ne'en seluk (6) iha Liquidoe), diresaun NDWSS iha postu-administrativu, no DNE iha municipio tenke sai membru seluk hosi konsellu.
- 4.5 Karik presidente labele halao ninia responsabilidade tamba razaun ruma, Vice-Presidente tenke halao ninia funsaun.
- 4.6 Membru sira hotu hosi konsellu tenke hakonu funsaun no responsabilidade hosi posisaun ne'ebé aloka ona ba sira ne'ebé mak hili ona. Funsauun no responsabilidade hosi pozisaun ne'ebé refere hosi Konsellu Bacias Hidrograficas hanesan apresenta iha **Tabela 1**.

**Tabela 1 Funksaun hosi Responsabilidade Membru sira hosi Konsellu Jestaun Bacias**

**Hidrograficas**

<b>Posisaun</b>	<b>Funksaun/responsabilidade</b>
Presidente (Administrador Postu-administrativu Remexio)	<ul style="list-style-type: none"> <li>● Halao enkontru regular no ad hok ne'ebé husu hosi membru sira;</li> <li>● Hasai karta konvite ba membru sira;</li> <li>● Lidera enkontru hosi konsellu ho fasilita diskusaun, asegrua regulamentu baziku iha diskusaun, tau perguntas hodi vota, no anunsia decisiaun.</li> <li>● Halo ajenda enkontru iha koordenasau Sekretariadu;</li> <li>● Fó matadalan no orientasaun ba membru sira hosi konsellu ba jestaun bacias hidrograficas ne'ebé sustentável;</li> <li>● Enkoraja membru sira hosi konsellu atu mantein halo esforsu hodi atinji konsersaun bacias hidrograficas ne'ebé sustentável no jestaun; no</li> <li>● Komunika ho ajensia seluk, ministériu, diresaun nasional, no organijasaun seluk ba asegura jestaun bacias hidrograficas ne'ebé própriu.</li> </ul>
Vice-Presidente (Administrador postu-administrativu Liquidoe)	<ul style="list-style-type: none"> <li>● Supporta presidente hakonu ninia dever;</li> <li>● Aktu hanesan presidente banhira presidente la iha;</li> <li>● Fó matadalan no orientasaun ba membru sira hosi konsellu ba jestaun bacias hidrograficas ne'ebé sustentável iha kolaborasaun ho presidente; no</li> <li>● Enkoraja membru sira hosi konsellu atu mantein halo esforsu hodi atinji konsersaun bacias hidrograficas ne'ebé sustentável iha kolaborasaun ho Presidente.</li> </ul>
Sekretariadu (DNF/Município MAP)	<ul style="list-style-type: none"> <li>● Assiste Presidente/Vice-Presidente halao enkontru, hasai no hato'o karta konvite ba membru sira, no halao enkontru;</li> <li>● Ezbosu ajenda enkontru iha koordenasau ho Presidente no Vice-Presidente;</li> <li>● Responsabiliza ba atividade dokumentasaun, hanesan foti nota, preparasaun rezolusaun/desizaun, nst.; no</li> <li>● Ajuda Presidente no Vice-Presidente komunika ho ajensia sira seluk, ministério, diresaun nasional, no organijasaun asegura jestaun bacias hidrograficas ne'ebé propio.</li> </ul>
Membru Konsellu (Xefi de suku sira)	<ul style="list-style-type: none"> <li>● Partisipa iha atividade ne'ebé prepara hosi konsellu, hanesan enkontru no visita;</li> <li>● Fahe no troka idea ho ativu iha enkontru hosi konsellu hodi rezolve problema ruma ne'ebé sai obstaklu ba atinji jestaun bacias hidrograficas ne'ebé sustentável;</li> <li>● Tuir regulamentu ne'ebé konkorda hosi membru sira;</li> <li>● Guia comunidade iha suku ne'ebé refere atu asegura katak sira bele tuir akordu ne'ebé halo hosi konsellu; no</li> <li>● Asegura comunidade iha suku ne'ebé refere atu proteje no maneija floresta no rekursu naturais iha maneira ne'ebé sustentabe.</li> </ul>
Membru konsellu (Ambiente)	<ul style="list-style-type: none"> <li>● Iha funsaun no responsabilidade ba membru konsellu (xefi de suku sira); no</li> <li>● Supporta comunidade iha suku iha bacias hidrograficas halao atividade protessaun ambiente, hanesan seremonia Tara Bandu, produsaun ai oan &amp; reflorestasaun, no edukasaun ambiental.</li> </ul>
Membru konsellu (SAS)	<ul style="list-style-type: none"> <li>● Iha funsaun no responsabilidade ba membru konsellu (xefi de suku sira); no</li> <li>● Supporta comunidade iha suku sira iha bacias hidrograficas iha protessaun bee iha suku ne'ebé refere.</li> </ul>

4.7 Konsellu ka Sekretariadu spesifikamente, bele assiste hosi organijasaun ne'ebé kompetente, hanesan ONG, iha operasaun Konsellu.

4.8 La iha membru konsellu tenke simu kompensasaun ba ninia servisu iha Konsellu.

**Seksaun 5: Enkontru**

5.1 Enkontru hosi Konsellu tenke halao iha Administrasaun Postu-administrativu Remexio ka Liquidoe. Membru ne'ebé atende enkontru uluk hosi konsellu tenke desidi no

konkorda enkontru tuir mai sei halao iha ne'ebé.

- 5.2 Konsellu tenke halao enkontru ho ninia membru sira regularmente.
  - (1) Enkontru kada fulan tolu
  - (2) Enkontru Anual
- 5.3 Enkontru kada fulan tolu sei halao kada fulan tolu iha tinan ida nia laran (ezemplu iha inisiu Marsu, Juñu, Setembre, no Dezembre). Iha enkontru, membru sira hosi Konsellu tenke diskuti issu no perukupasaun ne'ebé diriji ba jestaun floresta ne'ebé própriu no rekursu naturais ne'ebé relasiona ba floresta iha bacias hidrograficas no proteje vida moris comunidade nian.
- 5.4 Enkontru annual tenke halao iha fim do anu ka inisiu tinan (ezemplu iha mediu fulan Dezembre ka inisiu fulan Janeiro). Iha enkontru, membru sira hosi Konsellu tenke reve no avalia situasaun hosi bacias hidrograficas no atividade ne'ebé halao hosi Konsellu iha tinan ida nia laran.
- 5.5 Enkontru espesial hosi Konsellu bele halao iha tempo ne'ebé deit hosi presidente ka maioria hosi membru sira karik nia/sira hanoin ne'e nesesáriu atu halao ba interese hosi membru sira nian no mós konsellu.
- 5.6 Notifikasaun enkontru tenke distribui ba membru sira hotu pelumenus semana ida (1) antes data enkontru nian. Notifikasaun ne'e tenke tau objetivu, tempu no fatin hosi enkontru.
- 5.7 Karik membru balun la atende enkontru, nia tenke delega substitui ba enkontru.
- 5.8 Iha enkontru, prezensa liu hosi 50% (ka liu hosi ema nain 9) hosi membru sira no sira nia substitui tenke nesesáriu no suficiente atu konstitui quorum ba diskussaun ofisiál hosi Konsellu ho prezensa hosi president ka vice-presidente. Karik quorum mak la too, ne'e bele suspende hosi membru sira.

## **Seksaun 6: Foti Desizaun**

- 6.1 Rezolusaun no desizaun ruma hosi Konsellu tenke halo, adopta, no efetivu ho approva liu hosi 50 % (liu hosi ema nain 9) hosi membru ofisiál hosi Konsellu iha enkontru ne'ebé suficiente atu konstitui quorum no tuir prezensa hosi presidente ou vice-presidente.
- 6.2 Desizaun ruma ne'ebé halo sem iha prezensa hosi presidente ka vice-presidente konsidera invalidu.

## **Seksaun 7: Komite**

- 7.1 Konsellu, ho rezolusaun ne'ebé adopta hosi maioria hosi membru sira, bele kria komite espesial ne'ebé tenke servisu kona-ba servisu espesifiku ne'ebé delega ba. Membru sira hosi komite espesial tenke hili hosi membru sira hosi Konsellu iha enkontru.
- 7.2 Enkontru hosi komite tenke halao tuir tempo no fatin no tenke fiksi hosi presidente komite ne'ebé refere ka konsensu hosi maioria hosi membru sira hosi komite. Fó notifikasaun uluk ba membru hotu hosi komite antes enkontru.
- 7.3 Karik fornese rezolusaun hosi Konsellu, membru ofisiál balun hosi komite tenke konstitui quorum iha diskusaun komite.

7.4 Iha desizaun ruma hosi komite tenke halo ho approva hosi maioria hosi membru ofisiál hosi komite.

### **Seksaun 8: Amandamentu**

8.1 Ordenansa/regulamentu ne'e bele altera, amenda, anula ka aumenta ho aprova liu hosi 50 % hosi membru ofisiál.



## ***Appendix-3.7***

***Rezolusaun hosi Konsellu Bacias***

***Hidrograficas hosi Bacias***

***Hidrograficas Noru***





### **Apêndise-3.7 Rezolusaun Konsellu Jestaun Bacias Hidrograficas hosi Bacias Hidrograficas Noru**

**Konsiderandu katak,** bacias hidgrografikas Noru ne'e ida ne'ebé mak konstitui hosi mota Lacro no iha funsaun importante iha jestaun bacias hidrograficas ne'ebé kobre hosi floresta no kondisaun topografia;

**Konsiderandu katak,** Suku tolu (3) iha bacias hidrograficas Noru ne'ebé desenvolve ona mekanismu atu maneija no projete floresta no rekursu ne'ebé relasiona ba floresta iha dalan ne'ebé sustentável ho assistencia hosi projeto hamutuk entre Mnisterio Agrikultura no Peskas (MAP) no the Japan International Cooperation Agency (JICA);

**Konsiderandu katak,** MAP/DNF no Administrador Postu-administrativu Remexio no Liquidoe realija ona ai laran no rekursu ai laran ne'ebé iha relasaun iha Bacias Hidrograficas Noru tenke proteje no maneija ho diak ho introdus no fahe mekanismu hanesan iha suku hotu ne'ebé refere iha bacias hidrograficas;

**Konsiderandu katak,** suku 12 ne'ebé ninia teritorio balun ou kobre hotu hosi Bacias Hidrograficas Noru ne'ebé konfirma katak jestaun floresta ne'ebé sustentável no jestaun ne'ebé relasiona ba floresta, no mos jestaun bacias baciais hidrograficas ne'ebé ho objetivu komun hosi comunidade iha suku ne'ebé refere; no

**Konsiderandu katak,** Administrador Postu-administrativu hosi Remexio no Liquidoe no lider suku hosi suku 12 ne'ebé konkorda atu estabese konsellu jestaun bacias hidrograficas hodi atinji objetivu ba jeresan iha futuru iha suku.

#### **HO NUNE'E'E, ATU BELE REZOLVE hosi membru sira hosi Konsellu Jestaun Bacias Hidrograficas Noru hanesan tuir mai ne'e:**

Seksaun 1: Ema hirak tuir mai ne'ebé hili hanesan membru hosi Konsellu Jestaun Bacias Hidrograficas too ema seluk ne'ebé kualifikado troka sira ou karik sira resigna ann:

- a. Administrador Postu-administrativu hosi Postu-administrativu Remexio
- b. Administrador Postu-administrativu hosi Postu-administrativu Liquidoe
- c. Xefi de Suku hosi Suku Faturasa, Postu-administrativu Remexio
- d. Xefi de Suku hosi Suku Fadabloco, Postu-administrativu Remexio
- e. Xefi de Suku hosi Suku Hautoho, Postu-administrativu Remexio
- f. Xefi de Suku hosi Suku Maumeta, Postu-administrativu Remexio
- g. Xefi de Suku hosi Suku Fahisoi, Postu-administrativu Remexio
- h. Xefi de Suku hosi Suku Asumau, Postu-administrativu Remexio
- i. Xefi de Suku hosi Suku Fahisoi, Postu-administrativu Liquidoe
- j. Xefi de Suku hosi Suku Fatrilau, Postu-administrativu Liquidoe
- k. Xefi de Suku hosi Suku Bereleu, Postu-administrativu Liquidoe
- l. Xefi de Suku hosi Suku Acubili Toho, Postu-administrativu Liquidoe
- m. Xefi de Suku hosi Suku Namcleso, Postu-administrativu Liquidoe
- n. Xefi de Suku hosi Suku Manucasa, Postu-administrativu Liquidoe
- o. Xefi Departamentu ba Reforestasaun/Xefi Departamentu ba Jestaun Bacias Hidrograficas, DNF

- p. Direitór MAP municipio iha Municipio Aileu
- q. Funsionariu Municipio hosi Diresaun Nasional ba Ambiente iha Aileu
- r. funsionariu Postu-administrativu hosi Diresaun Nasional ba Fornesementu Bee no Saniamentu (NDWSS) iha Postu-administrativu Remexio
- s. Funsionariu Postu-administrativu hosi NDWSS iha Postu-administrativu Lquidoe

Seksaun 2: Membru sira hosi Konsellu Jestaun Bacias Hidrograficas ho ne'e deklarada no fahe vizaun, missaun, objetivu, no funsaun hosi Konsellu hanesan ne'ebé apresenta iha ne'e **“Vizaun, Missaun, Objetivu, no Funsionariu hosi Konsellu Jestaun Bacias Hidrograficas”** iha **Aneksu-1**.

Seksaun 3: Membru sira hosi Konsellu Jestaun Bacias Hidrograficas ho nune'e aprova regulamentu hosi Konsellu, iha forma ne'ebé hanesan ne'ebé iha **Aneksu-2**.

Seksaun 4: Rezolusaun ne'e tenke efetivu imediatamente.

**Data: xx xxxx, 2014**

**Presidente**

**Vice-Presidente**

XXXXXXXXXX  
 \_\_\_\_\_  
 Administrador  
 Postu-administrativu  
 Remexio

XXXXXXXXXX  
 \_\_\_\_\_  
 Administrador  
 Postu-administrativu  
 Liquidoe

**Sekretariadu**

XXXXXXXXXX  
 \_\_\_\_\_  
 Diretór MAP  
 municipio Aileu

XXXXXXXXXX  
 \_\_\_\_\_  
 Xefi Departamentu  
 Reforestasaun, DNF

XXXXXXXXXX  
 \_\_\_\_\_  
 Xefi Departamentu  
 hosi Konservasaun  
 Rai no bee, DNF

**Membru sira**

XXXXXXXXXX  
 \_\_\_\_\_  
 Xefi de Suku  
 Asumau

XXXXXXXXXX  
 \_\_\_\_\_  
 Xefi de Suku  
 Fadabloco

XXXXXXXXXX  
 \_\_\_\_\_  
 Xefi de Suku  
 Fahisoi

XXXXXXXXXX

XXXXXXXXXX

XXXXXXXXXX

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Xefi de Suku  
Faturasa

---

Xefi de Suku  
Hautoho

---

Xefi de Suku  
Maumeta

---

XXXXXXXXXX  
Xefi de Suku  
Acubili

---

XXXXXXXXXX  
Xefi de Suku  
Bereleu

---

XXXXXXXXXX  
Xefi de Suku  
Fahiso

---

XXXXXXXXXX  
Xefi de Suku  
Fatrilau

---

XXXXXXXXXX  
Xefi de Suku  
Manucasa

---

XXXXXXXXXX  
Xefi de Suku  
Namcleso

---

XXXXXXXXXX  
Reprezentante  
NDE Municipio  
Aileu

---

XXXXXXXXXX  
Reprezentante  
NDWSS  
Postu-administrativu  
Remexio

---

XXXXXXXXXX  
Reprezentante  
NDWSS  
Postu-administrativu  
Liquidoe

---

XXXXXXXXXX  
Reprezentante  
NDE Municipio  
Aileu

---

XXXXXXXXXX  
Reprezentante  
NDWSS  
Postu-administrativu  
Remexio

---

XXXXXXXXXX  
Reprezentante  
NDWSS  
Postu-administrativu  
Liquidoe

Aprova iha xxXX XX, 2014 hosi

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XXXXXXXXXX  
Diretór Municipio  
hosi Edefisiu  
Administrativu  
Municipiu, Aileu

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XXXXXXXXXX  
Diretór Municipio  
hosi Edefisiu MAP  
Municipio, Aileu

---

XXXXXXXXXX  
Diretór Nacional  
Diresaun Nacional  
Floresta, MAP

# **Aneku-1: Vizaun, Misaun, Objetivu, no Funsauun hosi Konsellu Jestaun Bacias Hidrograficas hosi Baciais Hidrograficas Noru**

## **Seksaun 1: Vizaun**

Konsellu jestaun baciais hidrograficas Noru ne'e kompostu hosi aliansa ne'ebé la buka lukru kompostu hosi administrasaun postu-administrativu ne'ebé refere no ajensia governo relevante ho objetivu atu proteje no maneija floresta, rai, no rekursu bee ho diak iha bacias hidrograficas Noru hodi hadia kondisaun moris no vida moris ema ne'ebé hela iha area bacias hidrograficas no hadia forneseментu bee ba area rai tetuk.

## **Seksaun 2: Misaun**

Misaun hosi Konsellu Jestaun Bacias Hidrograficas mak hanesan tuir mai:

- 2-1 atu fornese matadalan no orientasaun ba lider suku iha suku sira ne'ebé refere ba jestaun floresta ne'ebé sustentável hosi floresta no rekursu naturál sira ne'ebé relasiona ba floresta (Ezemplu PFLA, rai, no bee) iha bacias hidrgraficas;
- 2-2 atu fornese lideransa hodi harmoniza interese no atividade hosi suku iha bacias hidrograficas hodi atinji floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta iha bacias hidrograficas;
- 2-3 atu foti inisiativu iha planu, implementa, no avalia planu jestaun bacias hidrograficas hodi maneija floresta no rekursu naturál sira ne'ebé relasiona ba floresta iha maneira ne'ebé diak no sustentável hadia vida moris comunidade iha area bacias hidrograficas;
- 2-4 Atu ajuda lider suku sira iha suku sira ne'ebé refere hasae konsiensia hosi floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta entre comunidade iha suku ne'ebé refere;
- 2-5 atu promove ssaun ne'ebé nesésáriu ba floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta iha bacias hidrograficas iha koordenasauun ho governo relevante no organijasaun non governmentais no mos organijasaun internasional;
- 2-6 atu ajuda lider suku iha suku sira ne'ebé refere fó rekursu floresta ne'ebé iha valor no rekursu naturál sira ne'ebé relasiona ba floresta ba jersaun tuir mai iha suku ne'ebé refere; no
- 2-7 atu fahe esperiensa iha bacias hidrograficas ho unidade governo lokál (suku, postu-administrativu, no municipio sira) iha bacias hidrograficas iha Timor-Leste hodi promove jestaun floresta ne'ebé sustentável no rekursu naturál sira ne'ebé relasiona ba floresta iha nivel bacias hidrograficas.

## **Seksaun 3: Objetivu**

Konsellu Bacias Hidrograficas tenke hakonu misaun ne'ebé lista iha seksaun uluk atu atinji objetivu hanesan tui rmai:

- 3-1 atu redus incidente hosi eventu degradasaun ambiente, hanesan ailaran/sunu, eksploitasaun ilegal, no husik animal iha bacias hidrograficas;
- 3-2 atu hadia kondisaun hosi ai laran no rekursu naturál sira ne'ebé relasiona ba ai laran,

hanesan, ai laran, rai, no bee, iha bacias hidrograficas;

- 3-3 atu mantein no hadia vida moris komunidadade iha area bacias hidrograficas; no
- 3-4 atu hasae kapasidade lider suku no mós komunidadade iha suku ne'ebé refere hodi maneija floresta no rekursu naturál sira ne'ebé relasiona ba ai laran tuir dalan ne'ebé própriu no sustentável.

#### **Seksaun 4: Funsauun**

Konsellu Bacias Hidrograficas tenke hatudu funsauun nesesáriu ba jestaun ne'ebé diak hosi Bacias Hidrograficas Noru.

- 4-1 atu prepara planu jestaun bacias hidrograficas ho assistensia hosi governo relevante no organizaun non governmentál sira;
- 4-2 atu prepara planu assaun annual hodi implementa planu jestaun bacias hidrograficas iha inisiu;
- 4-3 atu monitor no avalia implementasaun planu assaun annual iha tinan ikus/fim do ano;
- 4-4 atu koordena implementasaun hosi planu jestaun bacias hidrograficas ho governo relevante no organijasaun non governmentál sira;
- 4-5 atu organija enkontru regular kada fulan tolu atu monitor situasaun hosi bacias hidrograficas no diskuti problema balun ne'ebé relevante ba jestaun ne'ebé sustentável hosi floresta no rekursu naturál sira relasiona ba floresta iha bacias hidrograficas;
- 4-6 atu adopta rezolusaun ne'ebé bele enkoraja suku hotu iha bacias hidrograficas atu hare ba floresta ne'ebé sustentável no jestaun rekursu naturál sira relasiona ba floresta iha bacias hidrograficas;
- 4-7 halo enkontru banhira deit kuandu situasaun presija; no
- 4-8 atu organiza ekipa traballu (ou komite) hodi resolve issu/problema importante balun ne'ebé bele afeita jestaun hosi bacias hidrograficas.

## **Aneku-2: Regulamentu Hosi Konsellu Jestaun Bacias Hidrograficas hosi Bacias Hidrograficas Noru**

### **Seksaun 1: Naran Konsellu**

- 1.1 Naran Konsellu Jestaun bacias Hidrograficas hosi Bacias Hidrograficas Noru tenke “Konsellu Jestaun Bacias Hidrograficas Noru.”

### **Seksaun 2: Skop no Definisaun**

- 2.1 Konsellu Jestaun Bacias Hidrograficas tenke iha aliansi ne'ebé la buka lukru ne'ebé kompostu hosi administrasaun postu-administrativu no suku ne'ebé ninia jurisdisaun kobre hotu ou balun hosi bacias hidrograficas lokalija iha Postu-administrativu Remexio no Liquidoe, Municipio Aileu.
- 2.2 Termus tuir mai ne'ebé uja iha dokumentu ne'e, karik espesifika iha ne'e, tenke iha ninia siginifikadu hanesan ne'ebé esplika tuir mai.
- (1) “CB-NRM” signifika katak jestaun rekursu naturál sira ne'ebé sustentável bazeia ba comunidade, ne'ebé approximasau introdus hosi Projetu hamutuk JICA no MAP ba floresta ne'ebé sustentável no jestaun rekursu naturál sira ne'ebé relasiona ba floresta iha Timor-Leste;
  - (2) “Xefi de suku” signifika katak ema ne'ebé oficialmente hili hanesan xefi de suku tuir Dekreitu Lei No. 20/II kona-ba Lideransa comunidade no Elisaun;
  - (3) “Presidente” signifika katak ema ne'ebé tenke tomakonta enkontru Konsellu no fó instrusaun ba membru sira hosi Konsellu.
  - (4) “Rekursu naturál sira ne'ebé relasiona ba floresta” signika katak rekursu naturál sira ne'ebé iha relasaun besik ba floresta, hanesan bee, rai, no produto floresta laos ai.
  - (5) “Sekretariado” signifika katak ema ou grupo ne'ebé iha funsaun atu serve hanesan hanesan sekretariado ba Konsellu.
  - (6) “Bacias Hidrograficas” signifika katak balija hidrolojikal hosi sekundariu ou tertiaru tributariu hosi mota nian.

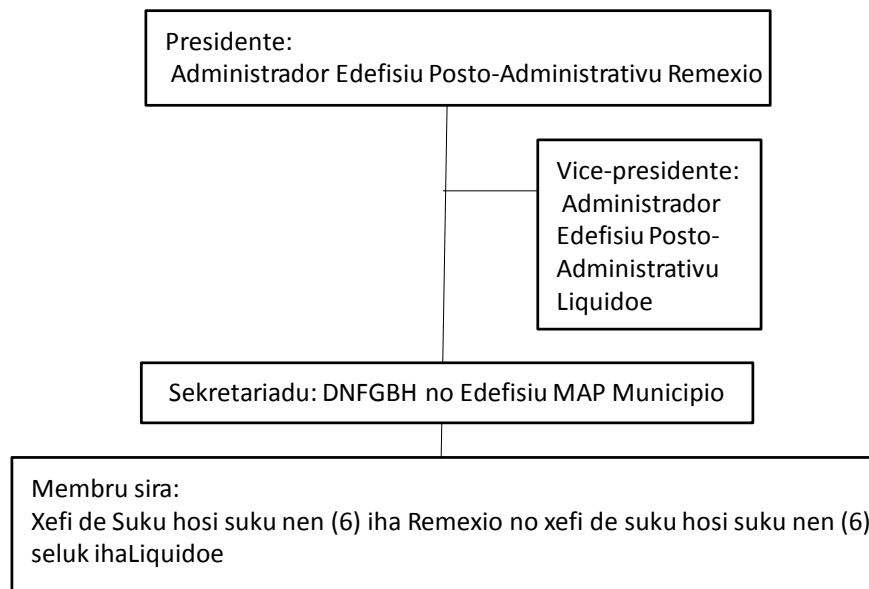
### **Seksaun 3: Membru**

- 3.1 Suku hotu ne'ebé kobre tomak hosi bacias hidrograficas Noru tenke sai membru hosi Konsellu Jestaun Bacias Hidrograficas Noru.
- 3.2 Administrador Postu-administrativu Remexio no Liquidoe no Diresaun Nasional relevante iha postu-administrativu/municipio, ho naran Diresaun Nasional Floresta (DNF), Diresaun Nasional Ambiente (DNA), no Diresaun Nasional Agua no Saniamentu (DNSAS), tenke involve iha Konsellu hanesan membru sira.
- 3.3 Konsellu tenke kompos hosi membru sira hanesan tuir mai:
- (1) Administrador Postu-administrativu hosi Remexio no Liquidoe;
  - (2) Xefi de suku hosi suku ne'en (6) iha Postu-administrativu Remexio;
  - (3) Xefi de suku hosi suku ne'en (6) iha Postu-administrativu Liquidoe;
  - (4) Representante Diresaun Nasional Floresta (DNF), MAP;

- (5) Reprerzentante MAP Municipio Aileu;
  - (6) Reprerzentante Diresaun Nasional Ambiente (DNA) iha Municipio Aileu; no
  - (7) Reprerzentante Diresaun Nasional Fornesementu Bee no Saniamentu (DNWSS) iha Postu-administrativu Remexio no Liquidoe.
- 3.4 Banhira membru balun troka ho ema seluk liu hosi elisaun suku no organijasaun muda iha Governo Timor Leste, membru tenke hafoun hodi responde ba mudansa.
- 3.5 Karik ema ruma hanoin relevante ba ou iha risku iha jestaun no proteje floresta no rekursu ne'ebé relaciona ba floresta iha Basias Hidrograficas Noru espresso nia interesse sai membru Konsellu Jestaun bacias Hidrograficas, Konsellu tenke hare ninia elijibilidade no desidi karik bele aseita.

**Seksaun 4: Organizasaun**

- 4.1 Konsellu Jestaun Bacias Hidrograficas tenke kompostu hosi presidente ida (1) Vice-presidente ida (1), sekretariadu ida (1) no membru sira seluk. Strutura Organijasaun hosi Konsellu hatudu iha **Figura 1**.



**Figura 1 Strutura Organijasaun hosi Konsellu Jestaun Bacias Hidrograficas Noru**

- 4.2 Administrador Postu-administrativu Remexio tenke funsiona hanesan presidente konsellu, no Administrador Postu-administrativu Liquidoe funsiona hanesan vice presidente.
- 4.3 DNF no MAP, ou ninia edefisiu iha Aileu, tenke sai hanesan sekretariado hosi Konsellu.
- 4.4 Xefi de Suku hosi suku 12 (ezemplu suku ne'en (6) iha Remexio no suku ne'en seluk (6) iha Lequidoe), direaun NDWSS iha postu-administrativu, no NDE iha municipio tenke sai membru seluk hosi konsellu.
- 4.5 Karik presidente labele halao ninia responsabilidade tamba razaun ruma, Vice Presidente tenke halao ninia funsaun.
- 4.6 Membru sira hotu hosi konsellu tenke hakonu funsaun no responsabilidade hosi posisaun ne'ebé aloka ona ba sira ne'ebé mak hili ona. Funsauun no responsabilidade hosi pozisaun ne'ebé refere hosi Konsellu Bacias Hidrograficas hanesan apresenta iha **Tabela 1**.



**Tabela 1 Funksaun hosi Responsabilidade Membru sira hosi Konsellu Jestaun Bacias**

**Hidrograficas**

<b>Posisaun</b>	<b>Funksaun/responsabilidade</b>
Presidente (Administrador Postu-administrativu Remexio)	<ul style="list-style-type: none"> <li>● Halao enkontru regular no ad hok ne'ebé husu hosi membru sira;</li> <li>● Hasai karta konvite ba membru sira;</li> <li>● Lidera enkontru hosi konsellu ho fasilita diskusaun, asegra regulamentu baziku iha diskusaun, tau perguntas hodi vota, no anusiu no decisaun.</li> <li>● Halo ajenda enkontru iha koordenasau Sekretariadu;</li> <li>● Fó matadalan no orientasaun ba membru sira hosi konsellu ba jestaun bacias hidrograficas ne'ebé sustentável;</li> <li>● Enkoraja membru sira hosi konsellu atu mantein halo esforsu hodi atinji konservasaun bacias hidrograficas ne'ebé sustentável no jestaun; no</li> <li>● Komunika ho ajencia seluk, ministeriu, diresaun ansional, no organijasaun seluk ba asegra jestaun bacias hidrograficas ne'ebé própriu.</li> </ul>
Vice-Presidente (Administrador Postu-administrativu Liquidoe)	<ul style="list-style-type: none"> <li>● Supporta presidente hakuon ninia dever;</li> <li>● Aktu hanesan presidente banhira presidente la iha;</li> <li>● Fó matadalan no orientasaun ba membru sira hosi konsellu ba jestaun bacias hidrograficas ne'ebé sustentável iha kolaborasaun ho presidente; no</li> <li>● Enkoraja membru sira hosi konsellu atu mantein halo esforsu hodi atinji konservasaun bacias hidrograficas ne'ebé sustentável iha kolaborasaun ho Presidente.</li> </ul>
Sekretariadu (DNF/MAP município)	<ul style="list-style-type: none"> <li>● Assiste Presidente/Vice Presidente halao enkontru, hasai no hato karta konvite ba membru sira, no halao enkontru;</li> <li>● Draft ajenda enkontru iha koordenasau ho Presidente no Vice Presidente;</li> <li>● Be responsabilija ba atividade dokumentasaun, hanesan foti nota, preparasaun rezolusaun/decisaun, etc.; no</li> <li>● Ajuda Presidente no Vice Presidente komunika ho ajencia sira seluk, ministerio, diresaun nasional, no organijasaun asegra jestaun bacias hidrograficas ne'ebé própriu.</li> </ul>
Membru Konsellu (Xefi de Sukus)	<ul style="list-style-type: none"> <li>● Partisipa iha atividade ne'ebé prepara hosi konsellu, hanesan enkontru no visita;</li> <li>● Fahe no troka idea ho ativu iha enkontru hosi konsellu atu resolve problema ruma ne'ebé sai obstaklu ba atinji jestaun bacias hidrograficas ne'ebé sustentável;</li> <li>● Tuir regulamentu ne'ebé konkorda hosi membru sira;</li> <li>● Guia komunidadade iha suku ne'ebé refere atu asegra katak sira bele tuir akordu ne'ebé halo hosi konsellu; no</li> <li>● Asegura komunidadade iha suku ne'ebé refere atu proteje no maneija floresta no rekursu naturál sira iha maneira ne'ebé sustentavel.</li> </ul>
Membru konsellu (Ambiente)	<ul style="list-style-type: none"> <li>● Iha funksaun no responsabilidade ba membru konsellu (xefi de suku); no</li> <li>● Supporta komunidadade iha suku iha bacias hidrograficas halao atividade protessaun ambiente, hanesan seremonia Tara Bandu, produsaun ai oan &amp; reflorestasaun, no edukasaun ambiental.</li> </ul>
Membru konsellu (SAS)	<ul style="list-style-type: none"> <li>● Iha funksaun no responsabilidade ba membru konsellu (xefi de suku sira); no</li> <li>● Supporta komunidadade iha suku iha bacias hidrograficas iha protesauun bee iha suku ne'ebé refere.</li> </ul>

4.7 Konsellu ou Sekretariadu espesifikamente, bele assiste hosi organijasaun ne'ebé kompetente, hanesan NGO, iha operasaun Konsellu.

4.8 La iha membru konsellu tenke simu kompensasaun ba ninia servisu iha Konsellu.

**Seksaun 5: Enkontru**

5.1 Enkontru hosi Konsellu tenke halao iha Administrasaun Postu-administrativu Remexio ou Liquidoe. Membru ne'ebé attende enkontru uluk hosi konsellu tenke desidi no konkorda enkontru tuir mai sei halao iha ne'ebé.

