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Collaborative Forest Management

Better partnership to benefit local community and sustainable teak forests



LPF Project, Java Case Study

Year 1 Report

LPF Java Team:
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Levelling the Playing Field:

Fair Partnership for Local Development to Improve the Forest Sustainability in Southeast Asia

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I. BACKGROUND

In many countries, including Indonesia, the implementation of development programs is usually carried out by the government. Although the objectives of those programs are to improve community's lives, to enhance their access to economic activities, and to create balanced environment, the planning and implementation of those programs rarely engage communities. There is no doubt that the subject and beneficiaries of development are community. Nevertheless, the implementation of those programs in many countries is usually done by government institutions or certain groups of people who are given the authority to do so.

The above situation can be found in many different development sectors in Indonesia, including the forestry sector in Java and other islands. Considering the important roles the people play in forest management, it can be expected that their active involvement should be encouraged. In reality, however, government plays a much bigger role than the community in forest protection, forest utilisation, etc. The management of state forests in Java is put under the authority of state-owned forest company called Perhutani. Since early 1960s, the company has the control over the forest's control, use, and protection. As the sole manager of the forests, the company determines how the forests can be best utilised and managed without other stakeholders' involvement. Their dominant role also applies to production forests. Forestry department believes that only Perhutani has the capability to manage and control state forests in the whole Java. The transfer of power from the state to one single entity, like Perhutani, can only occur in the centralised government political system. It can not occur under decentralised government.

Java is a highly populated island in Indonesia. Although the total area of Java is only 6.5% of the total area of Indonesia, around 64% of the total populations live in this island. The total state forest area in Java is 2.9 million ha (19%). It was estimated that a total of 35 millions people, of 6200 villages, interacted with and depend on those forests in one way or the other. Most of the villages that surround state forests are poor villages. The villagers have limited employment opportunities, most of the workers are over productive aged, shortage land ownership for agricultural activities and the average of land ownership is 0.25 ha per family. Many young people migrated to the city and took the job as overseas workers in Malaysia, Brunei, Saudi Arabia and Hong Kong, to improve their family welfare. Perhutani provided limited employment opportunities and cash income for the villagers. On the other hand, it can not be guaranteed that they can improve their lives if they participate in Perhutani forest management activities. State forests are important for a large number of people. If people can not benefit from the forests, and if forest management excludes them, it can not be expected that they will participate in protecting the forests.

Perhutani has implemented several activities to improve the welfare of the forest village communities and to restore the quality of forest resources. These include prosperity approach program (in the period 1972-1985), social forestry program (1986-2000), and forest village community development program (1994-2000). Those programs engaged the community in forest plantation activities, provided opportunities for the communities to plant food crops inside the forests, in between the rows of teak trees (locally called "tumpangsari"), engaged community in cattle rising and in the same time to have good forest plantation. These programs unfortunately failed to meet their objectives. The reasons for these failures include lack of Perhutani's understanding on the social dynamic and local political processes

in the village and national levels. Poverty still prevails in many villages despite the fact that Perhutani has implemented social welfare program since 30 years ago. Poverty and lack of people's participation has led to continuous and massive plundering and illegal logging activities.

Forest plundering that took place in the period of 1998 - 2004 in Java and outer Java islands showed that forest management system in Indonesia has not addressed and met the needs of community for forest resources. Several important points that came out from the implementation of Perhutani program until 2000 were the ineffectiveness of local community organization which was organised as user group, and the lack of equity in income distribution among villagers. Learning from their failure and experience, and facilitated by the political reform that took place in Indonesia since 1998, Perhutani revised its policies with regards to forest conflict resolution with inputs from different stakeholders. Since 1999-2000 Perhutani conducted a series of public consultations and discussion sessions with several NGOs and universities staffs in formulating a participatory Java forest management model to improve local people welfare and manage forests in sustainable way.

In 2001, Perhutani came up with a new national program called Community Collaborative Forest Management (PHBM or Pengelolaan Hutan Bersama Masyarakat). The main characteristic of PHBM is the willingness of Perhutani to empower local community organizations at the village level so that they can engage in forest management in collaboration with Perhutani and other community members.

The total state forest under the management of Perhutani is about 2,926,949 ha. It consists of 1,811,814 ha production forest, 627,937 ha protection forest, and 442,198 ha conservation forest. The 2002 data of Forestry Department and Perhutani showed that the highly critical forest land within production forest is about 370.130 ha (12.65%), within protection forest is 191,200 ha (6.53%), and within conservation forest is 68,375 ha (2.34%) (Foretika, 2004).

Those critical forest lands were caused by poor establishment of forest plantation, occupancy of forest land by community, and forest plundering. As an example, a total of 8,182,280 trees were illegally logged in Central Java province in the period of 1998-2003. This equals to a capital loss of 1.477 trillions rupiah (Bisnis Indonesia, 2003). To address these deforestation problems, the roots of the problems should be carefully investigated.

Decentralisation played a major role in changing the mind set and policies of the Perhutani on how to meet their forest management objectives. Perhutani is now opening up the opportunity for local people to get more benefits from the forests, sharing the income from the forests with local government and other actors who participate in forest activities, and controlling and managing state forest collaboratively. This is a new perspective in the context of forest management implementation in Java. Under this a new approach, Perhutani is no longer the one and only "stakeholder and player". Community, trader, local government are also the stakeholders and players in forest management, together with Perhutani.

PHBM, implemented by Perhutani since 2001, is based on the Board of Perhutani's regulation No. 136/Kpts/DIR/2001. It is a guide on how to integrate social, economic and environment proportionally to reach Perhutani's vision and mission. The objectives of PHBM are: (1) to improve the sense of responsibility from Perhutani, local people, and other interested actors to sustain forest resources; (2) to enhance the role of Perhutani, local people, and other interested actors in forest management activities; (3) to harmonize all forest management activities with regional

development and also refers to the social dynamic in the village area; (4) to enhance the quality of forest resources and related to the site specific problems; and (5) to improve Perhutani's income, and improve the earning of villagers and other interested actors at the same time.

The concept, goal and objectives of PHBM should be implemented in collaboration with local people and other related actors at the field level. Consequently, a lot of information should be gathered to implement PHBM properly. These include baseline data on social economic and culture of forest dwellers, ecological problems, and physical data on the state of forest resources.

To collect those relevant information and to support PHBM planning and implementation, a collaborative research team consisting of Faculty of Forestry Gadjah Mada University (FoFGMU), Perhutani, CIFOR, and CIRAD was established. This research is carried out under the European Union (EU)-funded Levelling the Playing Field (LPF) program. The collaborative research in Java is supported by Perhutani. A Memorandum of Understanding (MoU) between CIFOR, FoFGMU and Perhutani has been signed. This research team attempts to learn about the PHBM implementation process and to assess how well the participatory processes have been done so far. At the same time, the LPF program will facilitate local community organizations and enhance their capability in participating in PHBM process.

The preparation of LPF project has taken place since March 2004. Various meetings took place among FoFGMU, CIRAD and CIFOR team in Yogyakarta, Jakarta and Bogor. The research team has put together a research proposal, containing research methodology and work plan, and presented it at the LPF regional methodology workshop in Puncak, Bogor, in June 2004. This research proposal was further refined in Yogyakarta. The final work plan fleshed out detailed information that the team will be collected.

Research activities on PHBM will be carried out in 4 villages, i.e. Surajaya, Glandang, Tanggel, and Gempol. They are located in two forest districts (KPH or Kesatuan Pemangkuan Hutan) of Pemalang and Randu Blatung, Central Java. The data to be collected include basic information on relevant policies and regulations (through literature survey and collection of secondary data), stakeholders (key actors and stakeholders in the village, to be collected through stakeholder analysis), resource and resource use (products, boundaries, rules and norms, issue and problems), people's livelihood (social economic survey, access to land), institutions (through institutional analysis), and formal and informal agreements (through analysing PHBM agreement).

II. RESEARCH METHODS

The baseline study about PHBM implementation in KPH Pemalang and KPH Randublatung used more than one method. This is due to the wide variety of information that needs to be collected. The research methods and tools that will be used are described below.

Survey
This method was used to collect information on livelihood, resource, and resource use. For this purpose, 40 respondents were selected as follows: 30 respondents are farmers who worked on forest lot (forest farmer), and 10 respondents are board

members of LMDH (Lembaga Masyarakat Desa Hutan) or community organisation for partnership with Perhutani on PHBM program.

The respondents were selected based on the stratified random sampling and purposive sampling methods. The stratified random sampling method was used as we selected respondents by stratifying village population into land owner and forest farmers. Purposive random sampling was used to select respondents based on forest farmer typology in each village. Forest farmers are farmers who work in state forest land. In each village, i.e. Tanggel, Gempol, Surajaya and Glandang, both methods were used to select the respondents.

The survey collect information related to individual livelihood, which represent by the household. The data also shows the prosperity level of each actor who worked on forest land and the background, so that the typology of the forest farmer can be described.

Key Informant Interview (KI)
Key informant Interview was used to obtain the information related to:

1. Resource and resource use
2. Institutions
3. PHBM agreements

KI method was used by selecting actors or individuals who are considered knowledgeable of and have the information on the above issues. The selected key informants should represent the stakeholders involved in PHBM and should represent the villagers' views. The numbers of informants interviewed were 5 – 7 peoples, following the agreed work plan that was presented at the LPF workshop on Methodology in Puncak, Bogor, in June 2004. Besides interviewing the respondents, the research team also observed the environment and situation in which the interviews took place.

Focus Group Discussion (FGD)
Focus group discussion was conducted to collect relevant information on:

1. Resource and resource use
2. Institution
3. PHBM agreements

FGD is one of the methods that can be used to complement and elaborate the data collected through KI. Similar with KI, knowledgeable respondents were selected for FGD. By looking at the discussion agenda, the participants would understand what issues to be discussed. During FGD, the research team played the role of facilitator, i.e. facilitated the discussion and guided the discussion process. By doing so, it is expected that the collected information are accurate and reflect reality on the ground. FGD is implemented in 4 villages in this research.

In conducting FGD, we followed the following process:

1. Exploration of the objective of the FGD. This is an important stage so that FGD can take place according to the set objectives. This is also important to level off the understanding among the participants and facilitators with regards to the objectives of the FGD.
2. Small group discussion. This is done so that the participant can focus on specific issue. How the participants were split into smaller groups would depend on the issue discussed in FGD.
3. Pleno discussion (large group). The results of the small group discussions were subsequently presented and discussed in a broader forum so that all

participants can understand, ask questions, and provide feedbacks, etc. to members of small groups.

4. Conclusion and Reflection. At the stage, the participants reflected on what has been done during the discussion, revisited their concerns, and areas that were not clear. It is also a stage where issues discussed, agreements reached, etc. are summarised.

Role Playing

Role playing were used to support FGD for resource and resource use in Glandang village. This method was not used in three other villages, i.e. Surajaya, Gempol and Tanggel, because the issue of the forest resources raised during role playing was considered too sensitive to be discussed there. In these villages, Perhutani often monitored/patrolled and exclude community in this activity; consequently, community tended to avoid discussing issues related to forest resource use, in particular the woods (logs) or any illegal activities in forest.

Venn Diagram

This is a participatory method to discover participant's perspectives with regards to relations among the institutions exist in the village. By drawing the relationship among institutions, participants can express their perceptions easily. This method was selected because some of participants are difficult to express their perception or view in writing. This method is implemented in Tanggel during the FGD to collect information on institution.

Metaplan

This method was used to give more opportunity for each participant to freely express their ideas and thoughts. We used this method to explore the objectives, wishes and opinions of the participants.

Ice Breaker

Ice breakers, such as games, were used to refresh the discussion environment so that the participant can relax during the discussion. It also helped reduce the domination from the facilitator. Ice-breakers were facilitated by the participants, and sometimes by the facilitators. Ice-breakers were also used to gauge the moods of the participants (how they felt during certain stages of the discussion) and whether the participants felt the discussion met their objectives, etc.

III. SOCIO ECONOMIC

3.1. General Analysis of Socio Economic Condition

One of the PHBM objectives is to improve the livelihood of the people who lives around the Perhutani forests. The prosperity of the community is not only the responsibility of forestry sector, but also the community itself. Therefore in the baseline study, it is important to understand the livelihoods of the surrounding communities by identifying the resources which are available or owned by the communities, and the opportunities for them to use the surrounding forests and forest resources. For this purpose, we conducted analysis on the resource, resource use, and socio economic in the four research villages. They are: Tanggel and Gempol villages (in KPH Randublatung), Surajaya and Glandang villages (in KPH Pemalang).

Methods applied include a survey of 30-40 villagers, village elites and key informants in each village. To get in-depth information, we used the key informant interview

method. Focus Group Discussions (FGDs) in each village was used to triangulate the information obtained from the interviews.

3.1.1. The Village Demographic, Resource and Resource Use Analysis

There were 2 categories of information which have been collected in social and economic analysis of PHBM. They were resource availability and community resource use. The summary of the study results of each village will be elaborated below.

Glandang Village

The total population of the Glandang village was 2.810 people. In this village, there are a lot of resources that serve as the source of family economy. Besides resources that have already been exploited, there are resources that have not been exploited. There are river, irrigation, barrage, rice fields, gardens, state forest, community forest, and physical infrastructure such as shops, street, school and health facilities.

Around Glandang village, there are 4 rivers i.e. Waluh, Glandang, Jaganalan, and Kali Putih. Waluh river provides socio economic values to the community. The community made irrigation from the river to water their rice fields. This river also contained a lot of sand and stones that are exploited by community. The stone and sand are sold as a source of income for the community.

The source of clean water for consumption is wells. Every house has a well to meet their various needs, such as washing, bathing, and a source of the drinking water for family consumption. There are several wells which are used for community such as Walem well that is used to irrigate rice fields and gardens. The source of rice field irrigation is not only well but also springs in Rancah Wiru, Belik (the small one), and in the Sipedet. Furthermore, small check dams like Kali Waluh and Jaganalan also served as the source of rice field irrigation.

Because 87% inhabitants of Glandang village were farmers, it is therefore to describe their farming system. There are 5 types of field in Glandang village, i.e. Rancah field, “Bengkok desa” field, field of blok Jaganalan, dry field and GG field. The type of these fields reflects their ownership status. Bengkok desa field and GG field are owned by the government and they can only be used by village government officials during the period of their service. Dry field, Jaganalan group field and Rancah group field are owned by farmers (private property).

Besides fields, there are also gardens and state forest in the village. Gardens are the form of non-irrigated dry fields that are planted by the community with timber trees, just like in community forest. It is cultivated with teak and fruit trees like jack fruit, orange, etc.

State forests, managed by Perum Perhutani, which included in Glandang Village territory was grouped by Glandang villagers based on its distance from community settlement and group of community settlement. Most of the forest area around Glandang village is damaged because of forest plundering and the area has became the empty forest. The empty forest has been exploited by villagers for agricultural activity without permit from Perhutani. However, under the PHBM scheme, forest farms can be exploited by Glandang villagers. The total area of Perhutani forest that is managed under the PHBM scheme in Glandang is about 350 to 400 ha. When this study conducted, there is no institution, regulations and norms of PHBM that has been established in Glandang.

Community's dependency on Perhutani's forest resources was very high. When the conditions of the forests before foray, community collected firewood, teak leaf, and wood for village use (with permission from Perhutani), and other forest products like traditional herbs. They also used the forest land for tumpangsari. Around 90% of the villagers entered the forest and undertook their farming activities there. Tumpangsari activities in Glandang have begun since 1986, where each forest farmer got around 0,25 ha of the forest land (locally called " baronan").

Negative activities in the forests started to take place since 1998. Increased forest plundering activities by a group of people also occurred in Glandang. Teak, as old as 40 years, was cut down without Perhutani's permit since 1998-2000. In the period of 2001-2004, plundering occurred at tremendous rate and deforestation occurred. PHBM program was introduced in July 2004 in Glandang village, and was accepted by the community. At the end, it was shown that occupation of forest land by this inhabitant gives the picture about farmer community who were "hungry of land", becoming special problem which must be solved by Perhutani. PHBM will succeed if the benefits from the forests are shared following the principle of social justice, and are viewed by the relevant community as fair. Benefit from teak in recent year can not be shared because there was no wood to be felled by Perhutani.

The impacts of forest degradation have been felt by community, air temperature were increased, the water levels in the wells and rivers decreased during dry season, etc. Community members are aware that they have to rehabilitate forest area in their village. Community expressed their willingness to protect and conserve the forests.

Surajaya Village

The total population of Surajaya village was 7.644 people (1.941 households). In this village, there are a lot of resources that serve as the source of family economy. The resources include sand and stone/gravel, irrigation system, state forest, rice field and non irrigated field, sugar cane plantation, ranch, and Waluh river. Waluh river is utilized by community for bathing, washing, and a source of clean water during the dry season.

In several locations inside the forests, there were stone and sand mining sites that have been exploited illegally not only for individual purpose but also for commercial purpose. This mining activity has been carried out since 1980 by some of the Surajaya villagers. Within forest compartment 40 and 41, there are water springs and Perhutani has already built a reservoir there for the community's drinking and irrigation purposes.

82% inhabitants of Surajaya villagers were farmers, 14% were farm workers, and about 4% of the inhabitants worked in non agricultural sector. Because the majority of the villagers are farmers, it is important to describe their farming system. Agriculture took place in rice field and dry fields, either in their own farm, village land, or in the state forest. Rice fields are cultivated with paddy, and dry fields are cultivated with cassava, timber trees, and sugar cane. Sugar cane was developed in cooperation with the sugar cane farmers' cooperative.

The total area of state forest inside the Surajaya village territory is about 546 ha. From the forest the villagers fulfill their daily needs such as firewood, cattle food, leaf of teak, wood, and medicinal plants. They also cultivated forest land with cash crops, i.e. cassava.

Perhutani forest managed under the PHBM scheme in Surajaya village will be about 546 ha in the future. PHBM implementation will just focus on benefit sharing of teak, while crop planting has not become the focus of LMDH in Surajaya village yet. This may affect PHBM implementation and sustainability because the majority of the LMDH's board members perceived PHBM as a benefit sharing system while crop making is a part of KTH activities.

Tanggel Village

The total population of Tanggel village was 4.860. In this village, there are a lot of resources that serve as the source of family economy, i.e. rice field, garden or non irrigated dry field, rain-fed field, river, community forest, and state forest. Physical infrastructures exist in the form of shop, booth, and home industry (craft industry). The road of the village can be passed by cars and motorcycles. During the rainy season, agricultural products are brought to the market and sold. There are 5 elementary schools and 1 MTS (Islamic junior high school).

Around the village there is a river which is used by villagers for bathing, washing and also as source of clean water for cooking, etc. This river is not used for the irrigation because the field is rain-fed field. Several houses have their own wells and rainwater reservoirs. Water is scarce in this village, especially during the dry season.

Tanggel consisted of 13 sub-villages, and 46% of the residents are farmers. The total forest state is 2.560 ha within village jurisdiction and all of them are included under the PHBM program.

The relationship between inhabitants with forest was very close. This relation was reflected from the fact that around 93% of the respondents surveyed in this study were engaged in forest-related activities such as planting, firewood and other use. Other forest resources being extracted include teak stump, timber, and leaves, firewood, grass, medicinal plants. Cattle grazing and tumpangsari (over 0,5 ha of forest land) also took place inside the forests.

Negative activities in the forests started to take place since 1998. The increased frequency of forest plundering activities by a group of people also occurred in this village. Teak, as old as 40-60 years, was cut down without Perhutani's permit since 1999-2001. In the period of 2001-2004, Perhutani successfully minimized forest plundering by illegal wood operators at the sub-village level by cooperating with local police. PHBM program socialized by Perhutani was well accepted by Tanggel community, especially because of its teak benefit sharing system.

The impacts of forest damage have been felt by Tanggel community, air temperature were increased, the water levels in the wells and rivers decreased during dry season, etc. The villagers also observed that there was almost no bird in their village anymore. They did not make connection between water shortage and forest degradation as water shortage has always occurred in Tanggel.

Gempol Village

The total population of Gempol village was 3.134 people. In this village, there are a lot of resources that serve as the source of family economy, i.e. well, rice field, dry field, community forest and state forest. Physical infrastructures exist in the form of shop, street, school, and health clinic.

Around the village there is a river which is used by villagers for irrigating the rice fields, washing, and cattle washing. Wells are used for bathing and a source of clear water. Almost all houses in Gempol have their own wells.

38% of the villagers are farmers and 40% are farm workers. Because 78% of inhabitants work in the farming sector, it is therefore important to describe about their agriculture system. Agriculture is carried out in their own field, state forest, and dry river field (gowok field). Inside the state forest, cultivation is done using the tumpangsari system. The total area of forest to be included within PHBM program in Gempol village is 2.605 ha. LMDH (Lembaga Masyarakat Desa Hutan), community organisation who sign the partnership agreement with Perhutani on PHBM program, has been established down to the sub-village level to support the implementation of PHBM program.

Forest utilization is intensive because this village is located in the middle of forest. Transportation to and from this village is very limited. Forest resources used by Gempol community are firewood, medicinal plants, teak wood and leaves, seed of sengon, kesambi, secang, and lamtoro, wood charcoal, dig-out wood and honey.

In Gempol village, there were a lot of teak trees which had been felled down and hidden in the ground for several decades. This teak cannot be claimed by Perhutani as their properties because they were buried within the Gempol village administration and outside the state forest. There was no conflict over the digging out of the teak.

Negative activities in the forests started to take place in Gempol since 1997. The increased frequency of forest plundering activities by a group of people also occurred in this village. Teak, as old as 40-60 years, was cut down without Perhutani's permit since 1997-2001. In the period of 2001-2004, forest plundering could be minimized by Perhutani by their cooperation with local police.

The PHBM program, well-accepted by the community, was introduced in year 2002. In the last land occupation in forest by community shown that they were "hungry of land". It became a special problem which must be solved by Perhutani. PHBM will only succeed if there is a fair share of benefits from the forests, following the principle of social justice. Gempol village received significant benefits from the system because the forests still have a lot of stand trees.

3.1.2. Analyses of Farming Access and the Social Economic (local livelihood)

Glandang Village

Economic activities of community are supported by the existence of shops (16 units) and bamboo handicraft industries (2 units). The village asphalt road that connected it with the other village was 90% in good condition. There were home telephones (in 3 houses), 4 mobile phones, and 125 televisions. With regards to education, there are 2 elementary schools, each has 10 classes. There are 1 unit of puskesmas (health clinic), 1 midwife, and 3 traditional healers (dukun). The village has 1 mosque and 8 mushola (small mosque).

According to the village statistics, the average land owned by each village was 0,125 ha. Nevertheless, the data generated from the interviews showed that the average land per person was 0,22 ha. 75% of inhabitants had less than 0,6 ha of land even though 87% people of Glandang village were farmers. Their land ownership was very little so people lived depend on forest land. The income from their own land was not enough to cover their household needs.

The data generated from the survey showed that 56% family earnings came from agricultural activities (rice field, garden, and forest farm), 16% earnings came from working as laborer (worker and farm worker), 10% from trading, 1% from firewood sales, 3% from wood working, and 4% from working in the farm. As shown by the respondent data (40 people), the average respondent's earning was IDR3.856.350. If the total member of the family was 4 people, per capita earning for a year was IDR964.087.

The sustainability of PHBM will also be determined by the ability of the community to manage it. From education aspect, as much as 88% of respondents were graduated from the elementary school. Consequently, there is a need for the PHBM program in this village to strengthen the capacity of the community members.

Commercialisation of agricultural products is not problem in Glandang village. Traders of agricultural products came to the village and bought agricultural products on regular basis.

Surajaya Village

Economic activities of community are supported by 2 shops, 7 booths and 1 market. The village road that connected it with the other village was 90% in good condition. The road was made of asphalt and grounded stone. There are 7 schools (elementary schools and madrasah/Islamic schools). There are 1 unit of puskesmas (health clinic), 1 midwife, and 2 traditional healers (dukun). The village has 1 mosque and 8 mushola (small mosque).

The average land owned by Surajaya villagers was 0,29 ha, consisted of rice field, dry field and garden. Under PHBM program, additional agriculture land of 0,125 ha from state forest is available for villagers. 58% of the respondents were farmer and 27% were farm workers. Thus the total number of farmers were 85% (from the total respondent of 40 people). With 0,29 ha land, the respondent could not meet their need. Nevertheless, they can get additional cash from state's forest land.

The survey showed that the community's earnings came from the following sources: 25% of the family earnings came from agricultural activities (rice field, garden and forest land), 8% earnings came from activities as farm worker, 21% from working in the non-agriculture sector, 30% from service and commerce and 6% from the sales of firewood. Forest products (i.e. firewood, teak wood, leaf) contributed to 8% of the farmers' earnings. The average of respondent earnings was IDR4.659.163 per family per year, or about IDR1.164.790 per capita per year.

Other potential economic sources in Surajaya are trading and firewood. Firewood collection needs to be organized by LMDH and cooperated with the traders. The ability of LMDH to establish links with traders is key for PBHM implementation in Surajaya.
Commercialisation of agricultural products is not problem in Surajaya village. Traders of agricultural products came to the village and bought agricultural products on regular basis.

The sustainability of PHBM will also be determined by the ability of the community to manage it. From education aspect, as much as 50% of respondents were graduated from the elementary school. Consequently, there is a need for the PHBM program in this village to strengthen the capacity of the community members.

Tanggel Village

Economic activities of community are supported by the existence of shops (16 units), booth (6 units), middle handicraft industries (12 units), and small handicraft industries (2 units). The village asphalt road that connected it with the other village was 70% in good condition. There was only one satellite phone in the village. There was no cable phone. With regards to education, there are 5 elementary schools and 1 MTS (Islamic school). There are 1 unit of puskesmas (health clinic), 1 midwife, and 1 health worker (mantri), 1 traditional healer (dukun). The village has 5 mosque and 21 mushola (small mosque).

According to the village statistics, the average land owned by each villager was 0,4 ha. 46% of the respondents in Tanggel were farmers. From this data, the total land owned was not enough to meet their family needs. The data generated from the survey showed that 33% family earnings came from agricultural activities (rice field, garden, and forest farm), 12% from service activities (driver), 14% from fruit crop (orange), 7% from working as construction worker, 14% from taking the teak in state forest, and 3% from working in the farm.

As shown by the respondent data (40 people), the average respondent's earning was IDR6.003.775. If the total member of the family was 4 people, per capita earning for a year was IDR1.500.944.

The planting activity of PHBM program may fail because there may only be a few people who are interested in planting the empty land. Orange planting has good potential in Tanggel village because almost 14% community earnings came from orange. PHBM activities will be better if to be related to cultivate the orange fruit in Tanggel village. Respondents frankly revealed that 14% of their earnings came from teak plundering. This activity would have negative implications for Tanggel village. The PHBM program must able to control timber theft. Community was interested in PHBM program as they received benefits from the teak.

The sustainability of PHBM will also be determined by the ability of the community to manage it. From education aspect, as much as 66% of respondents were graduated from the elementary school. Consequently, there is a need for the PHBM program in this village to strengthen the capacity of the community members. Commercialisation of agricultural products is not problem in Tanggel village. Traders of agricultural products came to the village and bought agricultural products on regular basis. The problem they faced was the low price offered by the traders. They expected PHBM program to provide solution to this problem.

Gempol Village

Economic activities of Gempol community depended on the market outside the village. There was no big shop in the countryside. There were just 3 small booths for the family needs. There was no market in this village; the closest market was in Doplang which is located about 20 km from Gempol village. The road was built by the community themselves. Gempol community can organize collective action among themselves to develop their village. There is 1 puskesmas (health clinic), 1 midwife and 1 traditional healer (dukun). There are 3 elementary schools. Religious activities are supported by 6 mosques and 4 small mosques.

Based on the interview with the respondents, the average land owned was 0,25 ha. 94% of the respondents in Gempol were farmers. From this data, the total land owned was not enough to meet their family needs.

The data generated from the survey showed that 12% family earnings came from agricultural activities, 22% from working as farm worker, 27% from service and trade, 19% from wood sale, 3% from firewood sale, 2% from livestock, while the earnings from fruit sales only contribute to 1% of the total income.

As shown by the respondent data (40 people), the average respondent's earning was IDR8.602.037. If the total member of the family was 4 people, per capita earning for a year was IDR1.720.407.

The sustainability of PHBM will also be determined by the ability of the community to manage it. From education aspect, as much as 84% of respondents were graduated from the elementary school. Consequently, there is a need for the PHBM program in this village to prioritise the strengthening of the community members' capacity.

3.2. Socio Economic Per Village

3.2.1. Glandang Village

3.2.1.1. General Condition of the Village

The Village Administrative Boundary
The Glandang village is the village which administratively is a part of sub district of Bantarbolang, District of Pemalang. Within the framework of forest territory, it is a part of RPH Glandang, BKPH Slarang, KPH Pemalang. The total area of Glandang village is about 649 ha. The village has only 1 sub-village because its settlement area is quite limited. This village is located along the village road which connects it with other villages in Bantarbolang sub-district. The Glandang village is bounded by the following villages:

- Western part : Kajene village
- Eastern part : Bantarbolang village
- Southern part : Sambeng village
- Northern part : Kuta village

The administrative boundaries are marked by natural resources bounds, i.e. state forests at the western part. This part is far away from Glandang settlement which is clustered along the road. The eastern boundary is marked by Waluh river and agriculture area which administratively are part of Bantarbolang village. The southern part is marked by Waluh River which flows from the west. The northern part is marked by the state forest which is a part of Kuta village administration.

These boundaries did not limit the villagers to interact with other villagers or to undertake activities over there. There is a tendency for the villagers to use resources outside their own village territory. Geographically, of the Glandang village is located at 8°52'30'' – 7°20'11'' Southern Latitude and 109°17'30'' – 109°40'30'' East Latitude. The location is located at 76 m asl. The soil types are dominated by Grumusol and Latosol with the rain intensity up to 6.25 mm/month. The temperature is 25°-28°C. The Glandang village is passed by the two main rivers, i.e. Waluh River and Glandang River. Waluh River encircles the Glandang territory from the southern to the eastern part of Glandang. The Glandang River is located at the western part of the village which directly bounds to the state forest of Perhutani.

