

A MODEL OF COLLABORATIVE FOREST RESOURCES MANAGEMENT TO IMPROVE THE PROSPERITY OF POOR FAMILY FARMERS IN EAST JAVA

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ABSTRACT

The model of collaborative forest resources management between the local government and poor Pesanggem families becomes one of important alternative strategies to develop forests sustainably and equitably. The focus of this research is the collaborative forest resources management between the local government and Pesanggem farmers. The aim of the research is to analyze how far the local government and Pesanggem farmer involve in the collaborative forest resources management. The research is conducted in Pasuruan and Malang. The number of respondent involved in the research is 60 respondents. The research finding shows that the participation level of the local government and Pesanggem farmers in the collaborative forest resources management is quite high. The activities of the respondents in the collaborative forest resources management are deciding the planting location, planning, evaluating, monitoring, and preparing the seedbed. The income level of Pesanggem farmers that actively involve in managing the forest resources is also quite high. The average of their income is Rp 500.000,- up to Rp 650.000,- per month. This means that they give high contribution to the family income.

Keywords: Pesanggem farmers, collaborative forest resources management, farmers' prosperity.

ABSTRAK

Model manajemen hutan kolaboratif antara pemerintah lokal dengan masyarakat miskin petani pesanggem merupakan salah satu strategi alternatif yang sangat penting dalam membangun hutan yang berkeadilan dan berkelanjutan. Fokus penelitian ini adalah manajemen sumberdaya hutan kolaboratif antara petani pesanggem dengan pemerintah. Tujuan utama penelitian ini adalah menganalisis keterlibatan petani pesanggem dan pemerintah dalam mengelola sumberdaya hutan secara kolaboratif. Penelitian ini dilakukan di wilayah Pasuruan dan Malang. Jumlah responden dalam penelitian sebanyak 60 informan. Hasil penelitian menunjukkan bahwa tingkat partisipasi petani pesanggem maupun pemerintah lokal dalam pengelolaan sumberdaya hutan adalah tinggi. Aktivitas responden dalam manajemen hutan kolaboratif yaitu kegiatan penentuan lokasi penanaman, perencanaan, evaluasi dan monitoring sampai dengan persemaian tanaman. Tingkat kontribusi pendapatan petani pesanggem yang aktif dalam pengelolaan sumberdaya hutan terhadap pendapatan keluarganya adalah cukup tinggi. Rata-rata pendapatan petani pesanggem yang aktif pada pengelolaan sumberdaya hutan berkisar antara Rp 500.000,- sampai Rp 650.000,- setiap bulan. Ini artinya kontribusi petani pesanggem dalam menyanggah pendapatan keluarganya cukup berarti.

Kata kunci: petani pesanggem, manajemen hutan kolaboratif, kesejahteraan keluarga petani

INTRODUCTION

Forests become potential resources to run the economy of local people, especially for those who live around the forests. Forest resources play an important role to boost the economical condition of the residents [Goulet, 2003]. Consequently, some groups of people consider the forest resources as the country's potential asset. In the recent years, it seemed that the government was not really successful in managing the forest resources due to the lack of residents' involvement as the partner of the government. The writer even can say that residents only become the victims. They are blamed for looting the forest, deforestation, etc. This phenomenon leads them to act aggressively towards problems regarding to forest resources. Recently, the government tends to neglect those residents who live around the forest. The government claims that it is to develop and save the country's assets. The forest management is then handled by big private companies. This leads to another new problem. Thus, one of the important solutions towards the problem is developing forest by involving the local government and farmers living around the forest, who are known as Pesanggem farmers.

In order to support the forest to play its ecological and economical functions, it is essential to put preservation of the natural resources into the main agenda. Maintaining water and land management as well as expanding job opportunities are also need to be carried out to increase the national income. To run all of these, the government and the residents living around the forest play the strategic role as the primary forest manager [Everett, 2001; Paryavaran, 2002; Bass, 2000].

To conduct the forest management, the local government and Pesanggem farmers have to put their priority in degradation controlling and deforestation so that the quality of the forest will not be getting

worse. The big number of critical land is an actual phenomenon that needs to be paid attention to. Consequently, many efforts have to be given to conserve the land, swamp forest, and natural forest as well as saving the natural resources through reforestation in the bank rivers and along the river. [Sumitro, 2000]. The local governments of Pasuruan and Malang have to be proactive in conducting the forest management, especially managing the teak, cajuput, and mangrove forests. As we know, forest rehabilitations have been done several years ago. It led to the extension of the forest width in those particular regencies.