- 5.2 Konsellu tenke halao enkontru ho ninia membru sira regularmente.
- (1) Enkontru kada fulan tolu
  - (2) Enkontru Anual
- 5.3 Enkontru kada fulan tolu sei halao kada fulan tolu iha tinan ida nia laran (ezemplu iha inisiu Marsu, Juñu, Setembru, no Dezembru). Iha enkontru, membru sira hosi Konsellu tenke diskuti issu no perukupasaun ne'ebé diriji ba jestaun floresta ne'ebé própriu no rekursu naturál sira ne'ebé relasiona ba floresta iha bacias hidrograficas no proteje vida moris komunidadade nian.
- 5.4 Enkontru annual tenke halao iha fim do anu ou inisiu tinan (ezemplu iha mediu fulan Desembro ou inisiu fulan Janeiro). Iha enkontru, membru sira hosi Konsellu tenke reve no avalia situasaun hosi bacias hidrograficas no atividade ne'ebé halao hosi Konsellu iha tinan ida nia laran.
- 5.5 Enkontru especial hosi Konsellu bele halao iha tempo ne'ebé det hosi Presidente ou mayoria hosi membru sira karik nia/sira hanoin ne'e nesesáriu atu halao ba interese hosi membru sira nian no mos konsellu.
- 5.6 Notifikasaun enkontru tenke distribui ba membru sira hotu pelumenus semana ida (1) antes data enkontru nian. Notifikasaun ne'e tenke tau objetivu, tempu no fatin hosi enkontru.
- 5.7 Karik membru balun la attende enkontru, nia tenke delega substitui ba enkontru.
- 5.8 Iha enkontru, prezensa liu hosi 50% (ou liu hosi ema nain 9) hosi membru sira no sira nia substitui tenke nesesáriu no suficiente atu konstitui quorum ba diskussaun ofisiál hosi Konsellu ho prezensa hosi Presidente ka Vice-presidente. Karik quorum mak la too, ne'e bele suspende hosi membru sira.

### **Seksaun 6: Halo Desizaun**

- 6.1 Rezolusaun no decisaun ruma hosi Konsellu tenke halo, adopta, no efetivu ho approva liu hosi 50 % (liu hosi ema nain 9) hosi membru ofisiál hosi Konsellu iha enkontru ne'ebé suficiente atu konstitui quorum no tuir prezensa hosi Presidente ka Vice-presidente.
- 6.2 Desizaun ruma ne'ebé halo sem iha prezensa hosi Presidente ou Vice-presidente sei konsidera invalidu.

### **Seksaun 7: Komite**

- 7.1 Konsellu, ho rezolusaun ne'ebé adopta hosi maioria membru sira, bele kria komite especial ne'ebé tenke servisu kona ba servisu spesifiku ne'ebé delega ba. Membru sira hosi komite especial tenke hili hosi membru sira hosi Konsellu iha enkontru.
- 7.2 Enkontru hosi komite tenke halao tuir tempo no fatin no tenke fiksi hosi presidente komite ne'ebé refere ou konsensu hosi maioria hosi membru sira hosi komite. Foo notifikasaun uluk ba membru hotu hosi komite antes enkontru.
- 7.3 Karik fornese rezolusaun hosi Konsellu, membru ofisiál balun hosi komite tenke konstitui quorum iha diskussaun komite.
- 7.4 Iha desizaun ruma hosi komite tenke halo ho approva hosi maioria hosi membru ofisial hosi komite.

## **Seksaun 8: Amandamentu**

- 8.1 Ordenansa/regulamentu ne'e bele altera, amenda, anula ou aumenta ho approva liu hosi 50 % hosi membru ofisial.

## ***Appendix-4.1***

***Objetivu no Prosesu hosi  
Formulasaun Planu Jestaun Bacias  
Hidrograficas***



## Apéndise-4.1 Objetivu no Prosesu hosi Formulasau Planu Jestaun Bacias Hidrograficas

Loron \_\_\_Fulan\_\_\_Tinan\_\_\_

### 1. Objetivu

Objetivu prinsipál hosi formulasau planu jestaun bacias Hidrograficas mak atu fornese matadalan jestaun ba konsellu jestaun bacias Hidrograficas hosi bacias Hidrograficas xxxxxx iha maneira ne'ebé própriu no sustentável. Liutan, planu jestaun bacias hidrografica ne'e espera atu uza hanesan baze ida ba proposta ne'ebé sei submete ba MAP, Ministério/Diresaun nacional sira seluk, ONG no institusaun internacional ne'ebé fó apoiu fundu hodi hetan suporta finanseiru no tékniku liutan iha futuru.

### 2. Liña Jerál hosi Planu Jestaun Bacias Hidrograficas

Planu Jestaun Bacias Hidrograficas ne'e sei kompostu hosi kapítulu nen (6) tuir mai ne'e:

- Kapítulu 1 Introdusaun
- Kapítulu 2 Kondisaun atúal hosi bacias hidrograficas
- Kapítulu 3 Issu prinsipál ba jestaun bacias hidrograficas
- Kapítulu 4 Meta, Objetivu, no aproxima sira
- Kapítulu 5 Planu asaun
- Kapítulu 6 Sistema no prosedimentu hosi Implementasaun

### 3. Prosesu hosi Formulasau Planu Jestaun Bacias Hidrograficas

Konsellu jestaun bacias hidrograficas sei halao enkontru/sesaun tuir mai hodi diskuti konteúdu hosi planu jestaun bacias hidrograficas.

No.	Objetivu enkontru	Partisipante	Fatin	Tempu
1	Introdusaun hosi kondisaun atúal hosi bacias hidrograficas	Membru sira hosi konsellu jestaun bacias Hidrograficas, DNFGGBH, edefisiu MAP Municipiu	Edefisiu postu-administrativu	Loron ida
2	Diskusaun kona-ba meta no matadalan prinsipiu hosi planu jestaun bacias Hidrograficas	ditto	ditto	Loron ida
3	Diskusaun kona-ba atividade prinsipál hosi planu ne'e	ditto	ditto	Loron ida
4	Diskusaun kona-ba kuadru servisu institusional no Orariu Implementasaun hosi planu ne'e.	ditto	ditto	Loron ida

### 4. Prosedimentu ba Formulasau/Finalizasaun hosi Planu ne'e

DNFGGBH ho fasilidador sira/ONG sei halo ezbosu kapítulu ba planu jestaun bacias hidrograficas. Konsellu jestaun bacias Hidrograficas sei diskuti ezbosu kapítulu sira ne'ebé halo hosi DNFGGBH iha enkontru sira ne'ebé temi ona iha leten. depois de refléta ona sujestaun no komentariu hosi Membru sira, planu jestaun bacias hidrograficas ne'e sei finaliza.

Fin de dokumentu



## ***Apéndice-4.2***

***Sumariu hosi Planu Jestaun Bacias  
Hidrograficas ba Mota Inan Laclo no  
Comoro***





## Apendise-4-2: Sumariu hosi Planu Jestaun Bacias Hidrografikas ba Mota Inan Laclo no Comoro

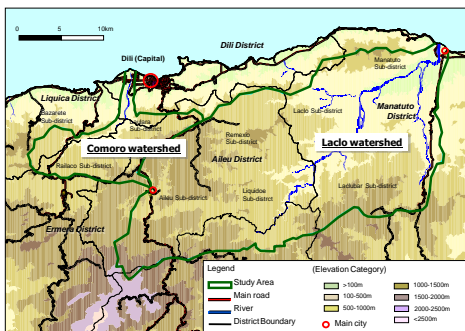
1

## 1. Fundamentu

- JICA hamutuk ho DNF halao ona estudu dezenvolvimentu ho naran\* Estudu ba Jestaun Bacias Hidrografikas Integradu Bazeia ba Komunitade iha Mota Inan Laclo no Comoro hosi Novembru 2005 to'o Marsu 2010.
- Rezultadu hosi estudu ne'e mak planu jestaun bacias hidrografikas integradu bazei ba komunitade (iha ne'e refere ba " planu jestaun bacias hidrografikas) ba mota inan sira ne'ebe mensiona dezenvolve ona.
- Planu jestaun bacias hidrografikas sei uza hanesan master plan ba jestaun floresta no rekursu natural sira seluk iha mota inan sira ne'ebe mensiona ona.

2

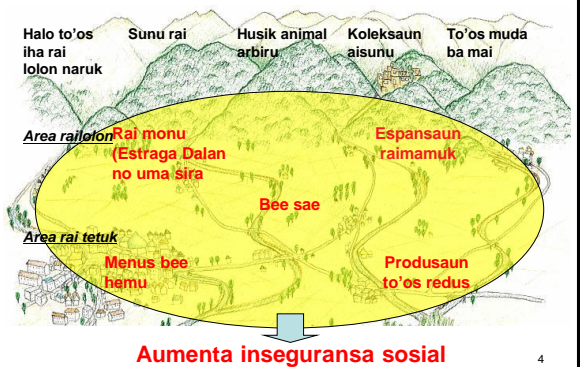
## 2. Fatin hosi Mota Inan Laclo no Comoro



Mota inan Lacló (130,000 ha)  
Mota inan Comoro (20,000 ha)

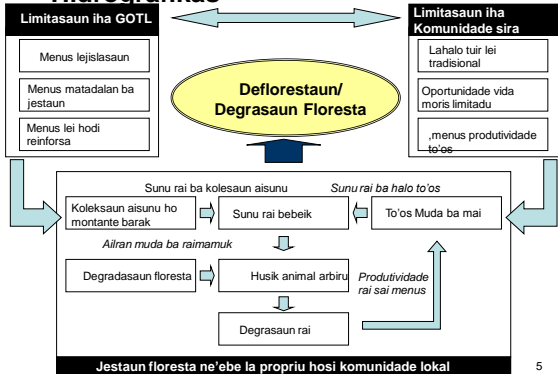
3

## 3. Situasaun Atual hosi Mota Inan sira



4

## 4. Problema sira ba Jestaun Bacias Hidrografikas



5

## 5. Konseitu Baziku hosi Planu Jestaun

### 5.1 Meta no Objetivu hosi CBIWMP

#### Meta:

Atu proteje no hadia ambiente bacias hidrografikas hosi bacias hidrografikas tarjetu

#### Intensaun Projeitu

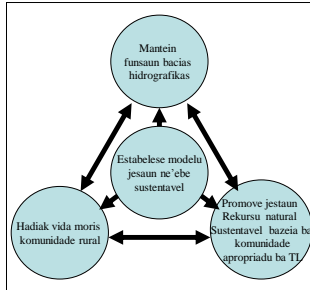
Atu alkansa jestaun bacias hidrografikas ne'ebe integradu no sustentavel liuhusi balansu jestaun rai/floresta ho propriu no hamenus ema kiak

6

## 5. Konseitu Baziku hosi Planu Jestaun

### 5.2 Apoxima baziku ba CBIWM

- (1) Mantein funsaun hosi bacias hidrografikas
- (2) Hadiak vida moris komunidade rural
- (3) Promove jestaun rekursu natural bazeia ba komunidade ne'ebe apropiadu ba Timor-Leste
- (4) Estabese modelu kuadru servisu institusional ida ba jestaun bacias hidrografikas



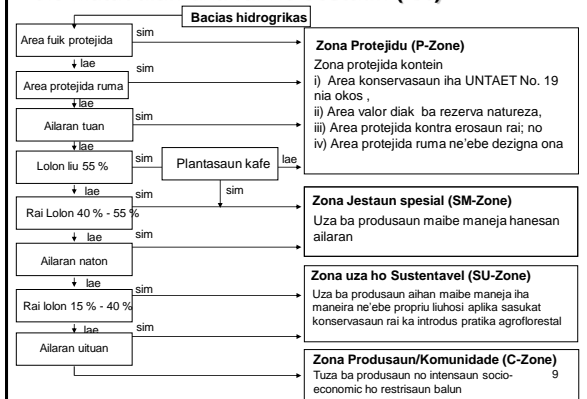
## 5. Konseitu Baziku hosi Planu Jestaun

### 5.3 Matadalan Uza Rai no Jestaun (1/3)

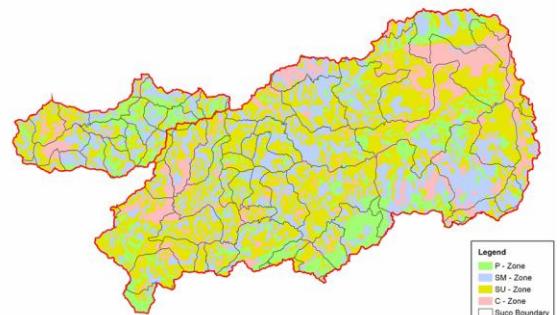
Intensaun CBIWMP introdus "zonasaun" iha jestaun bacias hidrografikas no klasifika area ba zona hat (4) tuir imajen geographical no uza rai agora.

Zona	Posivel uza rai
Zona Protejida (P-Z)	Ailaran tuan
Zona jestaun spesial (SM-Z)	Ailaran naton, plantasaun kafe/aifuan, produsaun floresta
Zona uza ho Sustentavel (SU-Z)	Plantasaun kafe/aifuan, to'os fohololon ho sasukat konservasau rai ka tekniku agroflorestal, husik animal tuir jestaun silvo-pastoral
Zona komunidade/produsaun (C-Z)	Tipu saida deit ba uza rai

### 5.3 Matadalan uza rai no Jestaun (2/3)



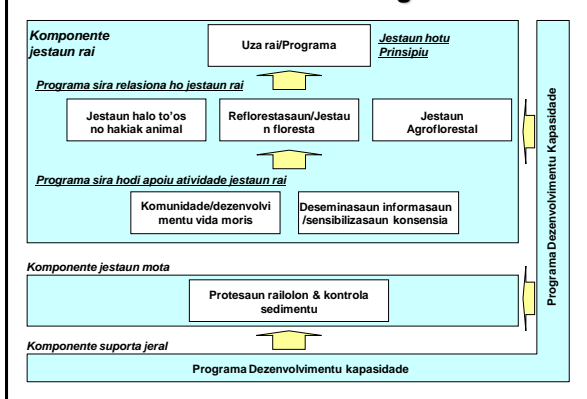
### 5.3 Matadalan Uza Rai no Jestaun (3/3)



Rezultadu hosi Zonasaun ba Mota Inan sira

10

## 6. Planu Jestaun Bacias Hidrografikas



## 7. Programa/Sub-programa prioridade

Total sub-programa 12 mak seleksiona hanesan prioridade hosi sub-programa 21.

Programa	Sub-programa prioridade
1. Uza rai	1) Planeamentu Uza Rai Parsipatoriu
2. Reforestasaun/Jestaun Floresta	2) Promosaun Kuda Ai 3) Produsaun Ai-oan
3. Jestaun Halo to'os no hakiak animal	4) Estensau Fini Bazeia ba Komunidade 5) To'os Uma hun 6) Husik animal kontroladu
4. Jestaun Agroflorestal	7) Promosaun To'os Foho Lolon Sustentavel 8) Rehabilitasaun plantasaun kafe
5. Protesaun Railolon no Kontrola sedimentu	9) Kontrola kadalak hosi inisiu
6. Dezenvolvimentu vida moris	10) Hasae rendimentu/Poupa gastu
7. Deseminasau informasaun/sensibilizasaun konsensia	11) Sensibilizasaun konsensia publiku
8. Dezenvolvimentu kapasidade	12) Dezenvolvimentu kapasidade

12

**Atividade CB-NRM potencial: Planiamentu uza rai parsipatoriu**



13

**Atividade CB-NRM potencial: Produsaun Ai-oan no Kuda Ai**



14

**Atividade CB-NRM potencial : Estensaun fini bazeia ba Komunitade**



15

**Atividade CB-NRM potencial : To'os uma hun/ Produsaun modo**



16

**Atividade CB-NRM potencial : Promosaun To'os Foho Lolon**



17

**Potential CB-NRM Activities: Coffee Rehabilitation/Improvement**



18

**Atividade CB-NRM potencial : Kontrola husik animal**



Halo kompos



Kuda aihan animal man



Halo lutu area husik animal



Bantu protein (to'os kuda aihan animal nian)

**Atividade CB-NRM potensial : Kontrola erosaun kadalak**



Erosaun kadalak iha skala kiik (ka iha etapa inisiu)



Kontrola erosaun ho lutu ai

**8. Ordem Implementasaun hosi Programa/Sub-programa Prioridade**

Etapa dahuluk:

Sub-Programa  
Planimentu Uza  
Rai Parsipatoriu

Etapa daruak:

Programa relasiona ho jestaun rau

- Promosaun kuda ai
- Promosaun produusaun Ai-oan
- Estenssaun fini bazeia ba komunidadade
- Sub-programa to'os uma hun
- Kontrola Hakiak animal ho aihan animal
- Promosaun To'os Foho lolon Susnitentavel
- Rehabilitasaun plantasaun kafe

Programa suporta

- Hasae rendimentu/Poupa kustu
- Kampana sensibilizasaun konsensia

Programa  
dezenvolvime  
ntu  
kapasidade

**End**  
**Thank you!**  
**Obrigada barak**

## ***Apéndise-4.3***

***Planu Jestaun Bacias Hidrograficas***

***ba Bacias Hidrograficas Noru***



**Apendise-4.3 Planu Jestaun Bacias Hidrografikas ba bacias  
Hidrografikas Noru**

**Planu Jestaun Bacias Hidrografikas ba  
bacias Hidrografikas Noru iha Distritu  
Aileu, Timor-Leste**



**Janeiro 2015**

**Koncelho Jestaun Bacias Hidrografikas Noru**

**Ho Assistencia hosi**

**Projeto ba Jestaun Rekursu Naturais nebe Sustentabel Baseia ba  
Komunidade implementa hamutuk ho JICA no MAP**



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## **Kapitulo 1 Introdusaun**

### **1.1 Fundamentu**

Degradasaun/deforestasaun floresta lao lais los iha Timor-Leste. Estudu foin lalais nebe halo hosi DNF ho assistencia hosi JICS iha 2013 indika katak pelmenus 184,000 ha hosi floresta nebe lakon ona iha decade ikus nee. Estudu hanesan relata katak pelmenus 170,000 ha hosi ai laran tuan nebe degrada ona ba ai laran uituan ba period hanesan. Degradasaun floresta nebe lais no deforestasaun kauja ona disaster natural, hanesan rai halai, erosaun,, no bee sae, no tamba nee, affeta ba ema nia moris iha rai laran, liu liu hirak nebe hela iha fatin nebe mak degrada ona.

Mota Laklo nee fatin bacias hidorgrafikas ida nebe mak krusial tamba akontese sunu rai, tesi ai, no koleksaun ai sunu, no husik animal iha parte leten iha bacias hidrografikas. Tamba iha funsaun nebe krusial hanesan rekursu bee ba produsaun foos nebe importante iha rai laran, hadia funsaun bacias hidrografikas, ho naran, redusaun sedimentasaun no stabilija lalaok bee, mak precisa atu mantein produsaun foos iha rai laran. Iha situasaun hanesan nee, Governo Timor Leste (GoTL), particularmente Ministerio Agrikultura no Peskas (MAP), implementa ona projeto hamutuk atu redus tendencia hosi deforestasaun no degradasaun hosi introdus floresta no approsima comunidade-baseia ba floresta/jestaun rekursu naturais ho assistencia tekniku hosi Japan International Cooperation Agency (JICA) desde 2011.

MAP no Ekipa Projeto JICA hili Bacias hidrografikas Noru, nebe mak catchments hosi tributario lo hosi Mota laklo, hanesan targetu ida hosi bacias hidrografikas ba projeto tamba hosi ninia importancia ba manutensaun hosi lalaok mota/kualidade bee iha mota laklo. Ekipa Projeto servisu ona ba desenvolvimentu hosi modelo ba floresta sustentabel no jestaun rekursu naturais iha kolaborasaun ho comunidade local iha suco tolu (3) lokalija iha bacias hidrografikas Noru ho parceria ho NGO, naran RAEBIA-Timor Leste.

Konfirma ona katak modelo nee bele ona redus insiden hosi sunu no explotaun ilegal hosi rekursu floresta iha suco tolu (3); MAP no Ekipa Projeto JICA decide atu assiste suco seluk nebe nebe iha bacias hidrografikas iha introdusaun modelo hanesan iha suco nebe refere atu proteje floresta no rekursu naturais iha bacias hidrografikas.

Iha Maio 2014, Ekipa JICA no MAP hahu ona konsultasaun ho parte nebe refere (esemplu, edeficiu administrasaun sub distritu, suco, no edeficiu distritu iha seitor relevante) kona ba formasaun hosi koncelho jestaun bacias hidrografikas hosi bacias hidrografikas Noru. Hanesan resultado hosi diskussaun, kuadru servisu hosi Koncelho Jestaun bacias Hidrografikas Noru, nebe konsiste hosi ninia vijaun, missaun, funsaun, no ho lei hosi koncelho, nebe finalija no determina hosi membro organijasaun.

Atu nune proteje no maneija floresta no ninia rekursu naturais iha Bacias Hidrografikas Noru iha maneira nebe sustentabel no apropriado, koncelho jestaun bacias hidrografikas decide atu desenvolve planu jestaun bacias hidrografikas. Koncelho Jestaun bacias hidrografikas ho assistencia hosi Ekipa Projeto no NGO asses ona kondusaun sosio ekonomiku no natureja agora, liuliu vulnerabilidade hosi area ba mudansa klimatika, no kauja deforestasaun no degradasaun floresta iha area. Koncelho mos iha diskuti konceitu basiku hosi planu jestaun bacias hidrografikas, matadalan principal ba jestaun bacias

hidrografikas nebe appropriadu, aktividade necessario ba jestaun bacias hidrografikas. Iha ikus, koncelho formula planu jestaun esplika iha dokumen nee.

## **1.2 Objektivu hosi Dokumentu nee**

Objetivu importante hosi dokumentu nee atu introdus no esplika planu jestaun bacias hidrografikas ho assaun necessario atu foti no procedur optimum no sistema ba implementasaun hosi planu, atu nune bele uja hanesan proposta atu hatama ba GoTL no mos fundu hosi instituisaun seluk ba financial no supporta tekniku iha futuro.

## **1.3 Skop hosi Planu Jestaun Bacias Hidrografikas**

Planu targetu bacias hidrografikas Noru, nebe ekstende liu hosi 12,000 ha iha Sub Distritu Remexio no Liquidoe iha Distritu Aileu. Objetivu Importante hosi planu jestaun bacias hidrografikas mak atu proteje no maneija floresta no rekursu naturais nebe relasiona ho floresta iha maneira nebe diak, tamba nee, ninia focus mak tau ba agrikultura no servisu floresta duke injeneria ba kontrola sediment/kontrola mota.

## **1.4 Komposisaun hosi Planu Jestaun bacias Hidrografikas**

Planu jestaun bacias Hidrografikas Noru kompostu hosi kaptilu neen (6):

Kapitulo 1: Introdusaun

Kapitulo 2: Kondisaun Rai agora hosi bacias hidorgrafikas Noru

Kapitulo 3: Issu agora kona ba Bacias Hidrografikas

Kapitulo 4: Metas, Objetivu, no Approsimasaun Basiku

Kapitulo 5: Planu Assaun

Kapitulo 6: Procedur ba no sistema Implementasaun

Hanesan hatudu iha leten, Kapitulo 1 introdus fundamentu no skop hotu hosi planu jestaun bacias hidrografikas. Kapitulo 2 esplika situasaun agora hosi bacias hidrografikas inklui ninia vulnerabilidade ba mudansa klimatika. Diffikuldade bot iha jestaun hosi bacias hidrografikas mak analija iha Kapitulo 3. Kapitulo 4 esplika kuadru servisu hotu hosi planu jestaun bacias hidrografikas (esemplu, objetivu, no approsimasaun nebe foti), no Kapitulo 5 propoin assaun/intervensaun necessario nebe foti ba atinji objetivu hosi planu jestaun bacias hidrografikas. Kapitulo ikus, kapitulo 6, foo detalho hosi oinsa planu nee tenki implementa.

## Kapitulo 2 Kondisaun Atual hosi Bacias Hidrografikas Noru

### 2.1 Fatin no Situaun Administrativu hosi Bacias Hidrografikas

Mota Noru mak mota sorum hosi Mota Laklo. Hahu hosi balija entre sub distritu Aileu no Sub Distritu Remexio no mos Liquidoe no halai tuir balija entre Sub Distritu Remexio no Liquidoe to kurva ho mota sorun seluk hosi mota Laklo, mota Eraibanaubere, nebe lokalija iha balija ho Sub distritu Laclou/Laclubar hanesan hatudu iha Figura 2-1. Total naruk hosi Mota Noru pelmenus 25 km no ninia area suli kobre 12,852 hosi area.

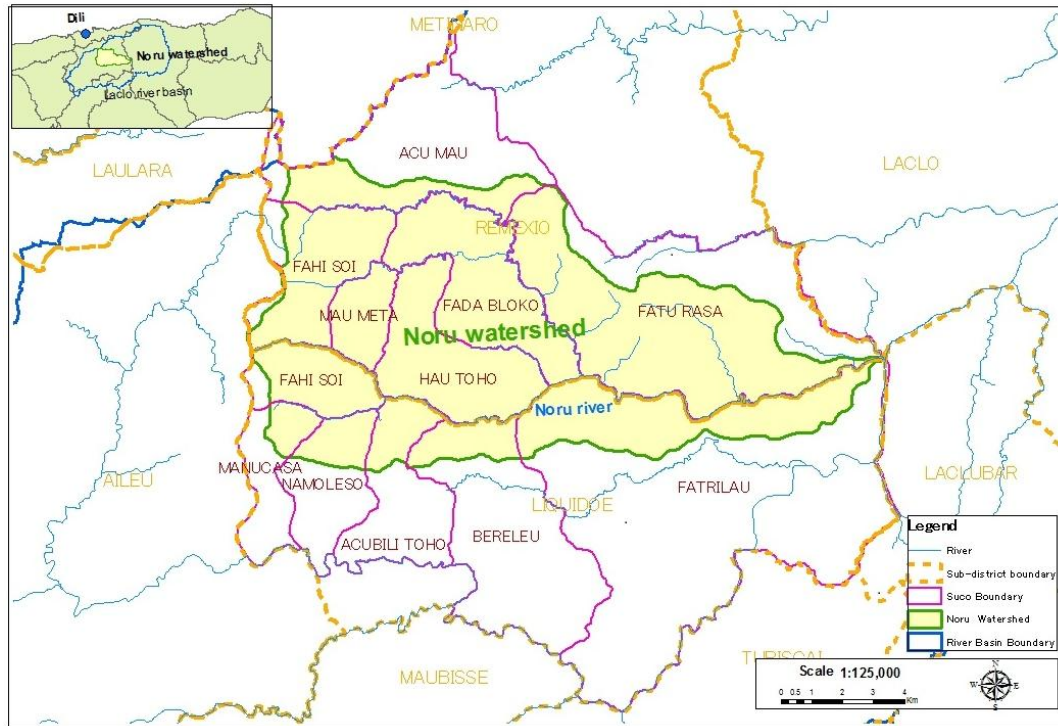


Figura 2-1 Fatin Bacias Hidrografikas Noru

Administrativamente, area suli luan total hosi suco 12 iha Sub Distritu rua, ho naran suco neen iha Sub distritu Remexio no Suco neen seluk iha Sub Distritu Liquidoe nebe mak hanesan iha okos.

Table 2-1 Suco relasiona ba Bacias Hidrografikas

Sub-distritu	Sucos	Total Area	Area iha Bacias Hidrografikas
Remexio	Acumau	3,875 ha	742 ha
	Fadabloco	1,766 ha	1,766 ha
	Fahisoi	1,404 ha	1,200 ha
	Faturasa	4,819 ha	3,334 ha
	Hautoho	1,528 ha	1,528 ha
	Maumeta	533 ha	533 ha
Liquidoe	Acubilitoho	1,272 ha	361 ha
	Belereu	2,685 ha	411 ha
	Fahisoi	803 ha	713 ha
	Faturilau	7,791 ha	1,700 ha
	Manucasa	784 ha	215 ha
	Nameloso	1,045 ha	338 ha
Remexio/Liquidoe	Others (Suco Saboria, etc)		11 ha
Total		28,316 ha	12,852 ha

Rekursu:

## 2.2 Kondisaun Natural

### 2.2.1 Iklima (Udan no Temperatura)

Hanesan parte balun iha Timor Leste, bacias hidrografikas mak iha tipu iklima fain udan nian karakteristikiku ho distinsaun klaru entre entre tempo udan no maran. Norueste fatin anin mosu hosi Novembro to Marsu, (fulan 4~5) lorin principal tempo udan ba area. Tempo bai loron kauja hosi anin sudoeste nebe mosu hosi Maio too Outubro (fulan 7~8).

Tamba la iha sasukat udan nian nebe mak halo iha area, maske iha tempo Indonesia, la iha dadus hosi udan monu rai iha bacias hidrografikas. Koleksaun dadus udan monu rai iha stasaun iha zona hosi bacias hidrografikas, ho naran Dili, Aileu, no Manatuto, nebe mak uja karakteristikiku hosi medida udan monu rai iha area.

**Tabela 2-2 Distribuisaun Udan Monu Rai Mensal no Mediu Annual iha Kapital Distritu**

(Unit: mm)

Distritu central	Jan	Feb	Mar	Abril	Maio	Junho	Julho	Aug	Sept.	Oct.	Nov	Dec	Media	Elevasaun (m)
Dili	156	125	147	115	74	43	22	17	15	26	70	138	940	0~100
Aileu	326	248	179	108	3	33	7	8	5	190	184	225	1,514	900
Manatuto	116	118	84	57	38	23	12	1	6	11	27	80	573	0~60

Rekursu: ALGIS, baseia ba dadus entre tinan 1962 no 1974 excepto ba Dili (1953-1999) no Aileu (2004-2005).

Maske iha dadus udan monu rai iha stasaun udan nian hosi MAP entre tinan 2006 no 2009, la tau ba konsiderasaun tamba la dun konsistencia.

Dadus nee bele sujere katak bacias hidrografikas bele tuir karakteristikiku tuir lalaok udan monu rai:

- Udan tau annual naton karik liu ou minus hosi 1,000 mm hahu hosi 600 mm to 1,000 mm;
- Elevasaun nebe ass liu iha area mak, udan mos ass;
- Parte ida okos besik ba iha ligdsun ho mota Eraibanaubere bele parte nebe mak maran liu iha bacias hidrografikas; no
- Udan monu rai koncentra iha fulan lima nia laran hosi Desembro to Abril.

Hanesan mos, laiha dadus seluk iklima nian nebe kolekta iha area. Temperatura media iha bacias hidrografikas manas liu duke iha Aileu fila, nebe mak 21 °C, maibe minus liu iha Dili, nebe 26 °C.

### 2.2.2 Rai lolon

Bacias Hidrografikas lokalija iha fatin nebe ass ba parte mediu hosi Mota Laklo, rai lolon nebe mak pelmenus iha 25 % okupa liu hosi 60 % hosi total area hosi bacias hidrografikas. Komposisaun rai lolon hosi bacias hidrografikas ninia sumario hanesan tuir mai.

**Tabela 2-3 Grao hosi Rai lolon iha Bacias hidorgrafikas**

Rai lolon	Area (ha)	Rasio (%)
0-8 %	372	2.9
8-15%	990	7.7
15-25%	2,817	21.9
25-40%	5,122	39.9
40-55%	2,560	19.9
> 55%	991	7.7
<b>Total</b>	12,852	100.0

Rekursu: Ekipa Projeto JICA

Figura 2-2 hatudu distribuisaun hosi area rai lolon iha bacias hidrografikas.

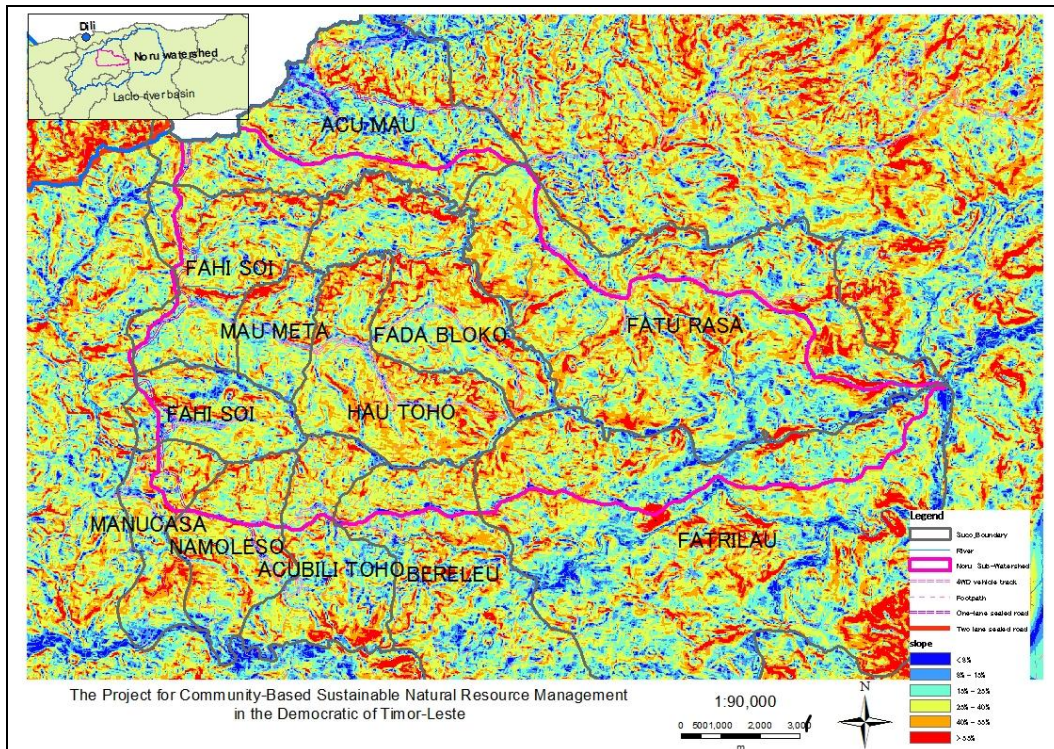


Figura 2-2 Mapa Rai lolon hosi Bacias Hidrografikas Noru

### 2.2.3 Elevasaun

Elevasaun hosi Bacias Hidrografikas hahu hosi 330 m to 1,500 m hosi tasi. Pontu hosi bacias hidrografikas lao tuir balija entre Sub Distritu Aileu no Sub Distritu rua, Remexio no Liquidoe, no parte okos liu lokalika hamutuk hosi Mota Noru no Eraibanaubere iha parte leste suco Suco Faturasa (Remexio) no Faturirau (Liquidoe).

