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# Master Plan for the Rehabilitation and Revitalisation of the Ex-Mega Rice Project Area in Central Kalimantan



## IMPROVING LIVELIHOODS IN THE EX-MEGA RICE PROJECT AREA IN CENTRAL KALIMANTAN

Technical Report No. 12

OCTOBER 2008

Euroconsult Mott MacDonald and Deltares | Delft Hydraulics  
in association with  
DHV, Wageningen UR, Witteveen+Bos, PT MLD and PT INDEC

# **Master Plan for the Rehabilitation and Rehabilitation of the Ex-Mega Rice Project Area in Central Kalimantan**

**Technical Report Number 12**

## **Improving Livelihoods in the Ex-Mega Rice Project Area in Central Kalimantan**

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## Table of contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Purpose and Scope of the Report .....	1
1.2	Selection of the Villages for SLA .....	1
1.3	Method to defining a Livelihood Support Strategy and Options .....	2
1.3.1	Sustainable Livelihoods Approach.....	2
1.3.2	Village Workshops .....	3
1.3.3	Public Consultations .....	3
1.3.4	Stakeholder Workshop .....	3
1.4	Structure of this Report.....	3
<b>2</b>	<b>Existing Livelihood Conditions in the EMRP Area.....</b>	<b>4</b>
2.1	Livelihood Assets.....	4
2.1.1	Financial Capital .....	4
2.1.2	Human Capital .....	4
2.1.3	Social Capital.....	5
2.1.4	Physical Capital .....	6
2.1.5	Natural Resource Capital.....	6
2.2	Vulnerability Context.....	6
2.3	Current Livelihood Strategies .....	7
2.4	People's Aspirations .....	9
2.5	Conclusions .....	9
<b>3</b>	<b>Options for Supporting Livelihoods.....</b>	<b>10</b>
3.1	Existing Livelihood Support Programs .....	10
3.2	Proposed Strategy to Support Livelihoods.....	11
3.2.1	Market Development.....	11
3.2.2	Small and Medium Enterprise Development.....	11
3.2.3	Agro-forestry Development.....	12
3.2.4	Community Driven Forest Conservation and Reforestation.....	12
<b>4</b>	<b>Recommendation on Priority Actions .....</b>	<b>14</b>
<b>5</b>	<b>References.....</b>	<b>15</b>

## List of annexes

**Annex 1:** Governmental Livelihood Support Programs

## List of figures

**Figure 1.1:** Care HSL Analytical Framework

## List of abbreviations

Bappeda	Regional Development Planning Agency
BKKBN	National Family Planning Coordinating Agency
BPMD	Regional Office for Community Empowerment
BPS	National Statistics Agency
CKPP	Central Kalimantan Peatlands Project
CIMTROP	Centre for International Co-operation in Management of Tropical Peatland
EMRP	Ex-Mega Rice Project
GOI	Government of Indonesia
Inpres	Presidential Instruction
KUPT	<i>Kepala Unit Pemukiman Transmigrasi</i>
MP	Master Plan
NGO	Non-governmental organization
NTFPs	Non-timber forest products
P3A	Water User Association
PLG	<i>Proyek Lahan Gambut</i> (Mega-Rice Project)
PSF	Peat Swamp Forest
PNPM	National Community Empowerment Program
PU	<i>Pekerjaan Umum</i> / Public Works
SMEs	Small and Medium Enterprises
SLA	Sustainable Livelihoods Analysis
UPT	Transmigration Settlement Units

# Summary

A Sustainable Livelihoods Analysis (SLA) was carried in six villages in the EMRP area, Central Kalimantan, Indonesia in the period February – June, 2008. The SLA was part of a broader socio-economic analysis of this area that was carried out within the EMRP socio-economic cluster (cluster 6). The objectives were to: (1) assess the range of productive resources or livelihood assets which local people command; (2) analyze the problems, coping mechanisms and strategies of the people living in the EMRP area; (3) identify successful livelihood strategies and the factors that contribute to this; and (4) contribute to the Master Plan strategy for improved livelihoods in agricultural and conservation areas. This technical report presents the results of the SLA.

A consideration of the selection of the villages for the SLA is followed by the method used to define a livelihood support strategy and options. The existing livelihood assets (i.e. financial capital, human capital, physical capital and natural resource capital) of the people living in the EMRP area are explained. A presentation of the factors that influence access, control and use of livelihood assets is followed by a description of current livelihood strategies and key drivers behind current livelihood problems. Lessons learned on community involvement in peat swamp forests rehabilitation and the presentation of findings on existing governmental programs for community empowerment and socio-economic development in the EMRP area are presented are followed by the main components of the proposed livelihood support strategy. Lastly, the priority actions for the short term (2008 – 2009) to initiate the implementation of the recommended livelihood support strategy are outlined.

# 1 Introduction

## 1.1 Purpose and Scope of the Report

This report presents the results of a Sustainable Livelihoods Analysis (SLA) that was carried out in the period February - June, 2008. The SLA is part of a broader socio-economic analysis of the EMRP area that was carried out within the EMRP socio-economic cluster (cluster 6)<sup>1</sup>. The objectives of the SLA were to:

1. Assess the range of productive resources or livelihood assets which local people command;
2. Analyze the problems, coping mechanisms and strategies of the people living in the EMRP area, in close cooperation with the clusters on Water management and infrastructure (cluster 4) and Land use for conservation and production (cluster 5) at the micro planning level;
3. Identify successful livelihood strategies and the factors that contribute to this, including external assistance;
4. Contribute to the Master Plan strategy for improved livelihoods in agricultural and conservation areas including needs in the health and education sectors.