Both rivers play significant role and function for the people of Glandang village, because those rivers supply water in both dry and rainy seasons. It is indicated that

there is semi-permanent irrigation for rice fields in Glandang village, especially for the paddy fields in the western part of the village. This is done by the villagers by building a dam in the Waluh River in the part that is called Lemah Abang. It has been renovated twice according to the villagers (the last renovation was in 2001), and it has been made permanent. While the Glandang River, located at the western part of the village, is usually used by people for irrigation, sand and stone mining, and for public washing, bathing and toilet.

The Width of the Village and Land Use
The total village land in Glandang is about 649 ha. The land use of Glandang village can be described as follows:

Table 1. Land use in Glandang Village

Land use type	Area (ha)	Percentage (%)
Rain-fed rice fields	8	1
Irrigated paddy fields	65	10
Forest	458	71
Settlement area	26	4
Dry agriculture lands	80	12
Others	11	2

Source: Village monograph of Glandang, 2004

The land use of Glandang village as in Table 1 indicates that the land in the village of Surajaya is dominated by forests which is almost of 71% of the total land. The irrigated rice fields and rain-fed paddy fields are almost 11%. The dry agriculture land includes the garden of Munjul which is an agroforestry and is located at the western part of the village. The settlement area is only 26 ha or only 4% of the total area. The settlement is clustered in one region, i.e. along the main road of the village, that is also road to the capitol city of Bantarbolang sub district.

The land condition in the Glandang village indicated that there were many lands that were not use in an optimum way. The forest land, however, has also been used by the villagers for tumpangsari in the last couple of years. There was no information about the characteristics and the total area used for tumpangsari. With regards to land ownerships, there are 98 lots of land that have been registered, and therefore have land certificates. There are also lands that belong to the village, which are locally called tanah bengkok.

Demography
Based on village monograph, the total population of Glandang village was 2810 people, which consisted of 1383 men and 1427 women. There was a balance number between men and women. It has 690 families with the average of family members of 4 people. The age distribution of Glandang villagers can be described as follows:

Table 2. The Glandang village based on class age distribution

Age Class	Population		Number of people
	Men	Women	
0-4	97	105	202
5-9	74	80	154
10-14	119	128	247
15-19	98	106	204
20-24	168	181	349
25-29	192	209	401
30-34	162	176	338
35-39	120	131	251
40-44	138	149	287
45-49	106	114	220
50 up	72	82	157
Total	1383	1427	2810

Source: Village Monograph of Glandang, 2003

Table 2 showed that the productive age class is big enough i.e. in the range of 15-50 years old amounted to 2207 people or almost 79% of the total population. The total men in the productive age were 1093 people (39%), and the women were 1114 people (40%).

Based on their education level, the population of Glandang villagers can be described as follows:

Table 3. Glandang village by education level

Level of Education	Number of people
Not educated	-
Elementary school (not finished)	-
Elementary school	1346
Junior high school (not finished)	-
Junior high school	1335
Senior high school (not finished)	-
Senior high school	46
University	1
Total	2728

Source: Village Monograph of Glandang, 2003

Based on Table 3, it was clear that the majority of the villagers had finished their elementary (49% of the total population) and junior high school education (49%). Only 2% of the total population had completed senior high school education, and only 1 person had university education. It can be concluded that the dominant education levels of the Glandang villagers were elementary school and junior high school.

Based on the source of livelihoods, the Glandang villagers can be grouped as follows:

Table 5. Village Demography of Glandang based on source of livelihoods

Source of livelihoods	Number of people
Farming: - rotation farming - permanent farming - gardening	 - 850 -
Farm labourer	150
Other labourer	50
Trading	38
Service	13
Employee: - state employee - private employee - Military	 2 15 2
Others: - Retirement	 21
Total	1141

Source: Village Monograph of Glandang, 2004

Based on Table 4, it was clear that farming was a dominant source of livelihood (74%), followed by farm labourer (10%), and other labourer (4%). The relatively low education levels of the villagers delimited their employment options, and may explain why farming activities are dominant in this village.

Financial and Source of Village Income

The financial conditions of the Glandang village can be analyzed based on several elements i.e. routine revenue and expenditure, and development revenue and expenditure. The financial conditions about Glandang village are showed in the following table.

Table 6. The financial status of Glandang Village

Type of budget	Amounts (IDR)
Balance from last year	-
Revenue from routine budget	37.523.783
Expenditure of routine budget	24.288.270
Revenue from development budget	-
Expenditure of development budget	13.235.513

Source: Village Monograph of Glandang, June 2004

The source of village revenue came from various sources, as shown below:

Table 7. The source of village revenue

Source of village revenue	Amounts (IDR)
Land that belongs to village	419.100
Village tax	570.000
Collective money from the community	6.220.000
Community's products	2.500.000
Incentive from Central Government	30.000.000
Total	39.709.100

Source: Village Monograph of Glandang, June 2004

Based on the above table above it can be concluded that the majority of the village revenue came from the central government and the collective money from community. The contributions of other sources were relatively low.

Village infrastructure
Village infrastructure in the Glandang village can be described as follows:

1. Economic facility and means
Economic facility and means consisted of economic means, transportation, networking and communication.

Related with Economic means, there are some means e.g.:

Table 8. Economic means in Glandang Village

Economic means	Total
Shop	16
Home industry/perajin (bamboo plait)	2

Source: Village Monograph of Glandang, 2003

The economical means as mentioned above can be found in every parts of the village, especially in RT (there are 8 RT). There are always shop facilities in every parts of the village. Nevertheless, there were only two home industries.

In relation with transportation means, Glandang village has the following:

Table 9. Transportation means

Detail	length (m)	wide (m)	Condition (%)		Remarks
			good	bad	
Road: - asphalt - stone - soil	5000	5	90	10	Just being asphalt
Bridge	10	5	80	20	

Source: Village monograph of Glandang, 2003

The road in Glandang was in good condition. It connects Glandang with other neighbouring villages. The bridge connects Glandang villages with Bantarbolang village across Waluh River.

In relation with transportation facility in Gelandang village

Table 10. Transportation facilities

Vehicle type	Total (unit)	Remarks
Public transportation		
Land transportation: - car - motorcycle - cart	 10 20 10	 Early of August 2004 From Bantarbolang

Source: Village Monograph of Glandang, 2004

Car is a new public transport for Bantarbolang-Glandang-Pemalang route. The public motorcycle (ojek) serves to and from Bantarbolang and Glandang villages, based on the request of the people. Before the inter-village public transportation was operated, villagers depended on ojek. It costs about IDR3.000/one way. The cost of public car for Bantarbolang-Glandang-Pemalang route is only IDR2.500/person.

The communication system in Glandang village can be shown here:

Table 11. Communication means

Detail	Total
Communication: - phone - cellular	 3 4
Entertainment: - radio - TV	 14 125

Source: Village Monograph of Glandang, 2004

The communication system in Glandang village is still limited. Only few people owned the communication devices. Public phone (Wartel) was only available in Bantarbolang sub district. There are only a few villagers (4 people) who own a cellular phone because it is very expensive. While for the entertainment purposes, almost all villagers have their own television. However, not all households have one.

2. Education facility
The education facility in Glandang village can be showed in the table below.

Table 12. Education facilities

Education facilities	Village	
	Total	Classroom
Elementary school	2	10
Junior high school	-	-
Senior high school	-	-
University	-	-

Source: Village Monograph of Glandang, 2004

With regards to education facilities in Glandang village, there are two school buildings. One building of elementary school of Glandang I is located in RT 2 region. It has 4 classrooms which are used in rotation for six elementary levels. The other building (elementary school of Glandang II) is located in RT 7, and it has 6 class rooms. Most of the villagers went to these two schools for their elementary education. Only few studied outside the village.

3. Health facility
The health facility in Glandang village are:

Table 13. Health facilities

Detail	Total (unit)
Health facilities: - branch of S ub-district clinic - village clinic - integrated Medical services in village level	 1 1 1
Medical staff: - midwife	 1
Traditional healers: - healers/shamans	 3

Source: Village Monograph of Glandang, June 2004

The health facilities in Glandang village can be considered quite poor although there are several village health clinics and medical workers (midwife). On the other hand, villagers preferred to go to the traditional healers.

4. Observance of religion facilities

The Glandang village has only Islamic worship facilities as follows:

Table 14. Religion facilities

Name of observance religion	Total
Mosque	1
Small mosque (musholla)	8
Total	9

Source: Village Monograph of Glandang, 2004

The majority of the villagers was Moslem (99% of the population). Almost every part of the village has religion facility.

3.2.1.2. Resource and Resource use

The natural resources in Glandang village are abundant. Based on the focus group interviews and focus group discussions, it can be concluded that there are many resources in Glandang. These include river, spring, dam, farms, gardens, agro forestry, and forest.

Glandang Forest Condition
The conditions of the forest resources in Glandang village varied over time. The conditions can be grouped into three periods:

- Period before 1998 (1965-1997)
- Period of 1998-2000 (reform)
- Period of 2000-present

1. Period 1965-1997
During this period, the plantation was established by Perhutani with teak as the main timber species. Teak was chosen for its high financial value. The plantation was established under the supervision of Perhutani supervisor (mandor) in the filed.

The villagers also interacted with the surrounding forests. Their activities include collecting of branches for firewood, leaf, timber (with the permission from Perhutani for village purposes). Villagers, who had the connection, were contracted by

Perhutani as contract labourers. Informal village leaders rented out their chainsaws for forest thinning.

Collection of the branches was done by many villages irrespective of the village boundaries. Villagers had access to the forests, although their access was limited. With regards to land within Perhutani forests in Glandang there was a land management which was done over a period of 8 years. The 6 ha land was planted with mahogany in 1996, and it was managed collectively by 24 people. Each person was entitled over a 0.25 ha land. Because the land was limited, not every villager can own or have access to land. According to the forest farmers who managed the land, the land was given by Perhutani to them for the services and support they provided in forest management.

2. Period 1998-2000

The forests were exploited during this reform period and forest plundering escalated. The latter involved many parties. The same situation occurred in Glandang, especially in KPH Pemalang.

In this period, there was social and political chaos which completely destroyed the forest plantation that has been managed since 1960s. There was a perception that the forests were planted by their ancestors so they were entitled to use them freely. Others perceived the forests as Soeharto's property. When he stepped down, the forests belong to no one so that they could freely use them. There was even an expression that "In Jakarta people plundered the shops, in Glandang people plundered the forests". This period was a critical time not only for the forests in Glandang but also for Perhutani. The Perhutani staff faced resistance as their authority was being questioned.

After there were no more trees stands in the forests as the results of forest plundering, what happened next was forest land occupation by the community for cultivation, or locally called baronan. This occurred immediately after forest plundering. There was almost no time interval between forest plundering activity and the forest transformation into empty land. The speed of change was similar with that when state forests were converted into baronan. This activity continued until Perhutani engaged forest farmers by offering them a plantation contract over the forest land.

3. Period 2001-present

The social interaction to the forest land is very dynamic. This time is the transition time and shifted from physical things even the socio communities. This period is the continuation from the previous time in which compartments of 35-40 years old (planted in 1965) were plundered. Forest plundering was followed by 'land plundering' or land occupation in which empty land was occupied by villagers.

In this period then the plantation activities of tumpangsari have conducted by the contract model of 2 years period in state forest land between forest farmer that is formed into KTH and Perhutani. During the 2 years contract whenever the contract has finished then it can be renewed and the obligation was to plant the main plantation in the forest plot.

Based on focus group discussions and the interviews with key informants, natural resources in Glandang village can be summarized as follow: rivers, wheels, spring, dam, farm/paddy fields, temple/cemetery, garden and forest. Every resource has local names which were used for generations. They later became the local name in Glandang.

Rivers
There are many myths associated to Waluh river. Besides having a cultural value, it is also have a economic value for the Glandang community and around e.g. from the river estuary they build the dam and its directed to farming fields in western side of the village by a canal along the line circle around the Munjul Garden to the farming fields. The other thing is that the Waluh River in eastern part of the village, it can be found that many communities from children to adults are collecting the river stones and sand and sell them as raw materials.
Glandang River, located inside the forest, i.e. western part of the village; Jaganalan River, located in southern part of the village closed to Karangjengkol village; and Kali putih River

Well
Well is a water resource which owned by most of the community with the average depth of 3-25 m. There are Jurong well, Walem well located in western part of the village and it is usually used to irrigate the farming field or walem garden, and Patenggang well which is believed to be guarded by a spirit. Nobody dares to come close to this well, especially the virgin girls. It is required to write the name of the well correctly so that people are not cursed by the spirit. The well is located deep in the virgin forest and far away from the village.

Spring
Rancah wiru spring is located between rancah farming field and Wiru village, which is used by the community to irrigate their farming field in around. Other springs are Belik and Sipedet.

Dam
Wuluh river dam is developed by the community and it is used to irrigate farming field which is located in western part of the village. This dam has been renovated twice. From simple dam, it was then developed into permanent dam with the fund from the government. This dam is channeled in circle following the line from Munjul garden to the other farming fields. This dam is capable of irrigating farming field in all seasons.
Jaganalan dam is developed for irrigating the farming field and or the garden around the Jaganalan river which is located in Karangjengkol village.

Farming field/Paddy field/Rice field
There are 5 types of rice fields, i.e. Rancah rice fields, Bengkok (village property) rice fields, jagalanan blok rice fields, dry-rain rice fields, and GG rice fields.

Garden
Munjul garden is an agroforestry or community forest. The community forest and private forest in Glandang village is only 25 ha. It is located in Munjul and it is bounded by the state forest area (compartment 71) on the south part. It is irrigated with the channel coming from waluh river to the western part of the village. Other garden are Krikil garden and Sipedet garden.

Forest
Forest states which located within the administrative area of Glandang village are clustered into several compartments, i.e.: Karangjengkol forest, Kejiwan forest, Lemah abang forest, and Walem forest. Other forest areas are: Kulon Munjul forest (community forest), Sukma ilang forest, Gunung cilik forest, Gunung kerti forest, Kali borangan forest, Gajoran forest, Kali pulutan forest, and Lobajin forest.

The resource use of the natural resources can be described below

Table 15. Resources use in Glandang community

Nature of the resources	Type of resource use	Use	Temporal usability
River	Water	Consumption (bathing, washing, toilet), irrigation rice field	Daily
	Sand	Sell (source of income)	Daily
	Stones	Sell (source of income)	Daily
Forest	Branches	Consumption (fuelwood)	Daily. Collected from the bark that left from forest plundering
	Teak wood	Household consumption, sell (source of income)	When the forest plundering is occurred
	Land	Tumpangsari, rain-fed rice field, fruit trees (banana, cashew, papaya, cucumber)	After forest plundering and still up to present
Private land	Rice fields	Paddy planted for self consumption	Long time ago and up to present
	Community forest/garden	Tree plantation, fruit trees, bamboo and vegetables, for self consumption	

Source: KI and FGD

3.2.1.3. Forest Dependency

The indication of the forest dependency of the Glandang community can be assessed based on the activities that were carried out in the forest, for subsistence or commercial purposed. This includes utilisation of wood and non-wood products by the community.

The forest products that were used by Glandang villagers prior to forest plundering were significant enough. Resources used include wood, branches, and firewood. The villagers also made use of the forest land that was under their management. These include almost all compartments remained after forest plundering which were located closed to the village and the settlements.

In general the Glandang villagers have very limited land. The average area owned according to Glandang village monograph is 0,125 ha. The need for firewood for daily cooking is around IDR2.000–3.000/day/ family. The firewood is collected from the remaining state forest or the bark that were left behind by forest plundering. Therefore almost of the community is being bound to the agriculture sector is very strong especially they are very dependant for the land. The used forest land so far are planted with various agricultural crops, such as corn, beans, peanuts, cassava, etc. They highly contributed to the community income. The agricultural products are consumed or sold. The income generated from the sale is very significant for the community.

The limited land availability led the villagers to make use of the land in the Perhutani forests, which is locally called baronan, eventhough the land is far away, between

1,5- 5 km, from the settlements area. Villagers will work on every empty land, which are not used by other people, despite its location. The total area of land used or managed would depend on the villagers' capability. River bed was also used as dry rice fields (jaganalan rice fields) during dry season. The river bed can not be used during rainy seasons.

Villagers depended not only on forest products but also the forest lands. Long time ago when the community has no land or rice field, they worked as farm labourer in other people's lands. When the opportunities declined with time, they shifted to baronan land. There is someone who can manage a big area of baronan land.

Most of the community fullfilled their family needs by collecting the branches from the forest which were left during forest plundering. They also worked on baronan land as main daily activities and also tumpangsari. A significant amount of time, from early morning until afternoon, was spent on farming activities.

3.2.1.4. Social Culture Condition

The Glandang village was established in 1802, based on the information from the first village headman. The majority of Glandang villagers are immigrant from other part of Java, including Pemalang or outside Pemalang. In Glandang village, there are many people who married with the inhabitants of other villages, but they then stay and live in Glandang.

Along time ago Glandang was located in the middle of very isolated forests. After the first village headman has been selected, Glandand village was later developed into the present situation. Currently, Glandang village is governed by a woman who is a daughter of the first village headman.

With regards to the socio-culture condition of Glandang, in general people are still believed in myth and animism (they still believe in the spirit of the ancestor) that affect their life. They believed that the next generation of the first Glandang village headman has a guardian (dampyang), or they believe that they should perform a ritual so that they can be released from the existing evil influence. On the other hand, the community also performs religious (Islamic) activities in the village. There are at least 4 groups of "pengajian" in this village, i.e. 2 groups of tahlil (pray) for men (khusnul khotimah group and miftakhul jinan), 2 groups for women (tahlilan putri istiqomah and tahlilan putrid miftahul jannah).

There has been a shift in the social value, especially the respect given by the young member of the community to the eldest or to the person in command of the village, i.e. the head of the village. There is an indication that the trust of some community in the village to the leader of village has been decline. The communities are difficult to mobilise, and they are not motivated to participate in development of the village or village activities. The village government is lead by younger generation who are more creative in managing and developing the village, however they have difficulties in establishing good relations with the community members. There is only formal relation between the village government and the community, while in the other hand informal or family approach is needed to built community's trust and empathy. Informal forum like 'pengajian' or 'tahlil' is more effective to gather people rather than the way village government formal invitation for a meeting.

Community seems to undergo some social change and transformations. On one hand, they still hold on to their traditional systems such as myths, etc; while the other hand, they also developed strong religious activities or praxis, such as tahlilan, and

religion-based education system, such as Al Quran kindergarten for small children. Family-based relationships are still embraced strongly by the community. Nevertheless, attitude such as selfish and lack of interests to participate in collective activities for public goods, is also observed.

3.2.1.5. Respondent Characteristics

Age
The respondents in this research were selected based on the distribution of the farmer who managed the forest land around the settlements of Glandang village. Based on the age, the respondents in this research can be classified as follows:

Table 16. Respondent classification based on the age

Respondent age	No. of people	%
< 30	1	2,5
30 – 49	19	47,5
50 – 59	7	17.5
> 60	13	32.5
Total	40	100

Source: Analysis of data primer

The table showed that most of the respondents were in productive ages, i.e. in the range of 30-59 years old (as many as 26 people or 65% of the total respondents). However the numbers of respondent above 60 years old who managed the 'baronan' were 13 people (32,5%).

Education Level
The education level of the respondents can be summarized as follows:

Table 17. Respondent classification based on Education level

Education level	Total	%
Elementary school (not finished)	3	7,5
Elementary school	35	87,5
Junior high school	0	0
Senior high school	1	2,5
University	1	2,5

Source: Analysis from primer data, August 2004

Based on the table above, it can be concluded that the majority of the respondents completed their elementary education, followed by unfinished elementary education 7,5% (3 people), senior high school education, and university education (both 2,5% or 1 person for each category). Glandang village has 2 elementary schools. For higher level education, Glandang villagers should go to Bantarbolang sub district or to Pemalang. Beside formal education, there is also informal education institution, i.e. kindergarten of Al quran Tarbiyatul Athfal.

The low level of education enjoyed by the Glandang villagers was due to poverty and low awareness of the importance of education. Human capital in Glandang is therefore relatively low. No modern technology is used by the villagers in managing their land. They generally use the prevailing local knowledge.

Land Ownership
The total area owned by the respondents is classified in the following table.

Table 18. Respondent land owner classification

Area (Ha)	Total	%
< 0,06	6	15
0,06-0,1	4	10
0,1-0,2	17	44
0,2-0,5	9	23
> 0,8	3	8
Total	39	100

Source: Primary data

The table shows that the smallest land owned by respondent is 0,06 ha and the largest land is 0,8 ha. The table also shows that the majority of the respondents (17 people or 44% of the total respondents) own land with the size of 0,1-0,2 ha and a land with the size of 0,2-0,5 ha owned by 9 people or 23% of the total respondents. The land types owned by the respondent are in the form of home yard, rice fields or garden. Almost all respondents have home yards (39 people). Only 1 person doesn't have it because he/she still live with his/her parent.

With regards to rice fields, 27 respondents have rice fields with varied size and 13 people don't have rice fields. For gardens, only 5 people have it and 35 people don't have it. The results indicated that the needs and demands for land are strong among the community members, especially since they depend on farming activities as their source of livelihoods.

Occupation
The majority of the respondents are farmers (35 people or 87.5% of the total respondents). This indicates that farming is the dominant occupation in Glandang. The rests (2.5%) are state government employee, trader, sand miner, labour, and military retirements (see below table).

Table 19. Respondent occupation

Occupation	Total	%
Farmer	35	87,5
State government	1	2,5
Trader	1	2,5
Sand digger	1	2,5
Labour	1	2,5
Military Retirements	1	2,5
Total	40	100

Source: Primary data

Income
Because farming is the dominant occupation of the villagers, the highest contributions of their income come from business and farming activities. Sources of income of the respondents can be detailed as follows:

Tabel 20. Source of income of the Respondent in Glandang, August 2004

Occupation	Total	%
Farmer	35	87,5
State government	1	2,5
Trader	1	2,5
Sand digger	1	2,5
Labour	1	2,5
Military Retirements	1	2,5
Total	40	100

Source: Primary data

Table 20 shows that the farming sector is the main source of the income of the respondent, includes state forest land (baronan) or rice fields. The community spends a significant amount of their time in this activity. Other sources of income contribute up to 16%; such as family members worked outside the village or in Pemalang. Trading contributes 10% to the total income, followed by cattle selling (6%), tools rental from rice mill, cars to transport the agriculture products (4%), woods (3%), firewood (1%), and medicinal plant (1%).

Quality of Life of the Respondent

The quality of the community life can be assessed from their expenditures to meet their need. The results founds in Glandang village are as follows:

Table 21. Expenditure of Glandang respondents, August 2004

Income sources	Total (IDR)	Income contribution to total (%)
Farming	86.519.400	56
Others	24.400.000	16
Traders	15.600.000	10
Cattle	9.259.600	6
Tools rental	6.600.000	4
Farming labour	5.660.000	4
Wood	5.000.000	3
Firewood	1.200.000	1
Medicinal plant	15.000	0.01

Source: Primary data

The table shown that the highest expenditure of the respondents is for food (around 51% of the total expenditure), followed by energy needs (18%), social cost (9%) and entertainment (9%). Expenditure for education is only 5%, and the rest (8%) is spent on installment, clothing, recreation, taxes, health, and home renovation.

Although the majority of the respondents claimed that their income can meet their needs, however there is constraints indicator that is nature for community, i.e. land condition and increasing agricultural needs. The intensity and frequency is very high for the agriculture land and baronan. The community's quality of life can also be assessed from their assets and savings. In Glandang, the community invests their savings in the forms of land (99% of the total savings), cattle (0,15%) and cash (0,09%). They also invest in agricultural tools such as mattock, sickle, etc., while

young community members who worked outside the village, i.e. in Pemalang or Jakarta, usually have a different quality of life.

The quality of life can also be assessed from the conditions of the respondents' houses. From the total 40 respondents, 25 people (62,5%) have permanent houses, 5 respondents (12,5%) have semi permanent houses, and the remaining 10 respondents (25%) have non permanent houses. Almost the house has roof tile, but only 4 houses (10%) have ceramic floor, 28 houses or 70% from floor tile, 2 houses' (5%) floor from cement, and floor from soil 4 houses (10%). While for the bathing, washing and toilet, 11 houses (27,5%)have it inside their house, while 29 houses or 72,5% have it outside their houses.

Another indicator is the use of clean water by the respondents. All respondents (100%) have wells as the source of their clean water. The river can also provide clean water for Glandang villagers.

3.2.2. Surajaya Village

3.2.2.1. General Condition of Village

Village Administrative Boundary
Surajaya village is located within the teak plantation forest which is managed by KPH Pemalang of Perum Perhutani. Surajaya village consists of four sub-villages i.e. Si Ali-ali, Surajaya, Slarang and Kemamang. At the north side, Surajaya village is bordered by Paduraksa village, at south side is bordered by Bantar Bolang sub-district, at west side is bordered by Banjar Mulya village and at east is bordered by Pegongsoran village. Surajaya village is located around 8 km from the capital of Pemalang sub-district, 11 km from the capital of Pemalang district, and around 135 km from the capital of Central Java Province. Public transportation in Surajaya village is available every day all the time. They are in the form of four wheel vehicles (angkot) or two wheel vehicles (ojek).

Based on its location as describe above, Surajaya village is accessible. It can not be categorized as isolated area. Due to its easy accessibility to the city, villagers adapt to and accept changes that occur directly or indirectly. One of the influences of the urban area to the village is the declining number of young generations who engaged in agriculture or forestry sectors. These sectors do not interest them. They would prefer to work in the city as non-agricultural labor, craftsman, store employee, mechanic, and private employee. Working in city is seen more prestigious than agriculture. Furthermore, they receive wages regularly and they can not enjoy their investment more quickly, unlike the agriculture and forestry sectors in which they will have to wait a much longer period of time before they can enjoy the benefits.

The total area of the village and Land Use
The total area of Surajaya village, excluding forest area is 570 ha. It is dominated by rice field and non irrigated agricultural field, amounting to 76% of the total village land. The detailed land use system in Surajaya is provided in Table 22.

Table 22. Land Use in Surajaya village

Land Using	Randualas village	
	Area (ha)	Percentage (%)
Irrigated and non irrigated agricultural field	434	76
Public building	4	0.8
Settlement	125	22
Cemetery	2	0.3
Road, etc	5	0.9
Total	570	100.00

Source: Village Monograph Data, 2002

The total agricultural land available in the village is 434 ha. Dividing this total land with the total number of farmers in the village, the total land available for each farmer is 0,1 ha per person. From this figure, it can be concluded that land availability and job opportunity in agricultural sector is very limited. It can also be concluded that the agricultural sector can not fulfill the need of household. In order to fulfill their household needs, farmers or labor farmers usually look for job opportunity in forestry sector. By becoming forest farmer (pesanggem), they can generate some additional income.

Demography

The total population of Surajaya village is 7.644 persons (3.866 men and 3.778 women), or 1.941 households. The total number of men is slightly higher then women, that is 51% of the total population. The percentage of the inhabitants within productive age is 75%, much higher than that of the non-productive age.

Description of the productive age at Surajaya village is provided in Table 23. The calculation of productive age is made by calculating the total number of villagers within the age of 10-56 years old. The term “not working” refers to those who are still in educational stage and those are unemployed. Those data are not enough to calculating the number of unemployed exist at Surajaya village.

Table 23. The number of Inhabitant within the work force group

Age Group	Total (Person)	Percentage (%)
10-14	1.525	21
15-19	1.323	17
20-26	1.475	19
27-40	925	12
41-56	467	6
Amount of productive age	5.715	75
Un productive age	1.929	25
Working inhabitant	4.699	
Not working inhabitant	1.016	

Source: Village Monograph Data, 2002

Table 23 shows that the highest number of labor force in Surajaya village is in the age of 10-14 and 15-19 years old. These ages are within the educational stage age. Outside this educational age, the highest number is in age the 20-26 years old. The total number of inhabitants who work is 4.699 persons (61%). The unemployed persons in the village are usually youth who cannot continue their study. For them,

agriculture sector is not interesting. Meanwhile, other job opportunity at village is very rare. Most of them, consequently, chose to go to the city (Jakarta). The existence of unemployed people can pose a threat to forest security.

Most of the Surajaya villagers are farmers (82%). Farmers depend on rice fields and non-irrigated agricultural field. The latter is usually planted with agricultural crops such as corn, peanuts, soybeans, small green peas, cassava, etc. Some parts of the non-irrigated agricultural field are also planted with sugar canes. Besides farming, villagers also engaged in other activities. Nevertheless, their numbers are limited, as shown in Table 24.

Table 24. Inhabitant Composition Based on Their Jobs

Job	No. of person	%
Farmer	3.875	82
Farmer Labor	650	14
Non Farmer Labor	64	1,4
Trader	40	1
Service	8	0,2
State Employee	31	0,7
Private Employee	15	0,3
Military	8	0,2
Pension	8	0,2
Total	4.699	100

Source: Village Monograph Data, 2002

From Table 24, it can be seen that 82% of Surajaya villagers are farmers. The term “farmer” refers to farmer who has their own land, meanwhile farmer who does not have their own land is called farmer labor or peasant. Farmer labor are farmer who farm the land which own by community or Perhutani land as forest farmer (pesanggem).

Financial and Sources of Village Income
The details of the village income are provided in Table 25.

Table 25. Sources of Surajaya Village Income

Income Sources	Amount (IDR)	%
Land of the village	95.749.000	80
Village retribution	4.185.000	3
Government Subsidy	20.000.000	17
Total	119.934.000	100

Source: Village Monograph Data, 2002

Surajaya village also received routine budget and income budget from central government, as shown in Table 26.