### 2.2.4 Uja Rai no Kobre Vegetasaun

Resultado hosi assesmentu halo hosi Ekipa JICA no MAP ho naran “Estudu kona ba Jestaun Bacias Hidrografikas Integrado Baseia ba Komuidade iha Mota Lacleo no Comoro ,” nebe implementa ona hosi 2005 to 2010, nebe mak refere hotu atu determina uja rai agora no vegetasaun kobre hosi Bacias hidrografikas Noru. Assesmentu hosi estudu nee halo uja Landsat imageries foti iha tempo rua nebe diferente iha tinan 2003, nebe suplementa hosi aerial photos foti iha tinan 2003. Resultado nee hatudu katak vejetasau kobre no uja rai hosi bacias hidrografikas Noru bele klasifika ba klase hanesan tuir mai eight (8).

Tabela 2-4 Kategoria hosi Vejetasaun no Uja Rai

Kategoria hosi Vejetasaun no Uja rai	Kriteria hosi Kategorijasaun
1. Floresta	
1-1: floresta besik (natural)	Canopy closure : > 70%
1-2: floresta mediu (natural)	Canopy closure : 30 - 70 %
1-3: Woodlot (natural)	Canopy closure : 15 - 30 %
2. Ailaran	Domina hosi ai laran
3. Dut (inklui husik animal no toos foho lolon)	Domina hosi dut (La iha ai)
4. Plantasaun kafe	Plantasaun kafe no ai mahun (Casuarina/Falcata)
5. Rai mamuk (inklui husik animal no toos foho lolon)	La iha vejetasaun ou dut nebe sunu
6. Sandbar/River bed	

Rekursu: Relatorio final hosi Estudu kona ba Jestaun Bacias Hidrografikas Integrado Baseia ba Komunitade iha Mota Lacro no Comoro, JICA, Marsu 2010

Figura 2-3 hatudu uja rai agora no mapa vejetasaun kobre bacias hidrografikas. Area distribui ba uja rai ida idak/klase vejetasaun iha suco nebe refere no mos bacias hidrografikas nebe apresenta iha Tabela 2-5, no summario hanesan tuir mai.

Table 2-5 Area hosi Klase Uja Rai Ida idak iha Bacias Hidrografikas

Klase uja rai	Bacias Hidrografikas	
	(ha)	(%)
1. Floresta	5,005.4	38.9
1-1: Ai laran besik (natural)	600.5	4.7
1-2: Floresta Medium (natural)	2,705.3	21.1
1-3: rai ai nian (natural)	1,699.6	13.2
2. Ailaran	4,898.3	38.1
3. Dut	1,065.4	8.3
4. Plantasaun kafe	95.1	0.7
5. rai mamuk	1,685.0	13.1
6. Sandbar/River bed	101.5	0.8
Total	12,851.3	100.0

Rekursu: Relatorio final hosi Estudu kona ba Jestaun Bacias hidrografikas Integrado baseia ba Komunitade iha Mota Laklo no Komoro, JICA, Marsu 2010

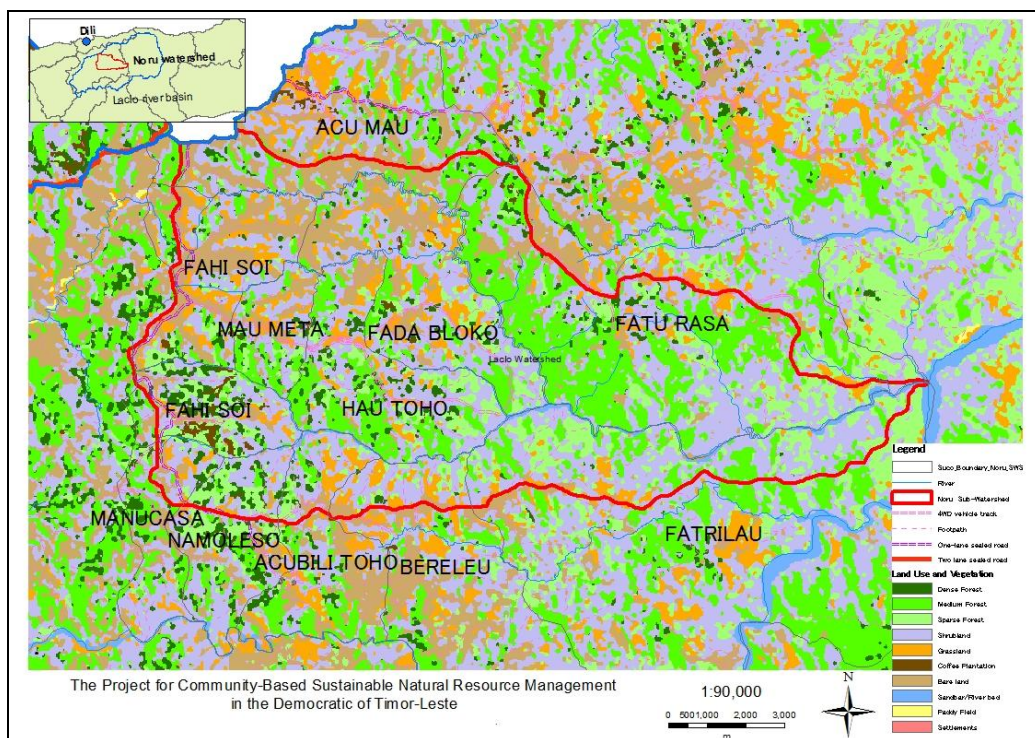


Figura 2-3 Uja Rai Agora no Mapa Vejetasaun Bacias Hidrografikas Noru



## 2.2.5 Potensial hosi Rai Halai

Studu hanesan halo hosi JICA no MAP mos assess potensial hosi erosaun rai iha Mota Lacro no Comoro uja metodo USEL. Estudu klasifika suco iha mota ba iha grau lima baseia ba potensial risku nebe bot, ho naran i) perigu, ii) Ass, iii) Moderadu, iv) Baixo, no v) baixo liu. Tuir mai tabela hatudu risku potensial hosi rai halai iha suco 12 relasiona ba Bacias hidrografikas Noru.

**Table 2-6 Potensial hosi Erosaun Rai iha Bacias Hidrografikas**

Part hosi Sucos	Baixu liu		Baixo		Moderado		Ass		Perigu		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
Acumau	388	52%	19	3%	22	3%	23	3%	291	39%	742	100%
Fadabloco	1,029	58%	21	1%	26	1%	34	2%	657	37%	1,766	100%
Fahisoi	594	49%	26	2%	32	3%	38	3%	510	43%	1,200	100%
Faturasa	1,587	48%	87	3%	108	3%	117	4%	1,434	43%	3,334	100%
Hautoho	822	54%	22	1%	26	2%	35	2%	624	41%	1,528	100%
Maumeta	296	56%	14	3%	23	4%	32	6%	168	31%	533	100%
<b>Liquidoe</b>												
Acubilito	193	54%	10	3%	13	3%	16	4%	130	36%	361	100%
Belereu	221	54%	11	3%	15	4%	16	4%	148	36%	411	100%
Fahisoi	482	68%	24	3%	24	3%	28	4%	155	22%	713	100%
Faturilau	921	54%	47	3%	60	4%	68	4%	604	36%	1,700	100%
Manucasa	132	61%	7	3%	8	4%	8	4%	60	28%	215	100%
Nameloso	199	59%	7	2%	10	3%	14	4%	108	32%	338	100%
Total	6,864	53%	295	2%	367	3%	429	3%	4,889	38%	12,841	100%

Rekursu: Relatorio final hosi Estudu kona ba Jestaun Bacias Hidrografikas Integrado Baseia ba Komunitade iha Mota Laklo no Komoro, JICA, Marsu 2010

Hanesan hatudu iha leten, pelmenus 41 % hosi bacias hidrografikas nebe konsidera erosaun rai leten nebe ass. Bacias hidrografikas no suco nebe refere bele affeta att liu karik progresso degradasaun floresta no area nebe mak iha udan bot durante tempo udan.

## 2.3 Kondisaun Socio-Ekonomiku

### 2.3.1 Demografia

Nee dificil atu identifika numero nebe esatu hosi uma kain no populasaun nebe hela iha bacias hidrografikas, tamba la iha peskija investoria focus eksklusivamente kona ba bacias hidforgrafikas nebe halo ona. Maske nune, dadus demografik hosi suco 12 bele substitui ba hirak nebe iha bacias hidrografikas. Tabela tuir mai hatudu kondisaun demografik hosi suco 12 nebe relasiona ba bacias hidrografikas iha tinan 2004 no 2010.

**Table 2-7 Populasaun iha Sub Distritu no entre Bacias Hidrografikas Noru**

Sub-distritu	Suco	2004 Census <1		2010 Census <2		Populasaun aumenta (%)
		No. familia	Populasaun	No. familia	Populasaun	
Remexio	Acumau	315	1,775	357	2,491	6.72
	Fadabloco	186	927	323	2,214	23.14
	Fahisoi	249	1,265	184	1,190	-0.99
	Faturasa	295	1,538	148	1,083	-4.93
	Hautoho	302	1,555	137	931	-6.69
	Maumeta	87	362	87	500	6.35
	Sub-total	1,434	7,422	1,236	8,409	2.22
Liquidoe	Acubilito	228	975	206	839	-2.32
	Belereu	151	685	179	1,153	11.39
	Fahisoi	325	1,464	187	1,216	-2.82
	Faturilau	136	668	98	672	0.10
	Manucasa	103	443	92	440	-0.11

Sub-distritu	Suco	2004 Census <1		2010 Census <2		Populasaun aumta (%)
		No. familia	Populasaun	No. familia	Populasaun	
	Nameloso	279	1,209	187	1,072	-1.89
	Sub-total	1,222	5,444	949	5,392	-0.16
Total	Sub Distritu 13	2,656	12,866	2,185	13,801	1.21

Rekursu: <1: Census populasaun 2004 no Uma kain (2004), DNS

<2: The Population and Housing Census (2010), NSD and UNEPA

Hanesan nebe indika iha tabela iha leten, populasaun hosi area nebe aumta hosi 1.21 % kada tinan. Karik populasaun aumta sei mantein hanesan nee, total populasaun iha bacias hidrografikas sei dala rua ba tinan 58. Tamba nee, importancia hosi jestaun rai nebe proprio sei aumta, hanesan pressaun populasaun iha rai no floresta sei mos aumta

### 2.3.2 Produsaun Agrikultural

#### (1) Produsaun ai han

La iha dadus nebe spesifikamente hatudu produsaun agrikultural iha bacias hidrografikas no mos iha suco 12 nebe refere. As the homogeneity of agricultural conditions is high among the sucos in the watershed, resultado hosi uma kain nebe entrevista iha survey nebe halao hosi ekipa Projeto JICA-MAP CB-NRM iha suco tolu (esemplu Suco Faturasa, Fadaboco, no Hautoho) iha tinan 2011 nebe uja ba klarifikasaun hosi kondisaun agrikultura iha bacias hidrografikas.

Ai han importante nebe produs iha bacias hidrografikas mak batat, aifarina, fehuk, no koto, nebe mak jeralmente kuda iha toos hanesan tuir maneira kuda kahur. Ai han importante nebe mak ninia estimasaun pelmenus 1 ha, no produsaun batat menus hosi 1 ton/ha. Fatin kuda no produsaun hosi ai han importante iha suco tolu mak hanesan tuir mai.

**Tabela 2-8 Area kuda no Volume produsaun hosi Ai han Importante kada Uma kain Iha Suco Tolu (3) (esemplu., Suco Faturasa, Fadaboco, no Hautoho)**

Suco	Batat <1		Aifarina <1		Fehuk <1		Forerai / koto <2		Kafe	
	Area kuda	Produsaun	Area kuda	Produsaun	Area kuda	Produsaun	Area kuda	Produsaun	Area kuda	Produsaun
	(ha/HH)	(ton/HH)	(ha/HH)	(ton/HH)	(ha/HH)	(ton/HH)	(ha/HH)	(ton/HH)	(ha/HH)	(ton/HH)
Faturasa	1.0	0.50	1.0	0.50	1.0	0.40	1.0	0.10	0.6	0.12
Fadaboco	1.0	0.50	1.0	0.40	0.9	0.27	0.3	0.03	0.9	0.18
Hautoho	1.0	0.50	1.1	0.66	1.1	0.55	0.4	0.04	0.9	0.18

Rekursu: Projeto ba Jestaun Rekursu Naturais nebe Sustentabel baseia ba Komunitade, Novembro 2013, JICA

Note: <1 Sira kuda iha plot hanesan kuda kahur.

<2 Forerai em jeral kuda ketak hosi ai han seluk, no koto seluk hanesan koto mean em jeral kuda kahur ho ai han seluk hanesan batat.

#### (2) Pratika halo toos

Em jeral, uma kain iha bacias hidrografikas iha toos ida ou rua nebe mak uja ba produsaun ai han kada tinan no toos balun nebe uja rotasaun. Toos balun iha bacias hidrografikas, liuliu hirak nebe iha suco tolu, medida konservaasaun rai, hanesan teras fatuk, teras banku, no teras kontur kompos applika ona ba parte balun hosi toos permanente. Maibe, teknik balun sidauk introdus ba mayoria toos nebe iha bacias hidrografikas.

Maske hadia sistema toos introdus ona iha suco tolu, mayoria toos iha bacias hidrografikas sei tuir dalan halo toos konvensional. Tuir mai tabela esplika Pontus importante hosi sistema konvensional no hadia sistema halo toos.

Tabela 2-9 Komparasaun entre Pratika Konvensional no Sistema halo toos nebe diak

Pratika halo toos	Pratika Konvensional	Sistema halo toos nebe diak
Hamos	◆ Tesi no sunu	◆ Tesi ◆ Kolekta dut halo kompos out au iha kanal kontur
Applikasaun kompos	◆ Laiha	◆ Preparasaun kompos uja dut no foer animal
Preparasaun rai	◆ Rai la fila ◆ Halo kuak no kuda ◆ La applika kompos	◆ Fila rai (uja animal) ◆ Applikasaun kompos hanesan adubu
Fini/Kuda	◆ Kuda ho random ◆ Kahur kahur ho ai han barak	◆ kuda tuir lina ◆ Kuda kahur liu hosi ai han rua to tolu
Manutensaun	◆ Hamos (dala ida) ◆ La aumenta adubu	◆ Hamos (dalabarak) ◆ Applikasaun adubu ben
Post koileta	◆ Tara batar iha ai leten	◆ Behu depois hamaran no rai iha jereken

Rekursu: Ekipa Projeto JICA

### 2.3.3 Produsaun Animal

Animal konsidera hanesan asset nebe mak bele uja hanesan oferta ba eventu ceremonia (esemplu; kajamentu, ema mate, no halo lia) no ba for any emergent expenditures. Maske familia hotu iha bacias hidrografikas iha animal balun, liuliu fahi no bibi. Familia balun, liuliu sira nebe mak hela iha Suco Faturasa, iha karau balun, maibe mayoria iha karau no mos bibi/fahi.

### 2.3.4 Seguransa Ai han

Peskija intervista uma kain hosi Projeto CB-NRM iha Suco Faturasa, Fadabloco, no Hautoho indika katak mayoria hosi comunidade iha suco infrenta menus ai han entre fulan Novembro/Desembro no Fevereiro/Marsu. Rajaun importante ba la iha seguransa ai han konsidera menus produsaun, ai han limitado, lakon durante rai, no menus oportunidade atu hetan rendementu. Tendencia nee hare atu to prevail almost all the hilly and area foho iha Timor Leste, hanesan relatorio assesmentu halo hosi FAO/WFP iha 2007 indika katak iha det 40 % hosi familia iha rai laran bele asegura ai han. Tabela tuir mai hatudu resultado hosi assesmentu kona ba balansu ai han iha Timor-Leste.

Tabela 2-11 Assessmen Balansu Ai han

<b>1. Total Availability</b>	<b>70,820</b>	<b>26,740</b>	<b>26,909</b>	<b>124,469</b>
1-1 Opening stocks	1,000	0	0	1,000
1-2 Production	69,820	26,740	26,909	123,469
<b>2. Total Utilization</b>	<b>70,821</b>	<b>113,104</b>	<b>26,909</b>	<b>210,833</b>
2-1 Food Use	89,902	74,918	14,984	179,803
2-2 Seed, Feed & Losses	18,974	2,249	807	22,030
2-3 Closing Stocks	1,000	8,000	0	9,000
2-4 Cross-commodity substitution	39,055	27,937	11,118	0
<b>3. Import Requirements</b>	<b>0</b>	<b>86,364</b>	<b>0</b>	<b>86,364</b>
3-1 Anticipated Commercial Imports	0	71,000	0	71,000
<b>4. Uncovered deficit &lt;3</b>	<b>0</b>	<b>15,364</b>	<b>0</b>	<b>15,364</b>

Komunidade iha bacias hidrografikas foti ona stratejia hanesan tuir mai atu infrenta ho menus ai han, hanesan i) redusaun numero han, , ii) redusaun montante han, iii) konsumu ai han alternativu (esemplu; aifarina no fehuk), no iv) konsumu ai han emerjenvia (esemplu kontas no uhi).

### 2.3.5 Estimasaun Nivel Rendementu

Peskija intervista halo hosi Projeto CB-NRM no mos estimasaun rendementu annual kada familia iha Suco Faturasa, Fadabloco, no Hautoho iha US\$ 829, 954, no 760. Dadus nee fo hanoin katak kondisaun ekonomiku iha area bacias hidrografikas iha kondisaun nebe kiak hanesan nebe kompara ba iha standar nasional. Rendementu uma kain no gastus peskija halao hosi Diresaun Nasional Statistika iha tinan 2011 iha skalau bot relata katak standar rendementu mensal kada familia iha area rural ho ninia estimasaun pelmenus US\$ 310 inklui aseguara ai han. Dadus rua nee la necessario kompara ho seluk direktamente tamba targetu hosi peskija nebe diferente, maibe dadus bele sujere ninia tendencia hosi bacias hidrografikas hanesan nebe esplika iha leten.

## 2.4 Vulnerabilidade ba Mudansa Klimatika

### 2.4.1 Anticipa Mudansa Klimatika

Mudansa klimatika konsidera hanesan ameasa nebe bele hare maske iha Timor-Leste. Agora dadauk lalaok udan monu rai laos det iha bacias hidrografikas maibe mos iha nivel nasional varidade hosi tinan ba tinan; tamba nee, produsaun agrikultura komesa ona menus. Kondisaun iklima hare bele ona prikte iha nasaun.

Assaun Programa Adaptasaun Nasional (NAPA) kona ba mudansa Klimatika hatama hosi GoTL ba UNFCCC iha Desembro 2010 projecta mudansa klimatika iha Timor-Leste ba tina 30 tuir mai hanesan tuir mai.

**Tabela 2-12 Projected Climate Changes for the Next 30 Years**

Parameter	Mudansa																																	
Temperatura	<p>Em jeral, temperature sei aumenta sem iha variabilidade nebe significant. Eventu temperature bot nebe espera atu aumenta <b>intensity and length</b>. Tabela tuir hatudu mudansa iha temperature ba tinan 30 tuir mai.</p> <table border="1"> <thead> <tr> <th>Periodo</th> <th colspan="3">Projected changes (°C)</th> </tr> <tr> <th></th> <th>2020</th> <th>2050</th> <th>2080</th> </tr> </thead> <tbody> <tr> <td>Annual</td> <td>+0.8</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Dec.- Feb.</td> <td>+0.7</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Mar. - Maio</td> <td>+0.8</td> <td>+1.5</td> <td>+2.2</td> </tr> <tr> <td>Jun. - Aug.</td> <td>+0.7</td> <td>+1.5</td> <td>+2.1</td> </tr> <tr> <td>Sep. - Nov.</td> <td>+0.9</td> <td>+1.5</td> <td>+2.1</td> </tr> </tbody> </table> <p>Rekursu: Assaun Programa Adaptasaun Timor-Leste ba Mudansa klimatika</p>	Periodo	Projected changes (°C)				2020	2050	2080	Annual	+0.8	+1.5	+2.2	Dec.- Feb.	+0.7	+1.5	+2.2	Mar. - Maio	+0.8	+1.5	+2.2	Jun. - Aug.	+0.7	+1.5	+2.1	Sep. - Nov.	+0.9	+1.5	+2.1					
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Sep. - Nov.	+0.9	+1.5	+2.1																															
Udan monu rai	<p>Mudansa tuir mai nebe pridekte udan monu rai iha Timor Leste.</p> <ul style="list-style-type: none"> <li>- media udan monu rai annual espera bele aumenta;</li> <li>- tempo bai loron sai maran liu; no</li> <li>- Intensidade udan bot nebe espera aumenta, maibe frekuencia hosi eventu sei tun.</li> </ul> <p>Mudansa iha udan monu rai iha rai laran ba tinan 30 mak hanesan tuir mai.</p> <table border="1"> <thead> <tr> <th rowspan="2">Periodo</th> <th colspan="3">Montante Udan Monu rai</th> <th rowspan="2">Intensidade udan monu rai projeksaun</th> </tr> <tr> <th>2020</th> <th>2050</th> <th>2080</th> </tr> </thead> <tbody> <tr> <td>Annual</td> <td>+ 2%</td> <td>+ 4%</td> <td>+ 6%</td> <td>+ 1-2%</td> </tr> <tr> <td>Des.- Feb.</td> <td>+ 3%</td> <td>+ 5%</td> <td>+ 6%</td> <td>+ 2-4%</td> </tr> <tr> <td>Mar. - Maio</td> <td>+ 4%</td> <td>+ 5%</td> <td>+ 5%</td> <td>+ 2-4%</td> </tr> <tr> <td>Jun. - Aug.</td> <td>0%</td> <td>0%</td> <td>- 5%</td> <td>+ 6-8%</td> </tr> <tr> <td>Sep. - Nov.</td> <td>0%</td> <td>0%</td> <td>- 1%</td> <td>+ 4-6%</td> </tr> </tbody> </table> <p>Rekursu: Assaun Programa Adaptasaun Nasional Timor-Leste National ba Mudansa Klimatika</p>	Periodo	Montante Udan Monu rai			Intensidade udan monu rai projeksaun	2020	2050	2080	Annual	+ 2%	+ 4%	+ 6%	+ 1-2%	Des.- Feb.	+ 3%	+ 5%	+ 6%	+ 2-4%	Mar. - Maio	+ 4%	+ 5%	+ 5%	+ 2-4%	Jun. - Aug.	0%	0%	- 5%	+ 6-8%	Sep. - Nov.	0%	0%	- 1%	+ 4-6%
Periodo	Montante Udan Monu rai			Intensidade udan monu rai projeksaun																														
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Jun. - Aug.	0%	0%	- 5%	+ 6-8%																														
Sep. - Nov.	0%	0%	- 1%	+ 4-6%																														

Tropikal Siklon	Frekeuncia no naruk hosi eventu nebe espera atu hamenus, maibe ninia intensidade espera sai ass.
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Rekursu: Assaun Programa Adaptasaun Nasional (NAPA) kona ba Mudansa Klimatika, GoTL, 2010

Tamba nee, kondisaun iklima hosi bacias hidrografikas mos espera atu muda tuir dalam hirak tuir mai:

- Iha tempo bai loron, temperatur bele ass, no mos udan mos sai menus;
- Iha tempo udan, udan tau forte, hanesan udan tau kada horas, bele sai ass, no udan monu rai bele prolunga;
- Anin sai bot; no
- Lalaok udan sei sei varidade hosi tinan ba tinan.

### 2.4.2 Imapktu Potensial ba komunidadade iha Bacias Hidrografikas

Konsidera mudansa klimatika iha bacias hidrografikas, Conselho Jestaun Bacias hidrografikas halo assesso potensial impaktu kon aba kondisaun moris no ekonomiku iha bacias hidrografikas hanesan tuir mai.

**Tabela 2-13 Impaktu Potensial kon aba Kondisaun Moris no Ekonomiku hosi Komunidadade iha Bacias Hidrografikas**

Seitor	Impaktu Potensial kauja hosi Mudansa Klimatika <1
Agrikultura	<ul style="list-style-type: none"> <li>◆ Produsaun batar bele redus tamba temperature as effete on pollination and kernel set.</li> <li>◆ Produsaun aifarina bele aumenta tamba aifarina precisa temperature nebe ass no radiasaun solar ass ba desenvolvimento tahan optimal.</li> <li>◆ Temperatura manas bele aumenta inceden peste no moras.</li> <li>◆ Estraga ai han hosi anin bot bele aumenta.</li> <li>◆ Some farms may be eroded due to the expansion of gully erosion during the rainy season.</li> <li>◆ Produtividade animal bele redus tamba rekursu limitado no menus bee durante tempo bai loron.</li> <li>◆ Rai bekur bele menus tamba progresso dekomposisaun organiku rai durante tempo bai loron no erosaun rai leten durante tempo udan.</li> </ul>
Floresta no Agrofloresta	<ul style="list-style-type: none"> <li>◆ Inciden sunu ai laran bele aumenta durante tempo udan.</li> <li>◆ Inciden rai monu bele aumenta liuliu iha rai lolon.</li> <li>◆ Species balun la moris diak iha bacias hidrografikas tamba aumenta temperatura.</li> <li>◆ Kafe no sabraka nia moris bele affeta tamba manas makas iha tempo bai loron.</li> <li>◆ Forests along small streams may be washed out due to heavy rains during the rainy season.</li> </ul>
Infrastrutura	<ul style="list-style-type: none"> <li>◆ Rede servisu rural bele estraga ho udan bot.</li> <li>◆ Bee nebe mak uja hanesan rekursu bee bele estraga tamba udan makas durante tempo udan.</li> <li>◆ Risku hosi estraga uma no infrastrutura seluk bele aumenta tamba mosu anin bot hosi incident sunu rai no rai halai.</li> </ul>
Bee, Saniamento, no Saude	<ul style="list-style-type: none"> <li>◆ Asseso ba bee bele reds tamba bee balun maran.</li> <li>◆ Volume bee bele redus tamba durante tempo bai loron, qualidade bee affeta hosi kontaminaun durante tempo udan.</li> <li>◆ Inciden hosi respiratorio no infessaun asosiadu bele aumenta iha tempo bailoron.</li> <li>◆ Incident moras no infessaun bele aumenta durante tempo udan.</li> <li>◆ Risku hosi kontaminaun ai han no beneno bele aumenta durante tempo udan.</li> <li>◆ Risku hosi kanek no mate hosi accidente kauja hosi disaster naturais bele aumenta.</li> </ul>

Nota: Impaktu potensial nebe identifika hosi Ekipa Projote JICA no MAP baseia ba “Assaun Programa Adaptasaun Nasional Timor Leste ba mudansa klimatika (2010)” no “mudansa klimatika no populasaun aumenta iha

Timor-Leste: Implikasaun Seguransa Aihan (2012)” no identifika potensial nebe reve no konfirma hosi koncelho jestaun bacias hidrografikas.

#### 2.4.3 Vulnerabilidade hosi Bacias Hidrografikas ba Mudansa Klimatika

Hanesan esplika iha leten, kondisaun moris no sosio ekonomiku hosi komunidadade iha bacias hidrografikas konsidera vulnerable tebes tamba mudansa klimatika. Tamba nee, necessario atu hametin resiliens hosi komunidadade iha bacias hidrografikas, nebe hamahan ann liu ba konvensional halo toos iha rai lolon hanesan sira nia vida moris loron loron, uja rekursu naturais hanesan rekursu importante ba bee hemu nian, no iha risku nebe ass hosi disaster naturais no eventu nebe asociado, hanesan anin bot, sunu rai, no rai halai.

## Kapitulo 3 Issu Aktual iha Jestaun Bacias Hidrografikas no Parceiro relevante ba Jestaun Bacias Hidrografikas

### 3.1 Issu iha Jestaun Bacias Hidrografikas

#### 3.1.1 Historia Degradasaun Ai laran

Baseia ba diskussuun kona ba situasaun actual hosi bacias hidrografikas Noru entre membro sira hosi koncelho jestaun bacias Hidrografikas Noru no resultado hosi survey profil suco nebe halao iha suco balun ho bacias hidgrofikas Noru, nee avalia katak deforestasaun nebe rigorosu no degradasaun ai laran hahu iha okupasaun Indonesia no kontinua too agora hanesan ninia sumario tuir mai.

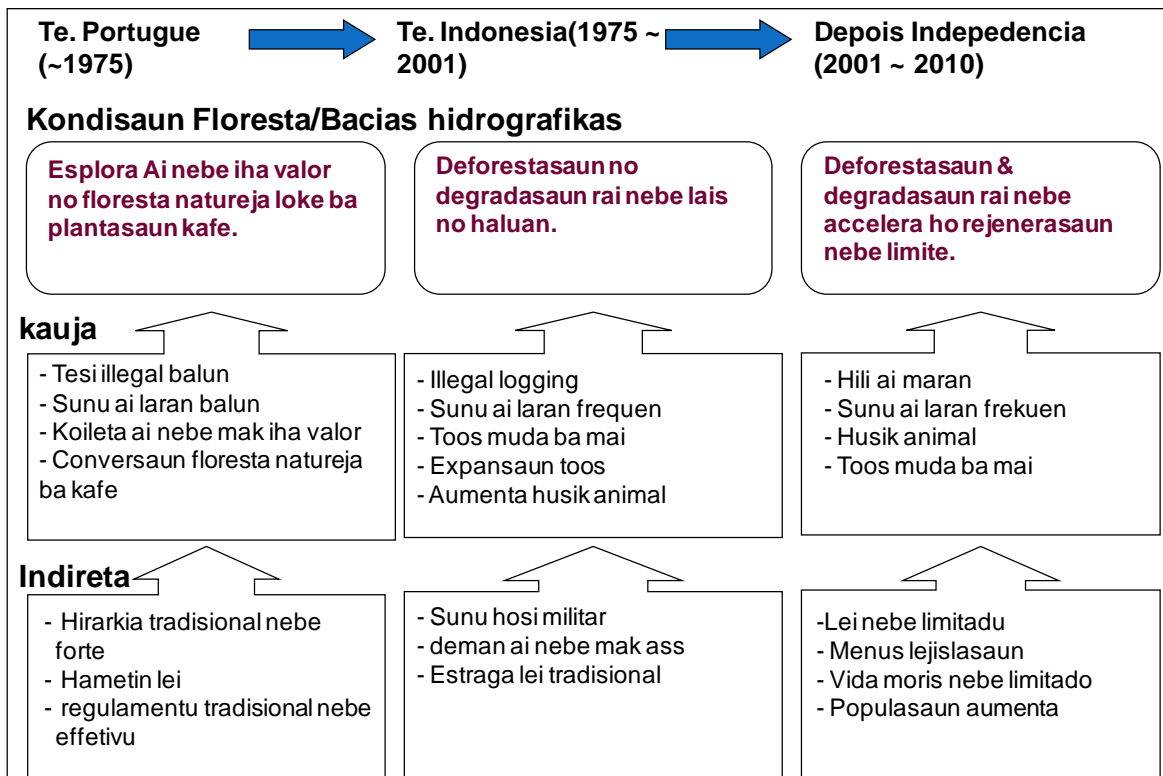
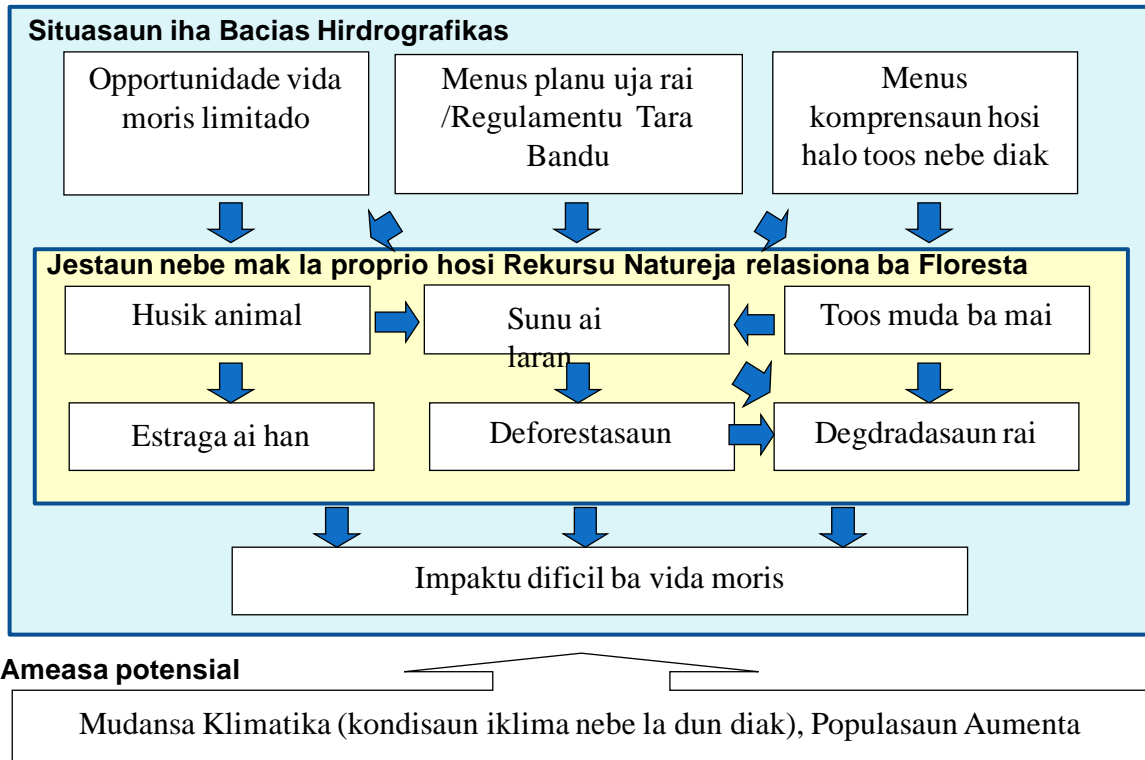


Figura 3-1: Historia Degradasaun Ai laran iha Bacias Hidrografikas

Iha tempo Portuguese, aktividade estraga ambiente, hanesan toos muda ba mai no explotaun illegal, nebe la existe iha area tamba sistema tara bandu nebe efetivu regula aktividade ema nian hanesan sistema nebe liga ba hametin lei. Efetividade hosi sistema tara bandu sai fraku depois nasaun nee okupa hosi Indonesia hosi tinan 1975. Deforestasaun accelera makasa hosi militar Indonesia no kompania logging durante peirodo hanesan. Desde nee, ema barak iha bacias hidrografikas mantein pratika aktividade estraga.