## 1.2 Selection of the Villages for SLA

Six villages were selected for the SLA in the three EMRP case study areas<sup>2</sup> as defined by the Master Plan team and in close cooperation with the other clusters, such that livelihood assets and issues and existing livelihood strategies could be assessed under different demographic conditions and ethnic background of the population, and biophysical conditions, water management systems and land-use patterns.

The land and water management systems in the EMRP area include that of the Dayak, Banjarese and transmigrant communities. The selected villages cover these three systems and included:

- **Katunjung** and **Pilang**: Two Dayak communities, located respectively along the Kapuas river in the north-west part of Block A, and along the Kahayan river in the northern part of Block C.
- **Bahaur Hilir**: A Banjarese village, located towards the mouth of the Kahayan river in the southern part of Block C.
- **Gandang**: an older UGM transmigrant village from 1982, located along the Kahayan river in the southern part of Block C.

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<sup>1</sup> For details see the EMRP MP Inception Report: Strategy, Approach and Work Plan.

<sup>2</sup> The case study areas are: (1) the north part of Block C; (2) the southern part of Block C; and (3) Block A.

- **Menggala Permai** and **Rantau Jaya**: two PLG transmigration villages, both located in the Lamunti scheme in Block A .

### 1.3 Method to defining a Livelihood Support Strategy and Options

#### 1.3.1 Sustainable Livelihoods Approach

To develop a strategy and concrete policy and support options for local livelihood improvements in the EMRP area, the sustainable livelihoods approach was used. Figure 1.1. shows the sustainable livelihood analytical framework developed by CARE which has guided information gathering and analysis.

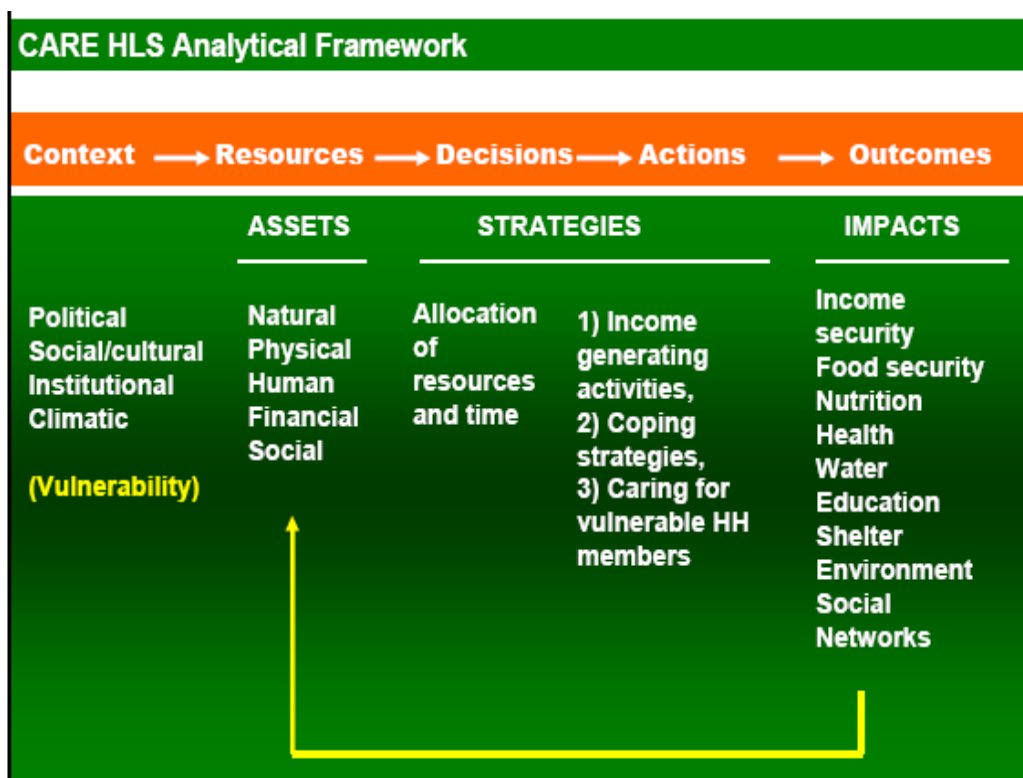


Figure 1.1: Care HSL Analytical Framework (source: CKKP/CARE Indonesia)

Miranda Cahn (2002)<sup>3</sup> in a paper in which she describes and critiques the sustainable livelihoods (SL) approach in the context of rural development, explains that this approach emphasizes that livelihoods and well-being are not just based on financial income or consumption, but also on financial, human, social and physical capital or livelihood assets, and activities required for a means of living. The status of the livelihood assets of local people is fundamental to understanding the option open to them, the strategies they adopt to attain livelihoods, the outcomes they aspire to and the vulnerability context under which they work and live (Ellis, 2000 cited by Cahn, 2002). The most well known definition of sustainable livelihoods comes according to Cahn (2002) from Chambers and Conway (1992)<sup>4</sup>:

<sup>3</sup> Cahn, M. (2002) Sustainable livelihoods approach: Concept and Practice.