The below budget was allocated to cover operational costs of the village government and the village development cost. Development of village infrastructure that is road development besides from government fund, its also from the collective money of community for about IDR80.000.000.

Table 26. Financial Condition of Surajaya village

Income Sources	Amount (IDR)
Routine income budget	105.598.783
Routine outcome budget	105.598.783
Acceptance income budget	111.217.783
Outcome development budget	5.619.000

Source: Village Monograph Data, 2002

Village Infrastructures
Surajaya village can be categorized as an advanced village. Besides its accessibility to the city, this village has also been equipped with relatively good physical infrastructure in various sectors, i.e. religion, health, education, sport, transportation, communication, and settlement. The infrastructure at Surajaya village is provided in the Table 27.

With regards to education facilities, kinder garden and elementary school can be reached from different parts of the village. To pursue higher educational level, such as junior high school, villagers have to go to Paduraksa village which is not very far from Surajaya village and Si Ali-ali sub-village. There is only one sub-village within Surajaya village which has difficult accessibility, i.e. Kemamang sub-village. It is located in the middle of forest and the connecting road is made of gravel. Due to its limited access, most of the children at Kemamang sub-village do not pursue higher level education, as the transportation costs exceed the educational costs.

3.2.2.2. Resources and Resource Use

Surajaya village community understands that there are two kinds of resources, i.e. natural resources and human resources. Resources are classified as an ability or power which can be used to produce something, which can be as in the forms of mind, goods and services. Natural resources are the richness of nature which can be used for mankind and the area itself. Human resources are the subjects and users of natural resources. This kind of definition is defined during the Focus Group Discussion at Surajaya village.

The different kinds of natural resources exist at Surajaya village are as follows:

Sand and stone
Within some area of Perhutani forest territory, there exist sand and stone mines. Up to now, community has used those mines illegally because it's located in state forest areas while there is no regulation about the stone and sand mining. Stones and sand are mined by community individually for personal or commercial purposes. The mines also provide job opportunities for a small part of the village community.

The sand was mined by Perhutani in 1980s, near forest compartment 144, by using heavy vehicle. It was later stopped when it almost reached forest compartment. The concern was that the activity may reduce forest quality in that compartment. Nevertheless, sand mining was continued by Surajaya villagers during dry season.

Table 27. Infrastructure at Surajaya village

Infrastructures	No. of items
Religion	
- Mosque	3
- Small Mosque	11
- Shrine	1
Health	
- Policlinic	1
Education:	
- Kinder garden	1
- Elementary school	7
Sports:	
- Football field	3 fields
- Volley ball field	3 fields
- Badminton field	2 fields
- Table tennis	2 fields
Transportation:	
- Environment road	11,8 km
- Village road	4 km
- District road	2 km
Transportation vehicles:	
- Bicycle	634
- Three wheel vehicles	14
- Pedicab	53
- Motorcycle	87
- Office car	2
- Private car	6
- Truck	7
Environment	
- Sanitation	7,5 km
Trade:	
- Traditional market	1
- Store	2
- Small shop	7
Settlement:	
- Permanent house	953
- Semi-permanent house	311
- Non-permanent house	224

Source: Village Monograph Data, 2002

Sand mining was carried out in Surajaya village at forest compartment 144 with the total area damage is 0,125 ha; while in forest compartment 41, total area damage is 0,1 ha. Negative impacts of sand mining include the danger of landslide, transportation road becoming muddy and flood when it takes place at young plantation compartment. The activity is also dangerous for sand miners. In Kaliwadas sub-village, at forest compartment number 29, landslide killed one sand miner. The latter threatens forest quality. As per village policy, sand mining is only permitted if only small vehicles are used to avoid village road destruction.

Spring

At Surajaya sub-village, there is a spring in the forest area, i.e. at the border between compartment 40 and 41. Perhutani built this spring so that it can be used as the

source of clean water, rice field irrigation, and cattle grazing. At Kemamang sub-village water capture was also built to fulfill clean water need of communities.

Besides from water capture, clean water and rice field irrigation water are provided by artesian well at Surajaya sub-village and Kemamang sub-village. The development of these artesian wells was done as a part of the government program on “Improvement of Ground Water Program” (P2AT) in year 1995 to increase productivity. Water use management was done by Darma Tirta, which was a group of water user farmer (Suka Makmur at Surajaya sub-village). Water use was done on a shift basis. Calculation is made on the hourly basis. The cost of water use was IDR10.000-12.000/hour depending on operational cost.

Forest

Surajaya village located inside and around the teak forest areas managed by Perhutani KPH Pemalang. The total area of forest territory existing at Surajaya village is 546 ha, of which 446 ha is planted with teak trees, and 100 ha is planted with mahogany trees. Administratively, the forest is a part of the BKPH Slarang, which consists of 3 RPH, i.e. Paduraksa, Kramat and Glandang. To meet their needs, the villagers depend heavily on forest. The community depends on forest resources such as the wood, firewood, cattle food, teak leaves, tubers, herbs (empon-empon), and farm land. Community life cannot be separated from forest, especially farmer with limited land or no land (labor farmer). Besides using forest resources, they also expect to use forest land for agriculture cultivation. Agriculture cultivation is done on plantation compartment or under old teak stand. Crops planted include rice, corn, peanut, small green pea, cassava, banana, etc.

Rice field irrigation and non irrigation field

Surajaya villagers generally depend on agriculture sector for their livelihood. Farm land in Surajaya village is large enough and it is belong to community and some parts belong to the village. Private farm land is usually managed by the owner or contracted to the labour farmer. Village land usually is used and managed by village officials as appreciation of their service, and this management right is valid over a period of their service only.

Irrigated rice field irrigation is usually planted with rice variety which can be harvested twice a year, or three times a year in some places. Non irrigated field usually is planted with a variety of crops such as cassava, sugar canes, etc.

Sugar cane plantation

Sugar can plantation is established on lands that belong to the community, with cooperation with the sugar cane farmer cooperative (Koperasi Raya Jaksa). Provision of result cooperation is calculated on the business result residue (SHU) sugar cane plant that is based on sugar price deducted by the production cost. All of production costs are shouldered by the cooperative while the farmers are responsible for establishing and maintaining the plantation. Harvesting and transportation of the sugar cane are the responsibility of the factory. SHU is 36% production cost and 64% for land owner farmer. The calculation is based on the total area and production.

Animal husbandry

Generally Surajaya villagers own cattle which are stalled and also shepherded. Separated from the settlement area, cattle stalls are being concentrated at forest border and near the spring. The reason the stalls are separated is to keep the settlement area clean and healthy. The cattle raised by the villagers are goat and buffalo. Cow is seldom raised by Surajaya villagers because they are used to raise

buffalo for a long time. The safety of the cattle is the responsibility of each cattle owner.

River
The only river at Surajaya village is Waluh River, which is located at the border of Surajaya village with Bantar bolang sub-district. As the location of this river is far from settlement, the river does not support the community's need for clean water or other direct needs.

With regards to the ability of the community to manage natural resources, the available human resources in Surajaya village are as follows:

- Technical abilities, i.e. making fertilizer (compost) and craftsmanship. These skills are developed through from experience and training which is held by related institution such as Perhutani, Crop Estate Department and Agricultural Department;
- Cultivation and forest plantation. This knowledge was passed on from previous generations;
- Work force. There is sufficient work force in Surajaya village. However, because job opportunity at village is limited, many youth chose to go to the city;
- Home industry from agriculture product, but villagers usually face problems in marketing the products.

3.2.2.3. Forest Dependency

Dependency of Surajaya villagers on forest resources is quite high. Community depends not only on forest land but also forest resources, both wood and non wood forest products. Their dependency can be classified into direct and indirect dependency. Direct dependency is if community uses forest resources to fulfill their need, while indirect dependency is if community does not interact directly with forest but they need forest products.

There is no written regulation with regards to forest use. It is based on the norms to ensure forest sustainability. The use of forest resources is expected to maintain, and not decrease, forest quality. The use is not limited by time and space, i.e. the community is free to use forest resources around Surajaya village whenever they need as long as forest sustainability is maintained.

The forest resources the community depends on can be classified into three groups, i.e. wood forest products, non-wood forest products, and farm land (baronan).

Wood Forest Products
Wood forest products are used for craft wood and fire wood. The use intensity for fire wood is higher than that of craft wood. Most villagers need firewood daily to fulfill their household need. Some villagers sell the firewood to community members who do not interact directly with the forests, or sell them in the city.

Wood forest products for craft purpose are directly collected from the forest by a small numbers of villagers. Craft woods are used for personal interest only if it is needed to build or renovate house and house tools with limited amount and intensity. Wood harvesting can be categorized by Perhutani as wood theft if it is for commercial purposes and if the harvesting intensity is uncertain. In certain times, i.e. family traditional festival (hajatan), idul fitri (Moslem celebration), and children school payment time, then wood harvests are increased. Wood can be sold to anybody who needs it, either the village community or the neighbouring villages.

The agreement between Perhutani and community on wood theft states that wood harvest for personal needs (build/renovate house, create house tools, fire wood which do not damage tree stands) is tolerated. Wood collectors will not be processed legally; they only get warning. Wood theft in big amount and for sale will be processed legally.

In collaborative forest management or PHBM agreement, forest security will be responsibility of both Perhutani and community (LMDH), because one of the goals of PHBM is to control wood theft problem.

Agreement for firewood use is at thinning out compartment and harvesting compartment, where community may take wood, branch, and small branch as long as are excluded craft wood size to be used as fire wood. Firewood taking is prohibited to be done at stand outside of thinning out compartment and harvesting compartment. However community usually takes firewood outside of thinning out and harvesting compartment because it is closer to their settlement, or because there are no thinning out or harvesting compartment. Those activities which are done by community also becoming forest stand damage.

The community's use intensity of illegal wood can be described as follows (based on the FGD on forest resources and its use at Surajaya's sub-villages): Siali-ali 10%, Surajaya 25%, Slarang 10%, Suren 10%, Kemamang 30%, and Kaliwadas 30%. This percentage refers to the number of community members involved in craft wood use illegally. To meet their wood needs, the community usually buy the wood in the wood store (non-teak wood), buy from Perhutani (in big amount), or buy illegal wood.

So far, the awareness of community to rehabilitate damage forest area does not exist yet. Community involvement is limited to cooperation contract at the plantation compartment. Meanwhile, there has been no initiative by the community to plant compartments with less growth with trees. Usually, if there is an empty land, it will be planted with agricultural crops.

Non Wood Forest Resources

Non wood forest resources which are used by the community are as below:

- Cattle feed
- Teak leaves
- Herbs or medicinal plants (empon-empon) that grow naturally under tree stand or at compartment border, i.e.: ginger, galingale and turmeric
- Tubers which grow naturally under old tree stand, such as: uwi, gembili and gadung
- Small animal: grasshopper and enthung
- Agriculture and garden products from baronan land
- Spring
- Sand and stone

Cattle feed

Surajaya villagers view forest as a source of cattle feed. From forest cattle feed which can get are grass, plants under tree stand, and leaves of trees forest. Besides from the forest, cattle feed can be collected from agriculture waste, such as straw, corn plant, etc. Cattle feed is usually collected by boy, adult woman, and adult man. To describe community's dependency on forest in order to fulfill cattle feed need, the table below provides an estimated percentage of community which has cattle in the four sub-villages of Surajaya village.

Table28. Percentage of community with cattle

Sub Village	Community with cattle	
	Goat	Buffalo
Si Ali-ali	80 %	30 %
Surajaya	30 %	10 %
Slarang	15 %	5 %
Kemamang	20 %	20 %

Source: Result of FGD resources and its use at Surajaya village

Teak Leaves
Only a small part of the community depends on teak leaves collection. Teak leaves are used for personal needs such as for food wrapping during hajatan. They are also the market for food and vegetable wrapping. Almost in each sub-village of Surajaya village, there is a person whose occupation is as teak leaves gatherer. It is usually done by adult woman; few are done by adult man. Teak leaves have been used for a long time; the intensity of use depends on needs. Teak leaves gatherers sell the leaves to the market everyday.

Teak leaves collection can damage young teak trees, i.e. defecting or breaking the stem. An agreement exists between the community and Perhutani that the community may collect teak leaves from old teak stand but not from young trees.

Herbs or medicinal plants (empon-empon)
Empon-empon can grow naturally at almost all of old trees stand or at compartment border. At some places empon-empon is planted by community independently. Special cultivation program is not developed yet by Perhutani and community. The reason why not been developed is because there is no market which can purchase empon-empon products with adequate price. There is a concern that the price of empon-empon will decrease if over-production occurs.

The kinds of empon-empon which can be extracted from the forests are medicinal plants of ginger family, i.e. galingale, turmeric and ginger. Empon-empon is collected for personal purpose (traditional medicine, and cooking spices) or is sold to market. Sometimes traders look for empon-empon to purchase in the village. Usually the empon-empon gatherers are adult woman; few are adult man. Empon-empon is usually collected during dry season. Empon-empon products are one of the additional sources of family income.

Tubers
Tubers are also often found under old stand, example: uwi, gembili, iles-iles, and gadung. Tubers are collected by community man and woman during dry season, usually for personal consumption. Up until now tubers are not marketed yet because there is no market and there is no technology to process those tubers.

Animals
At dry season which happen once a year, community can harvest small insects such as teak grasshoppers and enthung (teak caterpillar). Grasshoppers and enthung are insects which are good to consumed. Those animals are collected for self-consumption or sold. Enthung are sold per liter. The price is IDR5.000/liter. Teak grasshoppers are sold IDR50/pc. For community, grasshoppers and enthung are the source of protein source and one of the additional income sources. Besides grasshoppers and enthung, wild pork and monkey can also be found in small

number. Those animals are considered as pests because they damage agriculture crops such as corn, peanut, and cassava.

Farm land (baronan or forest lots)
Forests provide cultivation areas for Surajaya villagers. Forest land which can be used for cultivation is the plantation compartment, land under old tree stand, and empty forest land under died teak stand (or locally called teresan).

Farmers who want to use land within plantation compartment should establish cooperation agreement with Perhutani. Pesanggem has the obligation to plant and maintain teak trees, and they have the right to plant seasonal plants as tumpangsari (mix crops) plant within the contract period (i.e. 2 years). Seasonal plants which are planted by the pesanggem are rice, peanut, soybean, small green pea, and cassava. The whole harvest of those seasonal plants will go to the pesanggem.

Community uses open land under old teak stand because plant is seldom, so it is possible to plant the land with seasonal plants. Land under teresan trees is usually used by community until the harvest time. To use this land pesanggem does not need to establish contract with Perhutani. Whoever wants to use the land, they are permitted to do so. This land is used by community to planting corn, cassava, empon-empon, and banana. The whole harvests belong to the pesanggem.

3.2.2.4. Social Cultural Condition

At the beginning of its development Surajaya village was centralized at Surajaya sub-village. Later on, three other sub-villages developed. Surajaya village has not fully developed as indicated by the low educational level of community, and the main occupation of the community which is mostly farmer or labor farmer. The condition of Surajaya village is just like other village in Java, except for Surajaya sub-village which is located close, around 8 km, to the capital of the district.

Community self-help tradition and gathering (gandurasa) is being practiced by the community for example in road renovation, rewang (traditional common work for hajatan), and village gathering activities. The latter includes neighbourhood gathering, pengajian (reading holy qur'an and religion extension), etc.

Surajaya village also has a historical heritage in the form of ancient cemetery. The heritage is located at the forest edge near forest compartment number 41 which is exist culture heritage shape as cemetery. It is believed by community as cemetery of Prince Purabaya. At certain nights, Friday kliwon night, the cemetery is often used as a praying place. There is also sculpture in the form of a mother and her little child. Near this location, there also exists a spring, which was then built by Perhutani as water capturer, which serves as a source of clean water and irrigation water for rice field. This area is classified by Perhutani as LDTI (forest compartment with special goal).

This historical heritage is potential to be developed as a cultural tourism site. Surajaya villagers have already considered this possibility. Nevertheless, the idea has not been implemented due to technical and funding limitation. Development that has already been carried out at this ancient cemetery area includes the construction of a paseban (a place for villagers' meeting), a place for a caretaker (juru kunci), and the replacement of the old trees by the young one.

The ancient cemetery is located near a spring which is used by Surajaya villagers. A control small dam (cekdam) was built nearby to control erosion, but it is currently

damaged and not functional. The local community appealed the cekdam to be repaired to Perhutani.

3.2.2.5. Respondents Characteristics

Age
The data showed that the average age of the respondents is 40 years. The distribution of the respondents' age is presented in Table 29 below.

Table 29. Respondent Age Distribution

Age Group	Randualas village	
	No. of person	%
30-39	8	20
40-49	10	25
50-59	11	27,5
60 up	11	27,5
Total	40	100

Source: Primary Data Year 2004

Respondents of 30 years old and above were selected for the survey because they are considered to be mature and they had already chosen their profession or occupation. As the head of the family they are obliged to fulfill their households' needs. The age distribution data showed that the number of pesanggem with the age of over 50 years is 55% (of the total respondents). This fact could become a concern as it may affect the productivity of pesanggem.

Education Level
Respondent's educational level also influences their ability to process new concept and their ability to adapt to and accept changes. It is observed that the higher their educational level, the faster and easier for them to accept new concept. Educational level of the respondents needs to be concerned. From the total 40 respondents, 12 of them are not educated, 7 didn't complete their elementary education, 20 completed their elementary education, and only 1 person completed high school education. However, in general the respondents could communicate and express themselves quite well. The educational level doesn't correlate with their technical ability to manage their shared land. This ability and knowledge is most probably learned from the their parents.

Land Ownership
Limited land availability is a problem faced by most of the villagers, including the respondents at Surajaya village. The average land owned by a household is 0,29 ha which consists of 0,11 ha of irrigated rice field, 0,12 ha non irrigated field, and 0,06 ha of back yard. The shared land ownership of pesanggem is 0,125 ha/pesanggem. Due to the above situation, farmers with limited land or no land naturally keen to participate in forest plantation program. The decision to take shared land is usually made by both husband and wife, as they would like to get additional income for their family.

Occupation
Most of the Surajaya community depend their live on farming. However, the community usually has another side job. The choice of the main job depends on the size of respondent's land. The villagers who chose farming as their main livelihood (58% of the total respondents) usually own land or they do not have other experience

in the other sectors, or as farmer labour (27.50%) because they need cash money fast and they do not have capital to run agricultural business. The other side jobs such as craftsman, three-wheel vehicle drivers, firewood gatherers, and traders need experience and capital. Details of the respondents' main occupation are provided below.

Table 30. The main occupation of the respondents

Kind of Job	No. of people	%
Farmer	23	57,5
Labour Farmer	11	27,5
Pendycab (Becak) Driver	2	5
Driver	1	2,5
Village Security	1	2,5
Craftsman	1	2,5
Firewood Seller	1	2,5
Total	40	100

Source: Primary Data Year 2004

The side job is performed while waiting for the crops to be harvested. The total percentage of the respondents who did not have side job is 42.5%. The most common side job is as labour farmer, which is performed by 22.5% of the total respondents. Details of Respondents side job are provided at Table 31 below.

Table 31. Respondents' Side Job

Kind of Job	No. of people	%
Labor Farmer	9	22,5
Baron Farmer	3	7,5
Small Shop	3	7,5
Uncertain Trader	1	2,5
Craftsman	2	5,5
Mechanic	1	2,5
Husbandry	2	5,5
Firewood Trader	2	5,5
No Side Job	17	42,5
Total	40	100

Source: Primary Data Year, 2004

This kind of job choice has relevancy if it is correlated with respondent's age. The age and the status as the head of the family motivate the respondents to manage the shared land. This fact is indicated from the respondent's age distribution which is almost average at all age range. The group below 30 years old or unmarried chose to work outside the agriculture sector such as in Jakarta or become unemployed. Gender is not correlated with the involvement in agriculture sector and management of shared land. The male respondents' income is higher (92%) rather than the female respondents' (8%), although the prioritized respondents in this study are men due to their position as the head of the family. At Surajaya village, women are actively involved in cultivation activities at their own land and at the shared land. Women are involved in all activities such as land preparation, seed preparation, planting, post-harvest processing, and marketing.

Income

Pesanggem's family income can be divided in two categories, i.e. income generated from activities outside the forest, and income from the activities inside the forest. This categorization helps in understanding the level of dependency of the community on forests in order to fulfill their family needs.

The main source of the respondents' income comes from agriculture sector (24% of the total income) which is generated from their own land or shared land. The agricultural products include rice, corn, cassava, small green pea, peanuts, and vegetables. The respondents' income from forest source is generated from agriculture cultivation at the shared land, and the sales of firewood and teak leaves. The income generated from the sales of teak leaves and firewood is IDR15.530.000 or 8% of the total income. The respondents's annual income is provided in Table 32 below.

Table 32. Total annual income of the respondents

Income Category	Amount (IDR)	%
Farmer	46.185.500	25
Labor Farmer	15.013.000	8
Non-agriculture Profession	39.915.000	21
Service	27.500.000	15
Trader	29.925.000	16
Tools Rent	168.000	0.1
Firewood	11.240.000	6
Husbandry	4.930.000	3
Teak Leaves	4.290.000	2
Pension	7.200.000	4
Total	186.366.500	100
Average	4.659.163	

Source: Primary Data Year 2004

Land preparation of private land and shared land is done by using the family's labor. The system used is labour wage and not labour exchange. From this sector, economic activity of labour farmer run with of money rotation between respondents or community is about 8% of local economic activity. The offspring who worked in Jakarta (21%) also supports the family income and decreases their dependency to agriculture sector. This amount almost equal to agriculture sector, but this source of income is not owned by all of the respondents (70%).

Service income comes from sugar cane field preparation which is done by respondents on other person's land. At certain time, respondents also sell cattle such as goat and buffalo, and also fruits such as banana, mango, petai, and barteh. Fruits are cultivated in private land and shared land. People sell assets only if they need money for hajatan or children education.

The need for firewood often pushes the community to damage teak stand of above 10 years old. It is done by burning the bottom of the stand to kill the trees. Afterwards, the tree parts are cut down, starting from the small branches until the base. This phenomenon reveals the need to increase the awareness and responsibility of the community members so that they can properly implement the collaborative program with Perhutani.

The respondent's involvement to support forest sustainability includes the plant maintenance, and guard the forest from wood theft. Meanwhile, their activities which can be harmful to the forest are the desire of community to manage the shared land longer (more than 3 years) and plant it with agricultural crops which need open area with sunlight. In order to get sunlight for their crops, they kill the young trees by cutting out the trees' leaves, damaging the root of the trees, and burning leaves litter near the main plant. This phenomenon can be found at Surajaya sub-village with 20% damage level. The feed for their cattle, especially goats, is collected by cutting down the border plants, i.e. the kemlanding trees. This phenomenon is found at Si Ali-ali sub-village with 80% damage level.

The socio-economic conditions of the respondents can also be seen from the need level of the respondents' family. Total average of the respondents' need at Surajaya village is IDR300.107.000/year, with an average of IDR7.502.688/year. The highest need is for food (34%) and jajan (family informal non-food expenditure) including cigarettes (21%). The detail of the respondents' family need is provided in Table 33 below.

Table 33. Respondents Family Burden

Needs	Amount (IDR)	%
Food	103.140.000	34
Clothes	10.360.000	4
House	31.120.000	10
Education	8.220.000	3
Health	3.564.000	1
Recreation	830.000	0.4
Tax	685.000	0.2
Energy	35.957.000	12
Social Need	31.041.000	10
Jajan	63.128.000	21
Transportation	996.000	0.4
Payment	11.066.000	4
Total	300.107.000	100
Average	7.502.688	

Source: Primary Data, 2004

The average food need of a family per year is IDR2.578.500 or IDR548.700/person/year or IDR1.600/person/ day. With this condition, the nutrition quality of the community can be categorized low, because the standard expenses for one nutritious meal locally is IDR3.500.

Jajan is in big portion because it becomes routine daily burden. It is mostly spent on children's Jajan and cigarettes. Energy component is divided as electricity routine burden (40%), cooking including by gasoline, and firewood (45%), oil for engine vehicle (5%), and water (10%). Electricity expenses are really a burden for the respondents as the electricity voltage is too high than what is needed.

Social costs became unwritten obligation which has to be fulfilled as the respondents are part of the community. This burden can not be controlled because it was related with personal interest which cannot be regulated by an institution. In average this burden is three times a month with the burden of IDR60.000.000. The house expenses are not distributed equally to all respondents in the last one year. Routine house expenses only incurred on those respondents with impermanent house made

from bamboo plaited mats. The average annual expense is IDR200.000. Expenses for clothes are spent once a year during Moslem's celebration day. Some respondents don't buy new clothes because they get them from their children who work in the city.

Education burden is relatively low considering that many of respondents only educated their children until elementary school, junior high school, and senior high school. Medical expenses are also low because respondents just go to puskesmas, which charge low fees, when they get ill. Tax is low because tax is only charged to settlement, while most of the respondents only have limited land (0%). Transportation costs are also low because most of the respondents seldom travel (0%). They also never use their leisure time for recreation (0%). For most of the respondents, their life is good if they do not have loan and credit obligation payment (4%).

Quality of Life

Even though Surajaya village location is near the forest, their life is not under developed. From 40 respondents, 35 of them are indigenous community of Surajaya village, and 5 of them are outsiders who live at Surajaya village because they married Surajaya villagers. Community generally expertise and the standard of living are quite well. The quality of the community's life can be assessed from their settlement condition, water source, MCK (toilet), drainage system, energy, saving, etc.

The conditions of the respondents' settlement are as follow: permanent house owned by 26 Respondents (65%), semi-permanent by 8 Respondents (20%) and impermanent house by 6 Respondents (15%). With this condition, it can be concluded that the prosperity level of the community is quite well. The owners of the semi-permanent and impermanent houses have to renovate their house every year as the building is made of fragile wood or bamboo plaited mats. Comparing the total numbers of these houses with permanent houses, it can also be concluded that there is a wide economic gap among Surajaya villagers.

On the other hand, most of the house parts such as door/window frame, wood construction, are made from teakwood. They take it from forest with or without permission of Perhutani. Perhutani tolerates limited wood harvesting as it is done with Perhutani permission and it is not for sale. The house floor condition is usually ground (57%), cemented (20%), tiled (20%), and ceramic (3%). Floor seemed to be of low priority in constructing comfortable and healthy house. They just renovate the floor only if they have extra money.

The source of water used by respondents is well (22 respondents or 55%), PAM (4 respondents or 20%), pond (6 respondents or 15%) and arteries well (8 respondents or 10%). Digging up a well is not easy because water can only be found at the depth of 25 m or more. This condition led several families to dig up a well together and share it among them. This condition can be seen clearly at Kemangmang, Kaliwadas, and Suren area, meanwhile at Slarang and Kedungsantri area community chose to use well and PAM as water source. Si Ali-ali community use well as the source of clean water. For washing and bathing, they use water from irrigation at the border of Surajaya village and Kramat village. Surajaya sub-village community use arteries well and distribute the water by water pump.

The fulfillment of water need is influenced by the location of the toilet. Among the respondents, the toilets are located either at outside of the house (59%), inside of the house (33%), at the river/pond/irrigation (5%) and at neighbours' toilet (3%). It is also related with the disposal way septic tank (47%), jamban (8%), and pond (45%).

With regards to health facility, all of Surajaya villagers usually go to the puskesmas because its cost is affordable by all of respondents (100%), doctor 38 respondents (95%), midwife and mantri 25 respondents (62 %), and traditional healer all of respondents.

Saving is done by Surajaya villagers, and done not always in term of money but also in term of goods that is cattle, land, trees and jewellery. The total of saving is distributed equally among respondents. Only saving in term of land is done by all of respondents. This distribution is based on land ownership including for settlement which is had by all of respondents (100%). From all of respondent who had settlement land, only 16 respondents (40%) had other land besides settlement land. That land is in term of irrigated rice field (40%), non-irrigated field (40%), and yard (20%). Non-irrigated field is used to planting sugar cane with the production cycle of one year. Irrigation rice field is carried out at sloping land with a slope of about 10 degrees. Irrigation rice field is used to planting rice with the production cycle of twice a year. This production cycle is due to the use of technical irrigation system which uses arteries well built in 1994. There are artery well water pump and are capable to irrigate all of irrigation rice field of 158.300 ha at Surajaya village. Meanwhile, the yard is used planted with fruit trees such as mango, petai, and banana. This trees are considered as plant saving (1%). Meanwhile, 24 Respondents (60%) which only have settlement land is used shared land for farming. These private lands are inherited from their parents or purchased for settlement goal.

In cattle saving category, the majority of cattle raised is goat 45%, chicken 35%, buffalo 18%, and dog 2%. These figures are calculated by including Surajaya villagers who has cattle. Goat population is dominant at Si Ali-ali sub-village 55%, Kemangmang and Kaliwadas 35% and the other 10% distribute at Surajaya, Slarang, Kedungsantri, and Suren. Chicken population is distributed equally at all of village area, meanwhile buffalo population at Surajaya 40%, and Kemangmang 60%. Dog is distributed equally at almost village area even though in small percentage. Dog is not considered valuable by the community because they can get it free from other people. They raise dog to protect their house from theft. This is in contradiction with Islam normative doctrine which is categorized dog as defiling and filthy animal. The majority of Surajaya villagers are Moslem (7.299 persons or 99% of the total population).

Generally, respondents do not have saving in term of money because all of their income is spent on food, clothes, settlement, and children education. Tarsiers' allocation residue of income usually is used for jewellery saving 2%. Jewelry saving is done by 13 respondents (33%). Actually there are some consumer goods at respondent's house such as television, radio, CD player, recorder tape, and CD cassette. These goods cannot be categorized as saving because they are purchased for the children, and not for the respondents.