#### 3.1.2 Issu agora iha Bacias Hidrografikas

Agora, akontese sunu ai laran kauja hosi toos muda ba mai no animal husik arbiru mak kauja bot hosi degradasaun no deforestasaun ai laran iha bacias hidrografikas. Toos muda ba mai mos halo erosaun rai leten nebe nebe mos kauja degradasaun toos. Kauja no relasaun effeitu kona ba degradasaun ai laran iha bacias hidrografikas ninia sumario hanesan tuir mai.



**Figura 3-2: Kauja no Effeitu Relasaun iha Degradasaun Floresta**

Deforestasaun no degrasaun rai nebe mak att liu influencia ba vida moris komunidadade local hanesan nebe mak hatudu iha leten. Situasaun bele sai att liu karik kondisaun iklima nebe muda no favorabel no numero hosi uma kain nebe uja rai iha suco sei aumenta kuandu populasaun aumenta.

### 3.2 Parceiro nebe relasiona ba Bacias Hidrografikas Noru

#### 3.2.1 Parceiro Importante

Organijasaun tuir mai no grupo hosi ema nebe konsidera hanesan parceiro importante relasiona ba jestaun hosi bacias hidrografikas Noru.

- Administrasaun Distritu
- Admnistrasaun Sub Distritu Remexio & Liquidoe
- Suco nebe lokalija iha bacias hidrografikas
- MAP Distritu/DNF
- Officias Ekstensaun
- Guarda Floresta
- ND ba Ambiente
- PNTL
- SAS sub-distritu iha Remexio & Liquidoe
- Igreja
- NGO (AMAR, WV, Plan, Haburas, RAEBIA)

Importancia hosi parceiro no sira nia relasaun ba jestaun bacias hidrografikas mak analija hanesan tuir mai.



Tabela 3-1: Resultado hosi Analija Parceiro

No.	Naran	Importancia iha Jestaun Bacias Hidrografikas	Relevancia ba (Involvementu iha) Jestaun Bacias Hidrografikas
1.	Administrasaun Distritu	- Importante tebes tabas ninia servisu foo approva ba administrasaun sub distritu atu servisu iha jestaun bacias hidrografikas no fornese matadalan hanesan ba aktividade relevante bajestaun bacias hidrografikas.	- La ia involve direta iha jestaun bacias hidrografikas
2.	Administrasaun Sub Distritu Remexio & Liquidoe	- Importante tebes tamba sira hanesan iha autoridade ba aktividade iha bacias hidrografikas.	- Relevante ass - Involve direta iha jestaun bacias hidrografikas tamba iha nia fatin
3.	Suco nebe lokalija iha bacias hidrografikas	- Importante tebes tamba chefi suco mak responsabilija ba aktividade iha nivel suco no komunidadade mak sai jector ba rai no ai laran iha bacias hidrografikas.	- Relevante ass - Involve direta iha jestaun bacias hidrografikas tamba komunidadade iha suco mak nain iha area.
4.	MAP/DNF Distritu	- Importante tebes Administrasaun Distritu.	- La direta involve iha jestaun bacias hidrografikas
5.	Extensionista	- Importante tebes tamba sira servisu ho komunidadade.	- Relevante tebes - Involve direta iha jestaun bacias hidrografikas tamba sira servisu iha bacias hidrografikas.
6.	Guarda floresta	- Importante tebes tamba sira mak orienta komunidadade hare ba floresta nebe sustentabel no jestaun bacias hidrografikas.	- Relevante tebes - Involve direta iha jestaun bacias hidrografikas, maibe nee dificil ba sira atu halo viajen regularmente tamba nia la hela iha area bacias hidrografikas.
7.	ND ba ambiente	- Importante tebes tamba ND ba ambiente mos servisu ba konservasaun floresta.	- La involve direta tamba sira nia edeficiu la iha nivel sub distritu.
8.	PNTL	- Ladun importante tamba jestaun bacias hidrografikas laos servisu hosi PNTL.	- Involve direta iha jestaun bacias hidrografikas tamba PNTL servisu ho komunidadade atu prevene aktividade ilegal inklui sunu ai laran.
9.	SAS iha Sub Distritu Remexio & Liquidoe	- Importante tebes tamba SAS bele foo hanoin no ajuda komunidadade atu proteje floresta no area iha rekursu bee.	- Relevante tebes tamba SAS nia servisu mak atu proteje rekursu bee. - Involve direta tamba ninia edeficiu mos iha sub distritu.
10.	Igreija	- Ladun importante tamba igreija la iha papel ida kona ba jestaun bacias hidrografikas.	- Relevante tebes tamba ninia servisu atu orienta komunidadade local.
11.	NGOs (AMAR, WV, Plan, Haburas, RAEBIA)	- Importante tebes tamba NGO nebe implementa ona aktividade balun nebe relevante ba bacias hidrografikas.	- La direta ou kontinua involve iha jestaun bacias hidrografikas tamba sira la servisu kona ba bacias hidrografikas.

### 3.2.2 Koncelho Jestaun Bacias Hidrografikas Noru

#### (1) Vijaun no Missaun hosi Koncelho Bacias Hidrografikas

Koncelho Jestaun Bacias Hidrografikas Noru nebe estabesele iha Augusto 2014 ho assistencia hosi Projeto JICA-MAP ho naran “Jestaun Rekursu Naturais nebe Sustentabel baseia ba Komunidadade.” Membro sira hosi Koncelho konkorda katak vijaun hosi Koncelho mak atu proteje ho diak no maneija floresta, rai, no no rekursu bee iha bacias hidrografikas Noru atu hadia kondisaun vida moris hosi residente iha bacias hidrografikas no stabilija forneseментu bee ba area rai tetuk.

Specifikamente, Koncelho mos approva missaun atu atinji vijaun mak hanesan tuir mai.

- Atu fornese matadalan no orientasaun ba lider suco iha suco nebe refere ba jestaun nebe sustentabel hosi floresta no rekursu naturais nebe relaciona ba floresta (esemplu , NTFPs, rai no bee) iha bacias hidrografikas;

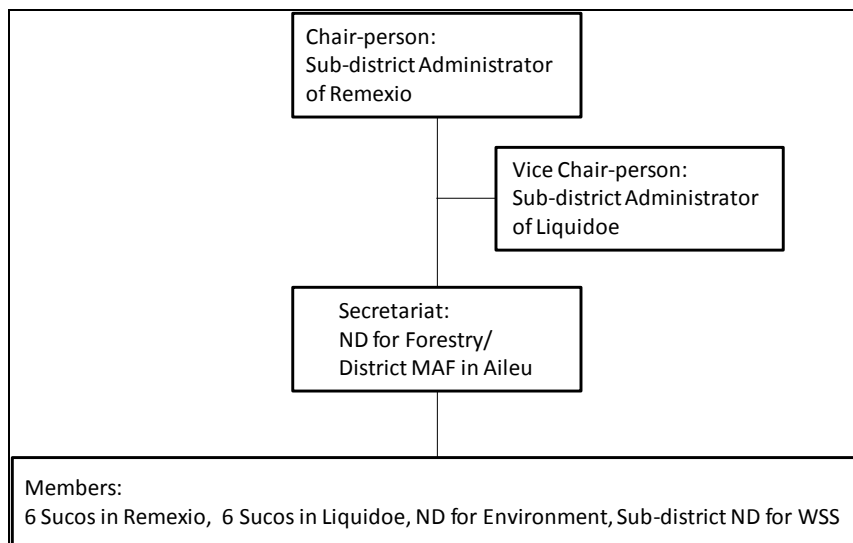
- Atu fornese lideransa iha harmonija interese no aktividade suco iha bacias hidrografikas atu atinji floresta nebe sustentabel no jestaun rekursu naturais nebe relasiona ba floresta iha bacias hidrografikas;
- Atu foti inisiativu iha planu, implementa no avalia jestaun floresta no rekursu naturais nebe relasiona ba floresta iha maneira nebe proprio no sustentabel no hadia vida moris local iha bacias hidrografikas;
- Atu ajuda lider suco iha suco nebe refere atu hasae konciencia hosi floresta nebe sustentabel no jestaun rekursu naturais nebe relasiona ba floresta entre comunidade iha suco nebe refere;

Atu promove assaun necessario ba floresta nebe sustentabel no rekursu naturais nebe relasiona ba floresta iha bacias hidrografikas iha koordenasau ho governo relevante no organijasaun non governmentais no mos organijasaun internacionais;

- Atu ajuda lider suco iha suco nebe refere foo floresta nebe iha valor no rekursu naturais nebe relasiona ba floresta ba iha jeresau tuir mai iha suco nebe refere; no
- Atu fahe esperiencia iha bacias hidrografikas ho unidade governo lokal (suco, sub-distritu, no distritu) iha bacias hidrografikas seluk iha Timor Leste atu promove floresta nebe sustentabel no jestaun rekursu naturais nebe relasiona ba floresta iha nivel bacias hidrografikas.

(2) Membro hosi Koncelho Jestaun Bacias Hidrografikas

Koncelho kompostu hosi presidente ida (1), vice presidente ida (1), sekretariadu ida (1) no membro seluk hanesan nebe mak hatudu iha tuir mai.



**Figura 3-3: Strutura Organijasaun hosi Koncelho Jestaun Bacias Hidrografikas Noru**

Administrador Sub Distritu Remexio mak iha funsau hanesan presidente Koncelho, no Administrador Sub Distritu Liquidoe hanesan vice presidente. DNF no MAP, ou Distritu Aileu, mak iha funsau hanesan sekretariado hosi Koncelho. Chefs de Suco hosi suco 12 (esemplu suco (6) iha Remexio no suco neen seluk (6) iha Lequidoe), edeficiu NDWSS iha Sub Distritu, no DNF Sub Distritu konstitui membro hosi Koncelho Jestaun Bacias Hidrografikas.

(3) Funsau hosi Koncelho Jestaun Bacias Hidrografikas

Atu atinji ninia vijaun no hakonu vijaun, Koncelho Jestaun Bacias Hidrografikas espera atu performa funsau hanesan tuir mai:

- atu formula planu jestaun bacias hidrografikas ho assistencia hosi governo relevante no organijasaun non governmentais;
- atu prepara planu assaun annual atu implementa planu jestaun bacias hidrografikas iha tinan inisiu;
- atu monitor no avalia implementasaun hosi planu assaun annual iha fim do ano;
- atu koordena implementasaun hosi planu jestaun bacias hidrografikas ho governo relevante no organijasaun non governmentais;
- atu prepara enkontro regular kada fulan tolu atu monitor situasaun hosi bacias hidrografikas no diskuti issu ruma nebe relevante ba jestaun nebe sustentabel hosi floresta no rekursu nebe relasiona ba floresta iha bacias hidrografikas;
- atu adopta resolusaun nebe bele enkorajen suco hotu iha bacias hidrografikas atu servisu iha floresta nebe sustentabel no jestaun rekursu nebe relasiona ba floresta iha bacias hidrografikas;
- iha enkontro banhira det situasaun precisa; no
- atu organija ekipa servisu (ou komite) atu hare ba issu importante ruma nebe bele affeta ba jestaun hosi bacias hidrografikas.

## Kapitulo 4 Metas no Objektivu Stratejiku hosi Planu Jestaun Bacias Hidrografikas

### 4.1 Metas no Objektivu Stratejiku

Objetivu importante hosi planu jestaun bacias hidrografikas mak atu atinji jestaun bacias hidrografikas nebe integrado no sustentabel ho balancu rai nebe proprio no jestaun floresta ho hadia vida moris local iha bacias hidrografikas. Tamba nee atu atinji objetivu importante, objetivu stratejiku hat (4) nebe estabelese hanesan tuir mai:

- a. Hadia no manutensaun hosi funsaun bacias hidrografikas;
- b. Hadia vida moris komunidadade lokal;
- c. Introdusaun mekanismu jestaun rekursu naturais baseia ba komunidadade (CB-NRM) iha suco nebe refere; no
- d. Estabelese kuadru servisu kolaborativu ba jestaun bacias hidrografikas.

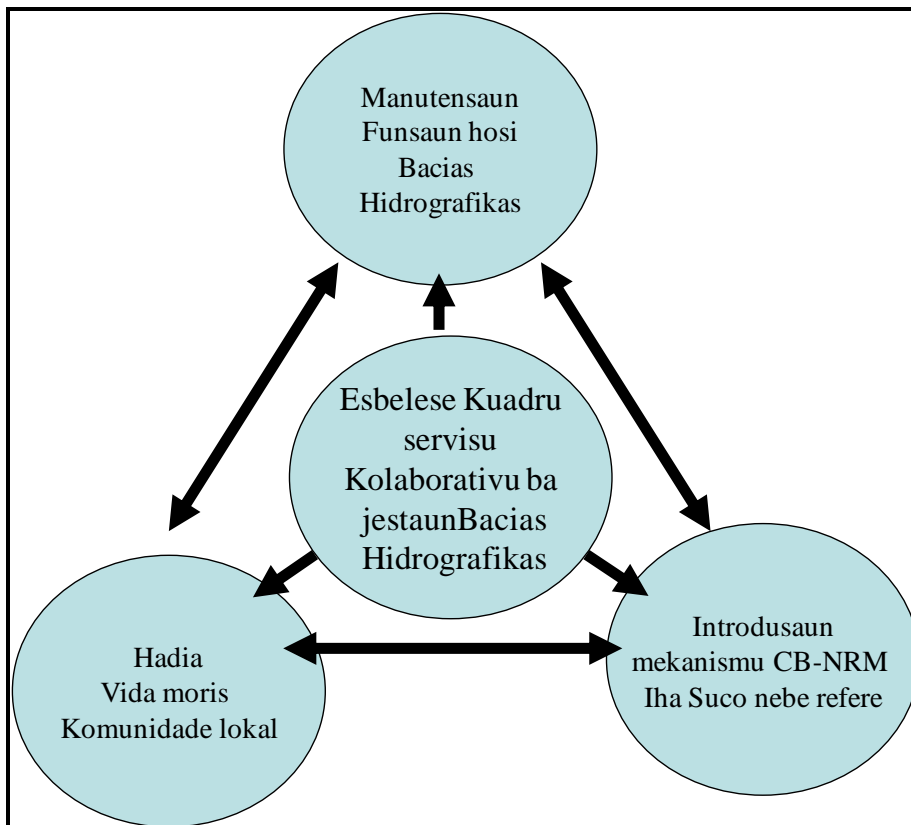


Figura 4-1: Objetivu Stratejiku hosi Planu Jestaun Bacias Hidrografikas

Detailho liu hosi objetivu stratejiku mak esprika hanesan tuir mai.

#### (1) Hadia no Manutensaun Funksaun hosi bacias Hidrografikas

Bacias hidrografikas iha funsaun importante nebe varidade ba vida moris komunidadade local laos det iha bacias hidrografikas maibe mos iha area tetuk mota Laklo nian, hanesan forneselementu bee mos nebe diak, kontrola bee halai, no provijaun hosi fatin ba produsaun agrikultura no koleksaun rekursu floresta. Funksaun nee mak esensial ba moris ema nian;

tamba nee, sira tengki mantain, ou hametin banhira det precisa, ho proteje no hadia floresta iha bacias hidrografikas.

Specificamente, planu jestaun bacias hidrografikas tengki diriji ba issu nebe mak kauja degradasaun hosi funsaun bacias hidrografikas.

- Sedimentasaun tun ba mota;
- Failha rai lolon/rai halai;
- Deforestasaun no degradasaun floresta liuliu iha fatin kritiku forneselementu bee; no
- Uja rai nebe la apropriado/uja rai nebe tuir dalan sustentabel iha rai lolon.

## (2) Hadia Vida Moris Komunitade Lokal

Hanesan nebe esplika iha Kapitulu 2 hosi planu jestaun bacias hidrografikas, mayoria rendementu familia iha bacias hidrografikas nee menus duke standar nasional no familida barak sei iha menus ai han ba iha fulan ruma iha tinan ida nia laran. Nee bele dificil ba komunitade local iha bacias hidrografikas atu muda pratika halo toos konvensional, ho naran toos muda ba mai, no aktividade estraga ambiente ba vida moris, hanesan husik animal no koileta ai maran, karik sir abele asegura seguransa ai han no rendementu nebe suficien ba sira nia moris loron loron.

Tamba nee, focus espesifiku ida hosi planu jestaun bacias hidrografikas mak thadia vida moris komunitade local iha bacias hidrografikas, liuliu sira nebe iha oportunidade limitado duke toos muda ba mai no esplotasaun rekursu floresta atu asegura ai han loron loron no rendementu.

## (3) Introdusaun hosi Mekanizmu Jestaun Rekursun Naturais nebe Sustentabel Baseia ba Komunitade (CB-NRM) iha Suco nebe refere

Mekanizmu CB-NRM, nebe introdus ona no demonstra hosi projeto hamutuk JICA-MAP ho parceira ho RAEBIA, inklui i) processo hosi hasae kapacidade lider suco no komunitade seluk atu uja no jeer rekursu nebe relasiona ba floresta iha maneira nebe produtivo no sustentabel no ii) sistema atu ajuda lider suco atu proteje rekursu nebe relasiona ba floresta hosi aktividade estraga ambiente. Liu hosi processo hosi estabeselese mekanizmu CB-NRM, lider suco no komunitade seluk involve iha i) formulaun planu uja rai futuru ho regulamentu suco, ii) hili prioridade agrikultura no servisu ekstensaun floresta, iii) institucionaliza regulamentu suco, no iv) aplikasaun tekniku/abilidade introdus hosi prioridade floresta no servisu ekstensaun agrikultura.

Suco tolu iha bacias hidrografikas, ho naran Suco Faturasa, Fadabloc, no Hautoho, assiste ona hosi Projeto hamutuk JICA-MAP iha estabeselese mekanizmu CB-NRM. Akontese sunu rai, esplotasaun illegal ba floresta, estraga ai han kauja hosi husik animal nebe komesa redus desde mekanizmu CB-NRM halao. Iha tempo hanesan, komunitade barak iha suco hanesan introdus ona no applika tekniku toos foho lolon nebe sustentabel iha sira nia toos rasik.

Mekanizmu nebe introdus iha det suco tolu hosi suku 12, objetivu stratejiku ida hosi planu jestaun bacias hidrografikas mak atu ajuda suco sia (9) nebe sei hela introdus mekanizmu CB-NRM iha suco nebe refere, atu nune bele atinji jestaun nebe sustentabel hosi rekursu nebe relasiona ba floresta iha nivel bacias hidrografikas.

(4) Hametin Kuadru servisu Kolaborativu ba Jestaun Bacias Hidrografikas

Issu ida nebe precisa diriji iha jestaun bacias hidrografikas iha Bacias Hidrografikas Noru mak incident sunu rai iha area balija entre suco nebe refere. Iha kaju balun, area balija nebe uja hosi komunidadade nebe hela besik ba husik animal no kasa; tamba nee, komunidadade dalaruma sunu area ba buka dut foun moris ou buka animal fuik. Tamba nee, esforsu kolaborativu hosi suco nebe refere precisa atu redus incident hosi sunu rai iha area balija em parallel ho introdusaun mekanismu CB-NRM iha suco nebe refere.

Atu facilita koordenasaun ko kolaborasaun entre suco 12 nebe refere hanesan nebe esplika kapitulu 3, Koncelho Jestaun Bacias Hidrografikas NORu nebe estabesele iha Setembro 2014. Tamba nee, importante atu ajuda Koncelho maksimija no hametin funsaun, liuliu hanesan platafora suco nebe refere no DNF/MAP bele servisu ba issu hirak nee iha jestaun bacias hidrografikas. Planu jestaun bacias hidrografikas tengki tau importancia ba hadia kuadru servisu kolaborativu iha kursu hosi implementasaun hosi planu.

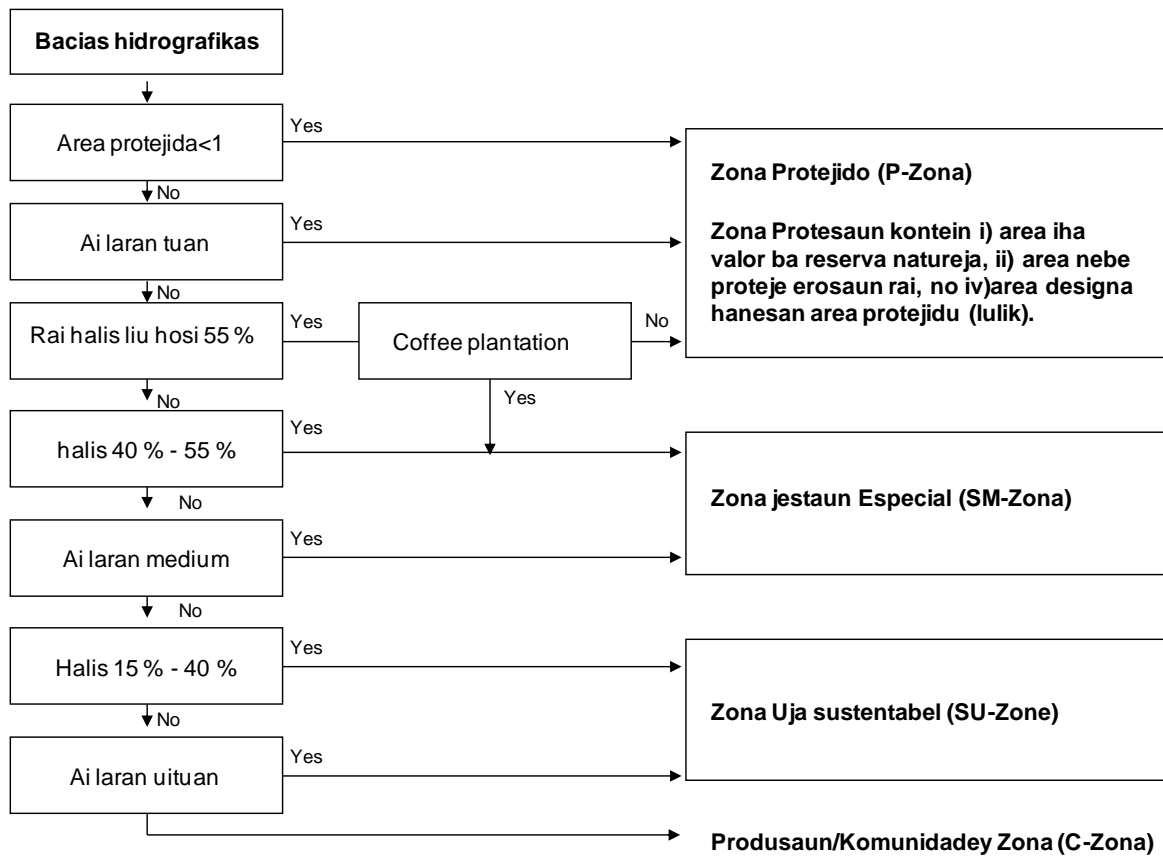
**4.2 Matadalan Jeral kona ba Jestaun Rai iha Bacias Hidrografikas**

Jestaun rai nebe proprio nee diak ba manutensaun no hadia funsaun hosi bacias hidrografikas. Tamba nee konsiderasaun tengki hare ba kobertura rai no ria lolon iha determinasaun hosi uja rai ba jestaun rai nebe proprio. Atu promove jestaun uja rai, Koncelho Jestaun Bacias Hidrografikas Noru konkorda ho DNF/MAP kona ba adaptasaun matadala tuir mai kona ba Jestaun no uja rai iha bacias hidrografikas.

**Tabela 4-1: Matadalan kon aba Jestaun no Uja rai iha Bacias Hidrografikas**

Zona	Descrisaun
P-Zona	Area nebe iha funsaun krusial bacias hidrografikas no valor ambiente nebe ass no valor ambiente nebe ass tengki proteje hanesan zona protejida. (P-zona). AI laran tuan no area rai lolon (liu hosi 55 %) maibe loas uja ba plantasaun kafe nebe klarsifika ba P-zona. Iha P-zona nia okos, uja ekonomiku balun no aktividade ekcepto hirak nebe permite regulamentu suco (esemplu., UNTEAT No. 19) nee permite. Hanesan area nebe maneija/proteje hanesan area protehidu.
SM-Zona	Floresta Mediu no area nebe nia lolon entre 40% no 55% nebe kategoria hanesan Zona Jestaun Especial (SM-Zone). Plantasaun kafe ho liu hosi nia lolon 55% mak mos klasifika iha zona nee. Area iha SM-Zona bele uja ba objetivu produsaun maibe tengki mos maneija ho simultan hanesan rai foresta atu prevene effete nebe negative ba iha rai no rekursu bee. Tamba nee, uja rai baseia ba floresta i) plantasaun kafe, ii) floresta kahur hosi ai no ai fuan, iii) floreta natureja uja ba koleksaun of NTFPs, nebe rekomenda ba area iha zona nee.
SU-Zona	Area ho lolon hosi 15% to 40% ou hirak nebe kobre ho ai laran uituan nebe kategoria iha Uja ZOna ho sustentabel (SU-Zona). Idea basiku hosi zona nee mak atu uja area ba produsaun ho objetivu atu mantein produtividade rai. Tamba nee, area bele uja ba halo toos maibe tengki maneija iha maneira nebe proprio ho applika medida konservsaun floresta ou introdus tekniku agrikultura.
C-Zona	Area nebe la pertencia hosi zona nebe mak mensiona iha leten mak kategoria hanesan ba Produsaun/Zona komunidadade. Em jeral, area iha ZC-Zona iha rai tetuk ba iha rai lolon no menus kobre hosi vejetasaun (ai laran, dut, rai mamuk). Tamba nee resultado nebe espera hosi komuinidadade local ho restiksion ruma. Toos foho lolon, rai husik animal, no natar, tau naran ruma, karik uja rai iha zona nee.

Tabela tuir mai hatudu processo hosi klasifika bacias hidrografikas Noru iha zona refere nebe esplika iha leten.



<1 Area protejida: area designa hanesan area protejida hosi comunidade.

**Figura 4-2: Tabela ba Klasifikasaun Bacias Hidrografikas ba iha ZOna Jestaun Rai**

Figura 4-3 iha pajena tuir mai hatudu distribuissan hosi zona refere iha bacias hidrografikas.

Kapitulu tuir mai, Kapitulu 5, esplika assaun importante nebe foti ba jestaun bacias hidrografikas nebe sustentabel tuir matadalan jestaun rai nebe esplika iha leten

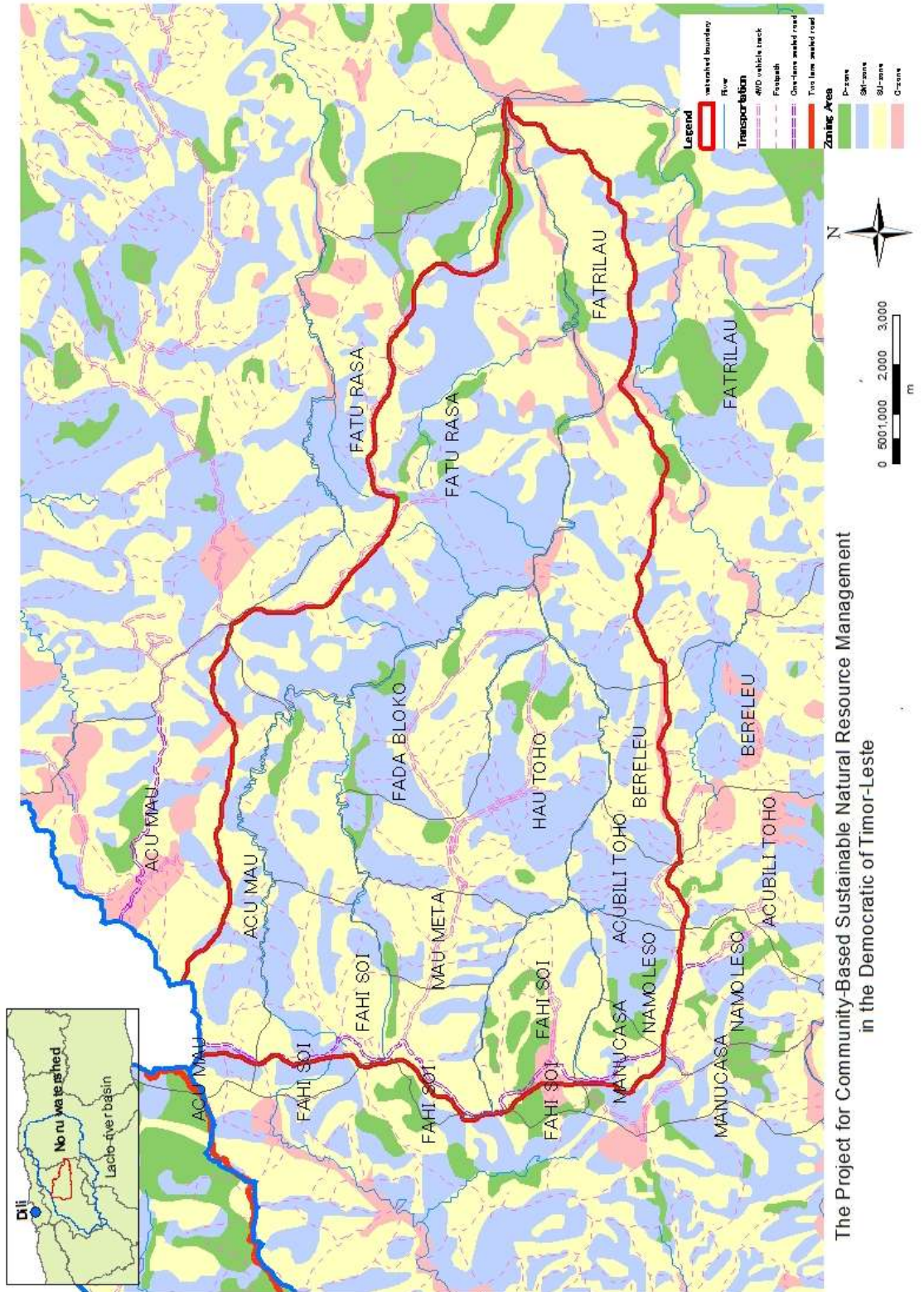


Figura 4-3: Zona Distribuissau iha Suco nebe refere iha bacias hidrografikas



## Kapitulo 5 Plano asaun ba gestaan basias hidrografikas

### 5.1 Plano asaun hotu iha kerangka

Hanesan desenhon nebe hatudu iha kraik nee, total lima (5) programa nebe proposta hanesan save ba asaun reailiza plano/mehi no strategia objetivo ba plano gestaan basias Hidrografikas nebe esplika iha capitulo 4.