[www.devnet.org.nz/conf2002/papers/Cahn\\_Miranda.pdf](http://www.devnet.org.nz/conf2002/papers/Cahn_Miranda.pdf)

<sup>4</sup> Chambers, R. and Conway, G.D. (1992) Sustainable rural livelihoods: Practical concepts for the 21<sup>st</sup> century. Discussion paper 296. Brighton, UK: Institute of Development Studies.



'... A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its assets, both now and in the future, while not undermining the natural resource base.'

### 1.3.2 Village Workshops

Three days workshops in the six research villages were organized by the EMRP socio-economic cluster with support of field staff of CKPP/CARE.<sup>5</sup> The outcomes provided insights into the livelihood assets of local people, the problems they face, and their aspirations for the future. The workshops were attended by participating community members, village heads, traditional leaders and representatives of the sub-district. CKPP/CARE field staff together with one or two community members facilitated the group discussions during a workshop. The facilitators were briefed and instructed in meetings before and during the workshops. Participatory rapid appraisal tools such as village mapping, venn diagrams, ranking and focus group discussions were used to gather information.

### 1.3.3 Public Consultations

The outcomes of the village workshops were discussed at public consultation meetings at the sub-district and district levels.<sup>6</sup> These meetings were organized in 20 sub-districts and all four districts and facilitated by members of the EMRP MP team. Through this multi-scale approach the specific issues and interests of the population living in one of the six villages for the SLA could be linked to the broader development priorities of local government and people living in the whole EMRP.

### 1.3.4 Stakeholder Workshop

A stakeholder workshop was organized at the provincial level (Bappeda) by the EMRP socio-economic cluster which was attended by NGO representatives of the CKPP project, representatives of various governmental departments and consultants of other clusters of the EMRP MP. The outcomes provided better understanding of the root causes behind current livelihood problems of people living in EMRP area, and of what GOI and NGO are doing to address these problems. Discussions groups were organized according to the three macro-zones in the EMRP MP: the Peatland Protection and Conservation Zone; the Development Zone; and the Adapted Management Zone.

## 1.4 Structure of this Report

In addition to this introductory chapter, this report consists of four chapters. In chapter two, the analysis of the livelihood assets and vulnerability context, components of the livelihood strategies for different types of village communities and key drivers behind the current livelihood problems are presented. In chapter three, firstly some major lessons learnt are presented on community involvement in PSF rehabilitation and ongoing governmental and NGO livelihood support activities in the EMRP area. Secondly, the proposed livelihood support strategy for the EMRP area is presented. Chapter four includes the recommendations on priority actions for the short term (2008 -2009).

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<sup>5</sup> See for a synthesis of the results of the workshops the EMRP Master Plan Technical Report No. 17

<sup>6</sup> See for a synthesis of the results of the public consultations, EMRP Master Plan Technical Report No. 17

## 2 Existing Livelihood Conditions in the EMRP Area

### 2.1 Livelihood Assets

#### 2.1.1 Financial Capital

Data from the BPS and BKKBN show a poverty rate of 36% across the EMRP area in 2005. Within the new PLG transmigration villages such as Mangalla Permai and Rantau Jaya, the poverty level is significantly higher than in other villages in the area and is estimated at 62.3% (BKKBN) and 75.4 (BPS). Agriculture is the main source of income, of which food crops (e.g. rice, coconut, vegetables and fruits); fish and non-food crops (e.g. rubber and rattan) are the most important. According to a household survey by CKPP, most farmers (56.5%) do not sell their produce and only 22% of farmers sell more than half of their produce.<sup>7</sup> Of those that sell their produce, roughly two-third considers that they generate a profit while the remaining one-third considers they do not make any profit. For most people in the area, even a small amount of money is difficult to save. Access to basic financial services such as credit, savings, payment and transfer services and insurance is poor. Main credit sources for the local population include:

- Private money lenders, shopkeepers, middlemen and land lords who ask up to 20% interest rates on small and short term loans; and
- *Arisan* saving and borrowing groups in which savings are generally too small for making productive investments.

The poorest segments of the population depend for access to loans and credits on the so called *ijon* system according to which agricultural produce and wood is sold to middlemen before actual harvesting at fixed prices. This system appears to be a poverty trap leading to increasing debts and structural dependency on private money lenders for the most vulnerable people in the area.

#### 2.1.2 Human Capital

##### **Educational levels**

Among the adult population in the EMRP area educational levels is low, and limited to (several years) of primary school education. Nowadays, primary school facilities are widespread over the area and most children complete primary school education. Continuation of their education depends however on the family income, distance to junior secondary and high schools and the policy of the district government towards education. The public consultations highlighted the lack of monitoring and transparency of the Education Cost Support (BOS) program from the government.

##### **Health**

Poverty, geographical and social isolation and low public health investments are dominant factors in reducing access to health services and resources in the EMRP area and hence impact negatively on health conditions, in particular of women and children. Roughly 50% of the villages in the EMRP area have

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<sup>7</sup> Beukering, P.J.H., et al (2008) The economic value of peatland resources within the Central Kalimantan Peatland Project in Indonesia: Perceptions of local communities.

access to community health centers. There is a general lack of immunization, midwives and children's care. Diseases that are related to poor drinking water and sanitation facilities such as diarrhea and vomiting are common in the area. Diarrhea and malaria are diseases recurring every year during dry season. Food security in the area is threatened by agricultural pests and diseases, low soil fertility, floods and fires and decreasing availability of wild food resources harvested in PSF. Traditional medicines are widely used to cure common diseases and injuries. The importance of PSF as harvesting area for food and medicinal plants requires further study.