3.2.3. Tanggel Village

3.2.3.1. General Condition of Village

The Village Administrative Boundary

Tangel village is located in the southern part of Blora district. The boundaries of BKPH Tangel are:

- The southern part is bounded with Kadengan and Ngliron village
- The northern part is bounded with Sub-District of Banjarejo
- The eastern part is bounded with Kadengan village

- The western part is bounded with Sub-District of Jati

The border of Tanggel village with another village was in the form of forests or road, because the Tanggel area is indeed surrounded by the forest. The main road connecting Tangel area with Subdistrict of Randublatung splits this village into two parts.

Total village area and Land Use
The total area of Tanggel village is about 3.265 ha. It consists of 13 villages, i.e. Bogorejo, Suru. Gumeg, Jambean, Kedungthik. Temon, Tanggel, Sonorejo, Kalipang, Ngimbang, Ndelok, Ngasem, and Ngampel. From more than 3,000 hectare of the total village area, part of this area is forests about 2.559 ha (managed by Perhutani).

The soil in the Tanggel village is of grumusol type, containing lime and clay. The pattern of land use at the Tanggel village is as follows (source: Agriculture office of Randublatung, Blora):

- Rain-fed field : 283.145 ha
- Non irrigated land : 206.556 ha
- Home garden : 208.940 ha
- Others uses : 41.080 ha

By the flat and waved land typologies, Tanggel land is indeed infertile. There is no irrigation system, so the villagers rely on the rain reservoir that collects rainwater during the rainy season.

Demography
Total Tanggel population is about 4.860 persons or 1.585 households. The total number of person in each family is 3 persons. The composition between male and female is almost equal.

The population characteristic according to the age group can be seen in Table 34.

Table 34. Population Characteristic of Tanggel Village Based on Age Group

Age Group	No. of person	%
0 – 4	122	2,5
5 – 9	389	8
10 – 14	444	9
15 – 19	362	7,4
20 – 24	457	9,4
25 – 29	391	8
30 – 34	385	8
35 – 39	612	13,6
40 – 44	358	7,4
45 – 49	318	6,5
50 – 54	165	3
55 – 59	138	3
60 – 64	168	3
65 – 69	161	3,2
70 up	390	8
Total	**4,860**	**100**

Source: Village monograph data (Asper Office), 2004

The age distribution in the area will influence its social condition. When the number of the residents with productive age is high, the prosperity of its resident should be higher in comparison with that with lower number. Nevertheless, it is possible that socio-economic problems may also emerge in area with high productive age when other production factors are not supportive. High labour force without enough employment opportunities will create socio-economic problem. This situation occurs in Tanggel village. The productive age (15-55 years old) in Tanggel village was about 63% from total population, but the employment outside of the agricultural sector was not available. As a result, the young members who mostly do not want to work in agriculture sector just become family burden.

The cultural influence from the outside world to the young group was also very high. The billiard game, emerging as the new life style in Tanggel, was not an ordinary problem. Most Tanggel youth spend their time on this game. The business is established by an entrepreneur from outside Tanggel. It does not have positive impacts to Tanggel condition, either socio-economically or culturally. On the contrary, the existence of this type of entertainment has increased the expenditure of the households, while the cash produced by economic activities was not sufficient to increase the community's economic prosperity.
With regards to education, the level of the community's education can be seen in Table 35.

Table 35. The level of community's education at Tanggel Village

Education	**Total**	**%**
Pre school	963	20
Not school	146	3
Elementary school not graduated	228	3
Elementary school graduated	3.182	66
Secondary school graduated	244	5
High school	74	2
University graduated	23	1
Total	3.258	100

Source: Village monograph, 2004.

The majority of Tanggel villagers graduated from elementary school (66%) due to low awareness of the Tanggel villagers. The community does not see education as important. This is reflected from the fund allocated by the respondents for education.

To understand the situation in Tanggel village, we also collected information on the villagers' livelihood (see Table 36).

Considering the land condition, the total area of the village, and its history, it appeared that the highest source of income came from agriculture (78%), either from working as farmers or farm labours.

Financial and Source of village income
Data on village income was not available. This is due to lack of proper documentation on village finance, inactive village government, and the conflict within the village government. The village government is not performing their administrative functions at the moment.

Table 36. People's livelihood at Tanggel Village

Livelihood	Total	%
Farmer	1.512	46
Farm labour	1.055	32
Industry and construction worker	380	12
Trader	32	1
Driver	3	0.1
Civil servant	55	2
Private Employee	189	6
ABRI (army)	2	0.1
Entrepreneur	20	0.6
Retired	10	0.2
Total	3.258	100

Source: village monograph, 2004

Village Infrastructure

Public facility and facilities are available in the Tanggel village to support the community. The existing infrastructure is described in Table 37.

Table 37. Infrastructure at Tanggel Village

Means	Total	Explanation
Elementary School	5	Some are 6 classes, some 3 classes
Secondary School	1	Run by private institution
Community health clinic at the village level (Puskesmas)	1	
Posyandu (Integrated Child Health on houses basis)	6	Available in the village
Telephone	1	Satellite
HT	9	Perhutani
Mosque	5	
Musholla (small mosque)	21	Available in each sub-village
Road	-	Gravel and soil
Entertainment	1	Billiard game
Stall	6	
Store	16	
Home Industry	12	Furniture
Small-scale industry	2	Furniture

Source: Village monograph, 2004

The much needed public facility is a road to support the villagers' economic activities and to connect the village to the market. There is no market in the Tanggel village so that almost all agriculture products are sold directly on the field or in the villagers' houses. The buyers come directly to the villagers and they set the price.

3.2.3.2. Resources and Resource Use

The different forest resources utilised by the community are as follows:

Stump

Stump collection by the community for commercial purpose created conflict with Perhutani as the community do not get Perhutani's permission beforehand. Nevertheless, stumps are usually collected by the community in small quantity and they are used as firewood. Commercial utilization of stump was generally conducted by those with capital, and done either legally or illegally. Entrepreneurs who collect teak stumps legally have to give as much as 25% of their income to Perhutani.

The collection of stump in high quantity by local entrepreneurs was sold at the market outside of Randublatung. In one year, the entrepreneurs were able to sell the stump outside the area about three times; hundreds of stumps were sold each time. Illegal stump collection (without permission from the Perhutani) was done by the villagers of Ndelok, Ngimbang, Ngampel (at the north part of Tanggel village). The market was limited to Tanggel village (there is one furniture industry). The net profit generated from stump sale is around 30% of the sale price. One stump is usually sold at the price of IDR150.000, while the total cost of labour, transportation, and license is about IDR100.000 (information provided by Asper Tanggel).

The forest resources in form of stump from this cutting remains, when permitted to utilize widely by the community and not just one Tanggel people, it surely will raise income to their household. But up to now, utilization of this stump was done by people who have enough capital, while the people who do not have enough capital just become the labourers in digging up and delivering the stumps. On the other hand, the stump collection by the entrepreneurs has not yet maximal, because they transport the stump outside of Tanggel in form of raw stump, not in the form of finished or semi-finished products.

Teakwood

All community has the same perception with Perhutani with regards to teakwood in the forest, i.e. they are Perhutani's property and that Perhutani has the full right over the wood. Taking teakwood by the community therefore raised conflict. Up to now, illegal teakwood collection still takes place although not in the frequency and scale of the plundering time. At that time (1998-2000s) the community dared to take the teakwood, and the result can still be observed at the moment in the form of high quality teak table or other furniture in some of the villagers' homes (source: interview with KI and FGD resource). In fact, the community around the Tanggel who take part in plundering were just in the low level, those who was in the top level was not community around the Tanggel, one or more people get most benefit in that plundering time. But they are not their top levels (interview with Asper Tanggel). Illegal teakwood was sold for cash to meet the household's urgent need and for home construction.

Through the existing system, the community can now utilize legal teakwood from shared outcome of the last tree cutting. Nevertheless, it can be enjoyed by limited number of people, because the allocation of the shared outcome still depends on LMDH management, village party and Perhutani.

To deal with plundering and the continued loss of wood, Perhutani conducts operation many times, targeting the community members who still take the teakwood or store it in their house. This operation seems to be quite successful in controlling the wood loss as it has some psychological impacts to the illegal collectors.

Firewood

Firewood was the forest resource that is used by all community members. As access to this resource was very easy, the community did not utilize this resource as their source of income. They never sell it, whether at the Tanggel area or outside Tanggel.

Even LMDH, which ever offered to utilize the firewood produced from the last tree cutting, was not ready to take this business opportunity. Firewood collection by community created conflict with the Perhutani. The commercialisation of firewood to increase economy prosperity of the Tangel villagers was not considered by LMDH or Perhutani.

Cattle tending and Grass

The cow was the most common cattle owned by the Tanggel community. The result of the survey showed that Tanggel inhabitants have 3 cattle in average. Blora is the district in Java which has the most cattle. Traditional cattle raising has affected teakwood production and the quality of the cattle itself. Cattle tending, usually carried out by women, has been carried out by the community for generations. This has created conflict with Perhutani because cow tending is usually done in Perhutani land where the trees are still young. The activity disturbs and makes soil compaction. Furthermore, cattle are tended in group, involves a big number of cows. The community preferred to herd their cattle on the forest for a long period of time (from about 8 am to 2 pm) than to collect greenery for the fodder. There is still a prevailing assumption among the community that cattle that is caged is thinner that cattle that is tended in the forests. Cattle are the last asset that will be sold by the community, i.e. when they don't have any other asset to sell. For this reason, cow is usually kept in the villagers' house. This local knowledge was inherited from previous generation. This assumption is probably correct when forest resources are still abundant. In the situation where the forest is empty, and the fodder is exhausted, the application of this traditional knowledge is questionable. Base of the illogical thought has need for the cultural approach, because it was involved the knowledge system, thought pattern and tradition of the community. The mutual benefit offer needs also to be reconsidered, because involved the ownership (and saving) of community and their strategy to survive.

Teak Leaf

The teak leaf is usually used to wrap food. The collected green leaves are usually taken at the bud part when the teak standing was high. Frequency of leaf collection is high because many community members use the leaves. Teak leaf collection does not create conflict with Perhutani. Usually women have more access to the teak leaves.

Herbs or medicinal plants (empon–empon)

These resources can really become an alternative, but not many Tanggel villagers collect them. When forest condition was still good, empon–empon can be collected easily from the forest. They don't need to plant them. The price of empon–empon was still high at that time (the price of certain type can reach IDR17.500/kg). Today, when the forest is already barren, empon–empon are difficult to collect. They are still available but in remote places so that people is reluctant to collect empon–empon. Furthermore, the price of empon–empon is already declined (now, below IDR6.000/kg). This also related to macro condition of the state economy. The market price was determined by the buying power of the factory; the merchants of empon–empon have no bargaining power. Solo has been the empon–empon market for the Tanggel merchant, which is now beginning to be dominated by bigger merchants. According to the former empon–empon merchant in Tanggel, the Chinese and entrepreneurs from Jakarta have dominated the empon–empon business today. Besides for herbal tonic, empon–empon is also needed by the cosmetic factory. Processing for food and beverage is also beginning to take place, but the Tanggel community still sell them as raw materials. The processing they do is to dry and slice the empon–empon. Up to now, the entrepreneurs of empon–empon in the Tanggel have no longer run their business. They had problems in marketing the products. The

community rarely collect empon–empon from the remote part of at the forest. An effort to plant empon–empon, which involved LMDH, has also failed due to the management problem within LMDH itself.

Forest Land

The forest land remained from the plundering of BKPH Tanggel was the largest, about 1.500 ha. There is still about 400-500 ha that has not been planted. This has become a separate problem, because with this large, the community may take the shared land as large as possible. This wide empty land has made the teakwood management became ignored. The community may take the land everywhere. The permission of the Perhutani was not a problem. A lot of farmers take the land without permission. All pesanggem also realize that without any permission they are surely permitted to take the forest lots with the planting foreman, because with the existence of farmer which follow tumpangsari in forest, it clear that the Perhutani was benefited. Therefore that all this pesanggem not need to take contract for cooperation again, they can move the land as they like.

On the other hand, Perhutani has an empty land or young teak plantation, but the number of people who want to be forest farmers (pesanggem) is limited. This is the reason why Perhutani use the model of “banjar harian” to conduct plantation activities in which they pay the people from the village to do cultivation, land tilling, land preparation and other conservation efforts. The use of this system indicates that Perhutani has more damaged land than the pesanggem managed land.

The land which has no pesanggem was also affected by fire. When the teak age was 1-3 year, the grass may be taller than teak. When fire occurs, the loss from seed until maintenance cost became large. The planting foreman responsible to maintain this crop is in a difficult situation.

Utilization of the forest land by pesanggem was not optimal. The crop planted is the same with those planted by previous generation (i.e. maize, cassava) and of low sale price. Recently, rats attacked farmers’ crops located in the forest lots. This pest problem makes Tanggel villagers reluctant to take the forest lots. Furthermore, the villagers also have non-irrigated dry land that should be utilized.

The “banjar harian” model is more acceptable for the community, even if it can not be conducted every day. With the payment of IDR15.000/day, it is felt more beneficial to the community so that they begin demanding for cash than managing the agriculture land for maize and corn which offered no secured yields. Forest resource used by the community can be seen in Table 38 (based on FGD and Key Informant interviews).

The use of forest resource by community was taken place in the form of personal contract and institution (LMDH)

- Personal, in form of utilization of stump wood, forest lots, hewing, transportation, Banjar harian
- LMDH: sharing of the last cutting away produce

Table 38. Forest resource used by Villagers

Forest resource utilized	Consumption	Frequency of removal
Firewood	Self consumption	Daily
Grass/fodder	Self consumption	Daily
Cattle tending	Self consumption	Daily
Teak leaf	Sale & self consumption	Daily
Teak Stump	Self consumption & sale	Uncertain, according to needs
Land for planting (orange, gogo rice, red bean, corn, soybean, tapioca, seasonally plant)	Sale	Daily
Empon–empon (puyang, ginger, white turmeric, pule pandak, kunci pepet)	Sale	Daily

Source: Primary data from FGD and KI, 2004.

3.2.3.3. Forest Dependency

With 78% of the village area is in form of forest, it's only natural that the community is dependent on the forest. The community use forest land for agriculture purposes, or as Perhutani's labourer in forest management activities. The typology of the farmers based on the level of their dependency to forest:

- High dependence on the forest (93%) with indicators: using forest land and collecting forest resources (illegal wood, firewood, fodder, a place for cattle tending, teak leaf, teakwood, stump, empon-empon)
- Low dependence on the forest (7%)

People are involved in forest use and management e.g. banjar harian, making seeds holder (locally called acir), harvesting transportation business, and cutting labourer. Even if there is work available for the above activity, they are still able to work in their own place.

Looking at the dependence level of the community to forest, it can be concluded that the entrepreneur, which have great capital, in fact is highly depended on the forest resource, because most of all its business is related to the forest. Then the question is whether this becomes the purpose of PHBM? The non-optimal utilization of non-wood forest resource makes cooperation between community and Perhutani become very limited, whereas the access to forest was not limited again. Thus, the problem for raising the land as the "proper" value to reprocessing by pesanggem was in fact become agenda that must be considered together by the Perhutani and LMDH, than using banjar harian system that does not give profit to Perhutani and have to depress them at the lower level (like their planting foreman).

3.2.3.4. Social and Cultural Condition

A consumptive tendency of the Tanggel villager was beginning to take place. In one village almost all inhabitants have new motorbike, after year 2000s. Other electronic appliances which enter the village are refrigerator, magic jar, TV, and they are owned by some of the community. The offer from capitalism which came into this forest

village was progressively immeasurable and by means that immeasurable as well, start from credit system, or payment in cash, or sell the asset owned by the community.

From the cultural side, the characteristic of the feudal farmer was still dominant in daily live of these forest villagers. Their way of thinking, which is resistant to change, with regards to the economic management policy, their agricultural knowledge, or their perception of social cultural condition of the community was still similar with those of their ancestors. Tanggel community plants maize (usually called as gandhung) and cassava. Up to now this tradition has not changed, that plant becomes the crops that must be planted by the community.

Their submission to problems (as one character of Javanese farmer) still prevails. For example they catch the rats attacking their agriculture land, this matter was still considered to be something natural and no effort was made to look for its solution (source: interview by KI). Knowledge transfer, in form of structural approach, has not occurred. It was because access to education was very limited. In Tanggel village, there is only one Private Secondary School (MTS), whereas the average education level of the resident was elementary level.

The community members tend to respect informal leaders more. Leaders, especially the one who have great capital, have legendary background as illegal logger or locally called blandong. They have access to security with the backing from the police and strong position in the community, and tend to more accepted by some of the community, than the head of the village who actually has structural authority. Besides the typical informal leader mentioned above, there is also other charismatic leader, i.e. the one that has spiritual power. With his/her charisma, this informal leader can mobilise the community members and influence the policy at the upper village level.

The formal leader was not effective in influencing the opinion and movement of the Tanggel community. The personality of the formal leader was also not preferred by most of the community, so that the community tend to be inactive. Informal leader was more effective in mobilising the community, because he has supporters and he was a part of the community. It is clear that this charismatic leader has authority and legitimacy. Some policy can be influenced by this informal leader.

The local culture that is economically contra-productive, but is still maintained by local community was "buwoh" (social cost) which ranked the fourth in the community's expenditures. Socially, this tradition bonds the community members, but it was not effective when it burdens the household economically.

The myth or legend developed in the community has now decreased in comparison with the time when the forest was still intact. Opening of the road by Pertamina (mining company) in special line of the Tanggel, facilitates Tanggel community's access to outside world. With this access road, lighting and infrastructure came in while legend and myth started to disappear. Nevertheless, irrational way of thinking was still very strong in the community.

3.2.3.5. Respondent Characteristics

Age

The age distribution of the whole population of Tanggel is different from that of the respondents involved in this research. The age distribution of the respondents is shown in Table 39.

Table 39. The respondents' age group distribution

Age (Year)	Total	%
< 30	2	5
30 – 49	22	55
50 – 59	11	27.5
> 60	5	12.5
Total	40	100

Source: Livelihood survey in Tanggel (Primary data), August 2004

According to the demographic data of the Tanggel village, the majority of the inhabitants are on the productive age. From the total of the farmer respondent, 5% were young people under 30 years old. Only a small number of young generations still want to work in agriculture sector. The agricultural activities, as agriculture labour, or work on their own land, were mostly performed by the villagers of 30 years old and above. This mean they were usually have family and have family responsibility. Being a farmer was not their own choice, but as a part of the tradition because it is also done by previous generation.

Education Level

Education always a problem in any community, besides problem of education quality, there is also problem of access (infrastructure). Total number of schools in Tanggel is 2 kindergartens, 5 elementary schools, and 1 secondary school.

The quality of education affects the community's life style. With the existing education level and the limited access to education, the mind set of the community is very difficult to change. The budget allocated for education is also very small, only 3% of the total household expenditure.

The highest education that can be accessed by Tanggel community was only the elementary level. Even the total number of villagers who do not have elementary education (who do not have any formal education) is quite substantial, i.e. 20% of the total population. This was correlated with the available infrastructure in Tanggel village.

Table 40. Respondents' level of education level at Tanggel Village

Education Level	Total	%
Not Schooling	8	20
Elementary School not graduated	4	10
Elementary School	24	60
Secondary School	3	7.5
High School	1	2.5
Total	40	100

Source: Livelihood survey in Tanggel (Primary data), August 2004

Land Ownership

The land owned by the Tanggel villagers was in the form of:

- Land property. The total area of land owned by the community, in the form of rice field and home garden, is about 0,4 ha. Rice field is usually cultivated with vegetable (string bean, red pepper), maize, paddy, bean, orange, and coconut.
- Forest lots.

After the large scale plundering incidence, the exact number of farmers who took forest lots was not documented. This is due to the large extent of empty land which enabled the community to take land wherever without written permission from Perhutani (without contract). Data collection about pesanggem who take forest lots has not been conducted by Perhutani, therefore the sharing came from PHBM agreement did not benefiting the pesanggem who directly involved in forest management.

The forest lots taken by the farmer are usually cultivated with maize, cassava, orange, and banana. Orange is the new crop planted by the community. It was not planted as main crop previously. Orange at this time starts to be harvested by some farmer.

Table 41. Respondent's Land Occupation

Area (ha)	Total	%
< 0,06	6	15
0,06-0,1	0	0
0,1-0,2	3	7.5
0,2-0,5	23	57.5
> 0,5	8	20

Source: Livelihood survey in Tanggel (Primary data), August 2004

Occupation
All respondents were farmers who depend on land. They either work on their own land or work on other people's land (as farm labourer). Besides farming, the community have other livelihood sources, i.e. collect dig-out wood, as workers in banjar harian system, craftsman in furniture industry, carpenter, and entrepreneur of the dig-out wood, circumciser and tailor.

Table 42. Types of Forest Farmer Work as side job at Tanggel Village

Kind of Work	Total	%
Worker in furniture industry	2	5
Wood digger	2	5
Carpenter	4	10
Daily labourer	10	25
Entrepreneurs of digging wood	2	5
Circumciser	1	2,5
Tailor	1	2,5
Stone worker	1	2,5
Masseur	1	2,5
Total	24	60

Source: Livelihood survey in Tanggel (Primary data), August 2004

From this data, 40% of the farmers do not have other job besides working at the rice field. The side jobs that were conducted by the farmer include working for Perhutani as cutting labour, follow banjar harian system, and cultivation. It was clear that community still depend on the forest and land for their daily life, but not at the shared land of the Perhutani. The side jobs increase the income of pesanggem and allow them to cope better with their cash need.

Revenue

The highest source of income of the Tanggel villagers comes from the agricultural sector. The agriculture land which is quite wide can be developed as additional income to the family, but it's not use optimally although it contribute up to 38% of total source of income. The income from the teakwood or stump wood apparently is still the major source of income for the community (the 2nd source of income after agriculture). Non-wood forest resources did not contribute much to the community income. Orange appears to provide significant contribute to the community income (13%). In the long term, orange can be made as an alternative tree crop, to complement the existing agriculture crop. The average income of the community was about IDR6.003.775/year, and the income per capita was about IDR1.500.944/ year.

Table 43. Respondents' Income at Tanggel Village

Source of Income	Total (IDR)	%
Agriculture	72.520.000	32,5
Farmhand	5.470.000	2,6
Other labour force	15.220.000	6,8
Service	26.575.000	11,9
Trade	12.740.000	5,7
Others	13.200.000	5,9
Wood	31.500.000	14
Fruit	30.976.000	13,9
Animal	14.550.000	6,5
Medicinal plant	400.000	0,2
Total	240.151.000	100

Source: Livelihood survey in Tanggel (Primary data), August 2004

Around 52,5% of respondents perceived that their income can meet their daily requirements. The remaining 47,5% respondents stated that their income was not sufficient to meet their daily needs. There were different income and requirement levels among the community members.

Table 44. Respondent's Expenses at Tanggel Village

Type of Expenses	Total (IDR)	%
Food	89.100.000	37,2
Clothing	8.470.000	3,5
Repair of house	27.920.000	11,6
Education	9.654.000	4
Health	6.114.000	2,6
Recreation	430.000	0,2
Tax	2.518.000	1,1
Energy	16.069.000	6,7
Social requirement	26.700.000	11,1
Entertainment	21.416.000	8,9
Transportation	3.384.000	1,4
Others (agriculture cost, etc.)	28.000.000	11,7
Total	239.790.000	100

Source: Livelihood survey in Tanggel (Primary data), August 2004

The highest expenditure of respondent was for food or consumption (37%), while the expenditure spent on education was only 4% from total expenditure. The five main expenditure categories were:

- Food consumption (37%)
- Agriculture cost (12%)
- Repair of house (12%)
- Social cost (11%)
- Entertainment (9%)

The mean expenditure of household was IDR5.994.375/year. This means each household can only save about IDR9.025/year. In reality the community do not have saving in the form of money. Extra money was invested in the form of jewelleries, livestock, tree and land. Land investment was quite big; however they did not optimally the use.

Table 45. The type of respondent saving

Type of Savings	Total (IDR)
Jewelry	93.355.000
Livestock	5.470.000
Land	15.000.000
Tree	na

Source: Livelihood survey in Tanggel (Primary data), August 2004

Besides saving and income, asset is also an important indicator of community's economy. The type of asset owned by the community is highly dependent on their work type, their economic requirement, and their economic condition. The type of asset is also determined by culture.

Tables 46. Type of asset owned by the community

Type of Asset	Total
Mattock	87
Sickle	64
Large-bladed-knife	54
Axe	40
Plow	14
Spade	68
Bike	35
Motor	12
Car	2
Milling rice	1
Spraying tank	5

Source: Livelihood survey in Tanggel (Primary data), August 2004

The most commonly owned asset was the ones that support agricultural activity and equipment to take the stump wood (spade).

Quality of Life

The physical condition of community determines the level of their life quality. Health, house condition, and access to some basic requirement were some indicators of the community's life quality.

The quality of life style can also be measured by qualitative criteria, such as: the mind set of community, psychological condition of the community in general, i.e. whether they live in peace, or they feel safe in their own region. When the community did not feel "safe", their physical requirement was not fulfilled, and therefore their life quality was not met either.

Table 47. Access of community to clean water

Source of Pure Water	Total	%
Well	29	72.5
River	11	27.5

Source: Livelihood survey in Tanggel (Primary data), August 2004

Access to clean water was a big problem for the community. During dry season, around August the wells usually begin to dry up and the river water begins to decrease. In September onwards, the community have to queue up until 11 o'clock at night to get clean water from wells available around the Tanggel village (source: FGD).

Table 48. The drainage release

Drainage	Total
Latrine	29
Septic tank	1
River	10

Source: Livelihood survey in Tanggel (Primary data), August 2004

The data reflect the awareness level of the community and how they manage their requirement. From all respondent, just one uses septic tank release system. The majority of the community use latrine. Besides as the source of clean water, river was also used as the drainage release system and a place to bath their cattle.

With regards to health service, the community go to the local health clinic (puskesmas), medical assistant and traditional healer. There is only one medical assistant and one midwife in the Tanggel puskesmas. These two modern medical personnel are the ones that provide health service to the community. The midwife also provides health service such as posyandu and immunization by visiting each orchard in the Tanggel village.

Community's quality of life can also be assessed from the condition of their house. The house of all respondents was semi permanent, made of teak wood. It is important to note that many community members still do not properly keep their animals (ox, duck, chicken) separate and away from their house. This may be due to the value system held by the community, in which they put a high value to their rearing animals. Nevertheless, this situation does not contribute positively to the health condition of the community.

3.2.4. Gempol Village

3.2.4.1. General Condition of Village

Village Administrative boundary

Gempol village administratively is a part of Jati district, Blora region, and under the management of KPH Randublatung. The location of Gempol Village is remote and

relatively isolated. This makes this village isolated from modern life. This village is surrounded by forests, which administratively fall into other village areas. The Northern part is bounded with Kadengan and Ngliron village, Southern part is bounded with Banjarejo sub-district, Western part is bounded with Jati sub-district, and Eastern part is bounded with Kadengan village.

Water resource in Gempol is better than other area. River, sendang (lake-like water system) can be found in this village.

Total village area and Land Use
Gempol village has a total of 7.172 ha which consists of forest, rice field, dry field, and settlement area. Rice field in Gempol is rain-fed with a total area of 41 ha. The total area of tegal or dry field is 83 ha. The condition of dry land, no irrigation system whether there are still river and sendang. Total area of settlement area is about 70 ha.

The special feature that can be found in this village is gowok land. Gowok land is the land around a watershed. This land is the delta of the river so that there is a lot of fertile sediment for plantation. This land actually belongs to Perhutani, but the villagers can use them for agriculture purpose, usually for rice planting.

Demography
The total population of Gempol Village is 3.134 people, with equal number of male and female, and consisting of 860 families. The average number of people in the family is about 4 people.

Table 49. The distribution of the population according to age class in Gempol village

Age Class	No. of people	%
0 – 4	154	5
5 – 9	204	6,5
10 – 14	219	7
15 – 19	251	8
20 – 24	470	15
25 – 29	470	15
30 – 34	439	14
35 – 39	376	12
40 – 44	345	11
45 – 49	157	5
50 up	47	1,5
Total	3.134	100

Source: Gempol Village Monography, 2000

The age class of 20-29 years old was the age class with the highest percentage (30%). The high amount of young people in the village is a factor that may positively contribute to the village development.

Education is one of the factors that determine the community's way of thinking, and can be used as a parameter to assess the welfare of an area. Based on the level of education in Gempol, majority of the Gempol villagers do not graduate from elementary school (63%). Only 0.1 % of the total inhabitants enjoyed university education. From the figures provided in the table below, and if we take education as the parameter to evaluate development, then there is an education problem in Gempol.

Table 50. Educational level of Gempol villagers

Level of Educational	No. of people	%
Un-educated	168	2
Un-graduated from elementary	4.520	63
Graduated from elementary	1.987	28
Un-graduated from junior high school	-	-
Graduated from junior high school	387	5
Un-graduated from high school	-	-
Graduated from high school	132	1,9
University level	9	0,1
Total	3.134	100

Source: Gempol Village Monography, 2000

Occupation problems become an important issue because they are related to socio-economic problems. The physical conditions of Gempol village, which is dry and infertile and its low accessibility from town, limit the villagers' occupational options.

Most villagers choose to do work in agriculture sector although not as land owners who manage their own land. Limited agricultural land makes them work as farm labourer (40%), while 38% work as farmers. Other occupations in Gempol village are trader, civil servant, employee and breeder. Civil servant and employee are in village level.

Table 51. Habitant Occupation in Gempol Village

Occupation	No. of people	%
Farmer	1.102	38,5
Farm laborer	1.160	40,5
Trader	10	0,3
Civil servant	5	0,2
Employee	2	0,1
Breeder	587	21,4
Total	2.866	100

Source: Gempol Village Monography, 2000

Financial and Sources of Village Income

Related to the condition of Gempol village area which is covered with forests, the sources of income include:

- Retribution from trucks which transport wood and stump
- Subsidy from the higher level of government
- Wood commission
- Village income

There is no data on the income generated from each source due to administrative problems.