Programa Lima ba oin composto husi 11 sub programa maka hanesan hatudu iha kraik:

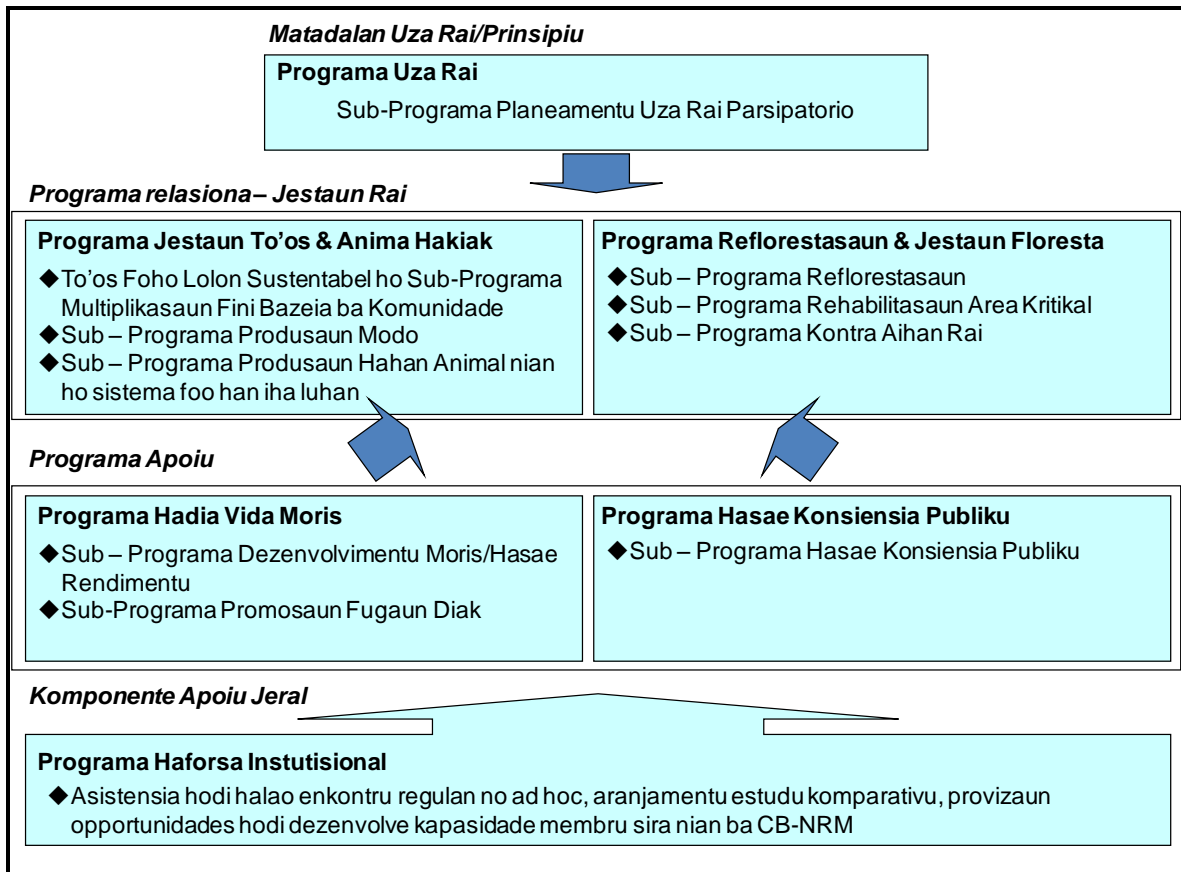


Figura 5-1: Kuadru Servisu jeral hosi Planu Jestaun Bacias Hidrografikas

Programa uza rai maka hanesan hun no akumula hotu estabesele maknismo CB-NRM iha nivel Suco atu ajuda Leader no komunidade local konsidera ho proprio maneja floresta relasaun ho rekurso Naturais iha linha hamutuk ho prinsipio gestaan rai nebe esplika iha capitulo 4. Gestaan rai relasaun ho programa, maka hanesan: i) Programa Managemento toos no animal ii) Programa reforestasaun no gestaan floresta, Objetivo atu asiste komunidade Lokal iha atu alankansa preparasaun plano iha programa uza rai. Gestaan rai relasaun ba programa suporta hanesan i) Programa Dezemvolve vida moris noii) Desiminasan informasaun/Programa hasae konsensia. Hanesan programa hotu nebe maka implementa iha gestaan nia okos no suverbisiona husi conselho basias hidrografikas Noru, specsipiko programa atu hametin funsaun husi conselho gestaan basias hidrografikas Noru no iha esperansa atu implementa rasik programa seluk nebe iha.

## 5.2 Programa Uza Rai

### 5.1.1 Objectivo

Memso utilizaun rai no principio-principio uza rai no gestaun principal iha Kapitulu 4 indika mata dalan/principio no gestaun uza rai iha basias hidrografikas, nebe persisa nafatin atu dezemvolve plano uza rai iha nivel Suco atu nunee comunidade local bele tranfere/tradus ba pratika iha sira nia fatin. Tan nee objetivo prioridde husi programa Uza rai atu comunidade local bele manaija floresta relasaun ho rekurso naturais nebe iha konsiderasaun ho principio gestaun uza rai iha linha koordenasaun ho Suco.

### 5.1.2 Strategia

Tamba Komunitade Lokal tenke responsabilidade ba gestaun rai no floresta realasaun ho rekurso naturais iha nivel local baseia ba konsepto CB-NRM uza rai no principio gestaun persiza tradus/transfere ba prepara plano uza rai liu husi suco idak – idak. Participasaun plano Uza Rai (PPLUR/PLUP)nebe The participatory land use planning (PLUP), nebe maka iha ona konhecemento no demonstra ona iha Suco Faturasa, Fadabloco, and Hautoho atu dezemvolve future plano uza rai ho regulamento Suco iha maneira participasaun, nebe uniko proposta actividade (sub-programa)nebe sei halao iha programa Uza Rai. PLUP/PPUR hatudo ona evidence nebe hanesan metode nebe efectivo atu hasae capacidade Leadersa Suco no comunidade seluk atu maneija rai Floresta, rekurso naturais iha maneira nebe sustentabilidade.

### 5.1.3 Sub programa Participasaun Plano Uza Rai (SP-PPUR)

#### (1) Objectivo

Objetivo prioridade ba sub programa nee atu ajuda Leader Suco no comunidade sira atu maneija rai no floresta relasaun ho rekurso naturais iha linha uza rai no gestaun principal iha Suco refere. Especialmente objetivo sub program atu:

- i) Asiste Lederansa Suco no comunidade local iha dezemvolvimento plano uza rai future ho regulamento suco iha gestaun rekurso naturais konsidera uza rai/gestaun principal, Uza rai agora, no traditionalmente nain ba rai;
- ii) Dezemvolve capacidade Lideransa Suco atu maneija floresta realasiona ho rekurso natrais ho maneira nebe klaro no sustenatabilidade regulamento Suco; no
- iii) Asisste comunidade Lokal iha selescasaun prioridade florest, no agrikutura serbiso extensaun nebe efectivo iha realizaun ba plano uza rai ba future.

#### (2) Area Targeto

Tamba suco supporta husi JICA-MAF projetoCB-NRM, ho naran Suco Faturasa, Fadabloco, no Hautoho, iha ona formulaun ba plno uza rai ba future hamtuk regulamento suco nebe formula tia ona plano uza rai ba future no regulamento suco idak – idak. SP-PPUR/PLUP tenke implemennta iha suco 9 seluk iha area basias hidrografikas.

#### (3) Prosedur implementasaun

SP-PLUP/PPUR atu implementa tuir acordo no balun nebe hamutuk tuir lei processo tuir etapa:

Tabela 5-1: Aktividade hosi PLUP-SP

Step	Outlines	Timeline
Formulasun Plano Uza Rai ba Future no formulasaun regulamento suco	Plano uza rai future no regulamento Suco tenke dezemvolve liuhusi diskusaun nebe seriu tuir lista iha kraik : 1) Konsultasaun ho leader Suco no comunidade konaba mekanismo PPUR/PLUP no CB-NRM ; 2) Formulaun equipa serbiso komposto husi membro conselho; 3) Hamutuk ho equipa serbiso Perpara plano serbiso ; 4) Visita ba Suco nebe iha implementa ona PLUP no CB-NRM nebe supporta husi Projeto JICA - MAF CB-NRM ; 5) Prepara Mapa uza rai Agora, uza arel pohto map nebe kobre suco (ho scale of 1/7,500~1/10,000); 6) Halo diskusaun konaba opsauun uza rai ba future no prepara mapa uza rai ba future; 7) Revisaun ba regulamento suco nebe regula gestaun rekurso naturais iha tempu passado; 8) Diskusaun konaba regulamento Suco; 9) Revisaun ba draft regulamento suco; 10) Konsultasaun ho kommunidade local konaba draft regulamento suco; 11) Halo perparasaun ba cerimonia Tara Bando; no 12) Implementa cerimonia tara Bando.	Fulan 3 - 4 (Ceremnia Tara Bando tenke halao iha inisio the Setembro bainhira kommunidade hahu halo perparasaun rai ba toos.)
Selesaun prioridade floresta no serbiso extensaun Agrikultura	Attendemento Prioridade floresta no serbiso extensaun Agrikultura nebe effektivo atu realiza mapa uza ba future nebe diak tenke hili liu husi prosesso hanean tuir mai nee : 1) Diskusaun ba attendemento floresta no serbiso ihaextensaun Agrikultura iha possibilidade atu halo attendemento selesaun primeiro; 2) Attendemento evaluasaun ba hili floreta no serbiso extensaun ho identifika ida nebe prioridade 3). Diskusaun ba prioridade floresta no serbiso Extensaun Agrikultura hamutuk ho Lider no comunidade local sira seluk no determina draf etapa serbiso extensaun.	Fulan 1~2 (Acividade bele hahu defois de prosesso PLUP iha Plano uza rai futuro)
Institutinalisaun regulamento suco	Atu institualiza regulamento suco, enkontro-enkontrotuir mai tenke halao regular/rutina husi conselho do Suco. 1) Enkontro mensal iha Suco entre membro conselho Suco atu monitor bainhira iha problema konaba gestaun rekurso naturais no diskute oinsa atu bele resolve problema nebe iha liu husi uza regulamento suco; 2) Enkontro kada Fulan rua iha nivel aldeia atu fahe informasaun ba comunidade iha nivel aldeia konaba situasaun nebe akontese iha suoc no oinsa Lider Suco uza regulamento ba resolve problemas; no 3) Enkontro Pleanri annual iha nivel suco hamutuk ho conselho do suco no comunidade atu ebalua efektividade husi regulamento suco.	Tinan 3~4 Defois 3~4, Enkontro mensal bele troka fulan rua ou fulan tolu ou tinan ida dala rua

## (4) Ideia nebe persisa

Ideia tuir mai nebe persisa ba iha implementsaun sub programa.

PLUP/PPUR

- a. Facilitador (Facilitador Prioridade, co-facilitador, and field assistencia)
- b. Hahan ba enkontro
- c. A0-sized aerial photo map nebe kobre suco (ho scale of 1: 7,500~1:10,000)
- d. Plastik transparente /plastiko sheetsho medidas A0
- e. Triplex (Liu husi medidas A0)
- e. Stationary (felt type pens, flipcharts, masking tapes, and tacks)

- f. Material no gastus ba Ceremonia Tara Bando
- g. Gastus ba estabelese libro regulamentos hamutuk ho mapa uza rai future
- h. Costo transportasaun ba facilitador no seluk- seluk tan

Selesaun prioridade Floresta no serbiso extensaun Agrikultura

- a. Facilitador (Facilitador Prioridade, co-facilitador , and field assistencia)
- b. Hahan ba enkontro
- c. Stationary (felt type pens, flipcharts, and masking tapes)
- d. Costo transportasaun ba facilitador no seluk- seluk tan

Instusionalizasaun regulamento suco

- a. Facilitador (Facilitador Prioridade, co-facilitador , and field assistencia)
- b. Hahan ba enkontro
- c. Stationary (felt type pens, flipcharts, and masking tapes)
- d. Costo transportasaun ba facilitador no seluk- seluk tan

(5) Resultado nebe espera

Ho esperansa katak Resultado tuir mai sei resulta husi implementasaun sub programa

Resultado direita

- a. Regulamento Suco ho Mapa plano uza rai future nee hetan konkordansia husi husi komunidadade.
- b. Lista prioritas floresta no serbiso extensaun Agrikultura hamutuk ho draf husi sira rasik

Impacto direita

- a. Acidente sunu ailaran/Floresta, tesi ai illegal, no husik animal arbiro reduce
- b. Rai nebe productivo iha suco aumenta

5.2 Programa Gestaun Toos no Animal

5.2.1 Objectivo

Objetivo prioridade husi Agrikultura no programa gestaun toos no animal atu modifika gestaun pratika halo toos no hakiak animal liu husi dalan sustentabilidade no formas productivo, selae hanesan iha pratika agora akontese, problema deforestasaun, degradasaun floresta hanean esplika iha kapitulo 3. Partikularmente, programa tenke fokus: i) Uza area rai lolon ho maneira sustentabilidade; ii) Hasae productivdade aihoris rai lolon; iii) Produse aihoris oioin atu hasae rendimento; no iv) Gestuaun hakiak animal ho sistema semi-intensivo atu efetivo uza animal.

5.2.2 Strategia no approximasaun

Atu realiza objetivos husi program gestaun toos no animal, tan nee sub programa tuir mai maka propoin iha possibilidade atu foti asaun.

- a. Sub program Sustenbilidade halo toos iha rai lolon hamutuk ho multiplikasaun fini baseia ba komunidadade
- b. Sub program produsaun modo
- c. Sub programa hakiak animal ho sistema intensivo

Atu komversa para atu muda pratika konvensional ba pratika sustentabilidade no formas productivo, iha tenke troka ema nia presepsaun husi pratika agora no hari sira nia kapacidade atu implementa no aplika pratika nebe iha. To convert the conventional practices into sustainable and productive forms, there is a need to change people's perception of the current practices and build their capacity to introduce and apply such improved practices. Ho nunez strategia ba sub programa tuir mai tenke adopta no implementa.

- a. Introdusau teknika liu husi kontinuasaun treinamento iha forma eskola agrikultor (FFSs)
- b. Utuliza rekurso local ho teklogia nebe efektivu
- c. Konsidera faktorez limitasaan iha basias hidrografikas

### 5.2.3 Sub-programa

- (1) Sub program Sustenbilidade halo toos iha rai lolon hamutuk ho multiplikasaun fini baseia ba comunidade (SUF ho CBSM-SP)

Eplikasaun ponto importante ba sub programa iha kraik:

**Tabela 5-2: Ponto importante ba SUF ho CBSM-SP**

Items	Deskrisaun
Objectiveos	<p>Objetivo importante ba sub programa atu hametin no capacita comunidade ba aplika teknika sustentabilidade halo toos iha rai lolon iha sira nia toos permanente hamutuk introdusaun majority fini improved alimentaria. (i.e., Batar, Aifarina, no Fehuk midar), ho sir abele reduce no hapara pratika lere no sunu toos. Spesifikamente objetivo sub programa atu :</p> <ol style="list-style-type: none"> <li>1) Introduce no halo decimasaun meus konserbasaun rai nebe pasil atu aplika maibe efektivu iha prebensaun ba erosaun;</li> <li>2) Introduce no decamina tekniko halo toos organiko nebe diak ba situaun iha suco agora;</li> <li>3) Introduse fini diak hanean batar, aifarina no fehuk nebe promove ona iha suco Faturasa, Fadablocu no Hautoho; no</li> <li>4) Enkoragen comunidade sira atu duplika save teknika agrikultura rai lolon nebe iha no aplika halo toos organiko iha sira nia toos; no</li> <li>5) Hasae produsaun ba mprioridade aihoris hanesan :(i.e., Batar, Aifarina, no Fehuk ) iha sucos no espera katak fini no material subciente iha epoka tuir mai.</li> </ol>
Area do target	Ba Suco hotu iha area basias hidrografikas so deit Suco Faturasa, Fadablocu, no Hautoho maka lae, tamba implementa ona
Prosedur implementasaun	<p>Sub programa tenke implement durante tinan 3 nia laran iha kada suco hanesan tuir mai nee :</p> <p><u>Tinan 1 (primeiro)</u></p> <ol style="list-style-type: none"> <li>1) Identifikasaunpotensi targeto beneficiarie no organizaun grupo agrikultor (grupo 1 kada aldeia);</li> <li>2) Selesaun ba lider grupo no member importante e determina regras no responsabilidade ba membro;</li> <li>3) Dezemvolve plano do serbiso ho maneira nebe participatory;</li> <li>4) Identifika fatin demonstrasaun ba kada grupo beneficiaries;</li> <li>5) Halao kourso treinamento (Eskala Agrikultor do kampo: FFSs) iha fatin demonstrasaun, nebe kobre topiko hotu tuir mai nee: (produse compost inklui ho manutensaun kompos, Hamos duut, Konstrusaun ai-Matenek, Sukat linha kontur, Aplika metodo konserbasaun rai, (teras kompos), Fila rai,aplikasaun kompos, selesaun fini, kuda fini, perpara adubus ben, Manutensaun toos(hamos duut no aplikasaun adubus ben),no koileta no pos koileta);</li> <li>6) Distribuisaun fini no material agrikultura</li> <li>7) Evaluasaun ba kourso treinamento no perpara plano serbiso ba tinan 2 liu husi meus</li> </ol>

Items	Deskrisaun
	<p>participasaun.</p> <p><u>Tinan 2 (Segundo)</u></p> <ol style="list-style-type: none"> <li>1) Fahe/Aaloka grupo ba sub grupo baseia ba sistema serbiso traditional nebe existe (sistema halosan) iha suco;</li> <li>2) Halo selesaun ba lider do sub grupo no identifka demoonstrasaun plot ba sub grupo;</li> <li>3) Halao kurso treinamento (Kampo Eskolah Agrikultor : FFSS) iha demonstrasaun plot nebe kobre topiko hotu hanesan tuir mai nee : Produce kompos inklui manutensaun ba komos, manutensaun ba konservasaun rai, Fila rai, aplikasaun kompos, selesaun fini, kuda fini, perpara adubus ben, manutensaun toos (hamos duut no aplikasaun adubus ben), koileta no pos koileta;</li> <li>4) Halao kurso treinamento /FFSS ba selesaun teknika prioridade iha ftiin demonstrasaun sub grupo nian ho naran, produce kompos inklui manutensaun kompos, konstrusi Ai-matenek no delineasaun linha kontur, aplikasaun konserbasaun rai (terras kompos), no prepara adubus ben;</li> <li>5) Enkorage membro sub grupo sira atu ajuda malu implementa teknika nebe demonstra iha fatin demonstrasaun sub grEncouragement of members of the subupo ; no</li> <li>6) Evaluasaun ba kurso treinamento.</li> </ol> <p><u>Tinan 3</u></p> <ol style="list-style-type: none"> <li>1) Assistencia iha aplikasaun toos tekniku foho lolon nebe sustentabel ba iha demplot no toos individual.</li> <li>2) Avaliasaun hosi aktividade.</li> </ol>
Orario	<p><u>Organizasaun grupo no plano serbiso</u> Fulan 2~3 (iha tempu udan)</p> <p><u>Halao treinamento /FFSS</u> Fulan 12 (defois tempu udan remata)</p> <p><u>Evaluasaun no planiamento</u> Fulan 1 (iha tempu udan remata)</p>
Idea nebe persiza	<p><u>Organizasaun grupo, Plano serbiso, no participasaun evaluasaun</u></p> <ol style="list-style-type: none"> <li>1) Fasilitador (Fasilitador inti, Co Fasilitador, no assistensia do kampo)</li> <li>2) Hahan ba enkontro</li> <li>3) Stasionary (felt type pens, flipcharts, and masking tapes)</li> <li>4) Transportasaun ba fasilitador no seluk tan</li> </ol> <p><u>Treinamento /FFSS</u></p> <ol style="list-style-type: none"> <li>1) Fasilitador (Fasilitador inti, Co Fasilitador, no assistensia do kampo)</li> <li>2) Material Agrikultura</li> <li>3) Hahan ba kurso treinamento</li> <li>4) Hasae fini no kuda material nebe sei kuda</li> <li>5) Bidon, balde ba tau adubus ben</li> <li>6) Material local (Hola husi comunidade lokal) ba compost no adubus ben</li> </ol>
Resultado nebe espera	<p><u>Resultado direita</u></p> <ol style="list-style-type: none"> <li>1) Quantidade subciente husi Fini diak hanesan batar, aifarina kain, fehuk kain tenke produse rasik iha suco.</li> <li>2) Numero husi comunidades balun sei aplika teknika halo toos ho maneira sustentabilidade iha rai lolon iha sira nia toos.</li> </ol> <p><u>Impakto Direita</u></p> <ol style="list-style-type: none"> <li>1) Bida local sei aumenta</li> <li>2) Sei minimiza Erosaun ba rai sei.</li> </ol>

(2) Sub Programa Produsaun Modo (SP-PM)

Esplikasaun konaba konaba sub program abele hare iha kraik.

**Tabela 5-3: Lina Jeral hosi VP-SP**

Item	Descrisaun
Objectivo	<p>Objectivo prioridade husi sub programa atu hametin capacidade comunidade hodi produse modo nebe qualidade hodi bele faan no hetan rendimento balun. Objectivo sepsifiko husi sub programa atu :</p>

Item	Descrisaun
	<ol style="list-style-type: none"> <li>1) Introduse no desimina teknika produsaun modo organiko ; no</li> <li>2) Introduse tipo modo oioin inklui modo nebe maka comunidade local sira sei kuda durante nee.</li> </ol>
Area do Targeto	Suco nebe maka iha bee matan nebe bele uza ba produse modo durante tinan ida nia laran
Prosedur implementatsaun	<p>Sub program tenke implementa ba iha tinan 3 nia laran iha kada suco ho maneira hanesan tuir mai nee :</p> <p><u>Tinan primeiro (1)</u></p> <ol style="list-style-type: none"> <li>1) Identifikasaun potensi targeto beneficiarie no organizaun grupo agrikultor (grupo 1 kada aldeia);</li> <li>2) Selesaun ba lider grupo no member importante e determina regras no responsabilidade ba membro;</li> <li>3) Dezemvolve plano do serbiso ho maneira nebe participatory;</li> <li>4) Identifika fatin demonstrasaun ba kada grupo beneficiaries;</li> <li>5) Halao kourso treinamento (Eskala Agrikultor do kampo: FFSS) iha fatin demonstrasaun, nebe kobre topiko hotu tuir mai nee:(Halo compos inklui manutensaun kompos, halo Bibeiro fatin, produse modo oan, Halo ridge, aplika kompos, perpara adubus ben, pestisida natural, manutensaun toos modo nian (hamos duut no hamar rai, aplika adubus ben no pestisida natural, no and taka ho hudi kulit ), koileta, no koleksaun fini );</li> <li>6) Distribusaun fini no material agrikultura; no</li> <li>7) Evaluasaun ba kurso treinamento no participasaun prepara plano serbiso ba tinan 2 (Segundo).</li> </ol> <p><u>Tinan Segundo</u></p> <ol style="list-style-type: none"> <li>1) halao treinamentu hanesan nebe mak prepra iha tinan premeiru;</li> <li>2) Distribuisaun fini; no</li> <li>3) Avaliasaun kursu treinamentu.</li> </ol> <p><u>Tinan terceiro</u></p> <ol style="list-style-type: none"> <li>1) Assiste iha kontinuasaun produsaun modo iha demplot no toos individual.</li> <li>2) Avaliasaun aktividade.</li> </ol>
Tempo	<p><u>Grupo organijasaun no planu servisu</u> Fulan 2~3 (iha tempo udan)</p> <p><u>Treinamento/FFSS</u> Fulan 6~8 (depois tempo udan remata)</p> <p><u>Avaliasaun no planu</u> Fulan 1 (iha tempo udan)</p>
Input necessario	<p><u>Grupo organijasaun, planu servisu, no avaliasaun participatorio</u></p> <ol style="list-style-type: none"> <li>1) Facilitador (facilitador premeiru, ko-facilitador balun, no assistencia terreno)</li> <li>2) hahan ba encontro</li> <li>3) Stationario (lapijera kores, flipcharts, no fita kola)</li> <li>4) meius transporte ba facilitador no seluk</li> </ol> <p><u>Treinamentu/FFSS</u></p> <ol style="list-style-type: none"> <li>1) Facilitador (Facilitador premeiru, facilitor segundu, no assistencia iha terreno)</li> <li>2) Instrumento toos</li> <li>3) Ai han ba kursu treinamentu</li> <li>4) Fini modo</li> <li>5) Bidon ou balde ba adubu ben</li> <li>6) material lokal (hola hosi comunidade lokal) ba kompos no adubu ben</li> </ol>
Resultado nebe espera	<p><u>Resultado direita</u></p> <ol style="list-style-type: none"> <li>1) produsaun modo sei aumenta iha suco.</li> </ol> <p><u>Impaktu direita</u></p> <ol style="list-style-type: none"> <li>1) Vida moris sei hadia.</li> </ol>

### (3) Sub Programa Produsaun ai han animal ho sistema fo Han (AFP ho SFS-SP)

Lina jeral hosi sub programa hanesan nebe esplika tuir mai.

Tabela 5-4: Lina jeral hosi AFP ho SFS-SP

Item	Descrisaun
Objetivu	Objetivu importante hosi sub programa mak atu hasae kapacidade komunidadade atu produs ai han animal atu nune animal nebe iha luhan bele han duke husik livre. Liuliu, sub programa nia objetivu atu: 1) Introdus ai han no enkorajen komunidadade atu kuda ai han besik toos; no 2) Introdus no fahe tekniku kona ba sistema foo han inklui halo animal luhan.
Target area	Suco hotu nebe refere ekcepto Suco Faturasa, Fadabloco, no Hautoho
Procedur Implementasaun	Sub programa nee mak implementa ba tinan tolu iha suco nebe refere iha manira hanesan tuir mai: <u>Tinan premeiru</u> 1) Identifikasaun hosi potensial target beneficiario no organija grupo toos nain (grupo ida kada aldeia); 2) Hili lider no membro importante hosi grupo no determina funsaun no responsabilidade hosi membro sira; 3) Desenvolve planu servisu iha maneira participatorio; 4) Identifikasaun hosi kada demplot ba grupo beneficiario; 5) halao kursu treinamentu (eskola treino: FFSs) iha demplot, nebe kobre topiku hanesan tuir mai: (preparasaun rai, kuda ai han/ ai han iha toos hanesan lutu moris ou dut, koleksaun material ba animal luhan, halo animal luhan, no husik animal iha luhan); 6) Distribuusaun fini no kuda material hosi ai han 7) Avaliasaun kursu treinamento no preparasaun planu servisu ba tinan segundu iha maneira participatorio. <u>Tinan Segundu</u> 1) Divijaun grupo ba sub programa baseia ba sistema servisu tradisional nebe iha ona (sistema harosan) iha suco; 2) Hili lider hosi sub grupo no identifikasaun hosi demplot sub grupo; 3) Halao kursu treinamento (eskola terreno: FFSs) iha demplot sub grupo; 4) Enkorajen membro sira hosi sub grupo atu ajuda malu atu applika tekniku importante iha demplot sub grupo; 5) Distribuusaun fini no kuda material hosi ai han no instrumento toos; no 6) Avaliasaun kursu treinamento. <u>Tinan terceiru</u> 1) Assiste iha manutensaun ai han no sistema ai han iha demplot no toos individual. 2) Avaliasaun hosi aktividade.
Tempo	<u>Organijasaun Grupo no planu servisu</u> Fulan 2~3 (antes udan) <u>Treinamento/FFSs</u> Fulan 12 (hosi inisiu tempo udan) <u>Avaliasaun no planu</u> Fulan 1 (tempo bailoron remata)
Input necessario	<u>Grupo organijasaun, planu servisu no avaliasaun participatorio</u> 1) Facilitador (facilitador, facilitador segundu, no assistencia iha terreno) 2) hahan ba encontro 3) Stationario (lapijera kores, flipcharts, no fita kola) 4) Meius transporte ba facilitador no seluk <u>Treinamento/FFSs</u> 1) Facilitador (facilitador premeiru, facilitador segundu, assistencia iha terreno) 2) Instrumento toos 3) hahan ba treinamento 4) Fini no material kuda ai han 5) material lokal (hola hosi komunidadade lokal) ba kompos no adubu ben 6) Meius transporte ba facilitador no seluk
Resultado nebe espera	<u>Resultado Direta</u> 1) Numero animal nebe tau iha luhan sei aumenta. 2) Kondisaun saude animal sei aumenta. <u>Impaktu Direita</u> 1) Estraga ai han kauja hosi animal sei redus. 2) Sunu ai laran ou tesi illegal ba lutu sei redus.



### 5.3 Reforestasaun no Programa Protesaun Floresta

#### 5.2.1 Objetivu

Objetivu importante hosi Programa reforestasaun no Protesaun Floresta aumenta kobre floresta iha bacias hidrografikas ho kuda ai nebe iha valor (esemplu ai industrial, ai mahon ba kafe, no ai fuan) iha rai privada no ai legume/kakeu atu rehabilita bee nebe degrada no mos area kritiku seluk. No mos, programa sei mos enkompas sub programa ba protessaun hosi floresta hosi sunu illegal iha kolaborasaun ho comunidade iha suco nebe refere.

#### 5.3.2 Stratejia no Approsimasaun

atu atinji objetivu hosi Programa Reforestasaun no Jestaun Floresta, sub programa tuir mai nebe popoin hanesan assaun necessario nebe foti.

- a. Sub Programa reforestasaun
- b. Sub Programa rehabilitasaun Area Kritika
- c. Sub programa kombate Sunu Ai laran

Eskola terreno (FFSs) mak adopta hanesan stratejia importane ba sub programa premeiru hanesan ninia area tarjetu mak rai privada, no seluk hosi nee sub programa precisa preparasaun entre membro sira nebe involve iha sub programa, suco nebe refere, no MAP/DNF desde sub programa ho ninia objetivu hadia no manutensaun hosi funsaun bacias hidrografikas laos det comunidade iha suco nebe refere maibe mos hirak nebe nebe iha area tetuk.

#### 5.3.3 Sub-programa

##### (1) Sub Programa Reforestasaun (Rf-SP)

Lina jeral hosi sub programa hanesan nebe esplika tuir mai.

**Tabela 5-5: Lina jeral hosi Rf-SP**

Item	Descrisaun
Objetivu	Objetivu importante hosi sub programa mak atu hasae kapacidade comunidade atu kuda ai industrial, ai mahon ba kafe, no ai fuan, iha fatin nebe diak iha maneira nebe diak. Liuliu, sub programa nia objetivu atu: 1) fornese ai industrial, ai mahon, no ai fuan ba comunidade nebe hakarak atu kuda ai oan iha sira nia toos rasik no mantein sira ho diak depois kuda; 2) introdus no fahe tekniku kona ba kuda ai industrial, ai mahon no ai fuan iha maneira nebe propio, no 2) introdus desenha nebe diak hosi ai industrial nebe kuda, ai mahon, no ai fuan.
Target area	Suco hotu nebe refere
Procedur Implementasaun	Sub Programa nebe implementa ba tinan rua iha suco nebe refere iha maneira hanesan tuir mai: <u>Tinan premeiru</u> 1) Identifikasaun hosi potensial target beneficiario no organijasaun hosi grupo too nain (grupo I per aldeia); 2) Hili lider no membro importante hosi grupo no determina hosi funsaun no responsabilidade hosi membro sira; 3) Desenvolve planu servisu iha maneira participatorio; 4) Identifikasaun demplot ba tipu ai nebe refere;

Item	Descrisaun
	5) Halao kursu treinamento (eskola terreno: FFSs) iha demplot, nebe kobre topiku hanesan tuir mai: (halo kompos inklui manutensaun, preparasaun rai, staka, kee rai kuak, ence ho aplikasaun kompos, kuda no manutensaun hosi ai oan (mahon, hamos, no aplikasaun adubu ben ba ai fuan)); 6) Distribuisaun ai oan no instrumento toos 7) Avaliasaun kursu treinamento no prepara planu servisu ba tinan segundu iha maneira participatorio. <u>Tinan segundu</u> 1) Divijaun grupo ba sub grupo baseia ba sistema servisu tradisional nebe iha system (sistema harosan) iha suco; 2) Hili lider hosi sub grupo no identifikasaun demplot sub grupo; 3) Halao kursu treinamento hanesan (eskola terreno: FFSs) iha demplot sub grupo; 4) Enkorajen membro sira hosu sub grupo atu ajuda malu atu applika tekniku importante iha demplot sub grupo; 5) Distribuisaun ai oan; no 6) Avaliasaun kursu treinamento. <u>Tinan terceiru</u> 1) Assiste iha kuda ai oan nebe distribui ba membro sira iha sira plot rasik iha maneira nebe proprio; 2) Assiste iha manutensaun ai oan nebe kuda iha demplot no plot individual iha maneira nebe diak. 3) Avaliasaun aktividade.
Tempo	<u>Organija Grupo no planu servisu</u> Fulan 2~3 (iha tempo udan) <u>Treinamento/FFSs</u> Fulan 12 (tempo udan remata) <u>Avaliasaun no planu</u> Fulan 1 (tempo udan remata)
Input necessario	<u>Organija grupo, planu servisu, no avaliasaun participatorio</u> 1) Facilitador (Facilitador importante, facilitador segundu, no assistencia iha tereno) 2) Hahan ba enkontro 3) Stationario (lapis kores, flipcharts, no fita kola) 4) Meius transporte ba facilitador no seluk <u>Treinamento/FFSs</u> 1) Facilitador (facilitador premeiru, facilitador segundu, no assistencia terreno) 2) Instrumento toos 3) Hahan ba kursu treinamento 4) Ai oan 5) material lokal (hola hosi comunidade lokal) ba kompos no adubu ben 6) Meius transporte ba facilitador no seluk
Resultado nebe espera	<u>Resultado Direta</u> 1) Area kuda ho ai oan sei aumenta. <u>Impaktu Direta</u> 1) Kobre floresta iha bacias hidrografikas sei aumenta. 2) Vida moris local sei aumenta.

## (2) Sub Programa Rehabilitasaun Area Kritika (CAR-SP)

Lina jeral hosi Sub programa nebe esplika iha okos.