#### **Local knowledge on the PSF environment**

In contrast to transmigration villages that are inhabited by people with no prior experiences with the management of peat lands for farming, Dayak people have great knowledge of the PSF environment. They harvest a great variety of non-timber forests products in PSF (e.g. rattan, damar resin, jelutong latex, gemor bark, wild vegetables and fruits and wildlife) that contribute significantly to local health and food security as well as incomes. A system of shifting cultivation is practiced which is adapted to the PSF environment, including diversified cropping patterns and tree crop farming. Banjarese and Dayak people maintain manage canals of 2 to 4 km long (perpendicular to the rivers), so called *handil*, to drain water into the rivers for farming. These canals are also used for water transportation.

#### **Traditional fisheries**

Many Dayak and Banjarese people practice traditional *Beje* fisheries. They dig rectangular ponds in forest or farmlands which act as refuges for fishes when waters retrieve after a flooding period. Fishes are left to grow during the dry season, only to be harvested just before new floods appear. In the PLG transmigration area *Beje* fisheries has disappeared with the realization of the water management infrastructure.

#### **Other technical knowledge and skills**

Next to knowledge and related skills on PSF, agriculture and fisheries, local people also have skills for home-based processing activities (e.g. rubber, fish, cassava, soy beans), and for the production of a great number of handicraft products (e.g. equipment and furniture).

### 2.1.3 Social Capital

#### **Customary laws, institutions and leadership**

In Dayak and Banjares villages, customary laws and tenure arrangements (*ayung kuh*) still mediate access to and withdrawal of rights to land and forest resources, including customary share cropping arrangements. People in older transmigration and PLG villages generally have official land certificates for the land they farm. Dayak and Banjarese people also merely rely on customary laws and leadership for solving disputes on rights on land and other resources, and other types of social problems. Traditional leaders such as the *damang* in Dayak villages have an important position in village governance and politics, where also a customary fines system called *jipen* is being maintained.

#### **Communal work parties and mutual help arrangements**

In villages throughout the EMRP area members of different families and households exchange labor through organizing communal work parties, such as *handep* (helping each other in planting paddy). Other types of communal work arrangement have also been recorded which vary according to the ethnic background of the population. Mutual help arrangements for ceremonial events, as well as for help in times of emergencies such as fires, illness and other cases of individual distress are common across the villages in the EMRP area.

### **Community organizations**

GOI induced community organizations in the EMRP area, such as farmer groups, farmer water user groups (P3As) and women and youth groups, appear hardly to function after a short period of active governmental support for their establishment. The village cooperatives (KUD) have long ago been dissolved or are not functioning anymore.

### **Village government**

Not unlike villages in other parts of Indonesia, the village government in most villages in EMRP area has many weaknesses.<sup>8</sup> In various cases the village head is absent or enjoys very limited trust among the villagers or traditional leaders. In transmigration villages (UPT) that have yet to be transferred to the district, the village heads are selected each year leading to lack of continuation in policies and program implementation as well as institutional development. Also, due to limited capacity, village administration is usually not well maintained.

## 2.1.4 Physical Capital

The state of the basic infrastructure and services in the EMRP area is poor, in spite of increased investments in rural infrastructure by the government in recent years.<sup>9</sup> Drinking water supply, access to education and health services are major issues for the local population. There is also a lack of village infrastructure such as village markets, village meeting halls and storage facilities for agricultural produce. In UGP transmigration villages the water management infrastructure is not completed or poorly maintained.

## 2.1.5 Natural Resource Capital

PSF is a major source of forest products for Dayak communities, and to a lesser extent to Banjarese communities, including rattan, Jelutung, Gemor, wood, wild vegetables and fruits, fish, bush meat and medicines. No PSF resources are left in PLG transmigration area, except for small strips along the rivers. In this area, harvesting of natural products is limited to Gelam trees and various grass species and bird hunting. In the coastal zone of the EMRP area, exploitation of Nipah palms for roofing and other building materials, fishing equipment, wrapping materials and household utensils is common. Overexploitation (e.g. Gelam, catfish and wild life) and unsustainable harvesting techniques (e.g. Gemor) and fishing methods are major issues in all villages where village workshops were organized.

## 2.2 Vulnerability Context

The livelihood options that local people have are affected by contextual factors (e.g. laws, policies, private sector, market dynamics) over which they have little or no control chances. For the local people in EMRP area factors that influence access, control and use of their assets include the following:

***Insecurity of land rights and forest access rights*** – The EMRP area includes large areas of agricultural land and forest over which the tenure and resource rights are poorly defined or disputed. In the ex-PLG transmigration area, land issues include the following cases:

- Multiple land certificates that have been issued for the same plot of land.

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<sup>8</sup> Further details are provided in the Technical report on Community Development and Village Institutions.

<sup>9</sup> Further details are provided in the Technical Report on Rural Infrastructure.

- Land claims by local Dayak people who provided money to transmigration families for financing their return to their home areas in exchange for their land certificate, but without formal land transfer.
- Land claims by local Dayak people who once were PLG settlers and who have now been returned to their home villages, but still are formal owners of the land they left behind.
- Frustration among local Dayak people about compensation payments for the loss of rubber and fruit trees that were never or only partly paid by the government in the time of forest clearance for creation of PLG.