Village Infrastructures

Not all development and progress in Gempol village come from government subsidy. In fact, some public infrastructure, such as road, bridge, sport field, and mosque, was developed by the villagers themselves. Other infrastructure related to economy is small shops for daily needs. There is no market in this village. The nearest market is in Doplang, about 20 km from Gempol. This lack of economic facility influences money rotation and prices of the products needed by the community.

Some of the infrastructure, such as road, was developed by Perhutani to support their operations, e.g. to transport forest product.

Table 52. Infrastructure in village

Kinds of infrastructure	Amount	Explanation
Economic: - small shop - small industry	 3 2	
Transportation: - road - bridge		3 kinds of roads: soil roads, gravel and asphalt. Road maintenance self-initiate by community
Transportation: - car - motor cycle	 5 96	
Education: - Elementary school	 3	
Health: - Puskemas - Midwife - Traditional healer	 1 1 1	
Ritual facilities: - Mosque - Musholla	 6 4	Self-initiate, and contribution from sharing of PHBM
Sports: - Football field - Volley field	 1 1	

Source: Gempol Village Monography, 2000

3.2.4.2 Resources and Resource Use

As Gempol Village is located in the middle of the forest, almost all materials in forest are used by the villagers. They also use forest resources to meet their livelihood needs.

Firewood (locally called rencek)
Most villagers use this resource. It is collected everyday. Rencek is taken from waste of tree harvested or by taking illegally from the tree stands. The market chain of rencek is as follow: first, the men who collect rencek will sell it to the middle-man (called pengepul), who then sell them to the buyer. The buyer then sells rencek to the rencek users or consumers. As pengepul is not Gempol villagers, Gempol rencek collectors have to transport it using bicycles. Every two days, rencek collectors sell about one meter cubic and the price is about IDR50.000. The price is, however, determined by pengepul. The market chain of rencek is also too long before it reaches the consumers (source: KI interview). To market rencek outside the village, LMDH started to make an agreement on rencek to regulate incentive. Except taking rencek from Gempol Village, entrepreneur will also transport rencek out from Gempol Village.

Table 53. Forest resources used by villagers

Kinds	Function	Uses
Firewood	Firewood	For households' use and for sale
Herbs or medicinal plants (empon-empon: kunci pepet, pule pandak, namplu, kapulogo, etc.)	Medicinal herbs	For sale
Teak leaves	Food packing	For households' use and for sale
Seeds of teak, sengon, sambi, secang, mlanding, etc.	Seedling	For sale
Forest wood	Charcoal	For sale
Dig-out wood	Materials for furniture	For sale
Fodder	Livestock	For households' use
Gowok land	Agriculture land	For sale and subsistence
Honey	Medicine	For sale
Walang, entung	Food	For sale
Forest animal (kidang, pig, bird, chicken alas, etc.)		For sale
Cattle tending		For households' use
Teak wood	Building materials	For households' use and for sale
Share land	Tumpangsari	For households' use and for sale

Source: FGD and KI of Resource and resource use

According to the sources, rencek of teak wood creates conflict between villagers and Perhutani, as it was cut before rotation time. So far, the conflicts are still at the low level and no penalty is imposed on the villagers.

Herbs/medicinal plants (empon-empon)
Empon-empon is the medicinal plant which is abundant in Gempol forest. The different varieties of empon-empon include kunci pepet, pule pandak, namplu, kapulogo. Supplying of empon-empon is done by:

- Cultivation. The pioneer of empon-empon cultivation was the head of BPD, a community's figure. Until now, there are 20 farmers who have prepared land and seeds in their home garden. Now, empon-empon cultivation will be proposed inside Perhutani's area besides tumpangsari plantation. The cultivation of empon-empon in Perhutani's area still becomes problem because Perhutani assumed that the system of harvesting empon-empon, i.e. digging out the soil, can cause soil erosion. Nevertheless, if planting is done under old stands, soil erosion will not occur (interview with Perhutani field staffs). The cultivation of empon-empon should become a joint agenda between Perhutani and villagers to prevent conflicts.
- Collection. Wild spices are collected in the forests. They are still abundant in the forests because there are many old stands of tree. This activity is mostly done by women. They collect these spices when they collect grasses for their cattle. There are villagers who collect these spices regularly. The middle men bought these spices from the village, and they determined the price.

Teak leaves
Used for food packing by family and restaurants. Woman often takes teak leaves when there are ritual-meal season, feasts, usually from July to September. Because these leaves are collected both for household's own use and for sale, they are usually collected every day. Unlike rencek, the price of teak leaves is very low as they can be collected from the forests easily.

Seedling
Local people also use seeds of hard wood and main wood. The kinds of species often used by local people for seedling are teak, sengon, secang, lamtoro or kemlandingan, and kesambi. The procedures used to collect these seedlings are:

- Collecting seeds from the ground
- Shaking the trees or picking the seeds directly from lamtoro and secang trees

Teak seeds collection is usually done around July to August. This activity is usually done by woman or children after school. Woman and children collect seeds in seeds collection area (APB), 3 km away from the nearest village. In a day, the seed collectors can collect 1/5 sacks of teak seeds. The price is around IDR5.000-10.000. It takes longer to collect secang dan lamtoro seeds because the old seeds have to be picked directly from the trees. Furthermore, secang is only planted in small quantity in the border of teak. Seeds are sold by villagers to the head of sub-village (Ketua RT) who is trusted by plant foreman and Perhutani field officer, then these seeds are taken to KPH Randublatung for seedlings.

For kemlandingan or lamtoro seeds, the trees are owned by the villagers and Perhutani. Now, kemlandingan becomes one of the rare species in the area. Perhutani faces difficulties in collecting the seeds, besides soil type in Randu is not suitable for this tree. Due to the many functions of this tree, the price of the seeds is more expensive than that of teak. This actually can be used by the villagers to increase their livelihood and welfare.

Charcoal from wood
There are 2 types of wood charcoal: keprek charcoal (made from teak wood) and charcoal made from other wood species, i.e. mahoni and kesambi. There are 2 ways of making charcoal, using the small branches or stump, and by cutting tree stands. Cutting tree stands is rarely done by charcoal makers.

Almost all of Gempol villagers make charcoal to increase their income. Charcoal is sold to the buyers from outside the village. One sack is sold for a maximum of IDR15.000. The price of charcoal made from forest wood is more expensive than that of keprek charcoal. Similar with other products, the price is not fixed by the charcoal makers. Another conflict with Perhutani related to charcoal making is the fire problems. Besides producing smoke, charcoal making can cause forest fire.

Dig-out wood
Dig-out wood is wood buried underground. There some possibilities where this wood comes from: old wood piled by soil, or waste of harvested trees which washed away when flood and piled in concave (because this wood usually found in concave).

During Japan colonialism period (1944-1945), this wood was cut down but not all was transported out (not enough time was available to transport them) when Japan left Indonesia. Then wood was then buried underground. The shape of the recovered wood is usually not complete or intact anymore. Dig-out wood like Gubal wood (the inner part of wood) is usually sold to Jepara for furniture. The buyers (from Jepara) usually come to the village. When the wood is transported to the buyers, the permit

from Perhutani must be obtained. The buyers give commission to Perhutani. Sometimes, buried wood is also found in the villagers' land, and not Perhutani's land.

Cattle's feed
Cattle's feed is usually found in the forest, or along the river. The plants for animal's feed are usually planted by owner in the agricultural land (not forest land). They are used every day by farmers who have cattle (most farmers have cattle). One kind of cattle's feed collected from the forest is lamtoro (kemlandingan), even if farmers plant them in their agricultural land. The collection of lamtoro creates with Perhutani. This is because lamtoro is difficult to grow in Randublatung. When Perhutani plants lamtoro in their land, the villagers usually steal lamtoro. Stealing of lamtoro is done by Gempol villagers. To handle this conflict, Perhutani takes a very repressive action. Perhutani puts poison on kemlandingan trees to prevent stealing. Lamtoro is planted in Perhutani's land to prevent erosion and as gap plantation. On the other hand, the price of lamtoro's seeds is expensive now and Perhutani faces difficulties to get the seeds. Seeds can be collected when the trees are about 2 years old. Perhutani doesn't allow forest farmers (pesanggem) to cut lamtoro before the trees reach this age.

Gowok land
Gowok land is the land along the river that has a lot of sediments and is fertile. Gowok land belongs to Perhutani. After PHBM programme is implemented, the villagers are allowed to use this land. It is not a must to have a written permit from Perhutani to use the land. But there is something strange with the management of this land. Land can be bought and sold, even if there is no land certificate from Perhutani. Most forest farmers have about 0,05-0,1 ha of Gowok land. There is legal procedure to register this land; the fastest they register, the more they can have land. When the flood come, this land will be submerged under water. Afterwards, the boundaries of gewok land have to remake. The land is usually used for rice and cash crops (locally called palawija) planting. Gowok land won't disturb the function of the river. Until now, Perhutani has never protested against this land management.

Honey
Honey from wild bees can still be found in big quantity in the forest around Gempol. Villagers collect honey in October, after the flowering season of teak (which occurs in the period of July to September). Many villagers collect honey from forest because of the near distance. Gempol villagers take honey by climbing trees in the forest. During harvesting time, villagers can collect up to 5 liters of honey and to get additional income from it. The villagers sell the honey directly at Getas or Doplang market. Cultivation of honey isn't much because the supply from wild bees is still abundant.

Walang, enthung
Walang is insects which contains high protein. Usually in Januari (wet season) or when Teak leaf has recently grew. All villagers can collect this insect and sell them in the market. The price is about IDR1.000 per plastic.

Hunting
Hunting is often done by Gempol villagers as there are many animals in the forests. The most hunted animals are pigs and birds. This activity is usually done by adults. There are two ways of catching the animal, i.e. by setting traps or by using gun. This animal usually sold to the market to increase income. The price depends on the type of the animals and their weight.

Shared land
Most villagers of Gempol have shared land in Perhutani's. The land is usually planted with peanut, corn and soybean and cassava. Most fields are just like bare land, but to have shared land, farmer has to get permission from Perhutani, whether the bare land can be planted with teak or not. Community's access to shared land therefore depends on Perhutani's policy. If there is plantation planning, farmers can plant on that land. But if there is no plantation planning, the farmers are not allowed to plant there. The existence of farmers actually benefits Perhutani, because they directly manage the forest. Written contract between Perhutani and forest farmers is legal, apart than the contracts made between Perhutani and LMDH on teak forest management. Recently, written contract in BKPH level is often made to anticipate domination either from villagers, LMDH, village or Perhutani.

Teak wood
Illegal cutting activity is quite low because Perhutani protects and patrols the forests through PCK (the security man from KPH); however, in some cases this security man do not always follow the rules, means money still acts to let illegal woods out from forest. Wood entrepreneur usually do this. Villagers only use wood for building house.

Cattle tending/grazing
There are 2 locations of cattle tending/grazing: old stand and young stand. Grazing of cattle in young stand area disturbs plantation, because the cattle crushes the plantation. In old stand, the cattle eat the bark of the trees. For this reason, cattle tending/grazing creates conflict with Perhutani. This activity is usually done by women in the morning until midday, then from afternoon until 6 pm. Perhutani offered a solution by planting elephant grasses.

3.2.4.3 Forest Dependency

Dependency villagers to forest are very high. The condition of the area and the different forest resources available around Gempol forest area (see table Resources and their uses) make villagers to interact with the forests. Limited accessibility to town (Jati district is about 20 km away) also isolates the villagers and make them more dependent on forests. Interaction between villagers and outsiders are also limited. It makes the flow of products and the influence from outside world is limited.

Nevertheless, some villagers now start to adopt the modern lifestyle. Changing can not be resisted, even if forest resources are still used by the villagers as much as possible.
The phenomenon in this village is quite different from other villages in Randublatung region. The condition of the forest is relatively better than that of other villages. The forest condition in this village is probably the best in KPH Randublatung. This can also be seen from the share they receive every year from the wood production is relatively big and consistent for about the next 5 to 10 years. According to Perhutani's calculation, the share received by farmers are around IDR140 million every year and it will relatively the same next year.

Agricultural activity always includes land and forest. Agriculture, as farm labourers or owner farmers, is dominant activity beside breeder. Based on village statistics, 91% of Gempol villagers have two kinds of job. The occupation available in this village isn't much, i.e. farmer, farm labourers, breeder, entrepreneur, civil servant, employee. These limited options make villagers dependent upon forest.

3.2.4.4. Social Cultural Condition

Gempol village administratively falls within the Jati district. It is located at the end of Blora area because its east side directly borders with Ngawi. The natural condition of Gempol creates high social cohesion among villagers. This social relation serves as social capital for villagers. 'Patron-client' system prevails in the village. The reasons for this are:

- Strong 'patron-client' relationship in some cases like building roads, public facility, includes school in the past. Although this infrastructure was built for Perhutani's purpose to exploit forest but villagers enjoy all infrastructure, and
- From the era of Dutch, Purhutani officer, especially sinder, played an important role in the villager (because he controls forest resources and have educational background).

Strong relationship also has implication on the position of informal leader in Gempol which can be easily accepted by the low level in the village. With regards to leadership, Gempol villagers are follow formal leaders than informal leaders.

Reviewing the history, the original villagers came from Pademangan area and Gempol (in a very small amount); there are fugitives, labourers of Perhutani (who do land clearing in the forests, but also it may include men who were forced by to cultivate forest), settlers who were assigned in the area (teacher, Perhutani's officer), traders, and because of marriage.

New comers will bring some significant changes in community. Consumer goods gradually entered Gempol. Recently, there is a regular social gathering whose members contributes to and take turns in getting an aggregate sum of money. This gathering was initiated by newcomer that has good position in that village. Electronic goods, such as rice cooker, VCD, tape recorder are sold by credits every month. This new development could bring positive effect as long as the villagers can use these goods efficiently and effectively to improve their work and economy. Nevertheless, these consumer goods could also have negative effect as it is not accompanied with household economic improvement.

One interesting phenomenon in the village is the venereal disease which was revealed to us by the health officer in Gempol. Kencing nanah illness was suffered by adults, and is still a stigma for the villagers. Because of that, there is no prevention done by village government or public figures.

Giving money donation is one strong culture in this village. This become a part of the social interaction in the community; give effect to economic condition of villagers.

Similar with Gempol, there are a lot of public infrastructure in this village which was built by the villagers themselves. The higher level government does not contribute much to the development of this village. Unfortunately, there is no meeting hall in Gempol for the office of village government officers to do their official works, therefore several activities were not carried out. For a while, the house of village headman and village staff served as their office.

3.2.4.5. Respondent Characteristic

Age

Based on the distribution of respondents' age (most of them is between 30-49 years old, or about 41 years old), most of them are still in productive ages. Work productivity should be high because they have the power to be workers. The spirit to

change and progress should colour their movement. Dynamic of villagers will also happen along with the rate of young generation. This showed in regeneration of LMDH, the inactive member was replaced with the dynamic one. Young generation started to think about their village and to improve the community's prosperity. All committee had been replaced with the new one.

Table 54. Classification of respondent age

Age classification (year)	No. of people	(%)
Less than 30	2	5
30 – 49	31	77
50 – 59	6	15
60 up	1	3
Total	40	100

Source: Primary data analysis of livelihood survey, 2004

Educational level

The educational level influences the social phenomenon in the village. Young generations now have enjoyed elementary level of education. The ability to write and read is enough for them to work as a farmer. Taking into account the location of the village, i.e. in the middle of the forests, and limited education infrastructure (see table village infrastructure) it can be considered normal that the villagers only had this educational level.

Table 55. The educational level of the respondents

Educational level	No. of people	%
Senior high school	1	3
Junior high school	5	13
Elementary school	34	84
Total	40	100

Source: Primary data analysis of livelihood survey, 2004

Land Ownership

The types of land owned by the villagers include rice field, dry field, residence, gowok land and forestland. The average land owned is about 0.25 – 0.29 ha. Due to limited land availability, naturally most villagers work as farm laborer (farmer who has less than 0,25 ha of land).

Table 56. Land Occupation

Area (ha)	Total
< 0,06	0
0,06-0,1	4
0,1-0,2	7
0,2-0,5	26
> 0,5	3

Source: Primary data analysis of livelihood survey, 2004

Occupation

Besides related to the physical conditions of the environment, villagers' occupation is also related with people access to modernity. What usually revealed during the discussion was the occupation in forest and agriculture. There are 3 types of

occupation in this village, as farmer, carpenter and village government officials. Farmers are still the dominant occupation (94%) of the respondents.

Table 57. Respondents' occupation

Types of occupation	No. of people	%
Farmer	38	94
Carpenter	1	3
Village government officer	1	3

Source: Primary data analysis of livelihood survey, 2004

Revenue

The farmers' income does not always in the form of cash money. Agricultural products are not always directly sold after harvest. Besides for personal consumption, harvest yield is also used for seed supply and sold at certain time. The income of this village is more varied compared to that of other villages. This indicated higher dependency of the villagers to the forests. Income generated from working as farm labourer still the biggest income for respondents (22,6%). Income from selling wood, both dig-out wood and stolen wood, are high too (18,5%).

With regards to the different income sources of Gempol villagers, there are a lot of incomes received from forest product (quite low as per below table). Farm labourer is a rational choice in the face of these problems. Beside income, the economic condition of the villagers should take into account their expenditure as well. The average income of each respondent is IDR8.039.875/year. Agriculture product for personal consumption is IDR559.250/year, so that total income is about IDR8.559.250/year. On the other hand, the average expenditure of each family is about IDR8.173.000/year. The income per capita is IDR1.711.850/year, considering that there are 5 people per household. With regards to the expenditure, most of the expenditure was spent on food consumption (42,5%). The second one is for education fee (17,5%) and the third one is social cost (15,8%). This data indicate that villagers perceive education as an important thing even when the facility is minimum. The awareness of the parents (who only graduated from elementary school) on the importance of education is an important factor that can increase the educational level of the villagers in general.

Table 58. Respondents' annual income

Kinds of Incomes	Amount (IDR)	%
Agriculture	39.421.000	12
Farm laborer	69.475.000	21
Building laborer	45.275.000	15
Service	31.500.000	10
Selling	54.000.000	17
Wood	59.500.000	18
Firewood	9.160.000	3
Fruit	1.750.000	1
Medicinal plant	1.680.000	1
Cattle livestock	6.910.000	2
Total	321.671.000	100

Source: Primary data analysis of livelihood survey, 2004

The expenditure allocated by the household for credits will increase if the flow of consumption is increased. People mobility is low, except if they go to school (outside the village). This is reflected by the smaller amount of expenditure on transportation compared to than on credits. Villagers had to get a loan if their expenditures are higher than their income. All respondents said that their income can't meet their household needs (survey from livelihood). The strategy used by the villagers to survive is by subsistence, selling asset or by taking a loan.

Table 59. Household consumption

Kinds of Plantation	Amount (IDR)	(%)
Rice field	3.585.000	16
Vegetables	8.075.000	36
Bananas	5.000.000	22
Firewood	5.710.000	26
Total	22.370.000	100

Source: Primary data analysis of livelihood survey, 2004

Table 60. Respondents' expenses

Kinds of outcomes	Amount (IDR)	%
Food	272.280.000	42
Basic necessities	22.200.000	4
House repairment	15.950.000	3
Educational	112.340.000	18
Health	21.880.000	3
Tax	397.000	0,06
Energy	45.480.000	7
Socio	101.400.000	16
Snacks	40.440.000	6
Transportation	1.440.000	0,2
Credits	6.960.000	1
Total	640.767.000	100

Source: Primary data analysis of livelihood survey, 2004

Most villagers have assets. For farmers, agricultural tools are the most valuable assets for farmers. The second most important asset is bicycle to take them to town. Bicycle is more commonly owned than motorcycle.

Table 61. Respondents' Assets

Kinds	Amount	(%)
Hoe	83	33
Sickle	120	47
Bicycle	25	11
Motor cycle	24	9

Source: Primary data analysis of livelihood survey, 2004

For farmers, land is the most important thing. The most common type of saving is land (45%), followed by teak and cattle. Saving in the form of money and jewelry is not common. This is because the villagers' expenditure is bigger than their income.

Table 62. Saving

Kinds	Amount (IDR)	%
Cash money	5.850.000	2
Jewellery	6.500.000	3
Cattle	55. 400.000	23
Land	106.500.000	45
Trees	63.750.000	27
Total	241.550.000	100

Source: Primary data analysis of livelihood survey, 2004

Quality of Life

There are a lot of variables that can be used to assess quality of life. Possible physic variables than qualitative one are psycis or mental. The conditions of house and the efforts of the villagers to maintain their health can be used as the indicators of the quality of life. From all respondent, there is no respondent who have permanent house. Almost respondents (87%) have semi permanent house, i.e. the wall made from wood, and the house is easily removed. 13% of the respondent have non-permanent house, i.e. the wall made from bark and can be removed. All houses have soil floor. Soil floor is common in Gempol even all roofs are roof-tile

There is no problem with access to clean water in Gempol, and all villagers use well. The surrounding forests influence the water supply of this village. In the future, this condition depends on the people willingness to conserve better the nature better in Gempol (statement in FGD). Drainage waste in villagers generally like privy out from house, and some respondents have already use septic tank (25%).

Table 63. Condition of respondent's house

House condition	Amount	%
Semi permanent	35	87
Non permanent	5	13

Source: Primary data analysis of livelihood survey, 2004

Table 64. Drainage waste

Drainage waste	Amount	(%)
Septic tank	10	25
River	0	0
Privy	30	75
Total	40	100

Source: Primary data analysis of livelihood survey, 2004

Health issue related with inhabitant life quality, using the above parameters, is in progress compare with other villages. But one thing that is embedded in the local people's culture is that many villagers keep their cattle in their house. The villagers should place their cattle away from house, but they didn't do it.

IV. ANALYSIS OF PHBM AGREEMENT

4.1. General Analysis of PHBM Agreement

The success of collaborative action among various stakeholders would depend on how far the interests of different stakeholders are accommodated in the agreements. The implementation of PHBM program in Central Java is sufficiently supported, structural and regulation-wise, by government institutions of provincial, district, and village levels. The structure of their relationships is defined by the government regulations.

The board form of communication forum down to village level has been defined by Perhutani through the decision letter of the Head of Perhutani Unit I Central Java No. 2142/KPTS/I/2002 on the guideline of PHBM in Unit I of Central Java. The board form of communication forum in 4 sub-districts and 4 villages of the LPF research sites is similar. This indicates that Perhutani highly controls the PHBM program. The variation of agreements implementation in 4 villages will be further elaborated and analysed below.

Understanding about PHBM

1. At the district of Pemalang and Blora, the Bupati or head of district fully supports PHBM. The Bupati is involving its technical offices to support PHBM, e.g. forest office, agriculture office, community's economic and welfare office, and planning office. The Bupati hopes that PHBM will improve forest quality and the livelihood of the community.
2. At the conceptual level, it can be concluded that the PHBM program in Blora and Pemalang has been designed properly. However, its implementation at the lower level was not fully participatory.
3. At village and LMDH levels, in all four villages, i.e. Tanggel, Gempol, Surajaya and Glandang, PHBM is not fully understood. The board of LMDH understood PHBM as shared benefit program from Perhutani to members of board members, and that forest protection should be done by the board of LMDH and Perhutani field officer only.
4. The principles of PHBM implementation, as stated in decision letter no 136/2001, such as participatory, equity, and simple, have not been implemented properly.
5. The poor understanding about PHBM concept at the village and LMDH levels is due to lack of sufficient time given for LMDH to fully understand about PHBM and to provide their inputs. The Perhutani's success team of PHBM at KPHs dominated the process from the beginning until the elaboration of collaboration agreement. All concepts, including the collaborative concepts, benefit sharing, rights and responsibility of different parties, have been prepared in advance by Perhutani. LMDH was not given the space to provide their inputs. Because the prepared concepts are more less the same, the agreements in four villages in Gempol, Tanggel, Surajaya and Glandang are also more or less similar.

Benefit Sharing Mechanism

1. PHBM is perceived by LMDH and Perhutani field officer as a program to share benefits which are generated from teak harvesting. The profit sharing of 25% (for LMDH) and 75% (for Perhutani) is decided by Perhutani on its own, without consultation with community.
2. The benefit sharing mechanism of wood products from the empty land has never been discussed by Perhutani and LMDH in Surajaya, Glandang, Gempol and Tanggel. Gempol, Surajaya and Tanggel have obtained the shared benefit, which

is determined unilaterally by Perhutani based on the calculation described in collaborative agreements between LMDH and Perhutani. Glandang village has not received the benefit from wood products because LMDH Glandang has just formed and there is no forest compartment that is harvested.

3. The utilization of the shared benefits given to Gempol and Tanggel villages is fully defined by LMDH itself. Based on observation in 2 villages, the fund is used to meet the interests of LMDH board. It is fair to say that the benefits are only enjoyed by LMDH board.
4. Since 2004, the LMDH of Gempol has decide that 12% from 25% of benefit sharing will be use to pay the salary/honorarium of LMDH board.
5. It is not clear how the forest farmer group (KTH or kelompok tani hutan) would enjoy the benefit from PHMB. None of the LMDH has defined how the shared benefit would be distributed to members of forest farmer groups. This is unfair for forest farmers as they are the ones who work in the forests, and they are usually the poorest members of the community.

The Decision Process

1. The decision-making process of LMDH is decided based on the meeting or deliberation in Tanggel, Gempol, Surajaya and Glandang.
2. The decision on short term planning was dominated by Perhutani field officers.
3. There are no clear mechanisms which define the relationship between LMDH and forest farmer group, so the forest farmer group can make their own decision with regards to plantation activities in the forest. It is not clear for forest farmer group on whether they will also receive the shared benefit.

The Capability of LMDH Members

1. The organizational capability of LMDH members in Gempol, Tanggel, Surajaya and Glandang is weak. They do not know what they are going to do in PHBM.
2. The capability of four LMDHs to plan for the management of the forests is still poor. The planning still follows the direction from Perhutani field officer.

Supervising and Sanctions

1. Gempol and Surajaya villages have agreed to oversee forest protection in which the LMDH board patrols the forests. Patrolling will be done twice a week. Tanggel and Glandang villages are not implementing any forest securing efforts.
2. There are no clear elaborations on how the LMDH board in the four villages can impose sanctions on those who violate the agreement.

Interaction between LMDH and Other Institutions

1. The LMDH in Gempol, Tanggel, Surajaya and Glandang do not interact or have relations with other institutions in their villages. LMDHs do not coordinate with communication forums at village level and sub-district levels.
2. In KPH Randublatung, a LMDH association has been formed as an interaction and learning institution for all LMDHs in that KPH. Similar association does not exist in KPH Pemalang. Nevertheless, due to lack of financial resources, no meeting has been organised by Randublatung LMDH association so far.

LMDH Role on Poverty and Forest Sustainability Issue

1. LMDH board of Gempol, Tanggel, Surajaya and Glandang are strongly committed to restore and manage degraded forests. Village communities are ready to participate in rehabilitating the areas that were subjected to forest plundering.
2. The main priority of the community is to utilize the forest land for taungya system or tumpangsari in Surajaya and Glandang village to meet their daily needs. On the contrary, the plantation activities in Tanggel and Gempol are carried out by

paying daily wages to the workers. Cash income is more important for the Tanggel villagers. It is not clear how forest management will be sustainable in Tanggel because the daily wage produces more failure than success.

Agreements of LMDH in KPH Pemalang

1. Glandang village
   - The working contract of plantation activities through tumpangsari system is between forest farmers and Perhutani (when LMDH was not yet formed)
   - The working contract of plantation activities through tumpangsari system is between forest farmer and Perhutani with LMDH as mediating institution (after LMDH is formed)

2. Surajaya village
   - The agreements between LMDH and Perhutani also include forest compartment that is collaboratively managed, benefit sharing system based on Perhutani decision, rights and responsibility, and institutional strengthening of LMDH
   - Forming secured area in harvested compartments, cooperate with Perhutani field officers (implemented)
   - Transportation services in harvested compartment is managed by the LMDH (implemented)
   - The fuel wood from harvested compartment is collected by the community, then the fuel wood is bought by LMDH for the price of Rp. 10.000/sqm. LMDH sells the fuel wood to traders for the price of Rp 12.000/sqm. The benefit goes to LMDH
   - The working contract of plantation activities through tumpangsari system is between LMDH with Perhutani (the role of forest farmer group is not clear in the contract)

The Agreements of LMDH in KPH Randublatung

1. Tanggel village
   - The personal contract with the community members for their involvement in activities such as take over the forest land, stump wood, transporting harvested wood, plantation activities (daily workers). The agreement is in the written form, but the daily wage is not written.
   - The contract with LMDH is in written form, which includes the determination of collaborative area (pangkuan) of PHBM, planting, securing and benefit sharing. The contract also specifies the rules of PHBM, task, rights and responsibility of LMDH and Perhutani in PHBM implementation at village level.

2. Gempol village
   - There is agreement of LMDH, village government, entrepreneur, trader and Perhutani about the utilization of fuel wood, stump wood, and digging wood. The term of agreements is to give the retribution fund by entrepreneur/traders to LMDH and village government which is in amount different variation. This agreement is done through FGD activities.
   - LMDH Gempol have been received the shared benefit of wood products in 2003 in amount of IDR 17 million. The money from shared benefit - the distribution and utilization - in LMDH internally can be indicates that not clear and not directive in utilization (e.g. to build the office of LMDH). Based on this then LMDH Wana Bersemi of Gempol village is decided to utilized the fund from shared benefit as follows: 12% for LMDH board, 5% for the success team of PHBM, 5% for communication forum in village level, 3%

for communication forum in sub district level, 40% for productive activities (investment), 20% for social cost and 15% for operational.

- The contract with LMDH is in the form of written, includes the determination of collaborative area (pangkuan) of PHBM, planting, securing and shared benefit. In the contract is also involving the rules of PHBM, task, rights and responsibility of LMDH and Perhutani in PHBM implementation at the village level.

