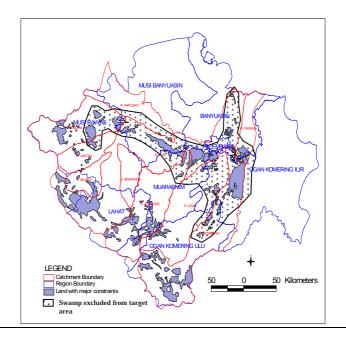
Application of Agroforestry (tumpang sari) on land with major constraints

#### 2. Location

Subject sites are land with major constraints for agriculture, which is shown as the blue area in the map.



# 3. Objectives

- To reduce soil erosion in farmer's plantation area
- To encourage farmers to introduce agroforestry method to use part of their house lot as home garden
- Lower farmer's temptation for short cycle of tree cutting (rubber and coffee plantations)
- Educate farmers in technique for soil conservation

### 4. Executing Agency

- Kabupaten- and Kecamatan-level Forest, Estate, and Agriculture Office: Responsible for selection of project area, project planning, and provision of technical guidance to extensions.
- Forest, Estate, and Agriculture Extension Offices: Responsible for contribution for the project planning, cooperation with the farmers in the project execution, monitoring and reporting the achievement of the project to upper-level offices.
- Provincial Forestry, Estate, and Agriculture Office: Responsible for providing general guidelines, preparation of budget, and provision of outside expert.
- Provincial- and Kabupaten-level BAPPEDA: Responsible for legislative action for land use regulation on the land with steep slope and severe soil erosion.

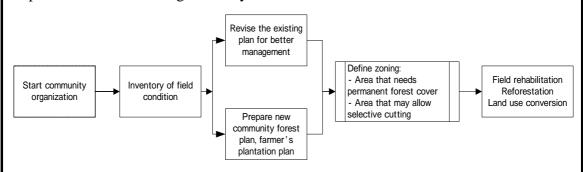
### **5. Program Description**

The program is composed of the following activities:

- Planning and Design, Land Preparation,
- Nursery Preparation and Maintenance, Tree Plantation, Training.

# **5. Program Description (continuous)**

Steps for introduction of agroforestry are as follows:



# 6. Implementation Schedule

Implementation schedule is as follows:

|       | Priority Program   | ]    | lst  | Ye  | ar  | 2  | 2nd | Ye | ar | 3 | rd ` | Yea | ır | 4 | th Y | <i>Y</i> ea | . [ | 51 | h Y | <i>Y</i> ea | r  | 6 | th \ | Yea | r  | 7t | h Y  | 'ear    | ٦ |
|-------|--|------|------|-----|-----|----|-----|----|----|---|------|-----|----|---|------|-------------|-----|----|-----|-------------|----|---|------|-----|----|----|------|---------|---|
| No.   | Title  | I    | II   | II  | IIV | I  | II  | Ш  | ΙV | I | II   | Ш   | ΙV | I | II   | III         | [V  | I  | II  | Ш           | IV | I | II   | Ш   | ΙV | I  | II J | ПП      | V |
| 3-1   | Application of agroforestry in farmer's plantations        |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
| 3-1-1 | Project formulation -Form a task team-                     |      |      | E   |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   | ш    |     |    |    |      |         |   |
|       | -Choose the project sites                                  |      |      | E   | +   |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   | ш    |     |    |    |      |         |   |
|       | -Negotiate with the community leaders                      |      |      | _   |     |    | +   |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
| 3-1-2 | Planning and design -Form a model project scheme           |      |      |     |     |    | +   |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   | ш    |     |    |    |      |         |   |
|       | -Start community organization                              |      |      |     |     |    | +   |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
|       | -Inventory of field condition                              |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
|       | -Revise the existing plan for better management            |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
|       | -Prepare new community forest plan, farmer's plantatio     | n p  | lan  |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      |         |   |
|       | -Define zoning in the plan                                 |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | •   |    |     |             | _  |   |      |     |    |    |      |         |   |
| 3-1-3 | Project implementation -Training-                          |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | =   |    |     |             | _  |   |      |     |    | _  | _    | 7       |   |
|       | -Land preparation  |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | •   |    |     |             | _  |   |      |     |    |    |      |         |   |
|       | -Check dam construction                                    |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | •   |    |     |             | _  |   |      |     |    |    |      | $\perp$ |   |
|       | -Nursery preparation and maintenance                       |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | =   |    |     |             | _  |   |      |     |    |    | _    | 7       |   |
|       | -Tree planting   |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             | ļ  |   |      |     | =  | _  | _    | 7       |   |
|       | -Forest /field maintenance                                 |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             | ļ  |   |      |     | =  | _  | _    | 7       | ▶ |
| 3-1-4 | Monitoring and reporting -Develop monitoring and eva       | alua | itio | n s | che | me | ;   |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   | Ш    |     |    |    |      |         |   |
|       | -Develop monitoring and evaluation scheme                  |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      | ⊥       |   |
|       | -Conduct monitoring and reporting                          |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    | =    | 7       |   |
|       | -Revision of project scheme                                |      |      |     |     |    |     |    |    |   |      |     |    |   |      |             | •   |    |     |             |    |   |      |     |    |    |      | 7       | Þ |
|       | -Sharing project experience in inter-project communication | atio | n    |     |     |    |     |    |    |   |      |     |    |   |      |             |     |    |     |             |    |   |      |     |    |    |      | 3       |   |