Installation of new transmigration families in the ex-PLG area, as is provided by the so called 'refill program' as part of the Inpres 2/2007 which targets relocation of 46,500 families, risks to create new land problems in the area.

There also exists a situation of conflicting land ownership claims between local Dayak communities and the government over land > 5 km from the rivers. According to Dayak legal conceptions these lands belong to them, but the government claim ownership over these lands also. Land disputes include cases where the government does not pay compensation to local Dayak communities for their losses of agricultural and forest resources due to oil palm plantation establishment on these lands. Another important source of conflict between customary property laws and state laws and regulations is the demarcation of forest conservation boundaries (see section 3.3.4 for details).

**Isolation, poor market access and lack of village markets** – Poor road conditions and expensive and irregular water transportation seriously hamper local people's livelihood options in the area. Village markets are scarce and local people largely depend on middlemen or wholesalers to sell their agricultural and forestry products.

**Soil acidity, agricultural pests and diseases** - Low agricultural production levels is a major issue in the villages across the area due to acid soils, floods, fires and pests and diseases. The deserted lands in the ex-PLG area cause pests (e.g. rats) and oil palm plantations cause infections of bordering rice fields by the rice bug (*walang sangit*). Most farmers in the area lack the financial capital to buy the external inputs (e.g. lime, fertilizers and pesticides) to increase soil fertility or to fight pests and diseases.

**Provincial policy on zero burning** – The current 'fire ban' is a major issue for the local population as no burning for land preparation reduces soil fertility (i.e. ashes neutralize soil acidity) and increases pests, leading to crop failures or reduced production. Alternative methods for land preparation (e.g. herbicides and manual labor) are generally beyond the financial reach of farmers. Local people hope that the policy for land clearing is revised to allow burning of limited areas.

## 2.3 Current Livelihood Strategies

The livelihood strategies of the population in the EMRP generally include on farm and off-farm diversification. In this section the components of the livelihood strategies for the different village communities in the area are shortly presented.

### **Dayak villages**

Dayak people depend on rice cultivation (hill rice), vegetable growing, tree crop farming (i.e. rubber and fruit trees), *beje* and river fisheries and harvesting of PSF products (e.g. rattan, *damar* resin, *jelutong* latex and *gemor* bark) for their livelihoods. Fruit trees that are cultivated include: bananas, *rambutan*, guava, jackfruit, orange and mango. Home based processing of fish and cassava contributes to their incomes.

Off-farm activities include: retail trade (i.e. village kiosks), trading in locally produced products, crafts (e.g. carpenter, boat making, furniture making and handicrafts), paid employment (e.g. boat man, forest worker, farm worker and rubber tapper), private services (e.g. motorbike rental and maintenance of boat motors) and seasonal migration.

Rice cultivation is perceived by Dayak people to be associated with relative high input costs (labor, lime, fertilizers, and pesticides), high risks and low returns. Marketing of fish, fruits and vegetables is seriously hampered by seasonal price fluctuations and poor market access. Rubber harvest is often only partly sold due to low capacity of local traders. Other challenges for rubber plantation development include: dependency on low productive rubber seeds for poor households and unequal distribution of access rights to land for rubber production. Decreasing availability of rattan, *gemor* trees and fish (i.e. *arwana*) is a major issue in Dayak communities.

### **Banjarese villages**

Cultivation of wetland rice and coconut tree farming along the riverbanks are the main livelihood activities of Banjarese people. They use an intercropping system (*tumpang sari*) in which rice and coconut are cultivated together with vegetables such as long bean, eggplant, bitter guard, cucumbers, gourds and bananas. River and *beje* fisheries also contribute to their livelihoods and exploitation Nipah palms for food (*keputat*) and building and handicraft materials is common. Off-farm activities are more or less the same as in Dayak villages, except for keeping birds for their nests. Banjarese people also face marketing problems due to poor road access and seasonal price fluctuations, in particular for vegetables.

### ***Transmigration villages from the 1980s***

Cattle and rubber are the main livelihood sources for people living in older transmigration villages. Cattle were introduced in the area since 1986/87 by the Asian Development Bank. Grass cultivation for cattle fodder is common. Fruit trees and vegetable growing contribute to local incomes. Rubber plantations are still young. Rice cultivation is for most people no longer a livelihood option because of the acid soils and high input costs. People who still cultivate rice have shifted away from wetland rice to cultivating hill rice on higher ground using the slash and burn system. Large village areas are not cultivated (*lahan tidur*) because of poor land conditions. Dried cassava is an important source of income for villagers because of a private company that is operating in the area. Galam trees are harvested on a commercial basis for the production of matches in Banjarmasin. Off-farm activities are comparable to Dayak and Banjarese villages (except for the production of bird nests which require high money investments), and also include employment with oil palm companies operating in the area.

Marketing of cattle and vegetables face problems due to poor road access and a decreasing number of cattle traders coming to the area.

### ***PLG transmigration villages***

Poor land conditions are also for people living in PLG transmigration villages the main constraint for agricultural production and large village areas are not cultivated. Rice farming does not sustain local livelihoods and people also grow vegetables, cultivate fruit trees and raise cattle. Bird hunting, fisheries

and home-based processing of soy beans, maize and cassava contribute to local subsistence needs and incomes. Employment with oil palm companies in the area or in urban areas is a strategy to secure local incomes as in many other villages in EMRP area.