In the collaborative forest resources management that involves the local government and Pesanggem farmers in a *POKJATANI PESANGGEM* (working group of pesanggem farmer), it is essential to build a strong working relationship to reach the goal of sustainable and equitable forest development. The local government and *POKJATANI PESANGGEM* have done well the sustainable and equitable forest management to raise the farmer family's prosperity.

Income sharing is done based on input sharing from each group. One thing that needs to be underlined from this system is the proportional income sharing of the forest resources production. The third party (private company or *NGO*) becomes the monitor and evaluator of the collaborative forest resources management.

Forests do not only have to be managed to improve the prosperity of the residents, but also it has to be managed as the integral part of the ecosystem. The forest managers have to be able to maintain the land, water, air, climate, and environment functions. Every change of forest functions needs to be followed by changing another function to keep the forest everlasting. Therefore, the stable natural balance will be maintained and it will not disturb the human living. This way, the value of forest

as the priceless natural resources can be maintained.

Nowadays, the local government and the residents have to put their priority in solving the problem of deforestation that is getting worse. The increasing number of critical lands becomes the phenomenon that has to be noticed. Consequently, many efforts have to be put to conserve the land, swamp forest, and natural forest as well as saving the natural resources through reforestation in the bank river and along the river. The local governments of Pasuruan and Malang have to be active in conducting the forest resources management, especially in utilizing the forest resources. The forest resources management involving the poor farmers living around the forest (Pesanggem farmers) in Pasuruan and Malang affects to the extension of the forest width. This is going to influence the ecological and economical aspects as well.

Based on the phenomenon in Pasuruan and Malang above (especially the one about involving the poor farmers living around the forest to manage the forest), this study aims to develop a model of collaborative forest resource management between the local government and the Pesanggem farmers to raise the prosperity of the poor farmers' families. It also aims to analyze the participation level of the residents living around the forests in managing the forest resources in the collaborative forest management. There are at least three significances of this study. First, it is to give a new point of view towards the concept of collaborative forest management between the local governments of Pasuruan and Malang and Pesanggem farmers. Second, it is to give an insight about the contribution pattern of Pesanggem farmers in the collaborative forest management. The last but not least, it is to develop a model of sustainable and equitable forest development which will form the culture of the local community (especially in the critical land that has never been explored

as the ecological and economical assistances).

THE METHODS

The research design used in this study is a qualitative research design completed by quantitative data related to the income of Pesanggem farmers and the informant from the local government who actively involve in the forest management. 60 respondents, which consist of 46 Pesanggem farmers and 14 informants from the local government, are chosen as the subjects of the research. Pasuruan and Malang is purposively chosen as the location of the research due to their abundance number of Pesanggem farmers who actively collaborate with the local government in conducting the forest resources management. Data collection is done through several steps. The first step is the researcher approaches the location of the research to acquire the general view of the situation and condition. In this step, the researcher meets the stakeholders who involve much in the forest resource management to know the situation and condition of the research setting. The second step is exploration. In this step, the researcher collects the data on the activity of the forest resources management done by the local government and Pesanggem farmers. The researcher also obtains the data from competent informants who know, understand, and concern a lot about the forest resources management. Another important step is deciding the technique used to collect the data. Since it is a qualitative research design, the technique used to collect the data is interview, questioner, and observation towards the activities done by the local government and Pesanggem farmers. The data analysis used in this research design is an interactive model of the collaborative forest management between the local government and Pesanggem farmers (their participation level) that support the sustainable and equitable forest development in Pasuruan and Malang. In analyzing the

data, the first step to be conducted is to look for and set systematically the interview transcript from the local government and the Pesanggem farmers, field note, and other data sources found in the field. All of these are collected to increase the level of understanding (towards a phenomenon) and help to describe the research findings. The analysis used to see the contribution of the Pesanggem farmers' income to their family is summing up the income from all of the family members that is spent to fulfill the family member/the whole family needs. The family income is formulated as follow:

$$I = W_j T_{MJ} + V$$

In which:

W_j = the income from the family member j

T_{MJ} = the time consumed to go to work by the family member j

$$I = W_F T_{mF} + W_w T_{mW} + N W_c T_{mc} + V$$

In which:

F = Father

W = Wife

C = Children

N = Number of Children

We used to assume that the activity of rural residents and the local wisdom become the barrier to the modernization. However, nowadays, this turns to be the social capital. The forest resources management done by residents living around the forest (associated in *kelompok kerja/Pokja* or working team) gradually show its usefulness and positive contributions to the residents living in Pasuruan and Malang regencies. Both regencies have been successful in empowering the residents to actively participate in the sustainable and equitable forest resources management. Cajuput, *Sengon* woods, teak woods, and mangrove are some of products of the collaborative forest resources management carried out by the local government and Pesanggem farmers.