4.2. Analysis PHBM Agreement per Village

4.2.1. Glandang

4.2.1.1. Agreement Background of PHBM Implementation

Glandang village is one of the 22 LMDHs targeted to be developed in 2004 by success team of PHBM in KPH Pemalang. This was followed the establishment of LMDHs in 26 villages in the previous year. In KPH Pemalang, there are 47 forest villages and the year of 2004 is the last year of this activity.

PHBM agreement has not fully met because this area has just managed to handle forest destruction problem. First, the forests in KPH Pemalang, especially in Glandang village and the nearby area, were badly damaged by mass anarchy. Many components/stakeholders were involved in the socio-political dynamics at the local level, which also affected forest management in Glandang village.

There was political and social chaos which led to illegal logging in the forests which was planted in 1960s. The rationale used to support the action was that the forests belong to their ancestors, so it was their rights to benefit from the forests. Another rationale was that the forests belonged to Suharto, the former president of Indonesia. When Suharto stepped down, the forests belonged to no one. If in Jakarta, the people plundered the stores, in Glandang village the people plundered the forests. It was a critical time for the forests in Glandang village. People damaged the forest and at the same time, fought against Perhutani officers, who lost their legitimacy at that time.

This mass forest plundering was followed by people taking over the land for agriculture activity, and the land was used to *baronan*, where the land was planted with agricultural crops right after the forests were plundered. This situation prevailed until Perhutani coordinated with *pesanggem* (forest farmer) in forest farmer group (KTH), and came up with plantation contract or *tumpangsari* for state forest lands.

This PHBM agreement was put together in the situation where the forests have been destroyed or taken over by the people, and its security has undergone some changes. This agreement was supported by the laws issued by the board of directors and commissioners of Perhutani and the Governor of Central Java on the establishment of PHBM and PHBM communication forum. Before PHBM was implemented, there was only planting contract between *pesanggem*, KTH and Perhutani on *baronan* land. Not all land managed by Glandang villagers was included in this contract.

4.2.1.2. The Process of PHBM Awareness Raising Program and PHBM Agreement

Awareness raising program is the first step taken by PHBM success team in KPH Pemalang from the whole process of PHBM implementation. The whole process of PHBM implementation includes:

- Awareness raising program both internal and external Perhutani
- Multi-stakeholder dialogue
- The establishment of LMDH
- The establishment of PHBM communication forum at village level
- The establishment of PHBM communication forum at sub-district level
- The establishment of PHBM communication forum at district level
- The formulation of collaboration agreement

As a matter of fact, the establishment of LMDH was not preceded by awareness raising program in the community. The process done by PHBM success team who consists of Perhutani staffs and local NGO, was reversed by establishing LMDH and the communication forum first, which then followed by other agenda for the villagers in consolidating the existence of LMDH. Similar process was also followed in another village, i.e. Kreyo village. The PHBM success team delayed the dissemination of more detailed information about PHBM and LMDH although the villagers showed great enthusiasm in forming this institution.

PHBM and its components were something new for Glandang villagers. It requires intensive attention to build concern, to accept and to understand it. In the present days, the villagers, especially LMDH and communication forum PHBM at village level, are still learning and trying to understand what actually their tasks, rights, and obligations in the implementation of this program and what role they can play in the development process. People have no clear understanding about the agreements, such as the Memorandum of Understanding (MoU) which plan to be signed in September. On the other hand, LMDH and communication forum PHBM at the village level, which were established in 16 July 2004, did not have big agenda for the villagers to do, either for internal interests or external cooperation.

The above case reflects LMDH establishment process and its implementation at the village level. However, this step was followed by attempts to increase people's understanding about PHBM in their area by meeting the *pesanggem* and by holding meeting in which the board of the organization was presented. They also plan to hold a meeting with Perhutani. This attempt was made by the LMDH board. The villagers perceived the functions of LMDH in Glandang village as: 1) a forum for *pesanggem* in accordance with PHBM, and 2) as Perhutani partner in PHBM. The aim of the institution is to channel the aspirations of *pesanggem* in the area to build cooperation in the planning, implementation, using and monitoring of PHBM.

On other hand, villagers also have rights and obligations. The obligations are to 1) run the organization to meet the objectives of LMDH establishment in Glandang Village, 2) protect and sustain forest resources for its sustainability and its benefits, together with Perhutani and other involving elements, and 3) provide contribution and production factor according to their capability. The rights are to: 1) plan, monitor and implement PHBM together Perhutani and other involving elements, 2) enjoy the generated benefits in appropriate proportion to their contribution to the process. LMDH also takes part in the process of PHBM socialization as appears in the next year planning, such as creating data base of all LMDH activities. These include:

- Data of each *pesanggem*'s land lots in each forest compartment (*baronan*)

- Inventory of agricultural crops planted by each *pesanggem* in every forest compartment (target December 2004)
- Inventory of current main forest trees (mahogany, teak) in each forest compartment
- Continue awareness raising program of Perhutani or other elements whenever possible
- In particular for forest compartment number 71 which is included in the plantation program in the year 2004; the awareness raising program will be conducted by LMDH together with Perhutani and other elements to *pesanggem*, either at the village level or in forest compartment 71 only.
- Inventory of land which is abandoned by *pesanggem* in Glandang village
- Exploring the possibility to cooperate with the third (private) party to utilize available space

LMDH Glandang is enthusiastic to learn about PHBM, their rights, obligations, and roles. The problem is that they cannot get the information easily outside Perhutani's scheduled follow-up the awareness raising program. The PHBM team of KPH Pemalang has not run yet the plan of awareness raising program; PHBM supervisors, i.e. *mandors* and field *mandor*, who also take part in the program have not been trained properly. Similar problem also exists at the Perhutani level which creates difference in perceptions about PHBM and the main idea of PHBM itself. The elements supporting this process, such as PHBM communication forum in village level, also face similar obstacle. They don't have good understanding about their tasks, functions, and rights. Meanwhile, LMDH Glandang has many activities and tasks that need to be implemented immediately.

Both Perhutani and LMDH are expected to make known the program. Perhutani requires this from all of their officers in the field, from BKPH to RPH level. They also form PHBM success team at the KPH level. Actually Perhutani has necessary human resources down to the field level, but they have not been utilized optimally. For example, *mandor* does not have a clear target in making known PHBM, and there is no obligation (stated in their contract) or incentives for them to do so.

4.2.1.3. Roles and Responsibility in PHBM Implementation

PHBM is accepted as a program which is developed by many stakeholders, especially Perhutani and farmers. PHBM also involves some institutions at village level, beside Perhutani. Every involved institutions have their own rights and obligations in the process. Those institutions include:

- KTH
- LMDH
- Perhutani
- FK PHBM at the village level (village communication forum of PHBM)
- Village council or BPD
- Village government

Their roles and responsibilities are as described below.

Roles and Responsibilities of KTH

Rights of the institution:

- To benefit from forest compartment
- To obtain wood production sharing

Obligations of the institution:

- To ensure forest protection in collaboration with Perhutani
- To plant forest trees and agricultural crops

- To undertake forest maintenance

Institution's rules:

- To provide guidance to *pesanggem*
- To control and monitor new forest plantations

Decision making pattern:

- To immediately report any theft activities to the head of sub-forest district.

Roles and Responsibilities of LMDH

Functions:

- As an organization for *pesanggem* in PHBM program
- As Perhutani partner in PHBM program

Tasks:

- To channel aspiration of *pesanggem* in the whole forest compartment with regards to the planning, implementation, utilisation, and monitoring of PHBM

Obligations:

- To running the organization to meet the aims of LMDH in Glandang village
- To maintain the forest resource sustainability for its functions and benefit continuity, in cooperation with Perhutani and other components involved.
- To provide contribution and production factor according to its capability

Rights:

- To plan, monitor and implement PHBM together with Perhutani and other elements.
- To benefits from the generated process in accordance to the proportion value and the production implementation that they have provided.

Roles and Responsibilities of Village Government

- To govern the development of the village society
- To make plan that deals with FK PHBM at the village level, which include:
  - forest resource management
  - its functions and benefits for the prosperity of the villagers, in particular Glandang village
  - create village regulations about retribution from logging and its mechanism. Then the regulations have to be approved by BPD
  - the process of policy making is done with agreement
  - the voting system will be determined later

Roles and Responsibilities of BPD

BPD is also responsible for village development. It also promotes cooperation and relation with the components outside the village. In certain cases, some of the BPD members also sit in the boards of LMDH Glandang and FK PHBM. The roles of BPD can be described as follows:

- As per Perda Kabupaten Pemalang No 7/2001, BPD is the partner of the village head
- Formulating village regulations (Perdes)
- Entitled to 10% of the village budget

In coordinating the relations in the institutions, between institutions, and between institutions and villagers, it is emphasized in:

- The relations between BPD and the village government
  - developing the village
- The relations between BPD and LMDH
  - maintaining the sustainability of the environment and security

The Role of FK PHBM at the Village Level

Tasks of FK PHBM at the Village Level

- To provide suggestions in the formulation of PHBM plans
- To monitor and evaluate PHBM implementation
- To maintain the implementation of PHBM
- To report the implementation of those activities to the village head, and provide a copy of the report to head of forest district

Functions of FK PHBM
- To supervise LMDH implementation

Responsibilities:
- To hold FK meeting every month
- To hold coordination and evaluation session with LMDH
- To provide suggestions or inputs to LMDH on PHBM annual plan

Roles and Responsibilities of Perhutani

The Collaboration Pattern
- LMDH formulates plantation collaboration agreement, starting from preparation to implementation stages:
  - land preparation
  - plantation contract agreement preparation
  - facilitate land preparation (making *acir*, hole)
  - planting processes (fertilizing; planting main crops, cash crops, and fence crops; and maintenance)
- Maintenance
  - clear shoot juvenile, young tree branch *(wiwil)*
  - pruning
  - clear the weed (non-economic plant)
  - thinning
- Harvesting
  - harvesting preparation, among other things are making non-permanent hut for workers; preparing the road for transportation; preparing workers, etc.
  - harvesting workers, i.e. chainsaw operator, *blandong*, loading workers and security
- Sharing system
  - after the harvesting is complete (harvesting A2, E, BI)
  - 25% (LMDH), 75% (Perhutani) contract starting from 0 year
  - it depends on the agreement term from the agreement starting point to harvesting
- Objects of Sharing
  - wood, i.e. its cash value in local currency (IDR)
- Responsibilities
  - awareness raising program of PHBM
  - consolidation of PHBM
  - making plans and strategies
  - implementation of PHBM
- Format of Support
  - guidance/training
  - technical and non-technical guidance
  - capital

The above role and responsibilities of each institution involved in PHBM give us with brief description and understanding of which institution plays an important role. In implementing their roles, the institutions have to coordinate, cooperate, and communicate with one another. The success of the program would depend on collaboration among these institutions. At this stage, we observed that there is a

tendency for one institution to dominate the others as they have more power, knowledge, and authority than other institutions.

4.2.1.4. Organization Structure and Membership of LMDH

The Process of LMDH Establishment

Glandang village was established in 1802. Nevertheless, the LMDH in this village was relatively young as its formation was only targeted by KPH Pemalang in 2004. The establishment of LMDH was fully initiated by Perhutani. They requested assistance from the village government. They held meeting forums which were attended by village government, village institutions, and Perhutani personnels, from field officer (mandor) to PHBM success team (the team who established by Perhutani to conduct the awareness raining program of PHBM). Joining this forum is also a number of pesanggem (forest farmers) and KTH (forest farmer groups) of Glandang. They were informed by mandor about this forum. At the village level, the invitation come from the village government as requested by Perhutani.

After two unsuccessful attempts to establish LMDH, finally in 16 July 2004 LMDH Glandang was established. The meeting was packed with agenda items proposed by PHBM KPH Pemalang success team. The agenda of the meeting was:

- Introduction about PHBM
- Multistakeholder dialogue
- LMDH formation
- Formation of communication forum at the village level

This program tends to represent Perhutani's interest rather than the villagers'. Perhutani also tends to control the program. During introduction session, it was revealed that it was the first time that the program was introduced and explained to the villagers. Not even the village government was well informed about PHBM was and its components. Consequently, the questions raised in the forum were basic, rather than critical questions, with regards to PHBM.

Multistakeholder dialogue never took place since the forum was mainly attended by village government and representative of village institutions. Most relevant stakeholders, pesanggem and KTH, were not active since they did not have a comprehensive understanding on the material presented. The low level of quality and quantity in the involvement of both parties (Perhutani and local community) could be an obstacle during the implementation in the field since this level is actually very important and determining. The participants of the forum did not seem to have good understanding of PHBM. However, the PHBM success team promised to conduct follow up socialization later on after LMDH and FK PHBM have been formed.

With regards to the personnels who will serve in LMDH, the candidates were proposed by PHBM success team without consultation with either the village head (who is in charge of the village governance) or the proposed candidates. During the meeting, below list of candidates was proposed. The proposed list was accepted by the meeting participants. The composition of board was as follows:

Caretaker	:	Glandang village headman
Chairman	:	Sri Budi Priyanto
Secretary	:	Ekit Lukito
Treasurer	:	Tasori
Program Planning	:	Suratno and Cahyono
Public Relation	:	Dullah
Sharing Division	:	Sutomo and Sutopo
Security Division	:	Suntoro and Supandi

After LMDH was authorized by the village head, the next step was the formation of communication forum in village level, in accordance with the existing regulation, i.e. SK Gubernur Jawa Tengah about the structure of FK PHBM in village level. The personnels who serve in the forum were selected by Perhutani rather than voted by community. The composition of the communication forum is as follows:

Caretaker	:	Glandang village headman
Chairman	:	Village secretary (Soedarno)
Secretary	:	KRPH Glandang (Tri Widodo)
Members	:	Duhaeri, Yahyo, Taqwid

Similar Perhutani-driven process was also applied in the establishment of LMDH in other villages. LMDH in those villages should be established by December 2004. The letter endorsing the establishment was issued by village head, witnessed by the sub-district officer. The copy of this letter was subsequently given to Perhutani to be registered to the notary as a preparation of Memorandum of Understanding (MoU) between Perhutani and LMDH Glandang. The MoU was planned to issued in September 2004.

LMDH Organization Structure

As LMDH Glandang is still young, it is still in the stage of board formation as mentioned above. The organizational structure of LMDH has not been formed yet since the villagers believe that the existing board can do their job well. A strict organization structure is not needed. Furthermore, the existing board can be change to suit the need of the village community.

Membership of LMDH

So far LMDH consists of members of the board only. The membership requirement has not been established. On one hand Perhutani states that the membership of LMDH should include KTH (forest farmer groups) who have worked in the field sector. As KTH is included within LMDH, they then become the part of LMDH who will deal with Perhutani. However, in reality, KTH deals directly with Perhutani field officers (i.e. mandor and mantri).

Pesanggem in KTH is formed by Perhutani based on the management land (baronan) in the same forest compartment. KTH is further divided into sub-KTH or block area (each sub-KTH is of 5 ha). One sector consists of more than one block area. KTH serves as communication channel between Perhutani and pesanggem, and activities follows what have been determined by Perhutani, including participating in PHBM program.

In this community forest management, Perhutani uses two models of cooperation:

- Collaboration with LMDH. In a form of PHBM agreement which specifies the benefit sharing system between Perhutani and LMDH. The contract is authorized by notary pubic, and
- Collaboration with pesanggem. In a form of contract with KTH, using agricultural crops model, over a period of two years. The collaboration can be renewed after the contract is complete.

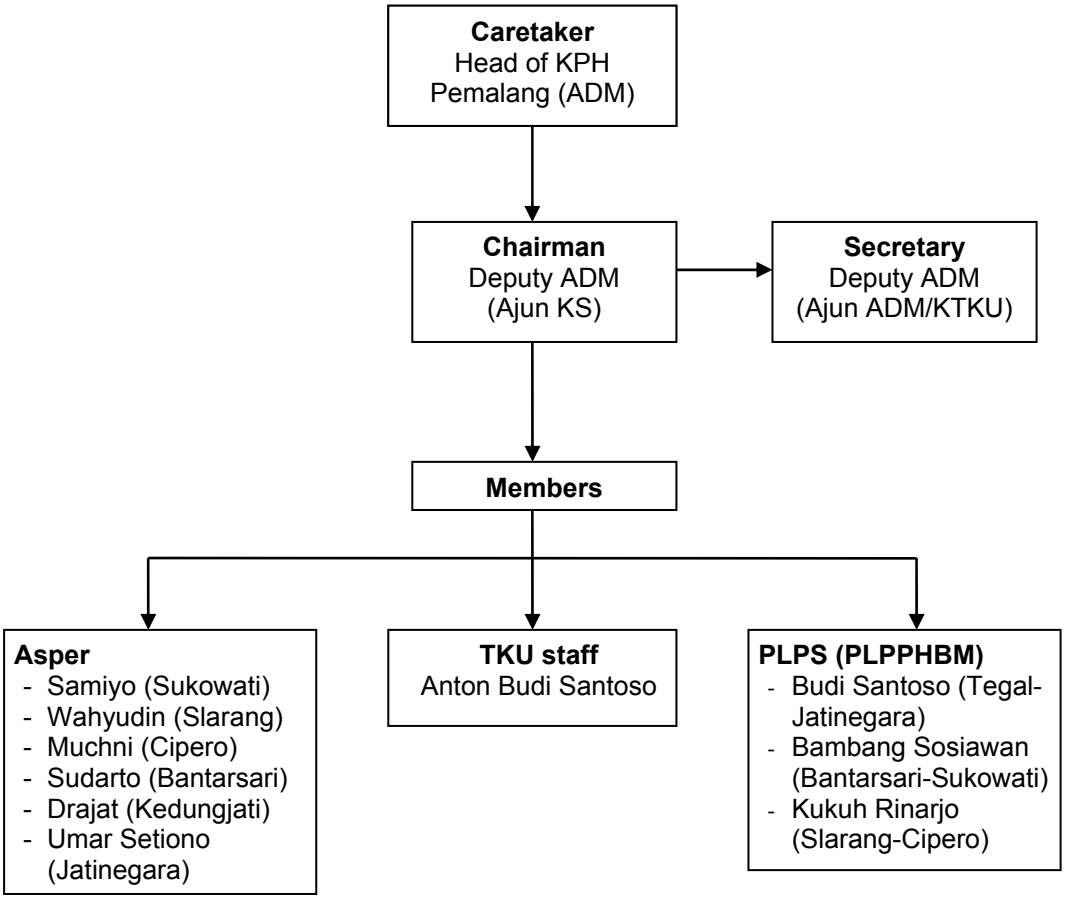
In Glandang case, area to be included in PHBM agreement is still being considered. The members of pesanggem are still being inventoried. In LMDH Glandang's site plan, almost all sectors have been planted and managed by people inside and outside Glandang village. Moreover, there are some sectors which are managed by Glandang villagers but they are included into the LMDH of other villages.

4.2.1.5. The Institutios of PHBM

The institutions of PHBM in district Pemalang is as follows:

- PHBM success team KPH Pemalang (Perhutani)
- FK PHBM in district level
- FK PHBM in sub district level
- FK PHBM in village level
- LMDH
- KTH

In accordance with these PHBM institutions, there is an organization structure at KPH Pemalang level. The structure follows the regulation of Head Forest District of Pemalang No. 134/KPTS/PML/2002 on the creation of Village Model, its execution team, and FK PHBM from village level to district level. The organizational structure is as follows:



Source: PHBM team KPH Pemalang

From the above structure, it is clear that there is a distinct system in the implementation of PHBM in KPH Pemalang level. But the awareness raising program of PHBM is mostly done by TKU staff and PLPHBM who have to go to 21 villages to socialize PHBM in the formation of LMDH and FK PHBM at the village level. The main responsibility of this socialization process is in the hand of PHBM KPH Pemalang success team. Within Perhutani, participation of non-Perhutani personnels inside the PHBM team brought about jealousy and suspicion. Those non-Perhutani

personnels are suspected to perform dual functions, as representative of Perhutani and as representative of NGOs.

The coordination meeting of PHBM in KPH Pemalang is held monthly, on the 20th of each month. At BKPH level, the coordination meeting is held monthly, but the date is not fixed. At RPH level, coordination meeting has not been arranged. At BKPH Slarang level, there are 3 RPH (RPH Kramat, RPH Paduraksa, RPH Glandang). There is one instructor (field officer or mandor) in every RPH who has been trained in Bandungan, Semarang. Those mandors are expected to transfer the information and knowledge learned during the training to other Perhutani mandors and pesanggem working in the sector. In reality, these mandors did not perform these expected tasks accordingly. This is probably due to the fact that they are not officially appointed as mandors in that area.

Although most of the Glandang area is forested, and there are several Perhutani staff who live in here, information about PHBM has never been disseminated. The socialization process is only done when they are about to arrange a meeting to establish LMDH and FK at village level. The socialization process is conducted by KPH success team, and it is usually done briefly. On the other hand, Perhutani's field staff (mandor) knows nothing about PHBM. They learn about PHBM at the same time with the villagers during the socialization process.

With regards to the institution of PHBM in district Pemalang, an FK at the district level is established following the Pemalang Bupati decree No 188.4/59 of 2003 on the establishment of FK PHBM at Pemalang district level. The member consists of Bupati of Pemalang (as caretaker), and assistant of economic development district Pemalang (as chairman). According to the decree, FK PHBM is in charge of:

- Providing suggestions in the formulation of PHBM plan.
- Monitoring and evaluating PHBM implementation.
- Supporting the implementation of PHBM
- Reporting activities of a, b, c to Bupati Pemalang.

In undertaking those tasks, FK PHBM in district Pemalang level should coordinate with Perhutani by including them in monitoring and evaluation team of PHBM.

In sub district level, there is an FK PHBM which is established based on the decree of the head of Sub-district Bantar Bolang No. 522/KPTS/2002 on the establishment of FK PHBM at the sub-district Bantar Bolang level. The tasks of PHBM at this level are similar to those of the district level, but the scope is limited to sub-district area only. The caretaker is the Head of Sub district Bantar Bolang, the chairman is secretary of sub district Bantarbolang, and the members come from the elements of sub district government and KPRH in Bantar Bolang area.

At the lowest level, there is FK PHBM in Glandang village level, but the authorization letter is still in process. The authorization letter is issued by village head in charge. The tasks of FK PHBM at this level are:

- Providing suggestions in the formulation of PHBM plan
- Monitoring and evaluating the implementation of PHBM activities
- Monitoring the progress of PHBM
- Reporting the activities 1, 2, 3, to the village head and copy the report to head of KPH Pemalang

The members consist of Glandang village head as caretaker and the secretary of village as chairman. The secretary of the FK comes from KRPH Glandang, and the members are public figure and mandor.

The main institution of PHBM is LMDH (Lembaga Masyarakat Desa Hutan or Forest Village Community Institution). This institution is created as a channel to manage forest together with community. Based on the Focus group discussion about analysis of agreement PHBM in Glandang level, LMDH which was established in July 2004 plays a significant role in socializing PHBM to the community, as seen from its one year plan is creating database of all LMDH activities. Some of them are:

- Data of each pesanggem's land lots per forest compartment
- Inventory of catch crops planted by each pesanggem in every forest compartment (target December 2004) per compartment
- Inventory of current main forest plantation (mahogany, teak) per forest compartment
- Socializing the programs of Perhutani or other elements, whenever possible
- With regards to forest compartment number 71, since it is included in the plantation program in the year 2004, LMDH will socialize it to pesanggem together with Perhutani and other elements, either in the village house or in compartment 71
- Inventory of land which is left by pesanggem in Glandang village area
- Explore possibility to cooperate with the third component (private) in space usage

The institution at the lowest level which deals with pesanggem is KTH. Novertheless, KTH is not independent since it follows the programs determined by Perhutani. The goal of this group formation is to meet the need of plantation contract between pesanggem in the sectors and Perhutani. This institution is a part of LMDH which works in the land included in the PHBM system. However, in the context of PHBM and sharing system, KTH doesn't have an authority to act institutionally. It acts under the authority of LMDH Glandang.

LMDH will coordinate and communicate with FK PHBM at the village level. FK PHBM at the village level coordinates with FK PHBM at the Bantar Bolang sub-district as well as with FK PHBM in Pemalang district. So far, FK PHBM in Glandang has not held any meeting and has not coordinated with other institutions because there was a conflict over which institution should make the invitation, i.e. Perhutani or village government. The problem rose since there is no distinction in the institution's structure. In this context, Glandang is included in the authority of RPH Glandang, GKPH Slarang, but administratively this village is included in sub district Bantar Bolang. Meanwhile, the representative of Perhutani in FK PHBM sub district Bantar Bolang is *Asper* Bantarsari. Surely it affects the coordination inter authority.

4.2.1.6. PHBM Implementation Policies

The policies with regards to PHBM implementation do not differ significantly from the policy in other area. Mostly they refer to the written policies issued by Perhutani, started from the board of director and commissioners to KPH level, while local government policies are in the form of decree of Governor of Central Java and decree of Bupati Pemalang and their subordinates (sub district and village). The policies can be classified according to the subject and the institutions who issue the policies. They are:

Memorandum of Understanding between LMDH and Perhutani
By the time this report is written, the agreement between LMDH Glandang and Perhutani has not been reached yet because LMDH Glandang was only established on 16 July 2004. The process is still on-going. The Village government issues the authorization letter about the establishment of LMDH and FK PHBM in village level.

Local government

1. Central Java Provincial Government

There are 3 regulations issued by Central Java provincial government with regards to the implementation of PHBM at the provincial level. They are:

- Governor decree No 24 / 2001 on PHBM in Central Java
- Governor decree No. 522/21/2002 on the establishment of FK PHBM in Central Java
- Head of Central Java Forestry office No. 188.4/663/ 2003 on the guidelines for PHBM evaluation and monitoring

2. Pemalang Local Government

There are 2 regulations issued at this level:

- Head of Bupati Pemalang Decree
  - Bupati decree No. 188.4/59/ 2003 on the establishment of FK PHBM at the district level
- Head of Bantar Bolang sub-District (Camat)
  - Camat decree No. 522/KPTS/ 2002 on the establishment of FK PHBM at the sub-district level.

Perhutani

There are 4 regulations issued that deal with the implementation of PHBM:

- Board of Central Perhutani office decree No. 136/KPTS/DIR/2001 on PHBM.
- Director Perhutani decree No. 001/KPTS/DIR/2002 on the guidelines of sharing system.
- Head of Perhutani unit I, Central Java No. 2124/KPTS/1/2002 on the guidelines of PHBM in Unit I Central Java.
- Head of Forest District decree No. 134/KPTS/PML/2002 on village model, its success team and the establishment of FK PHBM from village level to district level.

Informal Regulation (KPH Level to Village level)

The appointment of extension instructor in each RPH level (1 person). In BKPH Slarang there are 3 PHBM extension instructors for PHBM:

- RPH Kramat : Dul Latif
- RPH Paduraksa : Slamet
- RPH Glandang : Teguh Purnomo

The referent policy in the implementation of PHBM has not been effective yet because there are different interpretations among the involving institutions. For example, Perhutani tends to use the policies issued by his institution, although it is not optimal either. The local government who is in charge of the establishment of FK PHBM in certain administration levels has not been operational. The monitoring and evaluation team has not carried out their duty.

4.2.2. Surajaya

4.2.2.1. Agreements Background of PHBM Implementation

The PHBM is implemented in Surajaya village due to the decline in forest conditions. The decline of teak quality is caused by timber theft and forest plundering. The processes that reduce the quality of the teak can be grouped into three stages, i.e. before reform (before 1998), during reform (1998-2001) and after reform (after 2001). Before reform, timber theft and forest plundering occurred at low intensity, therefore

the forest degradation is not a problem. These activities were performed to meet the house construction needs and the wood was sold locally in low quantity.

The forest condition around Surajaya village declined significantly during the reform. Timber theft was at its peak in the period of 1998-2001 but the intensity decreased after 2001. It was usually done by the villagers who live around the forest, and they acted either individually or in a group. Timber theft took place in compartments which was in class age III and up. As timber was taken at the centre of compartment, the edge of the forest in the compartment is usually still in good condition. Simple tools, such as axe and handsaw, were usually used.

The reason behind timber theft and plundering before and after reform is different. Before the reform, the activities are conducted mainly by the ordinary village people for socio-economic reasons, i.e. to build or repair their houses, and to meet their basic economic needs. After the reform, the activities were performed, mainly not for socio-economical reason, but under the influence of irresponsible stakeholders and neighbours who conducted the theft activities and generated a lot of money from it. Those who took part in these activities were usually young people who lost their jobs in the cities and were forced to return to the village. The stolen timber was usually sold at a very cheap price and the money generated was used for used to purchase consumer goods.

The intensity of timber theft and forest plundering decreased later on for several reasons: a) the number of the trees were declined, b) the forest ranger has become more solid, and the people became more respectful to these rangers and the formal/informal leaders, c) the people became aware of the negative impacts of timber theft and forest plundering on forest resources. The negative impacts felt by the people include: a) land erosion in some places, i.e. at the steepest slope and corrugated area, b) the decline of water quantity, and c) increased in temperature. Despite these negative impacts, there are some people who benefited from the empty land as they can now use the land for agricultural purposed. The villagers in general need land for agriculture. The products harvested from the empty forest land can provide significant contribution for the family especially for the landless family or the family who has very limited agriculture land.

Local people are aware of the need to manage forests in sustainable manner so that forest conditions can be maintained over time. Despite this awareness, they are often forced to undertake activities that degrade the forests. Other activities that degrade the forests include: a) forest theft, b) fuel wood collection, c) digging the sand in the forest area, d) failure of plantation and e) land encroachment.

For the above reasons, PHBM was introduced by Perhutani at Surajaya village. It received positive response from the villagers, village government and other institution at village level (LPMD, BPD, youth club or Karang Taruna, Takmir masjid, RT/RW). LMDH of Surajaya was subsequently established. The LMDH is mandated by the villagers to establish and maintain the cooperation and collaboration with Perhutani. Through PHBM, the villagers expect to enjoy benefits from the forests and contribute to the sustainable forest management.