## 2.4 People's Aspirations

The village development visions that were formulated by local people during the village workshops include the following local aspirations for the future:

- To increase tree crop farming: rubber, rattan and fruit trees;
- To increase food self-sufficiency;
- Good market access through road improvements and strengthened marketing networks;
- Good access to health and education services;
- Rehabilitation of secondary canals;
- Adequate technical skills and strong farmer organizations;
- Strong partnerships with GOI and other partners who can support agricultural and plantation development.

## 2.5 Conclusions

The livelihood analysis presented in this chapter shows that on-farm and off-farm livelihood diversification strategies to reduce risks are common in the villages across the EMRP area. There is a clear trend away from rice cultivation towards tree crop farming such as rubber, fruit trees and coffee, and vegetable growing due to the poor land conditions and low returns from rice production. The provincial policy on zero burning accelerates this process.

There are four interrelated key drivers behind the current livelihood problems:

1. Locally weak external institutional relationships, including lack of representation of local people and their agricultural or natural resource based and non-farm enterprises in policies and decision making;
2. Poor supportive infrastructure and services, including poor road access and water transportation and lack of financial institutions and business development services;
3. Lack of producers' groups, associations, and cooperatives and business associations for improved market access, value chain addition and marketing; and
4. Lack of adequate or secure land and forest tenure and management rights for individuals and community groups.

As a World Bank report (2006) indicates, the implications are clear: '... If we are to improve local livelihoods and reduce poverty we need to tackle social, institutional and economic isolation and powerlessness. These issues are difficult for local people to address on their own and require multi-faceted policy and investment support and coordinated action by several groups or communities.'<sup>10</sup>

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<sup>10</sup> World Bank (2006) Sustaining economic growth, rural livelihoods, and environmental benefits: Strategic options for forest assistance in Indonesia, The World Bank Office, Jakarta, Indonesia, December 2006.

## 3 Options for Supporting Livelihoods

### 3.1 Existing Livelihood Support Programs

#### **Government**

The EMRP socio-economic cluster (cluster 6) has collected information on existing governmental programs for community empowerment and socio-economic development in the area.<sup>11</sup> An overview of these programs is inserted as Annex 1.

The main issues identified involve the following:

- Existing governmental programs are merely input-oriented, and appear not to be effective to solve the root causes behind current livelihood problems. There is a need for more performance-based planning and budgeting, including monitoring of processes and intended and unintended socio-economic outcomes and impacts.
- Mechanisms and procedures for local people's participation and accountability in planning for socio-economic development are inadequate. For instance, the annual participatory planning mechanism (*Musrenbang*) is not effective due to budget constraints and limited capacity for implementation
- Past support to transmigration families was a source of social tension between the settlers and Dayak people living in neighboring villages. It is recommended that target groups for the community empowerment program in Inpres 2/2007 are broadened from support to transmigrations families to also include non-transmigration families.<sup>12</sup>

#### **CKPP project**

The focus of the CKPP project is peat land rehabilitation through technical interventions and livelihood support actions.<sup>13</sup> The project applies an integrated and community-based approach to peatland rehabilitation in which active involvement of local people is considered to be crucial for successful project implementation. The poverty reduction component of the project includes work to improve local health centers and community development planning, and to invest in socio-economic development through for example development of fisheries, agriculture and forestry.

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<sup>11</sup> See for an overview and discussion of existing governmental programmes the EMRP Master Plan Technical Reports No 15 and No 17.

<sup>12</sup> See for a social impact analysis of the Inpres 2/2007 the EMRP Master Report No 15.

<sup>13</sup> See for detailed information on project activities and outcomes the CKPP report on Lesson Learned (March 2008) and the CKKP Summary Report (draft version, November 2008).



The project is piloting community-based re-greening and canal blocking activities in EMRP area since 2006, and has started in 2008 with 'bio-rights' pilots in five villages.<sup>14</sup> It also supports the establishment of farmer groups and has gained initial experiences with developing partnerships with private companies (i.e. for improved *jelutung* marketing). To provide guidance for support to livelihood improvements in the context of the implementation of the EMRP MP and other future projects in the area, it is recommended to review these pilot experiences, including development of standardized methods for implementation and monitoring of processes and outcomes.

## 3.2 Proposed Strategy to Support Livelihoods

In this section the four main components of the proposed livelihood support strategy for the EMRP area are presented.

### 3.2.1 Market Development

Commercialization of agricultural and other natural resource based commodities such as fish and non timber forest products is very low in the EMRP area. Local people have serious problems to access existing markets because of poor road conditions and expensive water transportation. They also lack market information that reduces their capacity to break into new market opportunities or to adjust to market threats. Their negotiating market power is further weakened because a lack of collective marketing mechanisms and dependency on middlemen and wholesalers.

There are various options for supporting market development:

- Market research and value chain analysis and price information for market expansion and improved prices for specific agricultural, agro-forestry and non-timber forest products that are produced in the EMRP area.
- Piloting, through market analysis, value chain development and promotion of value chain addition for 'best bet' agricultural, forestry, agro forestry and non-timber forest products, including provision of technical support and training and monitoring and impact assessments.
- Conduct design studies for development of producers' organization (associations and cooperatives) and piloting their development, including provision of technical support and training and monitoring and impact assessments.
- Monitoring the outcomes and impacts of the implemented market development activities and producers' organisations support actions.