**Tabela 5-6: Lina Jeral hosi CAR-SP**

Item	Deskrisaun
Objetivu	Objetivu importante hosi sub programa mak atu rehabilita floresta nebe degrada, area nebe defloresta ona, no rai nebe degrada iha area bee nebe kritika iha suco ho kuda ai iha maneira nebe kolaborativu.
Target area	All hotu nebe refere
Procedur Implementasaun	Sub programa nebe implementa ba tinan lima iha suco nebe refere iha meneira tuir mai: <u>Tinan premeiru</u>

Item	Deskrisaun
	<ol style="list-style-type: none"> <li>1) Identifikasaun area tarjeto nebe rehabilita konsidera kondisaun no importancia hosi area nebe refere;</li> <li>2) Hili fatin ida ou rua entre area tarjeto;</li> <li>3) Determina familia nebe hetan beneficiano direita hosi rehabilitasaun;</li> <li>4) Organiza ekipa servisu/kompostu hosi familia nebe hetan beneficiano;</li> <li>5) Desenvolve planu servisu ho lider suco no ekipa servisu;</li> <li>6) Hola ai oan;</li> <li>7) Mobiliza comunidade atu prepara rai ba kuda, kee rai kuak, ence kompos, no kuda);</li> <li>8) desenvolve akordu entre ekipa servisu, koncelho suco, no MAP/DNF kona ba manutensaun ai oan nebe kuda ba tinan rua ho balu (2.5);</li> <li>9) Manutensaun (hamos no mahon) ai oan dalarua durante tempo udan no dala ida durante tempo bai loran; no</li> <li>10) Avaliasaun aktividade no preparasaun hosi planu servisu ba tinan segundu iha maneira participatorio.</li> </ol> <p><u>Tinan 2~3</u></p> <ol style="list-style-type: none"> <li>1) Repete aktividade hosi 2) to 10).</li> </ol> <p><u>Tinan 4~ 5</u></p> <ol style="list-style-type: none"> <li>1) Repete aktividade hosi 9) no 10).</li> </ol>
Tempo	<p><u>Hili fatin tarjeto, identifikasaun beneficiario, desenvolve planu servisu</u>  Fulan 2~3 (iha tempo bai loran)  <u>Preprasaun rai, staka, kee rai kuak, ence fali, no kuda hosi comunidade hotu</u>  Fulan 1 (iha inisiu tempo udan)  <u>Manutensaun ai oan</u>  Tinan 2.5 (depois kuda)  <u>Avaliasaun no planu</u>  Fulan 1 (iha tempo udan remata)</p>
Input necessario	<p><u>Hili fatin tarjeto, identifikasaun beneficiario, desenvolve planu servisu</u></p> <ol style="list-style-type: none"> <li>1) Facilitador (facilitador premeiru, facilitador segundu balun, no assistencia terreno)</li> <li>2) hahan ba enkonro</li> <li>3) Stationario (lapis kores, flipcharts, no fita kola)</li> <li>4) meius transporte ba facilitador no seluk</li> </ol> <p><u>Preprasaun rai, estaka, kee rai kuak, ence no kuda hosi komuniade hotu</u></p> <ol style="list-style-type: none"> <li>1) Facilitador (Facilitador premeiru, facilitador segundu, no asistencia terreno)</li> <li>2) Instrumento toos</li> <li>3) hahan ba participante iha aktividade reforestasaun</li> <li>4) Ai oan</li> <li>5) Meius transporte ba transporte ai oan no facilitador</li> </ol> <p><u>Manutensaun ai oan</u></p> <ol style="list-style-type: none"> <li>1) Incentivu ekipa servisu</li> </ol>
Resultado espera	<p><u>Resultado Direta</u></p> <ol style="list-style-type: none"> <li>1) Floresta nebe degrada no/ou area degrada sei rehabilita.</li> </ol> <p><u>Impaktu Direta</u></p> <ol style="list-style-type: none"> <li>1) Erosaun rai leten sei redus.</li> <li>2) lalaok bee hosi rekursu bee importante iha suco sei stabilija.</li> </ol>

### (3) Sub Programa Kombate Sunu Ai laran (FFF-SP)

Lina jeral hosi sub programa nebe esplika iha tabela tuir mai.

**Tabela 5-7: Lina jeral hosi FFF-SP**

Item	Deskrisaun
Objetivu	Objetivu importante hosi sub programa mak atu minimija estragus hosi sunu ai laran banhira sunu rai akontese iha suco nebe refere iha kolaborasaun ho comunidade nebe hela iha area nebe sunu.
Target area	Suco hotu nebe refere
Procedur Implementasaun	Sub programa nebe atu implementa ba tinan lima (5) akordu entre suco no DNF iha suco nebe refere.

Item	Deskrisaun
	<u>Tinan premeiru</u> 1) Identifikasaun area suco iha suco. 2) Organiza ekipa kombate ahi hili comunidade nebe hela besik ba area sunu ou uja area hanesan ba toos no objetivu seluk no hakarak atu servisu ba comunidade seluk. 3) Hili lider no desenvolve lei ba ekipa kombate ahi; 4) Hola no provijaun simples instrumento kombate ahi no ekipamento ba ekipa kombate ahi; 5) halao treinamento uja instrumento no ekipamento no kombate ahi iha Julho no Augustu; 6) Manutensaun instrumento no ekipamento iha suco hosi tempo ba tempo; no 7) Avaliasaun aktividade no preparasaun planu servisu ba tinan segundu iha maneira participatorio. <u>Tinan 2~ 5</u> 1) Halao kombate ba ahi iha Augustu; 2) Manutensaun instrumento no ekipamento rai iha suco hosi tempo ba tempo; no 3) Avaliasaun aktividade no prepara planu servisu ba tinan segundu iha maneira participatorio.
Tempo	<u>Identifikasaun area sunu rai, organiija ekipa servisu, no desenvolve planu servisu</u> Fulan 2~3 (iha tempo udan) <u>Hola instrumento no ekipamento, treinamento, no kombate ahi</u> Fulan 2~3 (antes tempo bai loran) <u>Avaliasaun no kuda</u> Fulan 1(iha tempo udan)
Input necessario	<u>Identifikasaun area sunu, organiija ekipa servisu, desenvolve planu servisu</u> 1) Facilitador (facilitador premeiru, no facilitador seluk balun, assistencia iha terreno) 2) hahan ba enkontro 3) Stationario (lapis kores, flipcharts, no fita kola) 4) Meius transporte ba facilitador no seluk <u>Hola instrumento no ekipamento, treinamento, no kombate ahi</u> 1) Treinador no assisten 2) Instrumento no ekipamento kombate ahi 3) hahan ba treinamento no kombate ahi 4) meius transporte ba transporte ai oan no facilitador
Resultado nebe espera	<u>Resultado direta</u> 1) capacidade atu distingui ahi sei aumenta iha suco. <u>Impaktu Direita</u> 1) estraga hosi sunu rai sei minimija banhira sunu rai akonese. 2) incident sunu rai sei redus.

## 5.4 Programa Hadia Vida Moris

### 5.4.1 Objetivu

Objetivu importante hosi Programa Hasae vida Moris mak atu redus presaan em anian kona ba rekursu naturais nebe relaciona ba floresta ho hasae vida moris local ou desenvolve rekursu addisional hosi rendementu uja rekursu local nebe iha.

### 5.4.2 Stratejia no Approsimasaun

Atu atinji objetivu hosi Programa Hadia Vida Moris, sub programa tuir nebe propoin hanesan assaun nebe necessario atu foti.

- a. Desenvolve vida moris/Sub Programa hasae vida moris
- b. Sub Programa Promosaun Hadia Fugaun

Sub programa uluk, desenvolve vida moris/Programa hasae rendimento, nebe implementa ho uja metodo FFSs atu nune comunidade local bele hetan tekniku necessario kona ba desenvolvimento vida moris. No mos, uja rekursu local nebe iha no tekniku mak stratejia importante seluk nebe adopta ba sub programa hanesan.

Iha parte seluk, sub programa, Sub programa promosaun hadia fugaun, tengki introdus depos hadia kondisaun vida moris ho sub programa uluk. Programa atu sosa no distribui fugaun diak ba comunidade nebe hakarak atu uja no esforsu atu foo kustu balun hosi fugaun.

#### 5.4.3 Sub-programa

##### (1) Desenvolve Vida Moris/Sub Programa Hasae Vida Moris (LD/IG-SP)

Lina jeral hosi sub programa nebe esplika iha tabela tuir mai.

**Tabela 5-8: Lina Jeral hosi LD/IG-SP**

Item	Deskrisaun
Objetivu	Objetivu importante hosi sub programa mak atu hadia vida moris hosi rekusu hosi rendementu no kualidade hahan uja material nebe iha.
Target area	Suco hotu ekcepto Suco Fadablocos no Hautoho
Procedur Implementasaun	<p>Sub programa nebe implementa ba tinan 3 iha suco nebe refere iha maneira tuir mai:</p> <p><u>Tinan 1</u></p> <ol style="list-style-type: none"> <li>1) Identifika/hili membro feto no organija grupo feto (grupo ida per aldeia);</li> <li>2) Hili lider no membro importante hosi grupo no determina funsaun no responsabilidade hosi membro sira;</li> <li>3) halao assesmento rekursu participatorio no identifikasaun hosi opsaun desenvolve vida moris</li> <li>4) Desenvolve planu servisu iha maneira participatorio;</li> <li>5) halao kursu treinamento (eskola terreno: FFSs) kona ba potencial opsaun desenvolve vida moris, nebe tengki baseia ba rekursu naturais lokalmente disponivel em principal;</li> <li>6) Hala instrumento no ekipamentu necessario ba treinamento kona ba desenvolve opsaun vida moris potencial; no</li> <li>7) Avaliasaun kursu treinamento no preparasaun planu servisu ba tinan segundu iha maneira participatorio.</li> </ol> <p><u>Tinan Segundu no terceiro</u></p> <ol style="list-style-type: none"> <li>1) Kontinuasaun kursu treinamento (eskola terreno: FFSs) kona ba opsaun desenvolve vida moris potencial;</li> <li>2) Promosaun produto/komodite nebe produs hosi grupo feto iha koordinasaun ho merkado importante;</li> <li>3) Assiste iha produto merkadoria no halao negosio kiik baseia ba prodito/komodite hosi grupo feto;</li> <li>5) halao treinamento kona ba jestaun financa no provijaun hare kona ba livru konta; no</li> <li>6) Avaliasaun hosi kursu treinamento.</li> </ol> <p><u>Tinan terceiro</u></p> <ol style="list-style-type: none"> <li>1) Assiste iha kontinuasaun hosi produsaun hosi komodite hosi negosio kiik;</li> <li>2) Provijaun hare loron loron kona ba livro konta no jestaun osan; no</li> <li>3) Avaliasaun hosi kursu treinamento.</li> </ol>
Tempo	<p><u>Rekursu assesmento, organija grupo no planu servisu</u></p> <p>Fulan 2~3 (iha tempo udan)</p> <p><u>treinamento/FFSs</u></p> <p>Fulan 12 (hosi tempo udan remata)</p> <p><u>Avaliasaun no planu</u></p> <p>Fulan 1 (iha tempo udan remata)</p>
Input necessario	<p><u>Rekursu assesmento, organija grupo no planu servisu</u></p> <ol style="list-style-type: none"> <li>1) Facilitador (facilitador premeiru, facilitador seluk, no assistencia iha terreno)</li> </ol>

Item	Deskrisaun
	2) hahan iha enkontro 3) Stationario (lapis kores, flipcharts, no fita kola) 4) meius transporte ba facilitador no seluk <u>Treinamento/FFSs</u> 1) Facilitador (facilitador premeiru, facilitador seluk, no assistencia iha terreno) 2) Instrumento no ekipamento 3) hahan ba kursu treinamento 4) material lokal 5) meius transporte ba facilitador no seluk
Resultado nebe espera	<u>Resultado Direta</u> 1) Komunitade, liuliu feto, iha suco sei produs produto/komodite nebe bele faan iha merkado ho uja material lokal. <u>Impaktu direita</u> 1) Vida moris local sei aumenta. 2) Rekursu naturais iha suco sei maneija iha maneira nebe sustentabel.

## (2) Sub Programa promosaun Hadia Fugaun (ICSP-SP)

Lina jeral hosi sub programa mak esplika iha tabela tuir mai.

Tabela 5-9: Lina jeral hosi ICSP-SP

Item	Deskrisaun
Objetivu	Objetivu importante hosi sub programa nee mak atu redus uja ai sunu atu nune hamenus pressaun ema nian ba floresta natureja.
Target area	Suco hotu nebe refere
Procedur implementasaun	Sub programa nebe implementa ba tinan tolu iha suco nebe refere tuir maneria tuir mai: <u>Tinan premeiru</u> 1) Identifikasaun komunitade nebe hakarak atu uja no bele esforsu atu sosa fugaun diak; 2) Hola fugaun ba sira nebe bele esforsu atu sosa; 3) halao matadalan no treinamento kona ba uja no manutensaun fugaun; no 4) avaliasaun hosi efetividade hosi fugaun no identifikasaun komunitade nebe hakarak uja no bele esforsu atu sosa. <u>Tinan 2 no 3</u> 1) Repete hosi aktividade halao iha tinan premeiru (excepto 1))
Tempo	<u>Identifikasaun komunitade no sosa fugaun</u> Fulan 2~3 (tempo balun) <u>Halao matadalan no treinamento</u> Fulan ida(depois hola fugaun) <u>Avaliasaun no identifikasaun hosi komunitade</u> Fulan 1 (tinan ida depois introdusaun hosi fugaun)
Input necessario	<u>Identifikasaun komunitade no hola fugaun</u> 1) Facilitador (Facilitador premeiru, no assistencia terreno) 2) hahan ba enkontro 3) Stationario (lapis kores, flipcharts, no fita kola) 4) fugaun diak 4) meius transporte ba fugaun no facilitador <u>Matadalan no Treinamento</u> 1) Facilitador (Facilitador, no assistencia iha terreno) 2) hahan ba matadalan no treinamento 3) material lokal (ai sunu) 4) Meius transporte ba facilitador no seluk
Resultado nebe espera	<u>Resultado direta</u> 1) Numero hosi familita nebeuja fugaun sei aumenta. <u>Impaktu Direita</u> 1) Volume hosi ai sunu nebe konsumu iha suco sei redus. 2) Degradasaun floresta/deforestasaun sei menus iha suco.

## 5.5 Programa Hasai Konciencia Publiku

### 5.5.1 Objetivu

Objetivu importante hosi Programa Hasae konciencia mak atu hametin konciencia komunidadade hosi risku hosi aktividade destroy ambiente, ho naran, sunu arbiru, illegal logging, no husik animal arbiru, no hasae sira nia komprensaun hosi jestaun nebe sustentabel no proprio hosi rekursu naturais nebe relaciona ba floresta, katak incident hosi sunu ai laran, illegal logging no husik animal arbiru sei redus.

### 5.5.2 Stratejia no Approsimasaun

Funsaun hosi sub programa, ho naran Sub Programa Kampania Konciencia Publiku, mak propoin hanesan assaun necessario atu foti atu atinji objtivu hosi programa.

Tuir mai nebe konsidera hanesan stratejia importante ba fahe informasaun nebe efetivu iha kontestu socio ekonomiku hosi bacias hidrografikas Noru.

- target jerasaun rua, adulto no labarik, konsidera aumenta populasaun rapidu;
- atu prepra no uja material kampania konciencia publiku nebe facil atu komprende no visual atu minimija effete hosi difficultdade lingua; no
- atu uja rekursu ema nebe iha konciencia ba ambiente iha suco, hanesan lider nebe mak involve iha PLUP-SP, hanesan rekursu ema iha kampania atu ajuda mesajen hosi kampania nebe hetan iha komunidadade nia let.

### 5.5.3 Sub Programa Kampania Konciencia Publiku (PAC-SP)

Lina jeral hosi sub programa nebe esplika iha tabela tuir mai.

**Tabela 5-10: Lina jeral hosi PAC-SP**

Item	Deskrisaun
Objetivu	Objetivu importane hosi sub programa mak atu hasae konsiencia publiku hosi risku sunu rai, illegal logging, no husik animal, no komprensaun nebe diak hosi importancia hosi jestaun nebe sustentabel hosi rekursu naturais relaciona ba floresta entre komunidadade.
Target area	Suco hotu nebe refere
Procedur Implementasaun	Sub programa nebe implementa ba tinan rua ba suco hotu iha maneira tuir mai: <u>Tinan 1</u> 1) Identifikasaun topiku importante/mesajen nebe hetan entre komunidadade iha suco iha konsultasaun ho lider suco; 2) Desenvolve planu servisu hosi kampania konciencia ho material; 3) Halao kampania konciencia (workshops, encontro, no aktividade fahe informasaun seluk) iha suco; no 4) Avaliasaun processo no efetividade hosi kampania konciencia. <u>Tinan segundu</u> 1) Repeat of the activities conducted in the 1 <sup>st</sup> year (except 1))
Tempo	<u>Identifikasaun topiku no desenvolve hosi planu servisu ho material</u> Fulan 2~3s (tempo nebe det) <u>Halao kampania konciencia publiku</u> Fulan 8 (depois preparasaun hosi planu servisu) <u>Avaliasaun no identifikasaun hosi komunidadade</u> Fulan ida(depois kampania koncienciapubliku remata)
Input necessario	<u>Identification of communities and procurement of cooking stove</u> 1) Facilitador (Facilitador premeiru, no assistencia iha terreno) 2) hahan ba encontro 3) Stationario (lapis kores, flipcharts, no fita kola)

Item	Deskrisaun
	4) Meius transporte ba fugaun no facilitador <u>Kampania konciencia Publiku</u> 1) Facilitador (facilitador, no assistencia terreno) 2) Hahan ba participante iha kampania 3) Material ba kampania 4) Meius transporte ba facilitador no seluk
Resultado espera	<u>Resultado direta</u> 1) Material ba kampania konciencia publiku sei desenvolve. 2) Hasae publiku hosi necessidade protesau floresta sei aumenta. <u>Impaktu direta</u> 1) Incide sunu rai, illegal logging, no husik animal sei redus. 2) Degradasaun/deforestasaun floresta sei menus iha suco.

## 5.6 Progama Hametin Institucional

### 5.6.1 Objetivu

Objetivu importante hosi Programa hametin Institucional mak atu ajuda Koncelho Jestaun Bacias Hidrografikas mantein operacional atu hakonu missaun depois supporta direta hosi Projeto JICA-MAP CB-NRM iha Augusto 2015.

### 5.5.2 Stratejia no Aproximasaun

Koncelho jestaun bacias hidrografikas mak kuadru servisu nebe estabese ba protesau hosi funsaun bacias hidrografikas liu hosi jstaun nebe sustentabel hosi rekursu naturais nebe relaciona ba floresta iha bacias hidrografikas, tamba nee stratejia importante atu adopta mak atu ajuda Koncelho kontinua nina funsaun importante, ho naran hanesan i) plataforma nebe suco nebe refere bele koordena sira nia esforsu ba jestaun floresta nebe sustentabel, no, ii) komite asesoria ba suco nebe refere atu foti assaun necessario.

Foka mos ba hasae kapacidade koncelho membro sira nia atu facilita membro sira hosi Koncelho hakonu sira nia funsaun no responsabilidade ba operasaun hosi Koncelho maske depois supporta hosi Projeto CB-NRM. Em particular, nee necessario atu hametin kapacidade hosi lider suco hosi suco nebe refere, liuliu abilidade atu governa suco inklui rekursu naturais nebe relaciona ba floresta nebe uja ho efetivu iha mekanismu CB-NRM.

### 5.5.3 Assaun nebe Foti hodi hametin Koncelho Jestaun Bacias Hidrografikas Noru

Atu hametin funsaun hosi Koncelho Jestaun Bacias Hidrografikas Noru, tuir aktividade nebe supporta nebe propoin hanesan assaun nebe foti iha planu jestaun bacias hidrografikas.

**Tabela 5-11: Lina jeral hosi Hametin Koncelho Jestaun bacias hidrografikas Noru**

Aktividade	Lina Jeral	Input necessario	Target	tempo
Assistencia halao enkontro regular no enkontro ad hoc	Ajuda koncelho halao enkontro regular kada fulan tolu.	Facilitador ho assistencia Kustu ba hahan ba enkontro Stationario	1 Membro hotu hosi koncelho	Loron ida x dala 4 /tinan (kada fulan tolu (3) ba tinan lima)
	Ajuda koncelho halo enkotro adhoc ruma atu diskuti issu kona ba jestaun rekusu naturais	Hanesan iha leten	Membro hotu hosi koncelho	Kuandu precisa (ba tinan lima)



<b>Aktividade</b>	<b>Lina Jeral</b>	<b>Input necessario</b>	<b>Target</b>	<b>tempo</b>
Prepara troka vijita/estudu	Ajuda membro sira hosi Koncelho vijita suco balun nebe halao aktividade hanesan ba hirak nebe introdus iha bacias hidrografikas Noru no prepara encontro ho comunidade nebe hela iha suco.	Facilitador ho asistencia Kustu hahan ba encontro Stationario Meius transporte	Membro hotu hosi koncelho	Loron 2 x dala 1 /tinan (dala ida ba tinan ida iha ba tinan lima)
Provijaun oportunidade atu desenvolve kapacidade membro sira nian ba CB-NRM	Ajuda membro sira hosi Koncelho hasae sira nia kapacidade atu maneija ho diak rekursu naturais nebe relaciona ba floresta no regulamentu suco hosi suco nebe refere.	Facilitador ho asistencia Kustu hahan ba treinamento Stationario Meius transporte Fatin ba treinamento	Lider suco hosi suco nebe refere	Loron 2 x dala 1/tinan (dala ida iha tinan ida ba tinan lima)

Ho halo lista aktividade iha leten, Koncelho Bacias Hidrografikas Noru espera bele kapacita liu tan atu halao ninia missaun ba jestaun nebe sustentabel hosi Bacias Hidrografikas Noru ho koordinasaun nebe besik ho DNF/MAP.

## **Kapitulo 6 Planu Implementasaun**

### **6.1 Konceitu Basiku**

Planu assaun nebe esplika iha Kapitulu 5 tengki implementa ho supporta hosi MAP/DNF no mos organijasaun sira seluk, hanesan doador no ou organijasaun internasional. Tamba nee, iha espekulasaun katak nee la facil ba organijasaun nebe det atu implementa sub programa 11 iha suco hotu nebe refere ba tempo badak tamba menus rekursu humana iha rai laran no area remotas.

Ho nune, sujere atu trata planu jestaun bacias hidrografikas hanesan planu tempu naruk atu implementa iha decade balun. Kapitulu nee indika processo hosi implementasaun hosi planu, strutura organijasaun nebe propoin, no horario implementasaun ba tinan lima oin mai.

### **6.2 Metodo Implementasaun**

#### **6.2.1 Processo Implementasaun hosi Sub Programa**

##### **(1) Processo Hotu**

PLUP-SP tengki implementa uluk hosi sub programa sira seluk excepto PAC-SP no Hametin Koncelho hanesan PLUP-SP sei determina uja rai futuru no prioridade agrikultura no servisu ekstensaun floresta, nebe iha relasaun direita ba iha selesaun hosi sub programa nebe atu implementa iha suco. Tuir PLUP-SP, sub programa ida ou rua hili hosi comunidade local entre hirak nebe relasiona ba jestaun rai no programa supporta sei implementa.

Iha parallel ho PLUP-SP, PAC-SP no hametin Koncelho bele implementa atu hasae kapacidade hosi lider suco no mos comunidade seluk iha suco nebe refere. Tuir mai figura nebe hatudu lalaok implementasaun hosi sub programa.

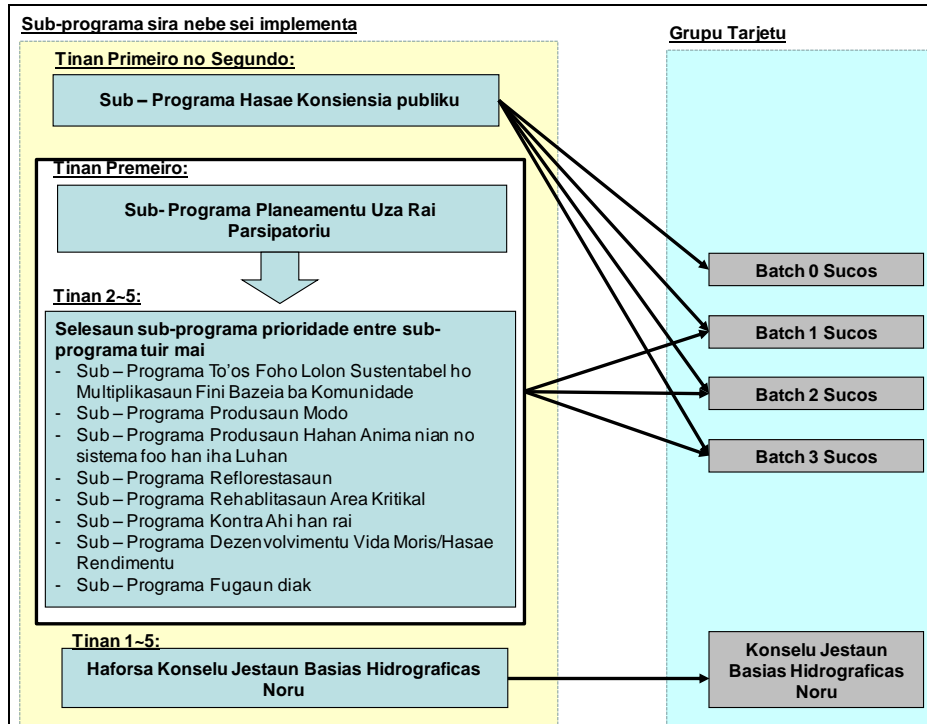


Figura 6-1: Processo hotu hosi Implementasaun sub Programa

(2) Hili Sub Programa

Hili sub programa iha suco nebe refere sei halao hanesan parte hosi processo PLUP-SP depois formulasaun hosi planu uja rai futuru ho regulamentu suco, liuliu preparasaun hosi planu uja rai futuru. Konsidera kapacidade hosi comunidade local no mos limitasaun hosi facilitador nebe competente iha rai laran, sujere atu implementa sub programa ida (1) ou rua (2) iha suco, ou bele mos dificil atu aseguira resultado nebe diak hosi sub programa.

Hanesan esplika iha Kapitulu 5, sub programa hotu sei la necessario diak ba iha suco hotu nebe refere. Tamba nee importante atu konsidera no assessu ba situasaun agora hosi suco no cek karik situasaun nebe apropriado ba implementasaun hosi sub programa nebe refere. Tabela tuir mai hatudu area tarjetu potensial ba sub programa hanesan nebe mak esplika iha kapitulu 5.

Tabela 6-1: Suco tarjetu no Peirodo Projeto hosi Sub Programa nebe refere

Programa	Sub-programa	Suco tarjetu nebe possibel	Periodo kada suco
Programa Uja rai	PLUP-SP	Suco 12 ekcepto Suco Faturasa, Fadabloco, no Hautoho	Tinan 4
Programa Jestaun Toos no Pekuaria	SUF ho CBSN-SP	Suco 12 excepto Suco Faturasa, Fadabloco, no Hautoho	Tinan 3
	VP-SP	Sucos nebe rekursu bee permanente nebe disponivel	Tinan 3
	AFP ho SFS-SP	Sucos nebe sei pratika husik animal entre comunidade sira	Tinan 3
Reforestasaun no Programa Protessaun Floresta	Rf-SP	Suco 12	Tinan 3
	CAR-SP	Sucos nebe bee matan degrada no/ou area importante	Tinan 5
	FFF-SP	Sucos nebe incidente sunu ai laran ass	Tinan 5
Programa hasae vida moris	LD/IG-SP	Suco 12 excepto Suco Fadabloco no Hautoho	Tinan 3
	ICSP-SP	Suco 12	Tinan 3

Programa	Sub-programa	Suco tarjeto nebe possibel	Periodo kada suco
Programa hasae konciencia publiku	PAC-SP	Suco 12	Tinan 3
Programa hametin Institucional	Hametin koncelho	Koncelho Jestaun Bacias Hidrografikasi Noru	Tinan 5

### 6.2.2 Grupo iha Suco

Hanesan apresenta ona iha Seksaun 6.1, nee karik dificil uitan atu implementa PLUP-SP no sub programa seluk iha suco hotu nebe refere. Tamba nee, suco nebe refere tengki tamab iha grupo hat (4) atu nune implementa planu assaun tuir fase nebe iha. Tuir mai tabela nebe hatudu numero hosi suco nebe aloka ba grupo ida idak no konceitu hosi implementasaun.

**Tabela 6-2: Grupo hosi Suco no Konceitu Implementasaun**

Grupo	Suco	Konceitu Implementasaun
Grupo 0	Suco 3 (Suco Faturasa, Fadabloco, no Hautoho)	Tamba suco nebe implementa ona PLUP-SP no sub programa seluk hosi 2011 to 2015 ho assistencia hosi Projeto JICA-MAP CB-NRM, nee rekomenda katak sira mayoria focus ba iha kontinuasaun hosi aktividade nebe introdus hosi sub programa ba tinan lima oin mai.
Grupo 1	Suco 3 (Suco 1 hosi Remexio no 2 suco hosi Liquidoe)	Grupo suco 1 sei hahu PLUP-SP depois analija situasaun iha terreno ba tinan premeiru. Tuir PLUP-SP, sub programa ida ou rua, hili hosi comunidade local hanesan sub programa prioridade, sei implementa iha tinan oin.
Grupo 2	ditto	Grupo suco 2 suco sei halo aktividade hanesan tuir maneira hanesan iha tinan segundu hanesan grupo premeiru 1 suco halo iha tinan premeiru.
Grupo 3	ditto	Grupo 3 suco sei hahu aktividade iha tinan ba dala tolu nian.

Horario Implementasaun ba tinan lima sei prepara baseia ba konceitu implementasaun nebe esplika iha leten.

## 6.3 Kuadru servisu Institucional ba Implementasaun

### 6.3.1 Organizasaun nebe involve iha Implementasaun

Organijasaun/grupo hosi ema nebe involve iha implementasaun hosi planu assaun.

- ◆ Suco (Koncelho suco no comunidade);
- ◆ Administrasaun Sub Distritu iha Remexio no Liquidoe;
- ◆ MAP (MAP Distritu Aileu);
- ◆ DNF;
- ◆ NGO nebe servisu iha terreno hosi jestaun floresta no desenvolve agrikultura; no
- ◆ Organijasaun Internasional ou Ajencia doador

### 6.3.2 Strutura Organijasaun nebe Propoin ba Implementasaun

Kada organijasaun/grupo nebe iha lista iha sub seksaun uluk tengki iha funsaun nebe diferente iha implementasaun hosi sub programa, ho naran:

- Suco mak sei hetan beneficiario direita no implementador iha terreno hosi aktividade sub programa iha tempo hanesan;

- Administrasaun Sub Distritu sei supporta implementasaun hosi sub programa hosi comunidade local iha suco;
- MAP no DNF karik fornese fundus atu implementa planu assaun no/ou funsaun hanesan ajencia implementador em particular karik fundu hosi governo;
- NGO sei assiste organijasaun ou facilitador eksternal nebe sei supporta ajencia implementasaun halao aktividade sub programa iha terreno;
- Organijasaun internasional ou ajencia doador karik rekursu fundu seluk ba implementasaun hosi planu assaun no iha tempo hanesan bele implementa hamutuk iha kolaborasaun ho MAP/DNF no mos NGO.

Strutura orgnijasaun nebe propoin ba implementasaun hosi planu assaun nebe hatudu iha okos.

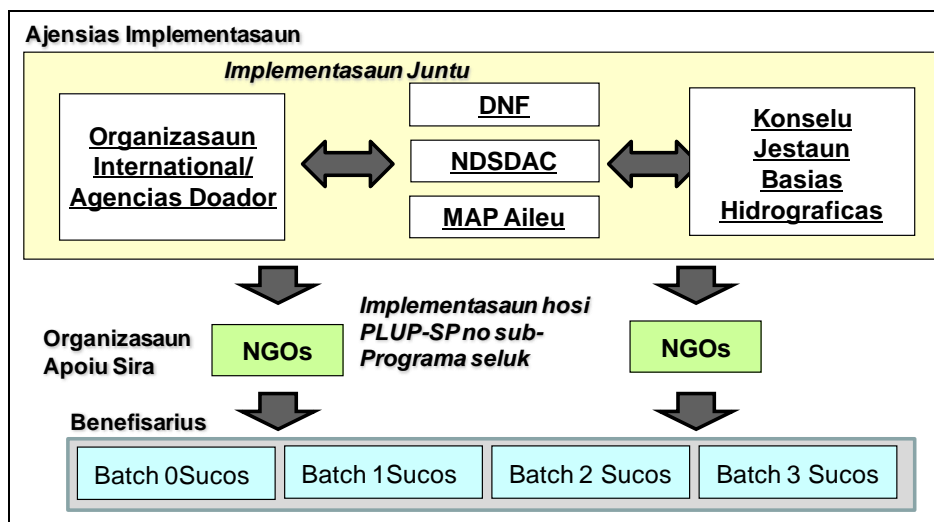


Figura 6-2: Strutura Organijasaun nebe Propoin ba Implementasaun

#### 6.4 Supporta necessario no Preparasaun ba Implementasaun

Fiar katak supporta no preparasaun tuir mai mak precisa ba iha implementasaun hosi planu assaun.