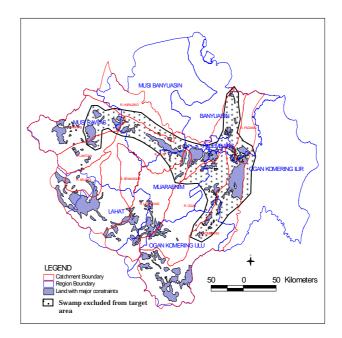
# 7. Program Cost (30 sites, 6,000 ha.)

| Planning and Design                 | Rp. | 2,155 million  |
|-------------------------------------|-----|----------------|
| Land Preparation                    | Rp. | 27,240 million |
| Nursery Preparation and Maintenance | Rp. | 1,148 million  |
| Tree Plantation                     | Rp. | 13,067 million |
| Training                            | Rp. | 1,901 million  |
| Total                               | Rp. | 45,511 million |

Strengthening of Agriculture/Estate/Forestry Extension

#### 2. Location

Subject site is the same area with Program 3-1-1.



# 3. Objectives

- To provide better attention and advise for local farmers for better land management.
- To reduce soil erosion in farmer's plantation area
- To encourage farmers to introduce agroforestry method to use part of their house lot as home garden
- Lower farmer's temptation for short cycle of tree cutting (rubber and coffee plantations)
- Educate farmers in technique for soil conservation

#### 4. Executing Agency

- Kabupaten- and Kecamatan-level Forest, Estate, and Agriculture Office: Responsible for provision of technical guidance to extensions.
- Provincial Forestry, Estate, and Agriculture Office: Responsible for providing general guidelines, preparation of budget, and provision of outside expert.

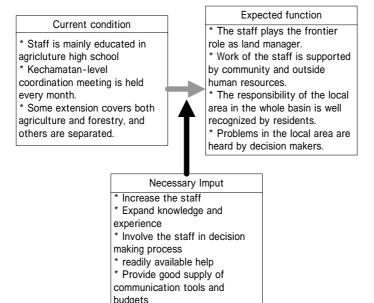
# **5. Program Description**

The program is composed of the following activities:

- Provision of higher education/training for current staff of the extensions.
- Increase the number of staff in extensions with major land constraints.
- Newly establish extensions where closer monitoring and advice is required.
- Introduce necessary equipment, nurseries, and laboratories.

# **5. Program Description (continuous)**

Expected function and necessary input for agriculture/forestry extensions:



# 6. Implementation Schedule

Implementation schedule is as follows:

|       | Priority Program 1s                                   |     | 1st Year |     |    | 2nd Year |    |     |    | 3 | rd ` | Yea | ır | 4 | th ` | Yea | r  | 5 | th Y | Yea | ır | 6 | th \ | Yea | r  | 7t | h Y  | /ear   |
|-------|---|-----|----------|-----|----|----------|----|-----|----|---|------|-----|----|---|------|-----|----|---|------|-----|----|---|------|-----|----|----|------|--------|
| No.   | Title   | I   | II       | III | ΙV | I        | II | III | ΙV | I | II   | Ш   | ΙV | I | II   | Ш   | IV | I | II   | III | ΙV | I | II   | Ш   | ΙV | I  | II : | III IV |
| 3-3   | Strengthening of agriculture/ estate/ forestry extens | ion | 1        |     |    |          |    |     |    |   |      |     |    |   |      |     |    |   |      |     |    |   |      |     |    |    |      |        |
| 3-3-1 | Project formulation                                   |     |          |     |    |          |    |     |    |   |      |     |    |   |      |     |    |   |      |     |    |   |      |     |    |    |      |        |
|       | -Form a task team                                     | _   |          |     |    |          |    |     |    |   |      |     |    |   |      |     |    |   |      |     |    |   |      |     |    |    |      |        |
|       | -Choose the project sites                             | _   |          |     | -  |          |    |     |    |   |      |     |    |   |      |     |    |   |      |     |    |   |      |     |    |    |      |        |
|       | -Negotiate with the community leaders                 |     |          |     |    |          |    |     |    |   |      |     |    |   |      |     |    |   |      |     |    |   |      |     |    |    |      |        |
| 3-3-2 | Implementation  |     |          |     |    |          |    |     |    | Ė |      |     | Ė  |   | Ė    |     |    |   |      |     | Ė  |   | Ė    |     |    | 4  | 4    | ->     |