4.2.2.2. Process of PHBM Awareness Raising Program and PHBM Agreement

As the first step, PHBM was introduced by Perhutani to the village government and village institution in the Surajaya village. The introduction session did not include the whole village population. It was conducted formally in the village public hall, and attended by the village government, board of the village institutions, board of RT/RW,

Karang taruna, and Takmir masjid. This was done by the Perhutani PHBM team of KPH Pemalang. This was subsequently followed by the establishment of LMDH and Communication forum at the village level. These were all done in that one meeting.

The information on PHBM and LMDH planning program was then disseminated informally in the next routine meeting in the village, e.g. meeting of RT/RW, arisan, tahlilan, pengajian, etc. The information was also disseminated to forest farmer user group (pesanggem) by holding a meeting at the planting plots in the field. The dissemination of information is still taking place at the moment. The purpose is that the village people will understand very well about the collaborative arrangements. The implementation of PHBM in Surajaya village still needs to be socialized to the whole village, including the different institutions which are related to PHBM (LMDH, KTH, FK PHBM, village government, LPMD, BPD, Karang Taruna, PKK and takmir masjid) and intensive facilitation to consolidate the institution, because there are many aspects of PHBM and the agreement which they still don't understand.

The agenda of the meeting in which Perhutani introduced the PHBM included the introduction, which was followed by the establishment of LMDH (accredited by the Gov. of Indonesia No. 19 of 2003 Surajaya village) and the formation of Communication forum (by the decision of Surajaya village No. 4111.2/07/Kpts/IX/2003). Perhutani also facilitated the process to design the strategic planning on PHBM in Surajaya village. The strategic planning laid out the different activities which will be conducted under PHBM for the next 5 (five) years. Perhutani also facilitated the design of the official document of collaborative agreement between LMDH and Perhutani in implementing PHBM in the Surajaya village.

The agreement specified the need to introduce and socialise PHBM to have a common vision about the consequences, role and the responsibility for each party. It also specified the need to clarify the number and wide of forest plots which manage under PHBM covered in the agreement, the members of LMDH, technical plan of the forest management, and benefit sharing agreement. LMDH and other institutions in the village haven't got a clear understanding with regards to the plan and the strategy for PHBM implementation in the Surajaya village.

4.2.2.3. Role and Responsibility in PHBM Implementation

The implementation of PHBM in Surajaya village involved two main important actors, bounded by the collaborative agreement, i.e. Perhutani and LMDH. Both institutions should understand their roles and responsibilities. With regards to Perhutani, they may be a clear understanding about their roles and responsibilities in implementing PHBM. Nevertheless, this understanding varied among the different levels, from the top level (KPH), medium level (BKPH), to the lower level (RPH). For RPH, particularly, PHBM is understood as an approach to control or to secure the forests by sharing the benefits generated from the wood. This is different from the real concept of PHBM, i.e. to engage villagers as the partners throughout forest management activities, from planning, to monitoring and evaluation. The main purpose of PHBM is to improve of the livelihood of the village people.

In relation with PHBM implementation, all related stakeholders (village people, LMDH, village government, every related institution and Perhutani) has agreed that it is their shared responsibility to protect and sustain forest resources to sustain their functions and benefits. To achieve the sustainable forest management, they will collaborate and engage in collective action. The stakeholders who are involved in the forest management should take a part in communication, coordination, cooperation, monitoring and evaluation.

Perhutani as the institution who has a mandate over forest lands take the roles as a facilitator in the PHBM implementation. The LMDH, as a partner in PHBM, engages in designing the plan, implementing, monitoring and evaluating PHBM implementation. PHBM also engages other village institutions. The role and responsibilities of different institutions in the PHBM implementation can be categorized into two groups, e.g.

- Direct role in the PHBM implementation. This includes LMDH, KTH and FK on PHBM at village level;
- Indirect role in the PHBM implementation. This includes the whole of village people in Surajaya, and other related institutions in Surajaya village.

Role and responsibilities of the involved institution in PHBM are specified in collaborative agreement document between LMDH and Perhutani. Nevertheless, LMDH and KTH stated that they don't really understand their rights and obligations. From the discussion group which was facilitated by the researcher team on 7 August 2004 in the public hall meeting of Surajaya, we collected the following information with regards to the roles of institutions involved directly in the PHBM implementation:

LMDH

LHDM is the representative body of the interested people in Surajaya village especially the forest farmer user group in the forest management through PHBM. Through the collaborative arrangement, the rights of the people (forest farmer user group) over the agricultural products harvested from the forest land are guaranteed. In addition, they will also receive a benefit sharing from the wood (about 25%) starting from the period of collaboration.

Function/role of LMDH:

- As a partner of Perhutani in the forest management
- Representing the community in the collaborative arrangement with Perhutani

Responsibility of LMDH:

- Collaborate with Perhutani in protecting the forest and conserving forest resources
- Develop the institution to socialise PHBM in the community
- Develop proper administrative procedure for PHBM implementation
- Carry out forest management activities, from planting, pruning to harvesting
- Give a contribution for the production facility to the forest farmer user group as their capacity

Rights of LMDH:

- Collaboratively design strategic plan of PHBM together with Perhutani
- Monitor and evaluate PHBM implementation in Surajaya village
- Gain the benefit from the PHBM as per agreement with Perhutani
- Receive benefit sharing from the wood from Perhutani
- Protect and conserve forest resources

KTH (Forest Farmer User Group)

This institution (formally) represents the interest of forest farmer user group who performs technical plantation activities under the coordination of LMDH.

Function:

- As a direct actors in planting forest plants in the field.

Responsibility:

- Managing the forest plant as specified in the agreement between LMDH and Perhutani
- Taking care of the forest plant that programmed by Perhutani as specified in the contract

Rights:

- 100% of agriculture products in the forest land during the contract will go to forest farmer user group
- Gain the benefit sharing from PHBM implementation

Communication Forum on PHBM

This institution represents the interest of the society especially forest farmer user group. Through this communication forum, they can provide their inputs with regards to PHBM implementation

Function:

- Coordinate with LMDH in the collaborative forest management activities
- Communicate the information related with forest management in the PHBM implementation

Responsibility:

- Constructing, monitoring, evaluation of LMDH and Forest Farmer user group in the forest management

Rights:

- Provide recommendations to village head to change or reshuffle the members of LMDH, if needed
- Receive information from the members of LMDH with regards to forest management.

The collaborative official document of PHBM implementation in Surajaya village has specified the rights and responsibility of LMDH and Perhutani. They are:

LMDH responsibility

- Together with Perhutani and other related interest actors, LMDH will protect and conserve the forest resources to sustain its function and benefit

LMDH rights:

- Together with Perhutani and other related interest actors, design the planning, perform, monitor and evaluate the PHBM implementation
- Gain the benefit from the activities that appropriate with the value and contribution of the production factors.
- The group that meet the requirements as a union can earn the benefit sharing after protecting/conserving the forest resources collaborative compartments or locally called petak pangkuan under their responsibility

Perhutani obligations:

- Facilitate the village people and other related interest stakeholders in the planning, implementation, monitoring and evaluation process
- Prepare the system and the staffs so that PHBM program can implement in conducive way with the village people and other related stakeholders in order to achieve the optimum process and develop the activities

Perhutani rights are:

- Together with the village people and other related stakeholders, design the planning, implementing, monitoring and evaluation of the PHBM
- Include silviculture and ecological aspect in the planning, monitoring and evaluation of PHBM
- Gain the support from the village people and other related stakeholders in conserving the forest resources for the sustainability of their function and benefit

The role of the communication forum on PHBM in the PHBM implementation does not exist in the official document of collaboration in PHBM scheme. At the moment, it is fair to say that the village communication forum on PHBM does not have a role to play. Consequently, even the board of communication forum on PHBM doesn't understand their job and function. Furthermore, the task of communication forum on

PHBM at the village level was not socialised either. In the head of the village decision letter about the establishment of village communication forum on PHBM, it was only mentioned the board members of the communication forum on PHBM, i.e.

Undertaker	:	Suristo (Head of the village)
Chairman	:	Wasis
Secretary	:	Suwarso (Head of RPH Kramat)
Members	:	Alip Winardo, Slamet Waluyo, Suharto, Joko Sungkowo, Darnoki, Kiswo, Warlim, and Prayit

The above members of the board also hold a position in the village institutions. The chairman of communication forum is also the chairman of BPD, while the secretary is also the head of RPH Kramat, and the members hold positions in village government, as head of the sub-village or head of RT/RW in Surajaya. With regards to the board members of communication forum on PHBM, there is a new policy from Perhutani that mandates the head of RPH, who administratively resides in the village, to serve as the secretary of the village communication forum. This policy is to facilitate the communication and information exchange from Perhutani to LMDH. IN accordance to this policy, the secretary of communication forum on PHBM in Surajaya village is the head of RPH Kramat.

The draft of the decision letter of the head of the village about the establishment of the village communication forum on PHBM, which was compiled by the PHBM team of KPH Pemalang, specified the task of communication forum on PBHM. Nevertheless, their tasks were not specified in the decision letter which signed by the village head. The reason is that because there are no socialization process and there were some disagreements on some tasks. Consequently, the letter of decision only specified the establishment of the village communication forum on PHBM. The chairman of the village communication forum on PHBM has tried to clarify this issue with the PHBM team of KPH Pemalang. He, however, has not obtained any clarification on this issue.

The proposed tasks of communication forum on PHBM, as per the decision letter of the head of the village about the establishment of the village communication forum on PHBM, are as follows:

- Give inputs in the design plan of PHBM
- Monitor and evaluate PHBM implementation
- Monitor the progress of the PHBM implementation
- Report the output of the activities no 1, 2, 3, to the head of the village, the village communication forum on PHBM, and copyfurnish the report to head of the KPH Pemalang.

4.2.2.4. Organization Structure and Membership of LMDH

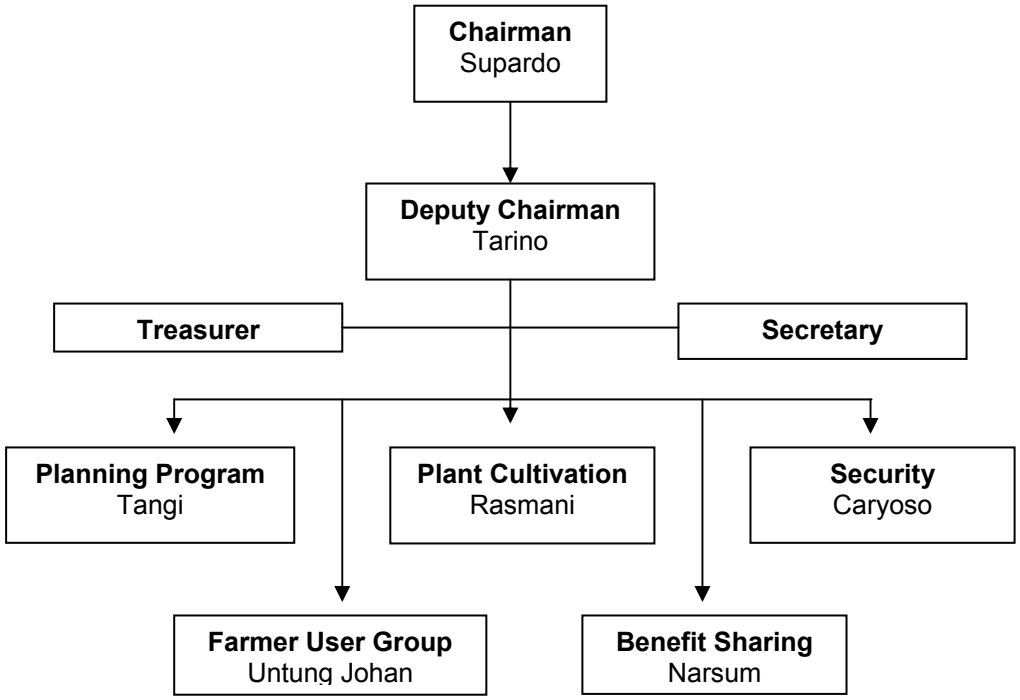
The objective and function to be performed by LMDH are sufficiently understood by the village people. Nevertheless, the plans to be performed by LMDH are not introduced properly.

Just like in village communication forum on PHBM, the members of LMDH have hold different positions in the existing village institutions in Surajaya. The chairman of the LMDH is the secretary of BPD, the treasurer is also the member of village government and BPD, and the members of other LMDH departments are officials of the village government, chief of karang taruna and takmir masjid.

The above organizational structure is obtained from the temporary LMDH office, i.e. the public hall meeting of Surajaya village. It differed from the structure specified in the strategic planning of PHBM of Surajaya village for 2004-2008.

The difference of the departments in the board of LMDH was not realized by the LMDH Surajaya and Perhutani. This indicated that 1) there is a lack of coordination between the two parties in formulating the strategic plan, 2) They did not use the agreement as a reference, because the organizational structure in the LMDH office is made earlier than the one in the strategic plan, and 3) the compilation of the strategic plan of PHBM was only for the purpose of the administration only.

The organizational structure of LMDH of Surajaya Village is as follows:



The different of the departments in the LMDH board can be summarised as follows:

Table 65. Organization of LMDH

Components	Organization structure of LMDH	
	LMDH office	In strategic plan of PHBM
Number of Department	5	4
Liaison Department	Not exist	exist
Planting cultivation	exist	Not exist
Security	exist	Not exist
Name of Department	Forest farmer user group organization	organization

In the organization structure of LMDH is not represent where the place and who is the members of the LMDH. The members of LMDH of Surajaya village here is still not clear yet about the agreement, there are two opinion, *i.e.* first, members of LMDH is all of village people of Surajaya and second, members of LMDH is all forest farmer

user group in the Surajaya village. The requirements members of LMDH has already arranged in the official document of Surajaya Village which is compiled by the PHBM team without confirmation with people of Surajaya village and conform it in open discussion, therefore the rule then is not agreed by the people in Surajaya village. The membership of the LMDH still needs to be further discussed to obtain the agreements in Surajaya Village.

The membership requirements of LMDH members as specified in the official document are: 1) citizens of the Republic of Indonesia who reside in Surajaya, sub-district Pemalang, district of Pemalang for a minimum 3 (three) years, 2) do not have criminal records, 3) have good behaviour as confirmed by the Surajaya community, and 4) in the age of 17-60 years old. Based on the official collaboration document of PHBM, the membership of LMDH consists of village government and village institutions which related with agreement in PHBM, i.e. village government, BPD, LKMD, takmir masjid, forest farmer user group, PKK, RT/RW, Karang Taruna.

4.2.2.5. The Institution of PHBM

Based on the formulating process then LMDH and communication forum on PHBM in Surajaya Village that is formed by the Perhutani KPH Pemalang, as one condition that should be met in the PHBM implementation at the village level. In other word, the idea of establishing PHBM at the village level did not come from the Surajaya village. The election of members of LMDH board and the communication forum on PHBM was not conducted openly. The management of LMDH and communication forum on PHBM is decided by a few elite people in the village, *i.e.* those who attended the first meeting on PHBM. The positions within the LMDH and communication forum on PHBM are hold by the meeting participants who have already held a position in the village institutions.

There are two views with regards to this situation. First, the situation was due to the lack of human resources in the Surajaya village and the limited numbers of people who are willing to volunteer to serve for village development. Second, the situation was due to the lack of information dissemination with regards to PHBM. The information only reached the village elites only. For those who hold positions in two institutions, they see it as their job and responsibility to represent the village community in the management of the forests to improve the livelihood and prosperity of the Surajaya community.

It can be viewed that those personnels are involved in the management of LMDH in their personal capacity and not as a representative of the village institution. If this is the case, it is only a coincidence that they are also elected for the positions in LMDH. In the collaboration document of PHBM the definition of LMDH is the institution of village people who are interested in the PHBM agreements, covering village government, BPD, LKMD, takmir masjid, forest farmer user group, PKK, RT/RW and Karang Taruna.

The village institutions that play a role in the PHBM implementation in Surajaya village can be grouped in two:

- Institutions that are directly involved in PHBM:
    - LMDH, the village institution who representing the village people that handle the collaborative agreement with Perhutani
    - Forest Farmer user group, an institution who performs the technical fields activities in the plantation
    - Communication forum on PHBM, the village institution who plays a role in the communication in relation of PHBM implementation

- The institution that are indirectly involved with PHBM, i.e. village institution in Surajaya villager (village government, BPD, LPMD, Karang Taruna, RT/RW, PKK etc.)

The empowering process of the institution in village level in PHBM system here should be done in participative way between Perhutani and village people. The participative means here is not so depth, it indicates that some process that has been going through 1) forming LMDH and communication forum on PHBM, 2) formulating the official founding document of LMDH, 3) formulating the collaborative document PHBM of LMDH and Perhutani and 4) the formulation of the strategic plan of LMDH in PHBM was conducted briefly and not well understood by the people. These gave the impression that these different processes were undergone just to meet the administrative requirements of PHBM implementation.

The documents produced in the process (founding document, strategic plan of LMDH, collaborative document with Perhutani) had been prepared by the PHBM team of KPH Pemalang. They were introduced briefly to the village people before the documents were signed. LMDH and other village institutions did not fully participate in formulating those documents. The processes therefore were done within a period of time, without having a lot of meeting between LMDH and Perhutani. Although LMDH and other village institutions can accept the absence of long meetings, the processes have weaknesses: 1) there is no learning process undergone by the village people and the village institutions; 2) they don't fully understand the contents of the documents produced; 3) lack of ownerships over the agreements specified in the documents. This weakness can be gleaned from the low interests among the villagers. To compensate these weaknesses, socialisation and institutional strengthening of the village institutions should be done to ensure effective implementation of PHBM.

There is no rule, written or not written, that regulate the relations between institutions with regards to forest management in PHBM. The functions of the institution in communication, coordination, cooperation, monitoring and evaluation are not implemented properly. Communication and coordination was done informally and by individuals or the board members who sought for the views or opinions from people or other institution on certain issues. Similarly, there is no sanction mechanism in place in PHBM implementation. The lack of rules and sanction mechanisms are realised by the involved institutions. Both rules and sanction mechanism need to be developed properly in the near future to strengthen the capacity of the institutions in implementing PHBM.

Within LMDH itself, there is no internal rule that regulate the relation between the board and members, and among its members. Furthermore there is no regulation on who can be the members of LMDH, whether it is open to every village people or limited to forest farmer user group who joined the KTH in Surajaya village. The LMDH board realized the need for such a rule, as per LMDH statute and basic rules. The needs are pressing since the collaborative planting will be performed later in 2004, and benefit sharing from the 2004 harvesting activities will be distributed to LMDH by the end of 2004. Statute and basic rules is not formulated in the founding document of LMDH which is not ratified by notary's document.

From the institutional aspect point of view, it was stated that PHBM will achieve its objectives, only if its implementation is done as prescribed rules and it is agreed by every parties. The LMDH and Surajaya villagers wish that the PHBM system can be implemented better so that it can improve the livelihood of the people. They don't

have high expectation from PBHM. They only expect that they can get their rights, in form of shared benefits.

The LMDH and other institutions are having expectation that the PHBM implementation will able to improve the livelihood of the people and lessening the poverty in Surajaya village. The level of dependency of Surajaya people to the forest resources is very much dependant, therefore by the PHBM scheme is like a big opportunity that gives to the people to manage the forest resources. Thereby the villager people will fell as an owner of the forest resources; therefore they will conserve the forest so that the function and the benefit of the forest are kept in sustained always. Interconnected with that then the institution will play role to facilitate the people in the collaboration activities of managing the sustainable forest. The activity that are going to do is related with the role of the institutions in the village level in the effort lessening the poverty and improving the quality of the environment are through coordinating inter institution in the effort to improve the participation level of the people through: counselling, extension, education and training related with the forest resource management.

The initial process of involving the forest villagers in the effort to secure the forest includes their direct involvement in securing the harvested compartment and its products in collaborative village compartment. The LMDH collaboration in the harvesting activities has been done in 2004 in the two compartments of Surajaya village. The collaborative arrangements that have been agreed by the LMDH with Perhutani are:

- The LMDH is directly involved in protecting the harvested compartment and its harvested products, by patrolling from the village people.
- The LMDH manages the wood transportation to the log yard
- The LMDH manages the sales of the fuel wood obtained from the branch and stick of the trees. The LMDH buys the fuel wood from the compiler with the standard prices higher than that of the fuel wood wholesaler. The wood is bought with the price Rp. 10.000/sqm which is then sold to fuel wood buyer. The benefit from the wood sale is used to finance LMDH operational activities.

4.2.2.6. Policy in the PHBM Implementation

The PHBM implementation is supported by some policies which are issued by Perum Perhutani, district government and village government. The policy is then used as a guidance or reference to facilitate PHBM implementation. Several policies that have been issued by Perhutani to support the PHBM in KPH Pemalang are:

- The decision of chief of supervisor council Perhutani No. 136/Kpts/Dir/2001 on Community Collaborative Forest Management
- The decision of board of the director of Perhutani No. 001/Kpts/Dir/2002 on the guidelines on benefit sharing of the wood
- The decision of the head of unit I Perhutani Central Java No. 2142/Kpts/I/2002 on the implementation guidelines of the community collaborative forest management in Unit I Central Java

The policies that have been issued by the district government to support the implementation of PHBM in Pemalang district are:

- The decision of Central Java Governor No 24/2001 on the community collaborative forest management in Central Java
- The decision of head of the Pemalang districts No 188.4/59/2003 on the establishment of communication forum on community collaborative forest management in Pemalang district

- The decision of the head of Forest District office of central Java No. 188.4/663/2003 on the guidelines for monitoring and evaluation of the management of the forest resources of the PHBM

The policies that support the PHBM implementation in Surajaya village are:

- The original document of LMDH No. 19/2003
- Collaborative agreement document between Perhutani KPH Pemalang and LMDH of Surajaya, sub district Pemalang, district of Pemalang No. 20 dated 10 November 2003
- The decision letters of the head of the Surajaya village No 4111.2/07/kpts/IX/2003 on the establishment of communication forum on PHBM in Surajaya village
- The document about the strategic planning of the PHBM for the period of 2004 – 2008

The current polices have not fully understood by the LMDH and the village communication forum due to:

- The socialization of those policies was not optimum. LMDH and other related institutions did not understand fully which policies serve as the basis of PHBM
- The transfer of knowledge with regards to those policies was not done properly. Consequently, the LMDH and the village communication forum did not understand clearly what their roles and responsibilities are in PHBM
- The LMDH and communication forum on PHBM was not involved in formulating those policies and agreement at the village level
- Those policies and agreements were drafted and prepared by the PHBM team of Perhutani of KPH Pemalang, and the villagers didn't evaluate those documents. Their reasons were that they did not understand what PHBM is about, and that they didn't want to hamper PHBM implementation. They did not realise that their lack of active participation will affect PHBM implementation at later stage. One of them includes the difference between the organisational structure specified in the official founding document and that in LMDH office. The question remains on which organizational structure should be followed
- The documents are only produced to meet the administrative requirements, and not as policies that would strengthen the stakeholders in PHBM

The related parties in the PHBM implementation is considering the necessary explanation abut the agreements that have been issued for the PHBM implementation especially on benefit sharing. Therefore it requires the socialization process and transfer of knowledge about it from Perhutani to LMDH and village communication forum on PHBM. Beside that the stakeholders are required to come up with agreements on:

- Agreements between village government with LMDH and communication forum on PHBM on delineation of tasks so that the task of village government and PHBM can be clearly differentiated
- The mechanism for solving the problems with regards to forest protection at village level of Surajaya, e.g. how to deal with forest theft and plundering
- The agreement about the role play among institution related with PHBM so that the control mechanism in the PHBM in village level can be implemented properly
- The agreements about the allocation of benefit sharing inside LMDH and village government
- The long term planning of LMDH with regards to PHBM

4.2.3. Tanggel Village

4.2.3.1. Agreements Background of PHBM Implementation

Up to 2000, the implementation of Perhutani forest management in Java has been criticized by different stakeholders. The hardest criticism was the failure of Perhutani to improve the livelihood of the people. After 2000, the idea for forest management which involves participation from the surrounding community and meets their needs at the same time more widely accepted. PHBM was socialized in the year 2000, and implemented at the village level in 2001.

To implement PHBM at field level for the first time, unit I chose Jegong village (KPH Randublatung) as the pilot project. LMDH was also developed at that village also, together with its socialization and authorization of some agreements. In 2002, KPH Randublatung began to add some targets for PHBM implementation by forming LMDH in several villages. Up to 2003, almost all of villages under KPH Randublatung had formed LMDH which was founded by notary act. However, according to internal source within Perhutani (in interview with Ajun), until now PHBM is still at the socialization stage and has not been implemented yet. It happens because the understanding of society is very low. They need to be shown how the new system should be implemented and how its success should be measured. Perhutani's perception which blames the local culture and knowledge system affects the policies formulated for PHBM implementation, from the socialization process to the implementation of the collaborative arrangements. The stages of PHBM agreement:

- Socializing the concept of PHBM, its goals and mechanisms
- Gain the trust and support from local people
- Facilitating the authorization of LMDH to the notary where Perhutani is responsible in covering the operational cost (by gathering all components involved)
- Building collaborative agreements with LMDH

4.2.3.2. Process of PHBM Awareness Raising Program and PHBM Agreement

Process of PHBM Socialization
So far the socialization process implemented in KPH Randublatung is aimed to make local people to accept a system which has developed by Perhutani. The system itself tends to reflect Perhutani's interest. The dominant feature during socialization process is the one way communication from Perhutani to local people.

The process began within Perhutani, which was then followed by socialization of PHBM concept to the local community. Since Perhutani has a hierarchical structure within its organisation, the understanding of the concept is not similar among different levels of the organization. The understanding of an *asper* about PHBM will be very different from that of a plantation *mandor.* Even the understanding of field supervisor and *Asper* can be very different. Plantation *mandor* will always be concerned about the plantation and its success, when he talks about PHBM. Collaborative arrangement in his mind is about land and the management of young plantation. Harvesting problem and other form of collaboration are not of his concerns.

Socialization at village level becomes the responsibility of field supervisor and Perhutani employees who have authority in that territory (i.e. Asper and Ajun), with the assistance of the NGO. Perhutani has to meet up with LMDH, villagers, and some of stakeholders in village. Usually sub-district government officials will join the meeting and deliver a keynote speech.

Socialization is not just done once but a few times. Perhutani also adopts a social approach, i.e. Perhutani employees who live in an area of the village under Perhutani territory are required to socialize PHBM program.

The Process of PHBM Agreement

PHBM agreement between Perhutani and community can be classified in 2 forms:

- Personal contract. Personal contract is established between Perhutani and members of the community who benefits from forest resources, directly or indirectly. In exchange, they have to give their contribution to Perhutani. Contracts can be written or unwritten. Cooperative arrangements can be made over the following activities: using forest land, transporting the harvested products and become daily workers
- Contracts with LMDH institution. Institutional cooperation that has been carried out is in forest protection. The institution would enjoy the shared benefits from harvesting even though the agreement only drawn one year earlier. This institutional contract is usually written.

The process of establishing agreement in Tanggel village started when Ajun, the field supervisor of PHBM success team conducted the awareness raising program of PBHM at the village level in 2002, by inviting: LMDH, LKMD, BPD, Head of Dusun (sub village), Head of Village, teachers, public figures, youths, PKK (woman organisation), former illegal loggers, and KTH.

Those components at this stage are invited to participate in agreement development and socialization process. In the next stage, not all components were involved. KTH, which was represented by one representative, in the next process can not survive as representation of pesanggem union, including the old conflict which still exist between the Head of KTH and Perhutani, created the stagnation of KTH. KTH subsequently became inactive. For this reason, there was no representation of pesanggem in LMDH.

1. The form of LMDH

Forming of LMDH was made by the representation of: LKMD, BPD, PKK, public figure, pengajian, and youth. It is very clear that the establishment of LMDH is influenced by Perhutani. Before LMDH is formed, the draft has already existed. Top down approach is still used and it is considered as an effective way to form the institution.

2. Exposition of agreement contents

This is a process in which the contents of the draft collaborative agreement between Perhutani and LMDH were read by field supervisor at the head of KPH Randublatung office. The entire chapter was read one by one. Nevertheless, the contents of collaborative agreement draft were formulated by Perhutani. Whether or not the contents were understood was not the concern of Perhutani (the result of interview with *sinde*r). The exposition of agreement contents was done as a part of the legal requirements to get the agreement legalized by the notary.

3. MoU Authorization

At this stage, the Head of Sub-district and government officials (Muspika, Polsek, Danramil) were invited. From the LMDH side, the following personnels attended the session:

- Treasurer of LMDH
- Secretary of LMDH
- Head of LMDH

The attendance of government officials strengthened the legality of the agreements.

4.2.3.3. Role and Responsibility in PHBM Implementation

At the conceptual level, it should be Perhutani, the community and other related stakeholders who are responsible in PHBM implementation. In reality, if the concepts are not realistic, then only those who make this concept can implement the program as per regulations specified in the agreement. There are 2 kinds of level about the description of role and responsibility of PHBM related to the policies, i.e. national level or village level.

As per existing fundamental policies, PHBM should run as a social system. Institution which influences teak forest management is Perhutani. Nevertheless, government and forest department are also involved. The existence of forest department and government affects Perhutani. Policy and authority of Perhutani became limited. For example: the authority over land use, that used to be under Perhutani, has now become the district government authority (interview with Ajun).

The role delineation between Perhutani, government and community or to the third party has been set out clearly and systematically in PHBM document, but its implementation at the field level is biased. The understanding of each element about its function, role, and responsibility is poor.

At the village level, PHBM is not implemented as a social system, but as a program to maximize wood harvests. The majority of the contracts are of personal type. Community does not want to undertake its responsibilities; cooperation only focused on result dividend. The role of LMDH, as representative of the forest village community, in this kind of forest management is limited to wood protection only. The village government does not perform its function, in controlling and monitoring the implementation of PHBM, and so the communication forum of village.