- Supporta financial atu kobre kustu/gastus ba implementasaun hosi sub programa (koordinasaun ho rekursu nebe karik iha hosi asistencia financial);
- Allokasaun facilitador ba encontro no treinamentu nebe planu iha sub programa (prepara kontrato ho NGO nebe iha competencia no esperiencia);
- Preparasaun instrumentu nebe necessario nebe precisa hola iha liur ba sub programa nebe refere hanesan tuir mai;

Tabela 6-3: Material eksternal nebe sosa

Sub-programa	Material nebe sosa hosi liur
PLUP-SP	- mapa Aerial photo ho skala 1/7,500 ~10,000 - Plastik transparan (medida A0) - Kuadru (medida A0)
SUF ho CBSM-SP	- instrumentu toos - Fini diak toos ai han toos foho lolon
VP-SP	- Instrumentu toos - Fini modo

Sub-programa	Material nebe sosa hosi liur
AFP ho SFS -SP	- Instrumentu toos - Fini no ai oan
Rf -SP	- Instrumento toos - fini ai (ai, ai fuan, no ai industrial) - Poly bags
CAR -SP	- Instrumento toos - ai oan
FFF -SP	- Instrumento kontra sunu rai no ekipamentu
LD/IG -SP	- Instrumento no ekipamentu ba desenvolvimentu vida moris
ICSP -SP	- hadia fugaun tein
PAC -SP	- Material kampania hasae konciencia publiku

- d. Preparasaun meius transporte ba facilitador no material nebe hola; no
- e. Mantein kordenasaun entre organijasaun nebe involve iha implementasaun planu assaun.

### 6.4 Horario Implementasaun

Horario implementasaun hosi planu assaun ba tinan lima oin mai iha ona ninia esbosu hanesan nebe hatudu iha tabela tuir mai. Iha preprasaun hosi esbosu horario implementasaun, assumasaun tuir mai nebe precisa konciada.

- a. Grupo 1~3 suco sei implementa sub programa ida ou rua depois PLUP-SP;
- b. Sub programa sei implementa tinan ida depois PLUP-SP.
- c. PAC-SP no hametin Koncelho Jestaun Bacias Hidrografikas sei implementa iha tinan premeiru separa hosi PLUP-SP.
- d. Sub Programa depois PLUP-SP nebe la espesifika iha horario implementasaun tamba hili hosi sub programa sei halao iha processo hosi PLUP-SP,
- e. Durasaun hosi sub programa nebe tentative tau iha tinan tolu, maske nee hosi tinan tolu (3) to tinan lima (5).

Activity	Target Groups	1st year		2nd year		3rd year		4th year		5th year	
		1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half
1. Strengthening of the Noru WMC	Noru WMC	[Blue bar spanning all 12 months]									
2. Public Awareness Campaign SP	All the 12 sucos	[Blue bar from 1st Half 1st year to 2nd Half 3rd year]									
3. Assistance in continuation of the sub-program activities	Batch 0 Sucos	[Blue bar from 1st Half 1st year to 2nd Half 4th year]									
4. Participatory Land Use Planning SP	Batch 1 Sucos	[Blue bar from 2nd Half 1st year to 2nd Half 5th year]									
	Batch 2 Sucos	[Blue bar from 1st Half 2nd year to 2nd Half 5th year]									
	Batch 3 Sucos	[Blue bar from 1st Half 3rd year to 2nd Half 5th year]									
5. Priority Sub-programs selected by communities in the sucos	Batch 1 Sucos	[Blue bar from 2nd Half 1st year to 2nd Half 4th year]									
	Batch 2 Sucos	[Blue bar from 1st Half 3rd year to 2nd Half 5th year]									
	Batch 3 Sucos	[Blue bar from 1st Half 4th year to 2nd Half 5th year]									

Figura 6-3: Horario Implementasaun Tentativu hosi Planu Assaun ba Tinan lima oin mai (2015-2019)



## ***Apéndice-4.4***

***Sumariu hosi Planu Jestaun Bacias***

***Hidrograficas***





**Apendise-4.4(1):  
Kondisaun Atual hosi Bacias Hidrografikas  
(Kapitulu 2 hosi Planu Jestaun Bacias Hidrografikas  
Noru)**

Projetu ba  
Jestaun Rekursu Natural Sustentavel Bazeia ba  
Komunidade iha Timor-Leste

10 de Outubro, 2014

Ekipa Projetu JICA no MAP

**Ezbosu Konteudo hosi Planu Jestaun**

- Kapitulo 1 Introdusaun
- Kapitulo 2 Kondisaun Atual hosi Bacias Hidrografikas Noru
- Kapitulo 3 Problema atual iha Jestaun Bacias Hidrografikas no Parseiru relevante ba Jestaun bacias Hidrografikas
- Kapitulo 4 Objetivu no Strategieja hosi Planu
- Kapitulo 5 Planu Jestaun Bacias Hidrografikas/ Planu Jestaun Bazeia ba ekosistema ba Adaptaun ba Mudansa Klimatika
- Kapitulo 6 Planu Implementasaun
- Kapitulo 7 Rekomendasaun

2

**Kontido Hosi Kapitulu 2 (Kondisaun  
Agora)**

- 1. Fatin no Situaun Administrativu hosi Bacias Hidrografikas
  - Kondisaun Natureja
    - 2.1 Iklima
    - 2.2 Rai lolon
    - 2.3 Elevasaun
    - 2.4 Uja rai no Vejetasaun nebe kobre
    - 2.5 Potensial hosi Erosaun
  - Kondisaun Socio Ekonomiku
    - 3.1 Demografi
    - 3.2 Produsaun Agrikultura
    - 3.3 Produsaun Animal
    - 3.4 Seguransa Ai han
    - 3.5 Estimasaun Nivel Rendementu Vulnerabilidade ba Mudansa Klimatika

3

**1. Fatin no Situaun Administrativu**

**(1) Fatin mapa**



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**1. Fatin no Situaun Administrativu**

**(2) Area Distribuisaun iha Bacias Hidrografikas**

Sub-distritu	Sucos	Total Area	Area iha Bacias Hidrografikas
Remexio	Acumau	3,875 ha	742 ha
	Fadabloco	1,766 ha	1,766 ha
	Fahisoi	1,404 ha	1,200 ha
	Faturasa	4,819 ha	3,334 ha
	Hautoho	1,528 ha	1,528 ha
	Maumeta	533 ha	533 ha
Liquideo	Acubilitoho	1,272 ha	361 ha
	Belereu	2,685 ha	411 ha
	Fahisoi	803 ha	713 ha
	Faturilau	7,791 ha	1,700 ha
	Manucasa	784 ha	215 ha
	Nameloso	1,045 ha	338 ha
Remexio/Liquideo	Seluk		11 ha
<b>Total</b>		<b>28,316 ha</b>	<b>12,852 ha</b>

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**2. Kondisaun Natureja**

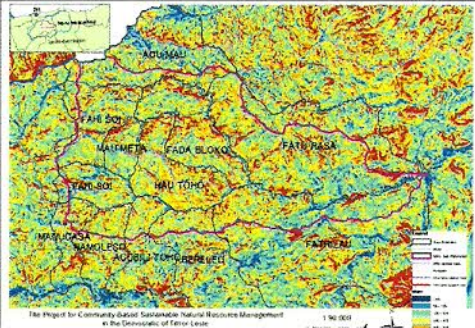
**2.1 Iklima**

- (1) Media/rata rata udan monu rai annual karik liu ou menus hosi 1,000 mm hahu hosi 600 mm to 1,500 mm.
  - (2) Area nebe elevasaun ass, udan tau barak.
  - (3) Parte badak besik ba iha mota Eraibanaubere karik bele parte nebe mak maran liu bacias hidrografikas
  - (4) Udan monu rai mayoria koncentra iha fulan lima nia laran hosi Desembro to Abril.
- Temperatura rata rata iha bacias hidrografikas hosi 21 ~ 26 °C.

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## 2. Kondisaun Natureja

### 2.2 rai lolon



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## 2. Kondisaun Natureja

### 2.2 Rai lolon

Rai lolon nebe mak liu hosi 40% lolon okupa pelmenus 30 % hosi total area hosi bacias hidrografikas.

Rai lolon	Area (ha)	Rasio (%)
0-8%	372	2.9
8-15%	990	7.7
15-25%	2,817	21.9
25-40%	5,122	39.9
40-55%	2,560	19.9
> 55%	991	7.7
<b>Total</b>	<b>12,852</b>	<b>100.0</b>

### 2.3 Elevasaun

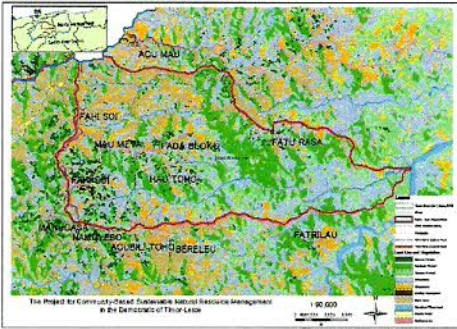
Elevasaun hosi bacias hidrografikas hosi 330 m to 1,500 m iha tasi leten. Pontu nebe ass liu hosi balija ho Sub Distritu Alleu, no parte okos liu lokalija hamutuk hosi Mota Noru no Eraibanabere iha balija ho Sub Distritu Lacio.

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## 2. Kondisaun Natureja

### 2.4 Uja rai no Kobre Vejjetasaun

#### (1) Uja rai Agora no Kobre Mapa



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## 2. Kondisaun Natureja

### 2.4 Uja rai no kobre Vejjetasaun

#### (2) Area Distribuisaun

Klase uja rai	Bacias Hidrografikas Noru	
	(ha)	(%)
1. Ai laran	5,005.4	38.9
1-1: Ai laran besik (naturejal)	600.5	4.7
1-2: Ai laran Mediu (natureja)	2,705.3	21.1
1-3: Ai (natureja)	1,699.6	13.2
2. Rai halo toos	4,898.3	38.1
3. Dut	1,065.4	8.3
4. Plantasaun kafe	95.1	0.7
5. Rai mamuk	1,685.0	13.1
6. Mota ninin	101.5	0.8
<b>Total</b>	<b>12,851.3</b>	<b>100.0</b>

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## 2. Kondisaun Natureja

### 2.5 Potensial rai Halai

Suco	Baxu Iu		Baxo		Moderado		Ass		Att Iju		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
<b>Remexlo</b>												
Acumau	388	52%	19	3%	22	3%	23	3%	291	39%	742	100%
Fadabloco	1,029	58%	21	1%	26	1%	34	2%	657	37%	1,766	100%
Fahiso	594	49%	26	2%	32	3%	38	3%	510	43%	1,200	100%
Faturasa	1,587	48%	87	3%	108	3%	117	4%	1,434	43%	3,334	100%
Hautolo	822	54%	22	1%	26	2%	35	2%	624	41%	1,528	100%
Mameta	296	56%	14	3%	23	4%	32	6%	168	31%	533	100%
<b>Lianidoe</b>												
Acubilito	193	54%	10	3%	13	3%	16	4%	130	36%	361	100%
Belereu	221	54%	11	3%	15	4%	16	4%	148	36%	411	100%
Fahiso	482	68%	24	3%	24	3%	28	4%	155	22%	713	100%
Faturiau	921	54%	47	3%	60	4%	68	4%	604	36%	1,700	100%
Mamucosa	132	61%	7	3%	8	4%	8	4%	60	28%	215	100%
Nameloso	199	59%	7	2%	10	3%	14	4%	108	32%	338	100%
<b>Total</b>	<b>6,864</b>	<b>53%</b>	<b>295</b>	<b>2%</b>	<b>367</b>	<b>3%</b>	<b>429</b>	<b>3%</b>	<b>4,889</b>	<b>38%</b>	<b>12,841</b>	<b>100%</b>

Pelmenus 40 % hosi area bacias Hidrografikas nebe konsidera erosaun rai leten makas.

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## 3. Kondisaun Socio-Economic

### 3.1 Demogrfi

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### 3. Kondisaun Socio-Economic

#### 3.2 Produsaun Agrikultura

- ◆ Produsaun ai han importante mak batar, aifarina, fehuk, koto nebe mak em jeral kuda iha toos hanesan tur maneira kuda kahur.
- ◆ Ai han nebe mak kuda ho estimasaun 1 ha, no produsaun batar menus hosi 1 ton/ha.
- ◆ Mayoria uma kain sira iha toos ida ou rua nebe uja ba produsaun ai han kada tinan.
- ◆ Medida Konservasaun rai no sistema hadia toos nebe mak introdus iha suco tolu (3) Faturasa, Fadabloco, no Hautoho.

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### 3. Kondisaun Socio-Economic

#### 3.3 Produsaun Animal

- ◆ Familia hotu iha bacias hidrografikas iha animal hanesan, liu liu fahi no bibi.
- ◆ Balun, liuliu hirak nebe iha Faturasa, iha karau mean no metan.
- ◆ Maibe mayoria hosi sira iha karu mean/metan no mos fahi no bibi.
- ◆ Menus ai han animal durante tempo bai lora nee perukupasaun ba jestaun animal.

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### 3. Kondisaun Socio-Economic

#### 3.4 Seguransa Ai han

- ◆ Mayoria komunidade infrenta menus ai han entre fulan Novembro/Desembro no fevereiro/Marsu
- ◆ Rajaun importante ba inseguransa ai han mak: i) menus produtividade ii) area ai han nebe limitadu, iii) produsaun lakon makas durante rai, no iv) oportunidade limitado atu hetan rendementu.
- ◆ Maneja stratejia nebe komunidade foti ona banhira menus ai han mak : i) redusau numero han, ii) redusau montante ai han, iii) konsumu ai han alternativu, no iv) koleksaun no konsumu hosi ai han emergencia.

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### 3. Kondisaun Socio-Economic

#### 3.5 Estimasaun nivel rendementu

- ◆ Uma kain nia rendementu iha Suco Faturasa, Fadabloco, no Hautoho nebe ninia estimasaun US\$ 829, US\$ 954, no US\$ 760.
- ◆ Maske la iha dadus kona ba rendementu uma kain iha bacias hidrografikas, dadus nebe mensiona iha leten hanesan representa kondisaun ekonomiku agora hosi uma kain iha bacias hidrografikas.

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### 4. Vulnerabilidade ba Mudansa Klimatika

#### 4.1 Mudansa klimatika

- ◆ Mudansa klimatika konsidera hanesan ameasa nebe mak hare iha Timor-Leste.
- ◆ Assaun Adaptasaun Programa Nasional (NAPA) projeta mudansa klimatika iha Timor-Leste ba tinan 30 hanesan nebe mak iha okos.
- ✓ Iha tempo bai lora, temperatura bele ass, no udan monu rai bele menus;
- ✓ Iha tempo bai lora, intensidade udan, hanesan kada horas ninia intensidade, bele sai ass, no bele prolonga;
- ✓ Anin bele makas; no
- ✓ Lalaok udan varidade hosi tinan ba tinan.

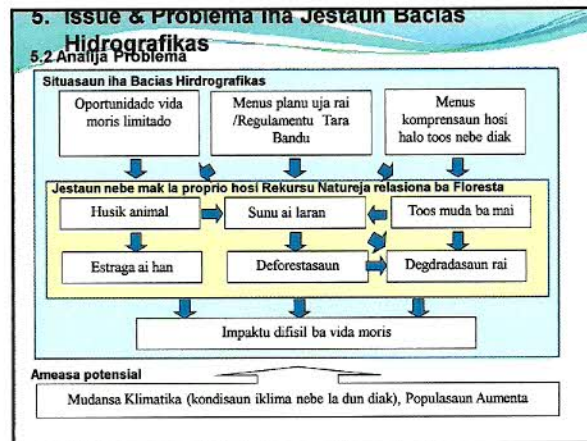
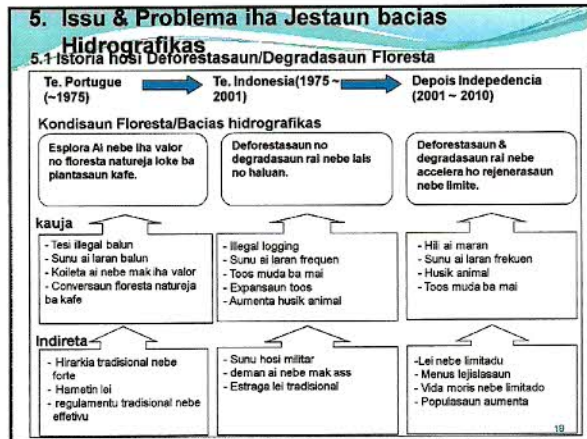
17

### 4. Vulnerabilidade ba Mudansa Klimatika

#### 4.2 Impaktu Potensial ba Komunidade

Setor	Impaktu potensial kauja hosi Mudansa klimatika-1
Agrikultura	<ul style="list-style-type: none"> <li>◆ Produsaun batar komesa menus, maibe produsaun aifarina bele aumenta.</li> <li>◆ Inciden hosi peste no moras estraga bele aumenta.</li> <li>◆ Estraga ai han hosi anin bot bele aumenta.</li> <li>◆ Toos balun bele att tamba espansaun hosi kanal.</li> <li>◆ Produsaun animal bele redus.</li> <li>◆ Rai bokur mos redus.</li> </ul>
Ailaran no Agrofloresta	<ul style="list-style-type: none"> <li>◆ Inciden hosi sunu ai laran aumenta.</li> <li>◆ Inciden hosi rai halai aumenta iha rai lolon.</li> <li>◆ Especie balun la moris diak tamba temperatura aumenta.</li> <li>◆ Kafé no sabraka bele affeta tamba manas liu.</li> <li>◆ Ai laran ho kadalak kiik bele fahé hosi udan bot.</li> </ul>
Infrastrutura	<ul style="list-style-type: none"> <li>◆ Rede servisu estrada rural bele estraga.</li> <li>◆ Lagua natureja uja hanesa rekursu bec nebe mak bele estraga.</li> <li>◆ Risku hosi estraga ba uma no infrastrutura seluk bele aumenta.</li> </ul>
Bec, Saniamentu, no Saude	<ul style="list-style-type: none"> <li>◆ Assesu ba bec bele redus tamba rekursu balun karik maran.</li> <li>◆ Rekursu bec bele afeta em termos hosi kualidade no kuantidade.</li> <li>◆ Inciden hosi moras hosi bec no infessaun bele aumenta.</li> </ul>

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**END**  
**Thank you!**  
**Obrigada barak**

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**Apendise-4.4 (2):**

**Meta no Objektivu Stratejiku no Lina Jeral hosi Planu Jestaun Bacias Hidrografikas (Kapitulu 3 & 4 no Lina Jeral hosi Kapitulu 5 hosi Planu Jestaun)**

Projetu ba Jestaun Rekursu Natural Sustentavel Bazeia ba Komunidade iha Timor-Leste

10 de Outubro, 2014

Ekipa Projetu JICA no MAP

**Esbozu Kontiudo hosi Planu Jestaun**

- Kapitulo 1 Introdusaun
- Kapitulo 2 Kondisau Agora hosi Bacias Hidrografikas Noru
- Kapitulo 3 Issu Atual kona ba Jestaun Bacias Hidrografikas no Parceiro Relevante ba Jestaun Bacias Hidrografikas**
- Kapitulo 4 Metas no Objektivu Stratejiku hosi Planu
- Kapitulo 5 Planu Jestaun Bacias Hidrografikas /Planu Jestaun Baseia ba Ekosistem ba Adaptaesau ba Mudansa Klimatika
- Kapitulo 6 Planu Implementasaun
- Kapitulo 7 Rekomendasaun

**Kontiudo hosi Kapitulu 3 no 4**

**Kapitulo 3 Issu Atual iha Jestaun Bacias Hidrografikas no pareceiro relevante ba Jestaun Bacias Hidrografikas**

**3.1 Issu iha Jestaun Bacias Hidrografikas**

- 3.1.1 Historia hosi Degradasaun Floresta
- 3.1.2 issu atual iha bacias Hidrografikas
- 3.2 Parceiro relasiona ba bacias hidrografikas Noru
- 3.2.1 Parceiro importante
- 3.2.2 Koncelho Jestaun Bacias Hidrografikas Noru

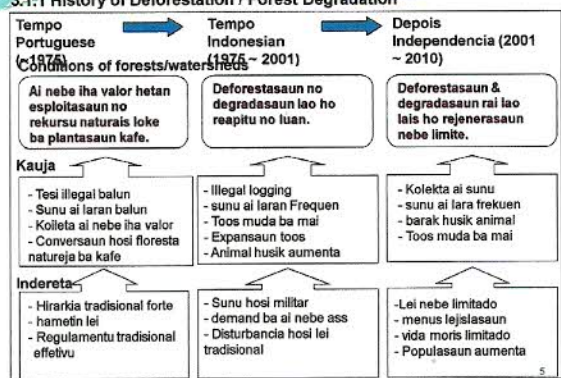
**Kapitulo 4 Metas no Objektivu Stratejiku hosi Planu**

- 4.1 Metas no Objektivu Stratejiku
- 4.2 Lina Jeral hotu kona ba Jestaun Rai iha Bacias Hidrografikas

**Kapitulo 3**

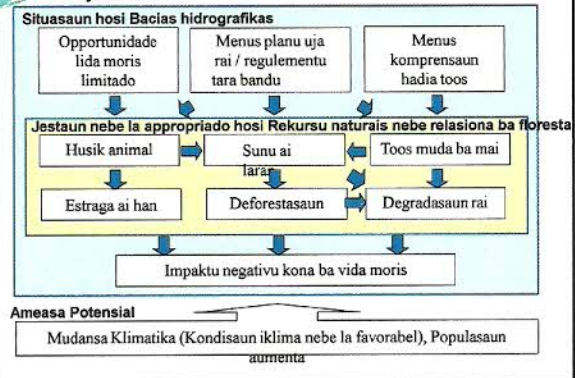
**3.1 Issu Atual kona ba Jestaun Bacias hidrografikas**

**3.1.1 History of Deforestation / Forest Degradation**



**3.1 Issu Atual iha Jestaun Bacias Hidrografikas**

**3.1.2 Analija Problema**



### 3.2 Parceiro relasiona ba Bacias Hidrografikas

#### Noru

##### 3.2.1 Parceiro Importante

- Administrasaun Distritu
- Administrasaun Sub distritu Remexio & Liquidoe
- Sucos nebe lokalija iha bacias hidrografikas
- MAP/DNF Distritu
- Officials Ekstensaun
- Guarda Floresta
- ND ba ambiente
- PNTL
- SAS sub-distritu iha Remexio & Liquidoe
- Igreja
- NGO (AMAR, WV, Plan, Haburas, RAEBIA)

Anallija liu katak parceiro refere nebe esplikia iha relatorio baseia ba resultado hosi diskussuun hosi Noru WMC.

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### 3.2 Parceiro relasiona ba Bacias Hidrografikas

#### Noru

##### 3.2.2 Koncelho Jestaun Bacias Hidrografikas Noru

(1) Vijaun no Missaun hosi Koncelho Jestaun Bacias Hidrografikas

##### Visaun:

*"Proteje no maneja floresta, rai, no rekursu bee ho proprio iha bacias hidrografikas Noru atu hadia kondisaun moris no vida moris hosi residencia iha bacias hidrografikas no estabilija fomesementu bee ba iha area tetuk."*

##### Misaun (Sumrio):

- ◆ Fomese matadalan no orientasaun kona ba jestaun rekursu naturais nebe relasiona ba floresta (SFNRM) ba lider suco;
- ◆ Fomese liderasan iha harmonija interese no aktividade suco nian;
- ◆ Planu, implementa no avalia planu jestaun bacias hidrografikas;A
- ◆ Ajuda lider suco hasae ema nia konciencia hosi SFNRM;
- ◆ Promove assaun neccario ba SFNRM nebe sustentabel;
- ◆ Hand over rekursu naturais nebe ihavalor ba futuru; no
- ◆ Faher esperiencia ho suco seluk atu promove jestaun rekursu naturais nebe relasiona ba floresta iha maneira nebe sustentabel.

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### 3.2 Stakeholders related to the Noru Watershed

#### 3.2.2 Koncelho Jestaun Bacias Hidrografikas Noru

(3) Funsauun hosi Koncelho Jestaun Bacias Hidrografikas

##### Funsaun (Sumario):

- ◆ Atu formula planu jestaun bacias hidrografikas;
- ◆ Atu prepara planu assaun annual atu implementa planu jestaun bacias hidrografikas;
- ◆ Atu monitor no avalia implementasaun hosi planu assaun anual;
- ◆ Atu koordena ho officials governo relevante no NGOs;
- ◆ Atu halao encontro regular kada fulan tolu atu monitor situasaun iha bacias hidrografikas;
- ◆ Atu adapta resolusaun nebe bele enkorajen servisu hotu iha floresta nebe sustentabel no rekursu naturais nebe relasiona ba floresta;
- ◆ Atu halo encontro iha tempo nebe det; no
- ◆ to organiza grupo servisu (ou komite) atu infrenta issu importante balun.

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## Kapitulo 4

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### 4.1 Metas no Objektivu Stratejiku hosi Planu

#### 4.1 Objektivu no Stratejiku objektivu

##### Objektivu hosi Planu Jestaun Bacias Hidrografikas

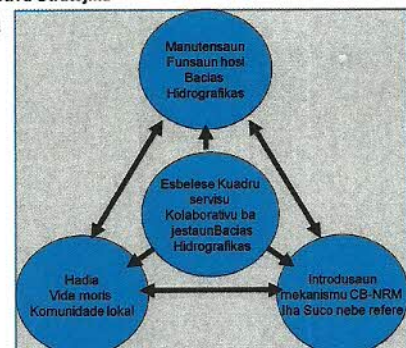
*"atu atinji jestaun bacias hidrografikas no jestaun bacias hidrografikas nebe integrado ho balansu jestaun rai ho proprio no jestaun floresta ho hadia vida moris lokal iha bacias hidrografikas."*

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### 4.1 Metas no Objektivu stratejiku hosi Planu

#### 4.1 Metas no Objektivu Stratejiku

##### Stratejiku Objektivu atu atinji Objektivu



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#### 4.1 Metas no Objektivu Stratejiku hosi Planu

##### 4.1 Metas no Objektivu stratejiku

- (1) Hadia no Manutensaun hosi Funksaun Bacias Hidrografikas
- ◆ Funksaun bacias hidrografikas, esemplu, forenesementu bee mos lao diak, kontrola lalaok bee nian, no provijaun fatin ba agrikultura no koleksaun rekursu floresta nebe esensial ba ema nia moris, tamba nee, sira tengki mantein ho proteje ai laran iha bacias hidrografikas.
  - ◆ Specificamente, issu tuir mai tengki diriji hanesan tuir mai.
    - Sedimentasaun ba mota;
    - Faiha rai lolon/rai halai;
    - Deforestasaun no degradasaun floresta; no
    - Uja rai la propio iha rai lolon.

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#### 4.1 Metas no Objektivu Stratejiku hosi Planu

##### 4.1 Metas no Objektivu Stratejiku

- (2) Hadia vida moris ema lokal
- ◆ Mayoria rendementu familia iha bacias hidrografikas nee tun liu duke iha nivel nasional no familia barak sei infrenta menus ai han ba parte balun iha tinan ida nia laran.
  - ◆ Nee difcil ba komunidade lokal atu muda pratika konvensional halo toos, karik sira bele asegura seguransa ai han no rendementu nebe suficien ba sira nia moris.
  - ◆ Fokus spesifiku ida hosi planu jestaun bacias hidrografikas mak tengki hadia vida moris hosi komunidade lokal iha bacias hidrografikas, liuliu hirak nebe iha limitasaun ba oportunidade vida moris.

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#### 4.1 Metas no Objektivu Stratejiku hosi Planu

##### 4.1 Metas no Objektivu Stratejiku

- (3) Introdusaun hosi Mekanismu CB-NRM iha suco nebe refere
- ◆ Mekanismu CB-NRM kompostu hosi i) processo hasae kapacidade komunidade no ii) sistema atu ajuda komunidade atu proteje no uda diak rekursu nebe relasiona ba floresta iha maneira nebe sustentabel.
  - ◆ Suco tolu (3) iha bacias hidrografikas, Suco Faturasa, Fadabloc, no Hauloho, introdus ona mekanismu CB-NRM.
  - ◆ akontese sunu rai, tesi ai ilegal, no estraga ai han kauja hosi husik animal nebe komesa redus ona.
  - ◆ Iha tempo hanesan, komunidade barak iha suco hanesan applika ona tekniku toos foho lolon nebe sustentabel ba sira nia toos rasik.
  - ◆ Objektivu ida mak atu ajuda suco sia nebe sei iha introdus mekanismu CB-NRM atu atinji jestaun nebe sustentabel hosi rekursu nebe relasiona ba floresta iha nivel bacias hidrografikas.

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#### 4.1 Metas no Objektivu Stratejiku hosi Planu

##### 4.1 Metas no Objektivu stratejiku

- (4) Hametin kuadru servisu kolaborativu ba Jestaun bacias hidrografikas
- ◆ Issu nebe diriji iha jestaun bacias hidrografikas Noru mak inciden sunu ai laran iha area balija entre suco.
  - ◆ Iha kasu balun, area balija nebe uja hosi komunidade hosi suco sira nebe mak ba husik animal no kasa.
  - ◆ Esforsu kolaborativu hosi suco nebe refere nebe precisa atu redus inciden hosi sunu rai iha paralel ho introdusaun hosi mekanismu CB-NRM iha sucos.
  - ◆ Importante atu ajuda koncelho atu hametin funsaun, liuliu hanesan plataforma iha suco nebe refere no DNF/MAP bele servisu kona ba issu jestaun bacias hidrografikas.

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#### 4.2 Matadalan hotu kona ba Jestaun Rai iha Bacias Hidrografikas

- ◆ Jestaun propio rai nebe diak ba manutensaun no hadia funsaun hosi bacias hidrografikas.
- ◆ Iha konsiderasaun tengki tau ba tratamentu rai no rai lolon iha determinasaun uja rai ba jestaun rai nebe propio.
- ◆ Atu promove jestaun no uja rai nebe propio, Koncelho Jestaun Bacias Hidrografikas konkorda ho DNF/MAP kona ba adopsaun hosi matadalan (nebe foo iha slide tuir mai) iha jestaun no uja ra iha bacias hidrografikas.

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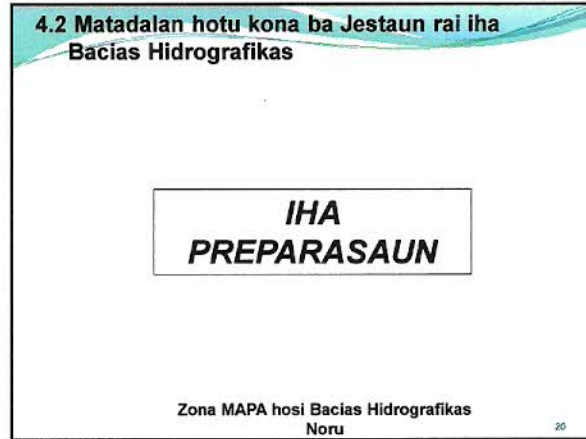
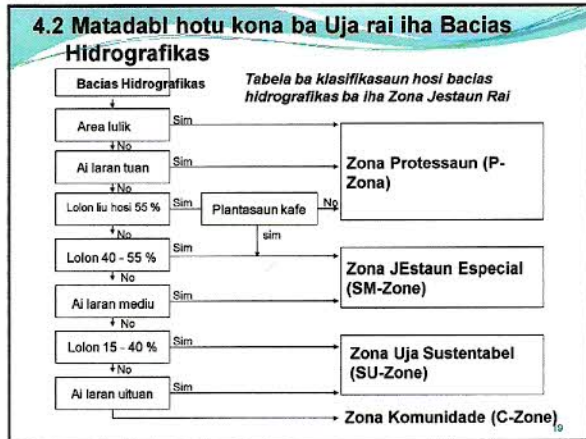
#### 4.2 Matadalan hotu kona ba jestaun rai iha bacias hidrografikas

##### Matadalan kona ba Uja rai no Jestaun iha bacias hidrografikas

Zona	Deskripsaun
P-Zona	Area nebe iha funsaun importante bacias hidrografikas no valor ambiente ass tengki proteje hanesan zona protessaun. (P-zona). Ai laran tuan no area rai lolon (liu hosi 55 %) maibe la uja ba plantasaun kafe nebe klasifika ba P-zone. Area hanesan nee tengki proteje hanesan floresta protejida.
SM-Zona	Floresta Medium no area ho rai lolon entre 40% no 55% mak kategoria hanesan Zona Jestaun especial (SM-Zone). Plantasaun kafe ho liu hosi 55% rai lolon nebe mos klasifika iha zona nee. Uja rai baseia ba floresta, hanesan i) plantasaun kafe, ii) ai laran kahur, iii) rekursu naturais, nebe rekomena ba iha zona nee.
SU-Zona	Area ho nia lolon hosi 15% to 40% ou hirak nebe kobre ho ai laran uituan nebe kategoria iha Zona Uja Sustentabel (SU-Zona). Area nebe bele uja ba halo toos maibe tengki maneja iha maneira nebe propio ho applika medida konservasaaun rai ou tekniku agrofloresta.
C-Zona	Area nebe la pertencia ba zona nebe mensiona iha leten nebe kategoria ba iha zona komunidade (C-Zona). Area nee bele uja ba objektivu ekonomiku ho restrisaun balun.