### 3.2.2 Small and Medium Enterprise Development

SMEs play a crucial role in economic development of Indonesia. SMEs are flexible and can more easily adapt to fluctuations in market demands. They also generate jobs more rapidly than larger business, are highly diverse and contribute to export and trade. Throughout the EMRP area there are people who make (part of) their living out of small enterprises based on agricultural resources (e.g. fish, cassava and soy beans processing) and forest resources (e.g. rattan and handicrafts), trade and support services (e.g. transportation and crafts). A major constraint to the development of these enterprises is poor market access, the limited access to institutional sources of credit and lack of business development services. It is

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<sup>14</sup> Bio-rights is an innovative financial mechanism that addresses environmental degradation by providing (convertible) loans to local communities for sustainable development in return for their active involvement in the conservation and restoration of the natural environment (van Eijk and Kumar, 2008).

recommended that future actions for SME development are being linked to the whole value chain: inputs, production, farming, agro-processing, packaging, marketing, sales, retail and business providers (i.e. vendors, buyers, technical input/skills providers, equipment and research).

There are various options for supporting SMEs development:

- Review of experiences with SME development elsewhere in Indonesia and SE-Asia and encourage provincial and district/city governmental agencies and the private sector to adopt and integrate positive experiences in policy and planning for poverty reduction.
- Conduct microfinance and enterprise development design study for specific target groups.
- Feasibility studies for developing SMEs for specific agricultural-, agro-forestry, or non-timber forest products with commercial value that are produced in the area.
- Development of partnerships between communities, private sector companies (oil palm) and (informal) market traders, processors (rattan, rubber) and distributors.
- Training for key business skills as well as new technologies and long-term capacity building through training programs and business coaching.

### 3.2.3 Agro-forestry Development

The potential for cultivating trees in farmlands is very high. Tree crop farming is common in the area and already represents an important source of income. There is a large amount of non-cultivated agricultural land and the local population show great interest in growing more trees in the future. The prices for rubber are rising and in the context of declining availability of PSF resources, cultivated trees have a major role to play in meeting local demands for wood and non timber forest resources.

There are various options for supporting agro-forestry development:<sup>15</sup>

- Support to enabling conditions for tree planting, in particular clear and secure land tenure for individuals and community groups.
- Village seed bank and nursery development for raising of trees for home gardens and farm lands.
- Small enterprise development for value addition of important tree products of home gardens and farm lands), and support to market development studies.
- Training for new technologies (e.g. farmer field schools).

### 3.2.4 Community Driven Forest Conservation and Reforestation

Roughly 60 % of the total of 1,415,500 ha of land in the EMRP area will be designed as forest conservation area. Once demarcated, the conservation areas will formally becoming public property (if they are not government-owned already). The forests in the area produce a wide range of non timber

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<sup>15</sup> These options are included in the proposal for the Central Kalimantan and Aceh Peatlands Partnership Programme (CKAPP). Draft proposal for consultation by CKPP Consortium, 20 November 2008.

forest products (e.g., rattan, rubber, nipah, sago, fuel wood, wood for construction, furniture and equipment, medicinal plants, wild fruits and vegetables) that contribute to local livelihood security and incomes. The establishment of conservation areas may come at the expense of community access and management rights, contributing to increasing conflicts between the social, cultural and economic interests of local people in forests and public environmental goals. Such conflicts directly undermine social stability and economic growth in the area, as well as aims of sustainable forest management. It is therefore essential to link local interests in forest and local knowledge of the forest environment with the aims of forest conservation and rehabilitation/reforestation of degraded peat forests. A process of local negotiation is necessary to resolve competing land management systems and claims and arrive at sustainable forest management solutions.

There are various options for supporting community driven forest conservation and reforestation:

- Support to enabling conditions for community driven forest conservation, in particular long-term forest management rights that favor greater community involvement in forest management, including forest plantations (e.g. handing over small areas of conservation forest to local communities in a pilot phase with technical assistance to the development of management plans and monitoring by third parties);
- Participatory land use planning and comprehensive micro site mapping as joint or communal decision bases for demarcation of conservation / forestry boundary.
- Conservation partnership development between communities, GOI and private sector (e.g. palm oil concessionaires).
- Promote payments for environmental services (e.g. up-scaling CKPP experiences with bio-rights mechanism and CIMTROP experiences with 'Buy Living Trees').
- Sustainable tourism development (e.g. support to eco-tourism development through partnership development between communities, conservation NGOs and private sector).
- Smallholder forest plantation development, including research on prospects of microfinance for plantation establishment.
- Village seed bank and nursery development for small holder forest plantations and peat forest rehabilitation/reforestation activities, in particular for locally highly valued native tree species (e.g. Jelutung, Gemor, Ramin, and Meranti).
- Small forest enterprise development for value addition of important non timber forest products (e.g. rattan, nipah, rubber), and support to market development studies.

## 4 Recommendation on Priority Actions

From the sustainable livelihood analysis presented in this report it is obvious that poor land conditions, poor rural transport infrastructure and weak village government and community organizations are root causes behind current livelihood problems in the EMRP area. Details on the actions to address these problems are provided in the technical reports on Land and Water Management, Rural Infrastructure and Community Development and Village Institutions.