Further opinion about PHBM was also disclosed by the higher officer of Perhutani officials, that PHBM is a business contract between society and Perhutani in along term, thus the critical point is how to give good assistance and to build understanding about the regulation, both to the society and Perhutani staffs. So, it is only natural that socialization process of PHBM faces many obstacles and needs long time.

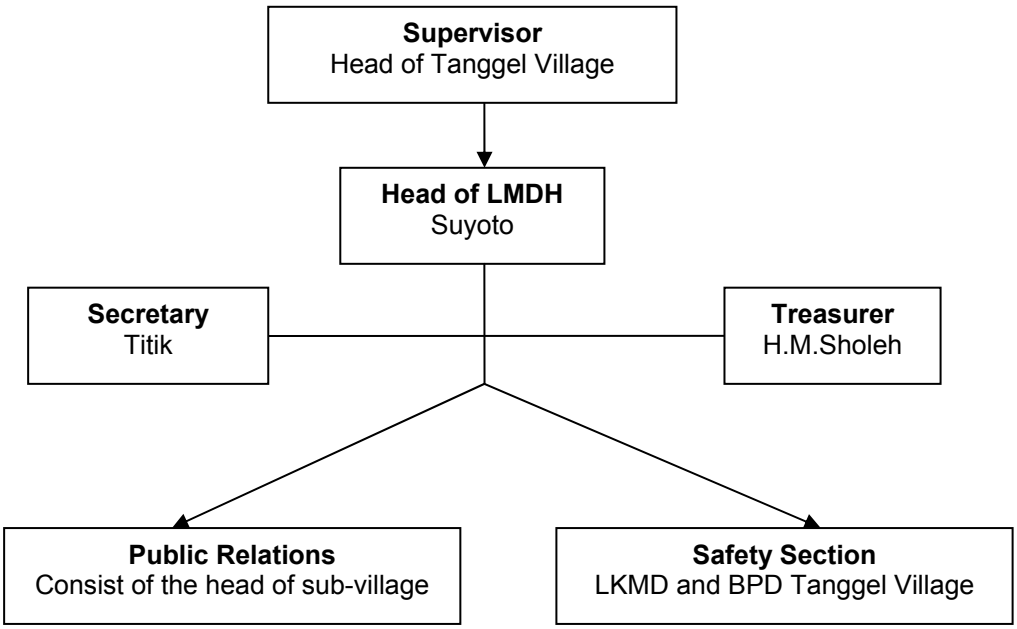
4.2.3.4. Organization Structure and Membership of LMDH

Process of LMDH Establishment
LMDH was established in December 2002, after Perhutani socialized the concept of PHBM and LMDH at the village level. At this early stage, Perhutani asked the villagers to gather to the villagers and other stakeholders at the village level. Perhutani was the one who initiated the socialization process, either at the village level or at the higher levels. In the second socialization meeting, several stakeholders who attended the meeting at the village hall were asked to serve in the LMDH board in Tanggel. This institution then became the legal (and formal) organization. LMDH then established a partnership with Perhutani.

LMDH Organization Structure
The establishment of an institution which does not design to meet the needs and interests of their members will not be sustainable. If the interests of the members cannot be fulfilled, the sustainability can nor be ensured. Coordination and consolidation will never take place, and unsolved conflict of interests must be handled immediately by LMDH. Farmer workers were not represented in this

institution; although they are the ones who play important roles in sustaining the forests.

Organizational Structure of LMDH:



The leader of LMDH becomes an important factor since the leader doesn't deal directly with forest, so any cooperation offered by Perhutani somehow difficult to implement. The activity is also limited to land clearing and the management of benefit sharing. The existing collaborative agreement benefits LMHD significantly, but it doesn't bring similar positive impacts to the farmers.

Membership of LMDH

LMDH in BKPH Tanggel was established in 30 December 2002. The membership of LMDH, according to the certificate of establishment was all Tanggel villagers. However, according to institution regulation (AD/ART), the membership is open and voluntary after consultation with the components involved.

So far, the understanding of villagers about the members of LMDH are the board of member only, while LMDH was established as the representation of institutions in the village (BPD, PKK, Pemuda, Karang Taruna, etc.). Moreover, the institutions at the village level do not have a distinct activity such as meeting to discuss their plan.

Other Involving Institutions at the Village Level

In Tanggel village, there are several institutions who are involved in forest management, either directly or indirectly (please refer to the table about the involvement of institutions in PHBM). The existence of those institutions is in variety.

From the table bellow, we can see people perception toward their own institutions, what are the rights and obligations of each institution, and whether they have been represented by the institutions or not. Eventhough the traditional informal institution (religious group) does not deal directly with forestry, the existence of the institutions in the last 20 years can provide a hint on what kind of group is actually needed by

the people. Moreover, for the following plans, the existence of grass-root institutions must be reconsidered.

Table 66. Institutions of Tanggel Village

Type of Institutions	Type of Activities	Society Involvement	Rights	Obligations	Constraints
BPD	- Monthly meeting for all BPD leaders in Randublatung - Involvement in the development of bridge which was built with the grants from the government (Sept 2003)	As construction worker		- Responding to people's aspirations - Maintaining the culture - Monitoring the performance of the government at the village level (criticizing government officer who breaks the rule)	- No follow up for the report - Lack of communication between the community and the government
LKMD	- Supporting the village in physical development project - The environment sanitary - Coordination with the village chief		Accepting grants from the village government	- Supporting the operation of village development	- As a matter of fact, the grants were never given to LKMD
Village	- Managing meeting every 35 days for all officers - Collecting data about village people every month	No involvement for people, only for officers	All officers get incentives once in 3 months	Each kepala dusun (sub village head) directs his people	
LMDH	- Managing the organization's administration, finance, working plan, activities inter institutions - Searching and giving information - Holding meeting either continuously or spontaneously - Evaluating all activities: patrol, security, involvement in training	People involvement in plantation of teak and other plants, the meetings, and keeping the forest security	Coordination with Perhutani, sharing or aid from other components, maintaining the institution	- Maintaining the sustainability of the institution, administration completeness - Managing the organization among the institutions Writing announcement letter to *asper*	Socialization run by LMDH is only 30% of all
PKK	- Monthly meeting in village house or sub district - Additional food every month in *posyandu*	People are involved in training	Village head grant, LMDH grant, giving suggestions, PKK training (about nature resource management)	Training to implement 10 basic program of PKK. One of which is about nature resource management)	

Type of Institutions	Type of Activities	Society Involvement	Rights	Obligations	Constraints
Pengajian (religious) group	- *yasinan* (weekly) - *berjanjenan* (weekly) - *manakib* (monthly) - *khataman al Qur'an* (monthly) - *Muslimat* (monthly) - *Sholawat nariyah* (weekly)	Involvement in the activity and supporting the meal	Accepting grant from the village	Educating the village people	
BPKBD *(Badan Pelaksanaan Keluarga Berencana Desa)*	- *Posyandu* 10 times in a month - Meeting in sub district level	People are involved in the activities	- Proposing continuous activities to PKK and *bidan desa* - Proposing for incentives	Encouraging people to improve their well being, such as *KB Mandiri*	- Some people don't know about the existence of this institution - No activity dealing with forestry
Perhutani	Perhutani's technical activities such as planting, maintenance harvesting, land clearing, seeds, and the making of *acir* Socialization of PHBM	- People are involved in technical activities in forest management - Perhutani invites other components for cooperation	- Empowering forest resource - Monthly salary for perhutani officers	Maintaining the sustainability of the corporation and also the forest productivity	

Source: FGD about Institutions in Tanggel, 2004

4.2.3.5. Institution of PHBM

The implementation of PHBM practically and by each institution might have worked, but not in a form of cooperation between Perhutani and LMDH. In this case, it only brings benefits to certain components only (especially those with big capital), while the other who has no access to the cooperation will not get the advantages.

Some of the institutions which are created as a result of the policy in implementing PHBM in KPH level are:

- Success team of PHBM. Success team of PHBM consists of those people who are responsible for the socialization of PHBM at the KPH level. They are: Perhutani officers (Ajun and Suplap) and local NGOs who is the consultant of Perhutani. The function of the institution is to conduct the awareness raisning program of PHBM up to the establishement of PHBM agreement, and
- PHBM Communication Forum. This forum is established at the provincial level, district level, sub district level, and village levels. The board consists of the government and Perhutani staff, either at the village level or provincial levels. This forum is established by Perhutani. The forum is open to everyone, so that any people concerned with forest resource sustainability can become a member of this forum. The forum is responsible to the local government. Although its function is to monitor and control the implementation PHBM, it doesn't have well-defined mechanisms to do so.

The tasks of the forum (according to governor and regent instruction letter) are:

- Coordinating and explaining operationally the activities of forest management together with the people
- Giving guidance, assistance, monitoring, and evaluating the result and the improvement of PBHM
- Performing other tasks with regards to PBHM in accordance to its principal tasks and the function of each institutions
- Reporting the evaluation to the governor of Central Java

The existence of the forum is still questionable because their operational costs are not sufficiently provided. At the village level, this forum does not function properly.

- LMDH Association. This institution was established when there was a workshop for LMDH by Perhutani. Referring to a proposal by *suplap*, an LMDH association was founded, and it serves as sharing forum among all LMDHs in Randublatung. There is no clear organizational structure and work plan yet. The current board consists of head and its deputy
- LMDH. Like other LMDH, LMDH "Langgeng Jati" in BKPH Tanggel was sponsored by Perhutani which was followed by socialization of PHBM and the other infrastructures. The existence of LMDH actually functions as a place for forest village community to increase their prosperity institutionally. In fact, LMDH consists of the board only.

The problem is how the institutions supporting PHBM contributes to the operation of PHBM as a social system. Community approach is not absolutely inoperative, but that community must be raised from the base, so that the interests and necessity of the member can be accommodated. The function of the institution is clear and applicative.

4.2.3.6. Policy in the Implementation of PHBM

The implementation of PHBM is supported by formal and informal regulations:

Policy in Province and District Level

- Decree of Dewan Pengawas Perum Perhutani, No. 136/KPTS/DIR/2001 about principal and spirit of PHBM.
- Decree of Gubernur Jawa Tengah No. 24, year 2001 about forest management together with people in Central Java
- Decress of Kepala Perhutani Unit I jawa Tengah No. 2142/KPTS/I/2002 on operational guidelines of PHBM in Unit I Central Java.
- Decree of Governor No. 522/21/2002 on the establishment of provincial communication forum.
- Decree of Bupati Blora No. 522/1992/2001 on the establishment of district communication forum.

Some policies are confusing such as the decree of Gubernur Jawa Tengah No. 24, Year 2001 on PHBM in clause 12 chapter VII. Herewith stated:

- Sharing system in PHBM is based on the contribution given by each components involved in the forest management.
- The amount that will be received by each components is calculated proportionally depends on its contribution.
- The sharing conditions are stated in PHBM agreement.

Meanwhile, in Keputusan Direksi PT Perhutani No. 001/KPTS/DIR/2002 (chapter IV), it is stated that the sharing proportion has been decided rigidly, that is 25:75.

According to the law, the rule in lower level should be more practical and technical, while higher-level rule should be more general because it should accommodate more interests of the institutions. However, in this case the situation is reversed.

Policies at the Village Level (LMDH)
At this level, there are three kinds of written policies:

- Memorandum of Understanding with Perhutani, which binds both sides
- Establishment certificate which includes basic plan which binds and control both sides including forest village community
- AD/ART by LMDH themselves

However, there are contradictions between the formal and informal policies, such as:

- The form of the organization. In the establishment certificate, it is stated that the organization is the form of association, while in AD/ART it is stated that the organization is in the form of corporation. These different forms have different consequences;
- Membership. In the establishment certificate it is stated that the member of the institution is all villagers of Tanggel, while in AD/ART it is stated that the institution is open for everyone. However, the mechanisms to apply for membership should be established through consultation between Perhutani and elements in the community, according to the activity;
- In the MoU it is stated that "forest village community have been involved in this agreement, including village government, Lembaga Ketahanan Masyarakat Desa, Takmir Masjid, Kelompok Tani Hutan, PKK, RT, RW, and Karang Taruna". From the definition, it is assumed that those who are outside the above mentioned groups are not the member of LMDH. Meanwhile, the local people perceive that the member of LMDH is the board of LMDH;
- There is no policy with regards to the cooperation between LMDH and other institutions, apart than its cooperation with Perhutani; and
- Similarly, there is no policy issued by the village government to support LMDH.

From the above policy, the institutions that affect the implementation of PHBM are: Perhutani, Local Government, Community, and third parties (NGOs, educational institutions, trader, etc.).

Institutions or forums which were created by Perhutani and government (i.e. LMDH, PHBM forum, PHBM team) should be reconsidered since their functions and roles of those institutions are often overlapped in the low level. Meanwhile, there has no benefit gained by the community while the forests are continued to degraded.

4.2.4. Gempol

4.2.4.1. Background of PHBM Agreement

PHBM program was conceptualized and socialized by Perhutani for the first time in 2001. Gempol village is very far from the capital of the district. It is located deep in the forest. Relatively isolated, the social relationship among its village members is different from that of other villages. Social relationship is very strong among members of the village. Stronger relationships exist between the community and Perhutani, and also between the community and the authority. From the beginning, the community is bound by Perhutani policies and authority. With this context, some agreements at the local level between Perhutani and community are well receive, even though it is in unwritten form.

PHBM as a system, which has different spirit with earlier Perhutani systems, can be used as an alternative of cooperation and conflict resolution which often occur

between community and Perhutani. Besides their normal relationship, conflict between Perhutani and Gempol villagers also happened in which Perhutani accussed the villagers for wood plundering. In 1998 – 2001, the tension between Perhutani and community was so high that it can be said that the community was at war with Perhutani. The critical time occurred after President Soeharto stepped down and reformation in Indonesia started. At that moment Perhutani authority just let wood plundering to take place and they can not do anything to prevent it. It was the moment when Perhutani did not have authority and was powerless. This condition was admitted by Perhutani employee who experienced it.

Conflict occurred in almost all of the area under Perhutani jurisdiction. This condition led Perhutani to take a new approach which involved community in each forest management activity. PHBM system was formed.

4.2.4.2. PHBM Awareness Raising Program and PHBM Agreement

Socialization of PHBM system in Gempol village was done in mid 2002. Legally, LMDH institution was formed on September 26, 2002 with notary public act no 120 by the notary office of PPAT Liembang Priyadi Daljono, SH. This institution is a legal institution, with full name Perkumpulan Masyarakat Desa Hutan (Forest Village Community Assosiation) “Wana Bersemi”. (There is no word that said about LMDH, the extraordinary thing is in agreement act, PMDH side is mentioned as forest village society group, for the next the word LMDH will becoming word used in this paper), community refers it as MDH. Then this institution established an agreement with Perhutani/KPH Randublatung in the form of collaborative agreement on Collaborative Community Forest Management (PHBM) in front of notary public on December 30, 2002. Implementations of PHBM program technically, are:

- Socialization (Introduction on the program)
- Building society trust by forming LMDH at the village level
- Gathering all elements to make an agreement or cooperation in front of notary
- Implementing LMDH agreement

The Process of PHBM Awareness Raising Program

As the new concept, the way PHBM is introduced to the community is crucial. If Perhutani initiates it in a wrong way, then this concept would be a time bomb for Perhutani. For example, if Perhutani presents the concept during socialization as a benefit sharing scheme, then the main interests of the community would be just on the benefit sharing and how to use it. The process of socialization that took place in Gempol village was just like that in other Perhutani areas, i.e. as an introduction of a new concept which was conceptualized by Perhutani and to be implemented in the community.

Perhutani invited village representative, village figure and pesanggem representative to introduce the collaborative concept that they offered to the community. Apart than this formal meeting (usually attended by KPH, field supervisor, Ajun, and also by representative from sub-district government officials), informal meeting was also conducted. Thus, several meetings were being held, but they were not attended by all members of the community.

It is necessary to point out that Perhutani was always the one who initiated the meeting. This gave the impression that Perhutani is the one who have interests in this program, and not the community. The success of Perhutani at the village level was due to their ability to convince key people at the village, i.e. head of LMDH, village secretary, village council (BPD), and the other village figures. These people then cooperate with Perhutani to socialize PHBM program and negotiate with other

figures who did not accept the program, the head of the village, and the other village institutions.

The Process of PHBM Agreement

PHBM agreement is the next step following the process of socialization of PHBM, and the establishment of the institution, i.e. LMDH, that could represents the interests of the community. This step is actually the most important step for the community, because it concerns with their interests, obligation and rights in forest management. In relatively short time, LMDH established agreements with Perhutani, village government, and the third party (entrepreneur). This can happen due to the intensity of the relationships between Perhutani and the key persons in village level, and the strong social relationship that exists among member of the community. Below are some of the agreements produced:

1. Agreement on the shared benefit

LMDH Wana Bersemi had already received a shared benefit for the total of IDR17.000.000. The money was used more for activities which can not be accountable for. However, the board of LMDH had come up with the following agreement:

Incentive for the board	: 12%
Incentive for the success team	: 5%
Village Communication Forum	: 5%
Sub-district Communication Forum	: 3%
Business Fund	: 40%
Social Fund	: 20 %
Operational	: 15 %

2. Cooperation agreement with entrepreneur

This agreement is established among 4 parties, i.e. LMDH, Village government, entrepreneur and Perhutani as the authority over forest resources. The agreement is about the retribution fund to be paid by entrepreneur to LMDH, and village government for the extraction of rencek, tree stump, and buried wood.

Some of those agreements were produced after many routine meetings, i.e. ten meeting sessions, which involved representatives of the whole stakeholders. Further analysis showed that the agreement only focused on how increase the income of the institutions, i.e. LMDH and the village. There are several points that are not covered, for example:

- How to implement the real cooperation in PHBM program. Until now, the management has been done by Perhutani only. Involvement of the community and LMDH in forest management was only limited to Perhutani activities such as: seeding, planting, land clearing, harvesting, and other activities. The genuine collaborative between Perhutani and LMDH has never been discussed seriously.
- How to use the shared benefits for community development. 40% of the shared benefits allocated as business fund is a controversial issue. The community and the village government wants to use the fund for physical development. There was a traumatic experience in managing subsidy fund and cooperation in previous years. Form and business format have not been thought yet. Based on previous experience, when there was high conflict in using the fund, the solution taken was usually to divide the fund equally to build physical infrastructure such as, mosque, road, secretarial office, etc. At the end, the fund, which was intended to increase community welfare, can not be enjoyed directly by the community.

The focus of the agreement on benefit sharing was related to Perhutani's approaches in socializing PHBM program and community's understanding of PHBM concept.

4.2.4.3. Role and Responsibility in PHBM Implementation

The role and responsibility in PHBM implementation can not be separated from PHBM policies. The elements that are involved in PHBM implementation are:

Perhutani
Perhutani is responsible for the management the forests and deals with its social, economic, and environmental problems. Perhutani is the element which interacts more with the forest. In the implemention stage, Perhutani is the first element which has major interest in forest management. Perhutani also has technical authority in managing the forests.

Government
Government plays a supporting role, because government has the authority over the territory and political power which could influence public activities. Government, through the PHBM communication forum, also has monitoring and evaluating roles in PHBM implementation.

Community through representative institution (LMDH)
As the second element in PHBM collaborative agreement, the community is participating in implementing the collaborative agreement. Legally LMDH (society) has the same position as Perhutani in managing the forest. But until now, the involvement of the community in forest management is limited to planting, harvesting or other activities (where technical guidelines have been set out by Perhutani).

Local Entrepreneur
Entrepreneur actually is a part of village community, but entrepreneur also has a different contribution from the villagers. Entrepreneurs have the permit to exploit forest resources, but they also have to consider forest sustainability and contribute to Perhutani and villagers. This is fundamental agreement between LMDH and local entrepreneurs because in Gempol village there are a big number of local entrepreneurs who use forest resources, such as tree stump, buried wood, fuel wood, and empon-empon.

Pesanggem
All of pesanggem in Gempol village have contracts with Perhutani so their responsibility and right are clear. Pesanggem has the right to use Perhutani land for planting agricultural crops, palawija, or seasonal crops. In return, pesanggem has to take care major plants of Perhutani within the period of the (i.e. 2-3 years). Furthermore, pesanggem also has the right to get a payment as high as IDR40.000 within the contract period. This money is to be paid at the beginning and at the end of the contract.

4.2.4.4. Organization Structure and Membership of LMDH

As a legal institution, LMDH whose members are the entire villagers have to deal with problems. Conflicts between Perhutani, boards, and the village side lead to a fundamental change inside the LMDH institution.

The Process of LMDH Establishment
The way of LMDH Wana Bersemi, can be divided into two phase:
1. Phase LMDH I

In this phase the head of LMDH is Mr. Yatno. The structure of the board was decided by Perhutani. People who sat in the board were the people who struggled for the founding of LMDH. The establishment of LMDH at that moment was not easy, because:

- PHBM concept was understood differently by each element; even within Perhutani, there existed different understanding about the concept. Within the community, there was a perception that, by signing the agreement, they can not longer access the forests. Whereas before they can use forest even though illegally. They even raised the possibility, in a meeting with the head of Gunung sub-village, to hire a lawyer to confront Perhutani if the agreement was continued.
- There are several public figures who were against PHBM as they feared it would threaten their wood business.

2. Phase LMDH II

After the end of LMDH I period, village government and Perhutani jointly selected the board of the second period democratically through direct election. The election was done by people from Perhutani, village government, and the community. During this period actually the community has strong bargaining power, because none of Perhutani and village government staff were elected to take up the position within the LMDH board. Perhutani wanted the position in the board to be taken up by retired Perhutani employees, but this idea was rejected directly by the community. After the democratically-elected board was formed, unfortunately the board was not ready with their program as the members are young people with less experience that that of the former board, village government, and Perhutani. This opportunity was taken by Perhutani to control LMDH. This was done by establishing a new structure which was called TIM Success at the sub-village level which consists of three Perhutani personnels. Then BKPH changed AD (basic principles of organization) and made new ART (elaborate more detail the contents of AD) without discussion with LMDH (Source: interview with key informants).

Membership of LMDH

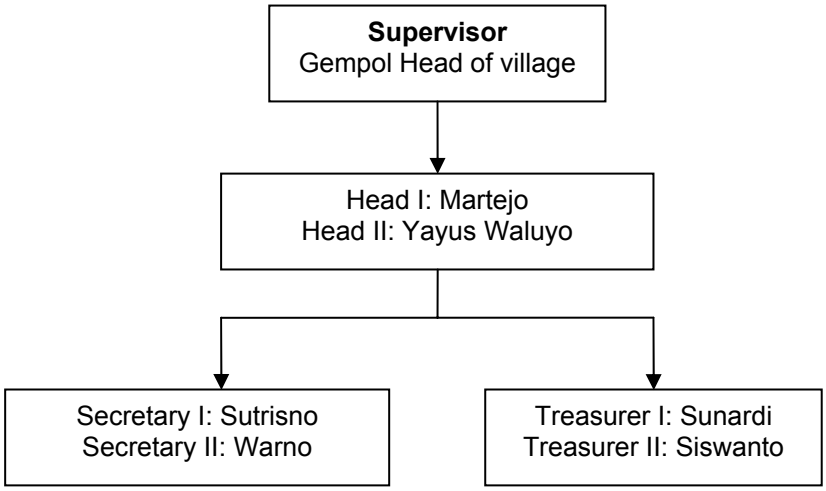
According to LMDH regulation (LMDH notary act), its members are the entire villagers. In reality, not all Gempol villagers are aware of LMDH. For them, the member of LMDH is LMDH board. LMDH board consists of representation from institution in Gempol (LKMD, BPD, teacher).

LMDH Organizational Structure

Organizational structure of LMDH follows the structure of modern organization. The structure of LMDH board are:

Supervisor : Basri (Head of Village)
Head 1 : Martedjo (wood entrepreneur)
Head 2 : Yuyus Waluyo
Secretary 1 : Sutrisno
Secretary 2 : Warno
Treeasure 1 : Sunardi
Treasurer 2 : Siswanto
Success team of PHBM: each sub village

LMDH Board Structure:



Source: LMDH document, 2004

4.2.4.5. Institutions of PHBM

Quantitatively, the results achieved so far indicated that there was a significant collaboration between LMDH and Perhutani. In less than two months, agreements were produced and the board was established in a relatively short period of time. These quantitative achievements will look different if we look at the processes used in establishing the board and the processes of decision making.

Internal LMDH
Actually the establishment of LMDH II was conducted democratically. Elected boards are the representatives wanted by the community, but the board cannot perform their tasks well. Factors that influence this are:

- Six of LMDH board are youth with common social status. Their power or influence is inferior compared to those of village government or Perhutani. We observed this the agreement/cooperation process that took place. It seemed they didn't have any power to influence policy-making even the internal policies of the institutions, and
- LMDH board members do not have sufficient organizational knowledge. This weakness can be observed in the way they run the organization and how they divide their tasks among themselves. The relations among board members are also not clear.

Other Institutions in Village
Generally community institutions that exist in Gempol village do not function well. Village government coordinates with LKMD and BPD only once a year to discuss about village development plan. From that description, it can be assumed that they are also not fully involved in implementing PHBM. Perhutani is the only institution that has enough power to implement PHBM. Perhutani dominated the whole process, starting from socialization, board establishment, formulation of regulation and agreements, and the implementation of agreements. Perhutani also has strong position because:

- Perhutani is the one who has the authority over forest management. This had been understood by most of Perhutani staffs. This understanding also prevails among the community and LMDH board. This understanding weakens LMDH position, and

- Only Perhutani who has the authority to manage the forests, from the productive point of view. As a company, Perhutani is very strict in implementing their programs. It is questionable that Perhutani and LMDH can collaborative on an equal footing if LMDH board and the community do not have proper knowledge in forest management.

Communication Forum
Communication forum is an institution produced by PHBM and it is legally responsible to the government where this institution was formed. At the provincial level, the forum is responsible to the governor, and at the district level it is responsible to the head of district (bupati). At the sub-district level, it is responsible to the head of sub-district (camat) and at the village level it is responsible to the head of the village. Member of communication forum does not come from the community or LMDH, but they come from Perhutani and government. The tasks of communication forum as per Bupati and governor decrees are as below:

- To coordinate and explain the operational activities of forest management to the community
- To advise, monitor, and evaluate the result and progress of PHBM activities
- To undertake other tasks which are related to the PHBM based on the major job and function of each institution
- To report the result of those activities to the governor of Central Java
- Legally, the written tasks and functions of communication forum are very clear. Nevertheless, the members of the communication forum do not know their tasks clearly

Success Team of PHBM
At the beginning success team was formed within the Perhutani, as an effort to support implementation of PHBM system. In Gempol, the village success team was formed down to the sub-village level (there are 3 sub-villages). PHBM success team at the sub-district level consists of Perhutani staffs, sub-village figures and head of group of certain family (RT).

LMDH Association
LMDH function is as a sharing body between all of LMDH in Randublatung. This association does not have board structure, work plan, or clear agenda. The existing board consists of head and secretary. LMDH association was formed during LMDH KPH meeting. The came to form this association came from Perhutani.

4.2.4.6. Policy in Implementation of PHBM

Perhutani policy and other related policies are:

- Board of Central Perhutani decree, No 136/KPTS/DIR/2001 on principles of PHBM
- Central Java Governor decree No. 24 year 2001 on Forest Resource Management in collaboration of community in Central Java Province
- Head of Perhutani decree at the level of Unit I Central Java No 2142/KPTS/I/2002 on the instruction of PHBM Implementation in Unit I Central Java
- Central Java Governor decree No 24 Year 2001 on PHBM
- Central Java Governor decree No 522/21/2001 on the establishment of Communication Forum on PHBM in Central Java
- Bupati Blora decree No 522/1992/2001 on the establishment of Communication Forum at the District Level

Whereas the policies at the village level:

- Notaries act Lembang Priyadi Daljono, SH. No 120 dated December 30, 2002 on the establishment of forest village institution “Wana Bersemi” in Gempol village
- Notaries act Liembang Priyadi Daljono, SH. No 121 dated December 30, 2002 on PHBM agreement between Perhutani KPH Randublatung with Forest Village Institution Wana Bersemi, Gempol village
- Planting Agreement letter dated April 1, 2003 between asper selogender and pesanggem
- Cooperative agreement letter developing forest sharing system between Perhutani KPH Randublatung and Mr. Jumingun
- AD (new version) society forest village institution (LMDH) Wana Bersemi Gempol village, dated June 1, 2004
- ART society forest village institution (LMDH) Wana Bersemi Gempol village, dated June 1, 2004
- Head of sub-District Jati decree number 522/459/2002, about forming PHBM communication forum level Jati sub-district

From these village level regulations there are some unclear points that may become the source of conflict. They are:

- In notaries act of LMDH establishment there is AD which say that form of this institution is “perkumpulan”, with all Gempol villagers, sub-district Jati, district Blora (chapter 6) as its members. Whereas the AD of institution does not mention about the establishment of LMDH in Gempol village;
- In ART, chapter 17; and
- In LMDH AD is mentioned: provision of business profits is arranged for forest farmer, LMDH board and village government and its percentage will be determined further in ART. Provision of the profits between Perhutani and LMDH is as the same as it used to be (i.e. 75:25). Only the proportion has changed :

Board incentive	: 12%
Success Team incentive	: 5%
Village Communication Forum	: 5%
Sub-district Communication Forum	: 3%
Business Fund	: 40%
Social Fund	: 20%
Operational	: 15%

From the above allocation of LMDH benefit sharing was not mentioned about the part of forest farmer. From this regulation we can see that the consistency of one regulation and the other (between AD and ART) needs to be improved. Also, at village regulation level, it is clear that role of Perhutani is dominant, compared to LMDH. Thus, Perhutani still has strong position in the community. Beside that these regulations are not pure products of the LMDH.

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