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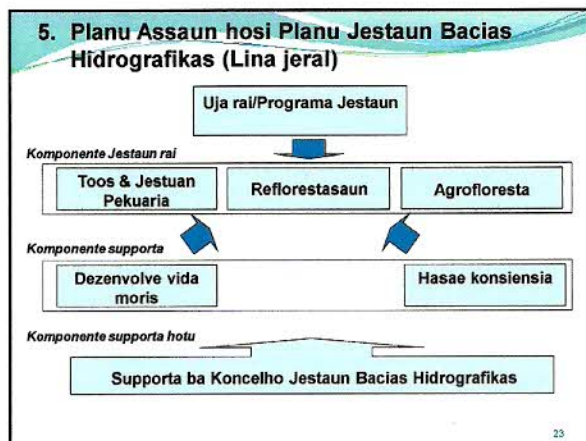
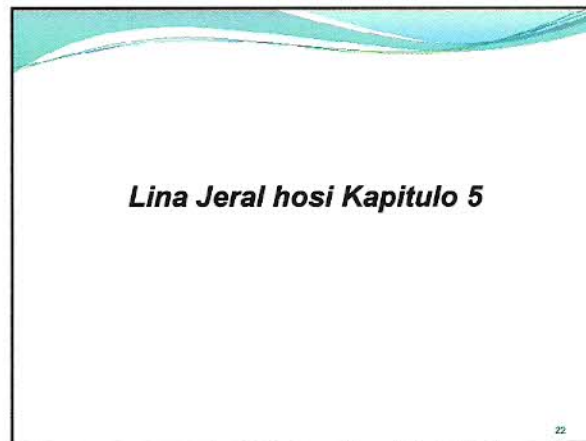




### 4.2 Matadalan hotu kona ba Jestaun rai iha bacias hidrografikas

Area Distribuisaun hosi Zona iha Suco nebe refere

Suco	P-Zona		SM-Zona		SU-Zona		C-Zona		Total	
	ha	%	ha	%	ha	%	ha	%	ha	%
Remexio										
Acumau										
Fadabloco										
Fahisoi										
Faturasa										
Hautoho										
Maumeta										
Liquidoe										
Acubilitoho										
Belereu										
Fahisoi										
Faturilau										
Manucasa										
Nameloso										
Total										



### 5. Planu Assaun hosi Planu Jestaun bacias Hidrografikas

Programa	Sub programa nebe propoin (Ezbosu ideia)
Uja rai/Programa Jestaun	◆ Sub programa Planu participatoriu uja rai (Planu uja rai futuru ho regulamentu suco, hili prioridade floresta no servisu ekstensaun agrikultura, & Institusionalija regulamentu suco.)
Jestaun toos no Pekuaria	◆ Sub programa Produsaun ai han animal no ◆ Sub programa produsaun modo
Reforestasaun	◆ Sub programa plantasaun komunitade (ho distribuisaun ai oan) ◆ Plantasaun eskola
Agroforesta	◆ Sub programa Promosaun toos foho lolon nebe sustentabel (inklui multiplikasaun fini baseia ba komunitade) ◆ Sub programa plantasaun toos uma hun (ho distribuisaun ai fuan)

## 5. Planu Assaun hosi Planu Jestaun Bacias Hidrografikas

Programa	Sub programa nebe propoin (Draft idea)
Dezenvolve vida moris	<ul style="list-style-type: none"><li>◆ Sub programa promosaun prosesu ai han</li><li>◆ Sub programa promosaun fugaun</li><li>◆ Sub programa dezenvolve vida moris tipu seluk</li></ul>
Hasae konsiensia	<ul style="list-style-type: none"><li>◆ Sub programa sensibilisaun konsiensia Publiku</li></ul>
Supporta ba KJBH	<ul style="list-style-type: none"><li>◆ Supporta ba enkontro regular</li><li>◆ Supporta ba vijita</li><li>◆ Fahe informasaun ho membro sira</li></ul>

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**END**

*Thank you!*

*Obrigada barak*

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**Apendise-4.4 (3):  
Planu Assaun no Planu Implementasaun hosi Planu  
Jestaun Bacias Hidrografikas  
(Kapitulu 5 no 6 hosi Planu Jestaun)**

Projetu ba  
Jestaun Rekursu Natural Sustentavel Bazeia ba  
Komunidade iha Timor-Leste

7 de Novembru, 2014

Ekipa Projetu JICA no MAP

**Esbosu Kontiudo hosi Planu Jestaun**

- Kapitulo 1 Introdusaun
- Kapitulo 2 Kondisaun Agora hosi Bacias Hidrografikas
- kapitulo 3 issu agora kona ba Jestaun Bacias Hidrografikas no parceiro relevante ba Jestaun bacias hidrografikas
- Kapitulo 4 Metas no Objektivu Stratejiku hosi Planu
- Kapitulo 5 Planu Assaun**
- kapitulo 6 Planu Implementasaun
- kapitulo7 Rekomendasaun

2

**Kontiudo hosi Kapitulu 5 no 6**

**kapitulo 5 Planu Assaun ba Jestaun Bacias Hidrografikas**

- 5.1 Kuadru Servisu hosi Planu Assaun
- 5.2 Programa Uja rai
- 5.3 Programa toos no Jestaun Pekuaria
- 5.4 Reforestasaun no Programa Protesaun Floresta
- 5.5 Programa Hasae Vida Moris
- 5.6 Programa Hasae Konciencia Publika
- 5.7 Programa Hametin Institucional

**Kapitulo 6 Planu Implementasaun**

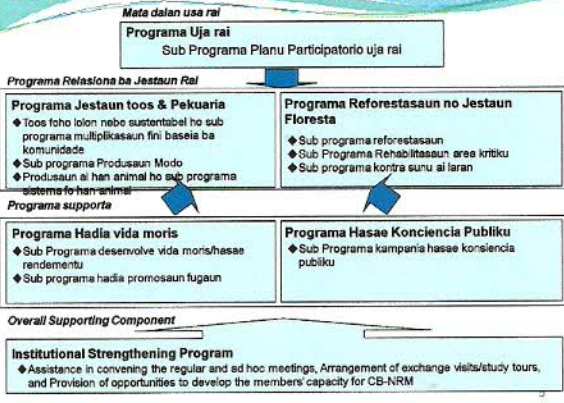
- 6.1 Konceito Basiku
- 6.2 Metodo Implementasaun
- 6.3 Kuadro Servisu Institucional ba Implementasaun
- 6.4 Supporta Necessario no Preparasaun
- 6.5 Horario Implementasaun

3

**Kapitulo 5**

4

**5.1 Kuadru Servisu hosi hosi Planu Assaun**



5

**5.2 Programa usa rai**

**5.2.1 Objektivu**

Atu facilita komunidade lokal atu maneija rekursu naturais nebe relaciona ba floresta iha suco nebe refere iha lina ho uja rai no jestaun principal.

**5.2.2 Stratejia**

- ◆ Atu tradus uja rai no jestaun principal hatudu iha Kapitulu 4 ba iha planu uja rai.
- ◆ Atu introdus/implementa planu participatorio uja rai (PLUP) hanesan assaun importante hosi Programa Uja rai.
- ◆ Atu hasae kapacidade lider suco no komunidade seluk atu maneija rai no rekursu relaciona ba floresta iha maneira nebe sustentabel.

**5.2.3 Sub-programa (Assaun)**

Atu implementa Sub programa Planu Partecipatorio uja rai (PLUP-SP) iha suco nebe refere ekcepto ba Faturasa, Fadabloco, no Hautoho.

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## 5.2 Programa Uja rai

### PLUP-SP

Items	Descriskaun
Objetivu	Atu ajuda lider suco no komunidade maneija rai no rekursu naturais nebe relasiona ba floresta iha lina ho uja rai no principal jestaun iha suco nebe refere.
Target Area	Suco hotu excepto Faturasa, Fadabloco & Hautoho
Procedur	(1) Formulasau planu uja rai futuru ho regulamentu suco (passu 12 ba fulan 3 ~5) (2) Hili servisu ekstensaun prioridade floresta no agrikultura (passu 3 ba fulan 2 ~ 3) (3) Institucionalija regulamentu suco (tipu 3 hosi enkonro regular ba tinan 3 ~ 5)
Input Necesario	Facilitador, Aerial photos, kustu ba enkonro, Meius transporte, stationario, kustu ba Tara bandu
Resultado nebe espera	Planu uja rai futuru no regulamentu suco (Resultado) Redus inciden sunu ai laran, illegal logging, no husik animal

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## 5.3 Programa Agrikultura no Jestaun Pekuaria

### 5.3.1 Objetivu

Atu muda toos no pratika jestaun pekuaria ba iha forma nebe produtivo no sustentabel fokus ba: i) uja area rai lonon nebe sustentabel, ii) hasae produsaun ai han, iii) diversifikasaun ai han, no iv) jestaun semi-intensivu pekuaria.

### 5.3.2 Stratejia

- ◆ Atu introdus tekniku liu hosi kontinuasaun treinamentu
- ◆ Atu uja efetivu rekursu lokal no teknolojia
- ◆ Foo atensaun tamba konsiderasaun ba kondisaun natural hosi bacias hidrografikas

### 5.3.3 Sub-programa (Assaun)

- a. Toos foho lonon nebe sustentabel ho sub programa multiplikasaun fini baseia ba Komunidade
- b. Sub programa produsaun modo
- c. Produsaun ai han animal no sub programa sistema fo han

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## 5.3 Programa Agrikultura & Jestaun Pekuaria

### (1) SÚF ho CBSM-SP

Items	Descrisaun
Objetivu	Atu hasae capacidade komunidade atu applika teknik toos foho lonon nebe sustentabel ba sira nia toos permanente ho introdusaun fini diak hosi ai han importante
Target Area	Suco hotu excepto Faturasa, Fadabloco & Hautoho
Procedur	(1) Forma grupo no planu participatorio (fulan 3) (2) Treinamentu (FFSs) kona ba tekniku toos foho lonon nebe sustentabel (tinan 1x dala 3) (3) Avaliasaun (semana 1x dala 1/year x tinan 3)
Input neccesario	Facilitador, instrumento toos, fini diak, kustu enkonro/treinamento, meus transporte, stationario
Resultado nebe espera	Applikasaun individual hosi tekniku toos foho lonon nebe sustentabel (resultado) Hasae produsaun ai han toos foho lonon (Impaktu)

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## 5.3 Programa Agrikultura & Jestaun Pekuaria

### (2) VP-SP

Items	Descrisaun
Objetivu	Atu hasae capacidade komunidade atu produs kualidade modo.
Target Area	Suco hotu nebe iha rekursu bee nebe bele uja ba toos modo durante tempo bai lonon
Procedur	(1) Forma grupo no planu participatorio (fulan 3) (2) Treinamentu (FFSs) produs modo (tinan 1 x dala 3) (3) Avaliasaun (Semana 1x dala 1 /tinan x tinan3)
Input	Facilitador, instrumento toos, modo musan, kustu ba enkonro/treinamento, meus transporte, Stationario
Resultado nebe espera	Produsaun tipu balun hosi modo iha suco (resultado) nebe Hasae rendementu (Impaktu)

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## 5.3 Programa Agrikultura no Jestaun Pekuaria

### (3) AFP ho SFS-SP

Item	Descrisaun
Objetivu	Atu facilita capacidade hosi komunidade atu produs ai han animal atu nune animal husik iha luhan duke husik livre.
Target Area	Suco hotu nebe pratika husik animal ho livre
Procedur	(1) Forma grupo no planu participatorio (fulan 3) (2) Treinamentu (FFSs) kona ba produsaun ai han animal no halo animal luhan (tinan 1 x dala 3) (3) avaliasaun (semana 1x dala 1/tinan x tinan 3)
Input necessario	Facilitador, instrumento toos, ai han/ ai oan, material ba halo animal luhan, kustu ba enkonro/treinamento, meus transporte, stationario
Resultado nebe espera	Animal luhan no ai han iha toos individual (Resultado) Redus animal husik arbiru (Impaktu) Uja foer animal ho efetivu ba toos (Impaktu)

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## 5.4 Programa Reforestasaun no Protesaun Floresta

### 5.4.1 Objetivu

Atu hasae floresta iha bacias hidrografikas ho kuda ai nebe iha valor (esemplu ai industrial, ai mahon ba kafe, ai fuan) iha rai privada no ai legum/kakeu atu rehabilita degradasaun bee no mos area seluk nebe kritika.

### 5.4.2 Stratejia

- ◆ Atu adopta eskola terreno (FFSs)
- ◆ Atu halo akordu entre koncelho suco, beneficiario hosi sub programa, no MAP/DNF desde sub programa rua nebe propoin mak ninia objetivu hadia funsaun bacias hidrografikas.

### 5.4.3 Sub-programa (Assaun)

- a. Sub Programa Reforestasaun
- b. Sub Programa Rehabilitasaun Area Kritika
- c. Sub Programa kontra Sunu Ai laran

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5.4 Programa Reforestasaun no Protesaun	
Floresta	
(1) Rf-SP	
Item	Descrisaun
Objetivu	Atu hasae capacidade komunidade atu kuda ai industrial, ai mahon ba kafe, no ai fuan, iha fatin nebe diak tur maneira nebe proprio.
Target Area	Suco hotu
Procedur	(1) Forma grupo no planu participatorio (fulan 3) (2) Treinamento (FFSs) kona ba kuda ai (tina 1 x dala 3) (3) Avaliasaun (semana 1 x dala 1/tinan x tinan 3)
Input necessario	Facilitador, instrumento toos, ai oan, kustu ba treinamento/enkontro, meius transporte, stationario
Resultado nebe espera	Aumenta ai (especie ai, ai fuan, no ai industrial) kuda iha suco (Resultado) Expansaun floresta iha bacias hidrografikas (Impaktu)

5.4 Programa Reforestasaun no Protesaun	
Floresta	
(2) CAR-SP	
Item	Descrisaun
Objetivu	Atu rehabilita floresta nebe degrada ona no rai nebe degrada iha-be matan nebe kritiku no area importante seluk iha suco ho kuda ai iha maneira nebe kolaborativu.
Target Area	Suco hotu nebe iha degradasaun ba bee no seluk
Procedur	(1) Identifikasaun, determina beneficiario, forma grupo servisu, no planu (fulan 3) (2) Hola ai oan no mobilija ema ba kuda iha area nebe degrada. (fulan 1x dala 1x tinan 3) (3) Manutensaun ai oan nebe kuda hosi ekipa servisu (dala 3/tinan x tinan 3) (4) Avaliasaun (semana 1 x dala 1/tinan x tinan 5)
Input necesario	Facilitador, instrumento toos, modo musan, kustu ba encontro/treinamento, meius transporte, stationario
Resultado nebe espera	Ai oan nebe kuda iha area degrada (resultado) Lalaok bee hosi rekursu importante nebe aumenta. (Impaktu)

5.4 Programa reforestasaun no Protesaun	
Floresta	
FFF-SP	
Item	Descrisaun
Objetivu	Mak atu minimija estragus hosi sunu ai laran banhira sunu rai akontese iha suco nebe refero iha kolaborasaun ho komunidade nebe hela iha area sunu rai nee akontese.
Target Area	Suco hotu nebe sunu ai laran nee akontese makas
Procedur	(1) Forma ekipa kontra sunu ai laran no hola instrumento no ekipamento hodi kontra sunu ai laran (fulan 3) (2) Halao treinamento uja instrumento no ekipamento (fulan 2) (3) Manutensaun instrumento no ekipamento (tinan 4,5) (4) Halao treinamento ba kombate ahi (fulan 1/tinan x tinan 4) (5) avaliasaun (semana 1 x dala 1/tinan x tinan 5)
Input necesario	Facilitador, instrumento no ekipamento kombate ahi, kustu ba encontro/treinamento, meius transporte, stationario
Resultado nebe	Ekipa kombate ahi ho abilidade no instrumento (Resultado) Minimiza estragus floresta (Impaktu)

5.5 Programa Hadia Vida Moris	
5.5.1 Objetivu	Atu redus pressaun ema nian kona ba rekursu naturais nebe relaciona ba floresta ho hadia vida moris lokal ou desenvolve rekursu adicional hosi rendimento rekursu lokal nebe disponivel.
5.5.2 Stratejia	<ul style="list-style-type: none"> <li>◆ Atu adopta eskola iha terreno (FFSs).</li> <li>◆ Atu uja rekursu lokal nebe disponivel.</li> <li>◆ Atu implementa sub programa (sub programa promosaun hadia fugaun) konsidera komunidade nia hakarak no esforsu.</li> </ul>
5.5.3 Sub-programa (Assaun)	<ol style="list-style-type: none"> <li>Desenvolve vida moris/sub programa hasae rendimento</li> <li>Sub programa promosaun hadia fugaun</li> </ol>

5.4 Programa Hadia Vida Moris	
(1) LD/IG-SP	
Item	Descrisaun
Objetivu	Atu hadia vida moris lokal ho hasae rekursu hosi rendementu no kualidade ai han uja material lokal nebe disponivel.
Target Area	Suco hotu ekcepto Suco Fadabloco no Hautoho
Procedur	(1) Forma grupo no planu participatorio (fulan 3) (2) Assesmento rekursu no hili opsaun vida moris potencial (fulan 1) (3) Treinamento (FFSs) kona ba opsaun vida moris (tinan 1 x dala 3) (4) Avaliasaun (semana 1 x dala 1/tinan x tinan 3)
Input necesario	Facilitador, material no instrumento seluk ba opsaun vida moris, kustu ba encontro/treinamento, meius transporte, stationario
Resultado nebe espera	Aumenta produo/komodite nebe bele faan iha merkado (Resultado) Hadia vida moris lokal (Impaktu)

5.4 Programa Hadia Vida Moris	
(2) ICSP-SP	
Item	Descrisaun
Objetivu	Objetivu importante hosi sub programa nee mak atu redus uja sunu ai maran atu nune hamenus pressaun ema nian ba floresta natural.
Target Area	Suco hotu
Procedur	(1) Identifikasaun familia nebe mak hakarak atu uja no esforsu atu sosa fugaun nebe diak (fulan 3 x tinan 3) (2) Sosa fugaun (fulan 1x tinan 3) (3) Halao matadalan no treinamento kona ba uja fugaun (fulan 1x tinan 3) (4) Evaluation (1 week x 1 time/year x 3 years)
Input necesario	Facilitador, fugaun, kusto ba encontro/treinamento, meius transporte, stationario
Resultado nebe espera	Aumenta familia nebe uja fugaun (Resultado) Redus deforestasaun/degradasaun floresta (Impaktu)

## 5.6 Programa Hasae Konciencia Publiku

### 5.6.1 Objektivu

Atu hasae konciencia komunidade hosi risiko hosi aktividade destrutivu ambiente, esemplu, sunu rai, illegal logging, no husik animal, ho hasae sira nia komprensau hosi jestaun nebe sustentabel ba rekursu naturais nebe relasiona ba floresta.

### 5.6.2 Stratejia

- ◆ Ninia tarjeto ba jerasaun rua, adulto no labarik, konsidera populasau aumenta rapidu;
- ◆ Atu prepara no material kampania konciencia publiku facil atu komprende no vijual; no
- ◆ Atu uja rekursu humano nebe mak diak ninia ambiente diak ba suco, hanesan lider suco, rekursu ema iha kampania.

### 5.6.3 Sub-programa (Assaun)

- a. Sub Programa Kampania Konciencia Publiku

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## 5.6 Programa Hasae konciencia Publiku

### (1) PAÇ-SP

Item	Descrisaun
Objetivu	Atu hasae konciencia publiku hosi risiko sunu, illegal logging, no animal husik, no komprensau diak liu kona ba importancia hosi jstaun nebe sustentabel hosi rekursu nebe relasiona ba floresta entre komunidade.
Target Area	Suco hotu
Procedur	(1) Identifikasau topik, planu servisu, no desenvolve material (fulan 3) (2) Halao kampania konciencia publiku (fulan 8 x tinan 2) (3) Avaliasau (semana 1 x dala 1/finan x tinan 2)
Input necessario	Facilitador, material ba kampania, kustu ba enkontro/treinamento, meius transporte, stationario
Resultado nebe espera	Material hasae konciencia publiku (Resultado) Hasae konciencia hosi risiko nebe fulk, etc. (Resultado) Redus inciden sunu, etc (Impaktu)

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## 5.7 Programa Hametin Institusional

### 5.7.1 Objektivu

Atu ajuda Koncelho Jestaun Bacias Hidrografikas Noru matein operacional atu hakonu ninia missaun maske depois supporta direta hosi Projeto JICA-MAP CB-NRM iha Augusto 2015.

### 5.7.2 Stratejia

- ◆ Atu ajuda koncelho kontinua ninia funsaun importante hanesan, esemplu i) plataforma nebe bele koordena sira nia esforu ba jestaun floresta nebe sustentabel, no ii) komite assesor atu foti assaun neccessario.
- ◆ Atu hasae kapacidade membro koncelho atu nune sira bele hakonu sira nia funsaun no responsabilidade ba operasaun hosi koncelho.
- ◆ Atu hametin kapacidade hosi llder suco atu governa suco inklui rekursu naturais nebe relasiona ba floresta uja mekanismu CB-NRM.

### 5.7.3 Sub-programa (Assaun)

- a. Hametin Koncelho Jestaun Bacias Hidrografikas Noru

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## 5.7 Programa Hametin Institusional

### Hametin Koncelho Jestaun Bacias Hidrografikas Noru

Aktividade	Lina Jeral	Inputs	Tempo
Assiste iha halao enkontro regular no ad hoc	Ajuda koncelho halao enkontro regular kada fulan tolu no enkontro ad hoc banhira precisa.	Facilitador, kustu ba enkontro, stationario, meius transporte	Loron 1 x dala 4/tinan x tinan 5  Kuandu precisa.
Aranja troka vijita/estudu	Ajuda membro sira vijita suco balun nebe halao aktividade hanesan ba hirak nebe introdus iha bacias hidrografikas Noru.	Ditto	Loron 2 x dala 1/tinan x tinan 5s
Provijaun oportunidade atu desenvolve kapacidade membro nian	Ajuda membro sira hasae sira nia kapacidade ba rekursu naturais nebe relasiona ba floresta uja planu uja rai futuru no regulamentu suco.	Treinador, kustu ba treinamento, stationario, meius transporte	Loron 2 x dala 1/tinan x tinan 5

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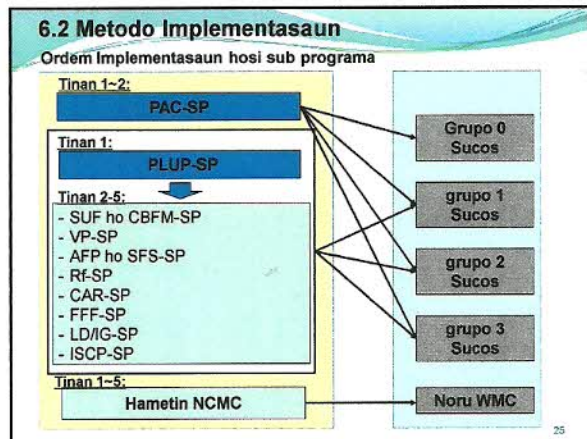
## Kapitulo 6

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## 6.1 Konceito Basiku

- ◆ Planu assaun espika iha Kapitulo 5 tengki implementa ho supporta hosi MAP/DNF no mos organijasaun seluk, hanesan doador no/ou organijasaun internasional seluk.
- ◆ maibe iha espekulasaun katak nee la dificil atu implementa sub programa 11 hotu iha suco nebe refere ba tempo badak.
- ◆ Sujere atu trata planu jestaun bacias hidrografikas hanesan planu tempo naruk nebe implementa iha dekade balun.
- ◆ Planu implementasaun(kapitulo 6) indika processo hosi implementasaun hosi planu, strutura organijasaun nebe propoin, no horario implementasaun ba tinan lima (5) tur mai.

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### 6.2 Metodo Implementasaun

Appropriado hosi Sub programa no sira nia durasaun

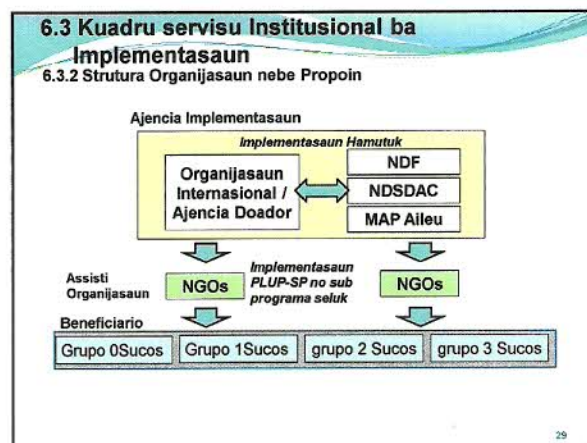
Sub-programa	Possible target sucos	Periodo suco	kada
PLUP-SP	Suco 12 excepto Suco Fadabloco, no Hautoho	Faturasa,	Tinan 4
SUF hoh CBSN-SP	Suco 12 excepto Suco Fadabloco, no Hautoho	Faturasa,	Tinan 3
VP-SP	Sucos nebe rekursu bee premanente disponivel		Tinan 3
AFP ho SFS-SP	Sucos animal shuik no pratika entre comunidade sira		Tinan 3
RF-SP	Suco 12		Tinan 3
CAR-SP	Sucos nebe bee matan degrada ona no ou area importante		Tinan 5
FFF-SP	Sucos nebe inciden sunu ai laran ass		Tinan 5
LD/IG-SP	Suco 12 excepto Suco Fadabloco no Hautoho		Tinan 3
ICSP-SP	Suco 12		Tinan 3
PAC-SP	Suco 12		Tinan 3
Hametin koncelho	Koncelho Jestaun Bacias hidrografikas		Tinan 5

### 6.2 Metodo Implementasaun

#### 6.2.2 Grupo hosi suco

Grupo	Sucos	Konseito Implementasaun
Grupo 0	Suco 3 (Suco Faturasa, Fadabloco, no Hautoho)	Suco nebe implementa ona PLUP-SP no sub programa seluk hosi 2011 to 2015 ho assistencia hosi Projeto JICA-MAP CB-NRM, rekomenda katak sira mayoria fokus ba kontinuasaun hosi aktividade nebe introdus hosi sub programa ba tinan lima oin mai.
Grupo 1	Suco 3 (Suco 1 hosi Remexio no suco 2 hosi Liquidoe)	Grupo 1 suco sei hahu PLUP-SP depois analija situasaun iha terreno iha tinan premeiru. Tuir PLUP-SP, sub programa ida ou rua, hili hosi comunidade lokal hanesan sub programa prioridade, sei implementa tinan tuir mai.
Grupo 2	ditto	Grupo 2 suco sei halo aktividade hanesan iha maneira hanesan iha tinan segundu hanesan nebe mak Grupo 1 suco halo iha tinan premeiru.
Grupo 3	ditto	Grupo 3 suco sei hahu aktividade iha tinan terceiru.

- ### 6.3 Kuadru servisu Institucional ba Implementasaun
- #### 6.3.1 Organizaun nebe involve
- ◆ Suco (koncelho suco no comunidade)
  - ◆ Administraun sub Distritu Remexio no Liquidoe
  - ◆ MAPF (MAP Distritu Aileu)
  - ◆ DNF
  - ◆ NGO nebe servisu iha terreno hosi jestaun floresta no desenvolve agrikultura; no
  - ◆ Organizaun internasional ou ajencia doador



- ### 6.4 Supporta necessario no Preparasaun ba Implementasaun
- Supporta finansial atu kobre kustu/gastus ba implementasaun sub programa (Koordenasun ho rekursu balun hosi assistencia finansial)
  - Allokasaun facilitador ba encontro no planu treinamentu iha sub programa (Prepara kontrato ho NGO nebe iha Kompetensia no esperiensia)
- Prepara instrumento necessario nebe precisa ba hola sasan eksternal ba sub programa nebe refere
- Prepara meus transporte ba facilitador no material nebe hola; no
  - Manutensaun kordenasaun entre organizaun nebe involve iha implementasaun hosi planu assaun.

### 6.5 Horario Implementasaun

Activity	Target Groups	1st year		2nd year		3rd year		4th year		5th year			
		1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd		
1. Strengthening of the Noru	Noru WMC	[Bar chart showing implementation from Year 1 to Year 5]											
2. Public Awareness Campaign SP	All the 12 sucos	[Bar chart showing implementation from Year 2 to Year 3]											
3. Assistance in continuation of the sub-program activities	Batch 0 SUCOS	[Bar chart showing implementation from Year 1 to Year 4]											
4. Participatory Land Use Planning SP	Batch 1 SUCOS	[Bar chart showing implementation from Year 1 to Year 5]											
	Batch 2 SUCOS	[Bar chart showing implementation from Year 2 to Year 5]											
	Batch 3 SUCOS	[Bar chart showing implementation from Year 3 to Year 5]											
5. Priority Sub-programs selected by communities in the sucos	Batch 1 SUCOS	[Bar chart showing implementation from Year 2 to Year 4]											
	Batch 2 SUCOS	[Bar chart showing implementation from Year 3 to Year 5]											
	Batch 3 SUCOS	[Bar chart showing implementation from Year 4 to Year 5]											

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**END**

*Thank you!*

*Obrigada barak*

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## ***Apéndice-4.5***

***Rezolusaun hosi Konsellu Jestaun  
Bacias Hidrograficas Noru ba Planu  
Jestaun Bacias Hidrograficas***



## **Apêndice-4.5: Rezolusaun hosi Konsellu Jestaun Bacias Hidrograficas Noru ba Planu Jestaun Bacias Hidrograficas**

Ref : \_\_\_\_\_ - 2015

Data : \_\_\_\_\_ , 2015

### **Assuntu : Proposta Planu Jestaun Bacias Hidrograficas ba Bacias Hidrograficas Noru**

Bazeia ba estabelesementu Konsellu Jestaun Bacias Hidrograficas Noru iha 21 de Augustu, 2014 ho assistensia hosi Ministerio Agrikultura no Peskas (MAP) no Japan International Cooperation Agency (JICA) atu proteje no maneija ai laran no rekursu naturál sira ne'ebé relasiona ba ai laran iha bacias hidrograficas tuir maneira ne'ebé próprio no sustentável;

**Tamba ne'e**, konsellu iha ona diskusaun lubun ida konaba tópiku ne'ebé relasiona ba Jestaun husi bacias Hidrograficas Noru, ho naran, i). kondisaun bacias Hidrograficas Noru agora, ii) konseitu istoria husi deflorestasaun no degradasaun floresta iha Bacias Hidrograficas , iii) konseitu baziku no prinsipál ba jestaun bacias hidrograficas, iv). Planu asaun ba jestaun bacias hidrograficas, no v) implementasaun prosesu hosi planu jestaun bacias hidrograficas iha Outubro no Novembro 2014.

**Tamba ne'e**, planu jestaun bacias hidrograficas ba bacias hidrograficas Noru ne'ebé ninia ezbosu halo husi Ekpa Projeitu kompostu hosi peritus JICA no Funsionariu MAP/DNF sira iha Dezembru 2014 bazeia ba resultadu diskusaun ne'ebé halo husi Konsellu Jestaun Bacias Hidrograficas; no

**Tamba ne'e**, planu ezbosu bacias hidrograficas ne'ebé aprazenta ba membru sira husi Konsellu Jestaun Bacias Hidrograficas Noru iha encontro regular daruak halao iha administrasaun Postu-administrativu Liquidoe iha 23 de Janeiro, 2015

TAMBA NE'E, DETERMINA hosi membru sira hosi Konsellu Jestaun Bacias Hidrograficas hosi Bacias Hidrograficas Noru hanesan tuir mai ne'e :

Seksaun 1 : Planu Jestaun Bacias Hidrograficas ba Bacias Hidrograficas Noru ne'ebé aneksu iha ne'e aprova hosi Konsellu hanesan matadalan ba Jestaun ne'ebé próprio hosi rekursu naturál sira iha Bacias Hidrograficas Noru em-Jerál no liu-liu iha suku sira ne'ebé refere.

Seksaun 2: Konsellu Jestaun Bacias Hidrograficas ne'ebé oficialmente hatama planu jestaun Bacias Hidrograficas ba MAP/DNF no Administrasaun Distrito Aileu atu buka sira nia assistensia tekniku no finansial ne'ebé nesésáriu ba implementasaun hosi planu Bacias Hidrograficas.

Seksaun 3 : Konsellu Bacias Hidrograficas hakarak tebes husu ba ajensia ne'ebé relevante hanesan MAP, Ambiente, MSS, Obras Públiku no seluk tan atu foti asaun nesésáriu ne'ebé imediata atu ajuda Konsellu Jestaun Bacias Hidrograficas iha implementasaun planu jestaun Bacias Hidrograficas ba Jestaun ne'ebé sustentável hosi floresta no rekursu naturál sira ne'ebé relasiona ba floresta no hadia vida moris lokáll iha Bacias Hidrograficas

Seksaun 4 : Rezolusaun ne'e sei efetivu kuando hetan ona asinatura hanesan tuir mai ne'e :

Data : Febreiru 13, 2015

**Presidente**

**Vice-Presidente**

XXXXXXXXXX

XXXXXXXXXX

Administrador Postu  
Administrativu Remexio

Administrador Postu  
Administrativu Liquidoe

**Sekretariadu**

XXXXXXXXXXXXXXXXXXXXXX

Diretor MAP Dsitrito iha Aileu

XXXXXXXXXXXXXXXXXXXXXX

Chefe Departamento, Dep.  
Reflorestasaun, DNF

XXXXXXXXXXXXXXXXXXXXXX

Chefi Dep. Konservasaun  
Rai no Bee, DNF

**Membros**

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Asumau

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Fadabloco

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Fahisoi

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Faturasa

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Hautoho

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Maumeta

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Acubilitoho

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Bereleu

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Fahisoi

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Faturilau

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Manucasa

XXXXXXXXXXXXXXXXXXXXXX

Xefe Suku Namoleso

XXXXXXXXXXXXXXXXXXXXXX

Representante DNA  
Distrito iha Aileu

XXXXXXXXXXXXXXXXXXXXXX

Representante  
NDWSS iha Sub Distrito  
Remexio

XXXXXXXXXXXXXXXXXXXXXX

Representante  
NDWSS Lequidoe