The actions for the short term (2008 – 2009) to initiate the implementation of the recommended livelihood strategy presented in this report (see section 3.3.) include:

- 1) Implement design studies for piloting community- based forest management, reforestation and smallholder forest plantations schemes.
- 2) Develop and support of pilots for carbon finance including establishment of appropriate policy and institutional framework and review of CKPP bio-rights pilot projects and CIMTROP experience 'Buy Living Trees', including provision of technical support and training, monitoring and impact assessments.
- 3) Implement design studies for development of cooperatives, small enterprises and small scale processing units for adding value to products.
- 4) Review governmental and NGO experiences with agro-forestry development in the EMRP area, including provision of technical support and training, monitoring and impact assessments.
- 5) Conduct market research and value chain analysis for specific agricultural, agro-forestry and non-timber forest products that are produced in the EMRP area.
- 6) Conduct microfinance and enterprise design study for specific target groups.
- 7) For coastal zone: implementation of diagnostic rapid appraisal studies to assess local dependency on coastal resources and to identify priority problems and actions.

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# Annex 1 Governmental Livelihood Support Programs

Ongoing governmental livelihood support programs in the EMRP area include the following:<sup>16</sup>

**The National Community Empowerment Program (PNPM)** - is a program which will cover 70,000 Indonesian villages by the end of 2009. The PNPM brings together several national community driven development programs active in the country under a single umbrella. The PNPM builds on the World-Bank Kecamatan Development Program and the Urban Poverty Program.

PNPM grant funds provided through the Multi-donor Support Facility will be used primarily for building Indonesian capacities for large-scale poverty reduction. Capacity programs supported by the Facility will engage a broad range of Indonesian players, including national and local governments, universities and research centers, civil society organizations and grassroots initiatives. Facility programs for renewable energy will help make PNPM environmentally sustainable, and the facility will be placing a special emphasis on innovative ways to ensure that PNPM reaches out to disadvantaged groups across Indonesia. The activities are focused on rehabilitation and development of infrastructure, health and educational services, and improvement of the economy through credit/saving activities which are specifically focused on women.

**Beras Miskin (RASKIN)** - Provision of Rice to Poor Households. The Government's main food-assistance program, Beras untuk Orang Miskin. (RASKIN), implemented by BULOG. The Raskin program is a subsidized rice program for poor families which provides 10 kg of rice per poor households at the price of Rp1,000 per kg. Handing out rice to poor communities. Each household receive an average of 10 kilogram. Each kilogram the people pays between Rp 1000 – 1500 (it is said to be a compensation for transport expenses). The distribution is done each three months.

**Dana BOS (Bantuan Operasional Sekolah)** - School expenses support. In March and October 2005, the Government of Indonesia reduced the subsidy, on fuel and reallocated most of the budget to four large-scale programs, namely education, health, rural infrastructure, and direct cash transfer. One program in the education sector is School Operational Assistance (Bantuan Operasional Sekolah: BOS) which provides assistance for schools with the aim to exempt Students from school tuition in order to support the achievement of the Nine Years of Compulsory Basic Education (Wajardikdas) Program. Through this program, the national government provides funding to schools at the primary and junior high school levels. The program commenced in July 2005 at the time of the new 2005/2006 academic year.

**DAK-DR (Dana Alokasi Khusus-Dana Reboisasi)** – Specially Allocated Funds - Reforestation Funds. The management of the Reforestation Funds (Dana Reboisasi). The current government regulation on

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<sup>16</sup> Further details are provided in the EMRP Master Plan Technical Report No 15 on Community Development and Village Institutions.

Reforestation Funds (Dana Reboisasi – DR) PP No. 35, was introduced in 2002 to replace PP No. 6/1999. The regulation states that forty per cent of the funds are to be reallocated to the provinces that have contributed to the central government's Reforestation Funds - called the 'contributing provinces'. The program developed under this funding is called the Specific Allocated Funds – Reforestation Funds (Dana Alokasi Khusus – Dana Reboisasi - DAKDR). This has been in operation since 2001 under the coordination of the district governments. The objectives of the program are: to facilitate community participation in rehabilitation activities by providing assistance with designing the activities, developing community institutions and providing technical assistance in implementing the planned activities. Farmer groups are given compensation for land preparation, maintenance cost and form of plant seeds.

**BLT (*Bantuan Langsung Tunai*)** - Cash Support for poor households. Support given to poor communities is in the form of cash, which is distributed by the post office. Distribution is done every three months.

**PMT (*Program Makanan Tambahan*)** - Additional food supply program. This program covers additional food (milk and biscuits) from the health clinics, which is distributed to each posyandu. There is also cash support which is managed by the posyandu to buy basic food materials. These are processed by the posyandu into health food, such as green bean porridge (bubur kacang hijau).

**ASKESKIN** – Health insurances for poor households, implemented by the department of health.

**IDT (*Inpres Desa Tertinggal*)** - Presidential instruction for less developed villages. Development of village roads from wooden planks (titian)

**Jatah hidup (*JADUP dan alat-alat pertanian*)** - Living allowance and farming materials. Support from the department of transmigration for the period of 1.5 years, after which an additional three months.

**Pelatihan INPOSMA (*Intensifikasi Lahan Pekarangan, Kompos dan Pengendalian Hama*)**- Training on garden intensification, compost and pest control. Department of Agriculture.

**KKP (*Kredit Ketahubab Pangan*)** - *Credit* program for food security implemented by the department of Agriculture in cooperation with BRO (People's Bank).





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