### 7. Program Cost

| Technical training of opponent area management | Rp. 743 million  |
|--|------------------|
| Provision of higher education (12 months)      | Rp.2,160 million |
| Increase the number of staff                   | Rp.2,520 million |
| Establish/renovate new extensions              | Rp. 310 million  |
| Introduce necessary equipment                  | Rp. 930 million  |
| Total  | Rp.6,663 million |

Reforestation of Production Forest and Forest Estate

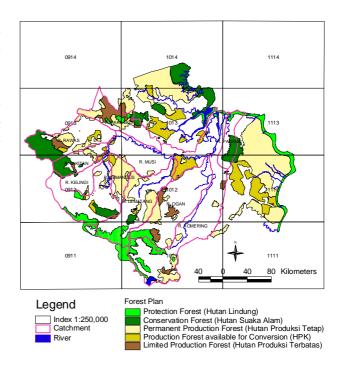
#### 2. Location

Subject sites are the production forests that already received the Reforestation Fund in the past.

The map shows all the production forests (Permanent, Conversion, and Limited Production), together with Protection and Conservation Forests.

#### **Priority 21 sites:**

HP. Mangsang Mendis, HP Rawas Utara I, HP Rawas Lakitan, HPT Rawas Lakitan, HP Bukit Balai, HPT Bukit Balai, HL Bukit Balai, HPT Gumai Tebing Tinggi, HPT Isau-Isau, HP Air Empelu, HP Bukit Asam, HPT Saka, HPT Meranti S. Kapas S. Saka Suban, HPT. Meranti LB. Buah, HP. Meranti S. Bayat S. Bahar, HP. Meranti S. Merah, HP. Sungai Lalan, HP Simpangheran Beyuku, HP Mesuji III, HPT. Air Tebangka, HP. Saka.



#### 3. Objectives

- To reduce soil erosion in Production Forest area
- To make sure that the obligation of reforestation by the forest companies are fulfilled as intended.
- To rehabilitate forest resource of the Province for sustainable use in the future.

### 4. Executing Agency

- Provincial Forestry office: Responsible for monitoring the reforestation fund and its recipient companies, providing reforestation guidances based on national and international guidelines, coordinating monitoring activities of tree growth using satelite images, consulting with Ministry of Forestry to establish stronger legal action to monitor the use of Reforestation Fund..
- Forest Police: Responsible for enforcing the forest law against illegal activities by forest companies.
- Kabupatens and agriculture extension offices: Responsible for monitoring of production forests in their regions.

### 5. Program Description

The program is composed of the following activities:

# **5. Program Description (continuous)**

### **Guidance and communication**

- The Provincial guidance for forest and plantation companies.
- Formation of investigation team that include members from forest industry, forestry research, environmental NGOs, and provincial and local government.

## **Encouraging Actions**

- Merit for corporation that achieved its reforestation oblication.
- Additional provincial grant to support maintenance work for reforestation.

# **Enforcing Actions**

- The timing of DR payment to be delayed to after-reforestation.
- Sabotage fine to be charged for those misconduct.
- Names of the companies that failed obligatory reforestation to be announced in mass media.
- Log production allowance to reflect amount of reforestation work achieved.

# 6. Implementation Schedule

Implementation schedule is as follows:

|       |   |        |         |         |         |                 |               |         |           |   |    |         |    | _ |      |         |     |    |     |     |    | _ |      |     |    |    |      |          |
|-------|---|--------|---------|---------|---------|-----------------|---------------|---------|-----------|---|----|---------|----|---|------|---------|-----|----|-----|-----|----|---|------|-----|----|----|------|----------|
|       | Priority Program  | 1      | lst`    | Yea     | ır      | 2               | nd            | Ye      | ar        | 3 | rd | Yea     | ar | 4 | th ` | Yea     | ır  | 5  | th  | Yea | ır | 6 | th ' | Yea | ır | 71 | th Y | l'ear    |
| No.   | Title   | I      | II      | III     | ΙV      | I               | II            | III     | IV        | I | II | III     | ΙV | I | II   | III     | IV  | I  | II  | III | ΙV | I | II   | Ш   | ΙV | Ι  | II ! | III IV   |
| 3-4   | Reforestation of production forest                      |        |         |         |         |                 |               |         |           |   |    |         |    |   |      |         |     |    |     |     |    |   |      |     |    |    |      |          |
| 3-4-1 | Guidance and communication                              | ,      |         |         |         |                 |               |         |           |   |    |         |    |   | I.n. |         |     |    |     |     |    |   |      |     |    |    |      |          |
|       | -Guidance for forest and plantation companies           |        | ĮIIIIII | ļIIIIII |         | udy<br>IIIIIIII | pna           | ase     | =         |   |    |         |    | I | v    | ope<br> |     | Ш  |     |     |    |   |      |     |    |    | _    | <b>-</b> |
|       | -Formation of investigation team                        |        |         | ara     |         |                 |               | H       |           |   |    | -       |    | • | Ţ    | acti    |     | •  | • • |     | -  |   | •    |     | •  |    |      | •        |
|       | -Monitoring of reforestation activities and achievement | t IIII | les     | an      | a st    | iay<br>IIIIIII  | pn<br>Illiiii | ase     | =         |   |    |         |    |   | In   | ODE     | rau | on |     |     |    |   |      |     |    |    | _    | <b>→</b> |
| 3-4-2 | Encouraging actions                                     |        |         |         |         |                 |               |         |           |   |    |         |    |   |      |         |     |    |     |     |    |   |      |     |    |    |      |          |
|       | -Preparation of provincial legislations                 |        |         |         |         |                 |               |         | ,,,,,,,,, |   |    |         |    |   |      |         |     |    |     |     |    |   |      |     |    | H  | 4    | <b>→</b> |
| 3-4-3 | Enforcing actions                                       |        |         |         |         |                 |               |         |           |   |    |         |    |   |      |         |     |    |     |     |    |   |      |     |    |    |      |          |
|       | -Preparation of provincial legislations                 |        |         | 0111111 | 0111111 |                 |               |         | ,,,,,,,,, |   |    | 1111111 |    |   |      |         |     |    |     |     |    |   |      |     |    | H  | 4    | <b>→</b> |
|       | -Consultation with national government for stronger po  | lici   | ies     |         |         |                 |               | 1111111 |           |   |    |         |    |   |      |         |     |    |     |     |    |   |      |     |    | H  | 4    | <b>→</b> |

#### 7. Program Cost

Research of industry plantation forest for 21 sites for priority.

Rp. 87.8 million

Inner- and Inter-Basin Coordination

#### 2. Location

Subject site is the whole Province.

Sub-basins may be grouped into 5 groups as follows:

- 1) Rawas, Lakitan,
- 2) Lematang,
- 3) Musi, Harileko, Semangus, Kelingi,
- 4) Ogan, Komering.



## 3. Objectives

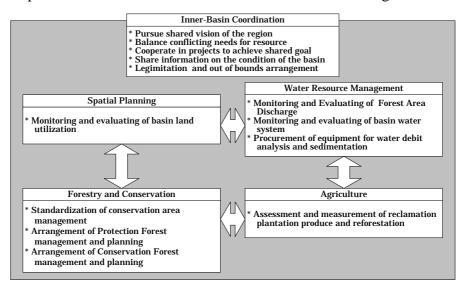
- To realize sound and comprehensive resource management of the Musi River Basin.
- To encourage local government manage their own resources in coordination with other government body within the same sub-basin.

### 4. Executing Agency

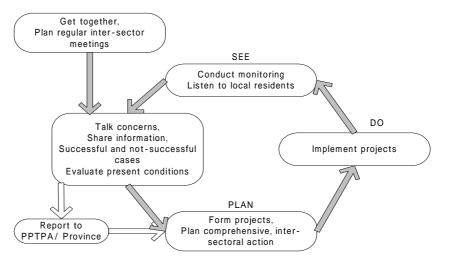
- The Governor's Office: Responsible for formation of Musi River Basin PPTPA, in cooperation with various related provincial office, academic researchers, and NGOs.
- Kabupatens: Responsible for sub-basin level organization similar to the PPTPA, with help from Provincial Governor's Office, and the PPTPA itself.

# 5. Program Description

Issues expected to be coordinated on the table of the coordinating bodies are as follows:



Expected activities of the coordinating bodies are as follows:



## 6. Implementation Schedule

Formation of sub-basin or Kabupaten level organization may be started prior to the PPTPA, or after, depending on willingness of Kabupatens.

#### 7. Program Cost

Refer to Program 6-5-3.