RESULT AND DISCUSSION

Habits, cultures, and activities regarding to the collaborative forest resources management in both regencies are no longer seen as the contrary to physical construction. They are now believed as the agent of change living side by side with the residents. They are also used as the modern tools to fix the damaged ecosystem, especially the surrounding environment. As the agent of change, they attempt to always improve the quality and quantity of the collaborative forest resources management. The improvement is carried out through contributing ideas to the policy maker.

In managing the collaborative forest resources, the local government and Pesanggem farmers are trying to fix the existing organization. The institution of the local government and Pesanggem farmers can go hand in hand with another institution that has the same goal in order to improve the forest resources' quality in the ecological and economical aspects. The model of the collaborative forest resources management that takes an important role in managing the forest resources in Pasuruan and Malang can also be a solution of deforestation done by the group of irresponsible people. Nevertheless, many people still think that local wisdom and non-formal institutions managing the forest resources are the ones who do not support the forest development.

Mostly the Pesanggem farmers in the committee of pokja (*kelompok kerja/working team*) and the client of the local government who run the forest resources management strongly believe that the collaborative model are able to improve the ecosystem quality in the ecological and economical aspects. Both sides (the farmers and the clients) need to share authority and have equal portion of duty. Besides, both sides have to put aside the wrong assumption which says that the forest resources management is just a ceremonial activity.

The attempt to improve the empowerment to develop the ecosystem quality is carried out in an integrated way. It includes the activity of farming, fishing, and foresting. Those activities are supported by farming and plantation developments that are able to create and expand the job opportunity as well as boosting the income and prosperity of Pesanggem farmers.

Positive and political supports are given by the local governments and the stakeholders to the collaborative forest resources management. The efforts to reforest the damaged forest through the collaborative forest management have been declared. It is to support the idea of the collaborative forest resources management that is implemented by the local government and Pesanggem farmers. This is very helpful since the local government becomes the institution that is fully responsible to the forest management.

The role of the local government of Pasuruan and Malang in empowering the Pesanggem farmers to develop the forest closely relates with the administration orientation of the local government that support the sustainable forest development. It means that the forest development has to be able to produce something positive in the ecological and economical aspects. Administration system for a better change is stated as an attempt to reach the modernization in more concrete way as the modal of human development as a whole.

The relationship between the administration and the renewal of economic, social, cultural, and environment aspects is explained in the administration development. As the development agent, the local government of Pasuruan and Malang implement it in the leadership and policies as well as the freedom

given to the residents living around the forest to manage the forest resources. In addition, the local government also gives a chance to private sectors and business plan developer to guide the residents in Pasuruan and Malang to concern about the social, cultural, and economical activities in their environment.

It seems that the potential to empower the local government and Pesanggem farmers' community as the basis of the sustainable and equitable forest resources management in Pasuruan and Malang is quite high. It can be seen from the big number of people who involve in the forest resources management in Pasuruan and Malang. They make groups in farmer's work group (Pesanggem farmers working team).

Another activity that is also carried out by the Pesanggem farmers is identifying the most dominant barrier that can potentially obstruct the sustainable and equitable forest development. After the farmers have identified the barrier, they try to find out the effective solution to solve it. The solution given is in line with the aims of collaborative forest resources management, such as developing the method of the collaborative forest resources management, the material and its implementation, and the skill of exploring the forest resources to produce the sustainable and equitable forest resources. To empower and coordinate the local government and Pesanggem farmer to manage the forest resources, a design of the model of collaborative forest resources management between the local government and Pesanggem farmers need to be well-planned. The model of the collaborative forest resources management is planned as follows:

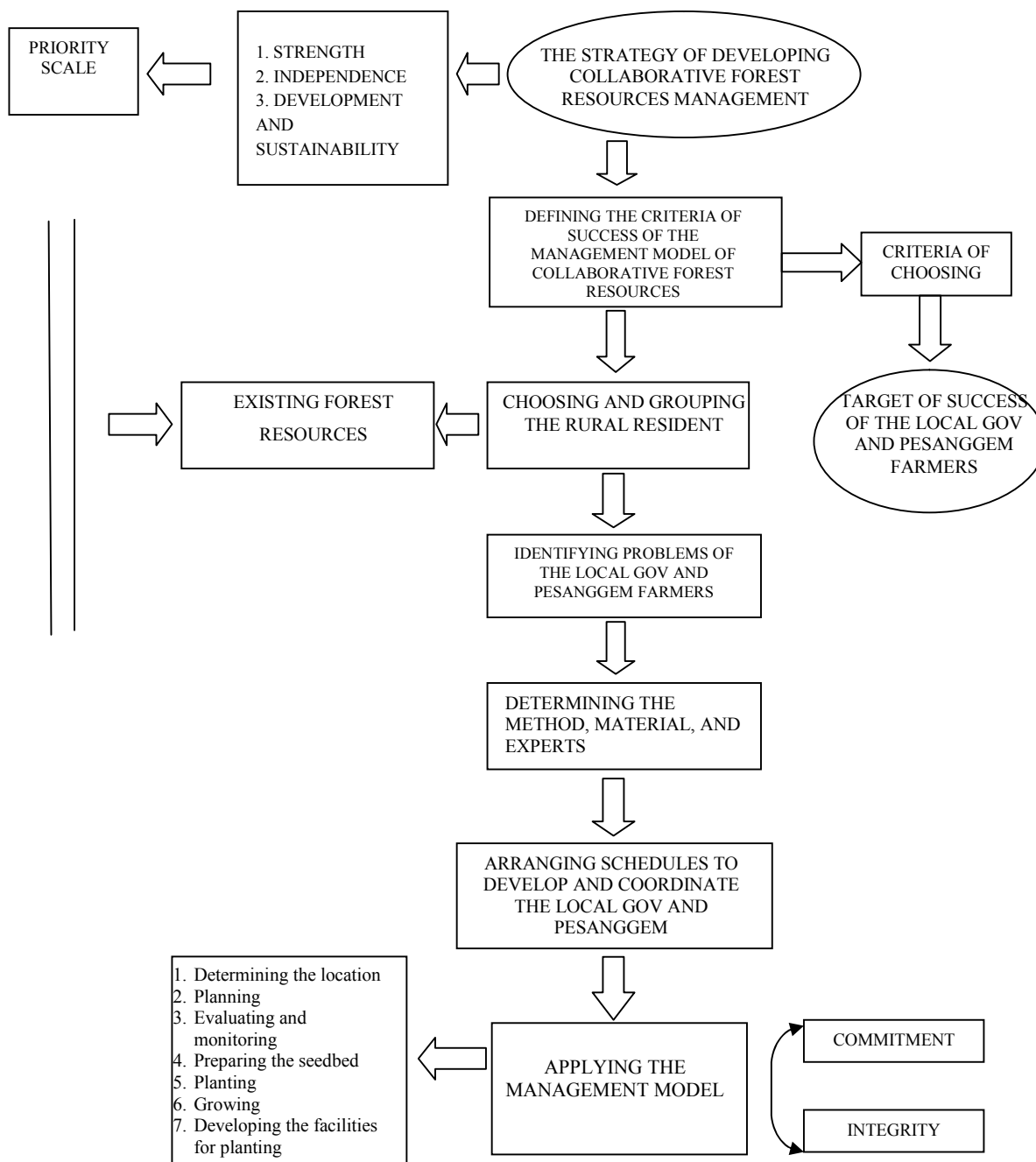


Diagram: The model of the collaborative forest resources management between the local government of East Java and Pesanggem farmers

To develop the strength of the institution, the local government and Pesanggem farmers need to underline several points. Those are: to understand the whole program of social forestry, the sustainable forest management, the rules and mechanisms to penalize the illegal logging, and the information and communication system of social forestry agents. The information about those points above might be spread through several activities

established by the local government, such as a system data-based workshop of the social forestry program, a secretariat establishment in desa, kelurahan, kecamatan, and Kabupaten in Pasuruan and Malang, and a working relationship between *NGO*'s and private companies.

The income of Pesanggem farmers who actively participate in the management of the forest resources significantly

contributes to their family earnings. It means that their contribution to the family income is quite high. Generally speaking, the average contribution of the active Pesanggem farmers is Rp. 500.000,- up to 650.000,- per month. In short, their contribution to their family income is much bigger than other families. This significantly raises the family earnings, so we can no longer say it is a supplementary income. Instead, it is the largest earnings of the family.

Developing the human resources of Pesanggem farmer in order to improve their empowerment has to be put into the higher priority in the sustainable development mapping. Otherwise, it will create a high social gap and dependence. The sustainable development is a process that tries to optimize the usefulness of the natural and human resources through synergize them in the development process. [Moeljarto; 2003, Richards. 2004].

An encouraging strategy has to be carried out to optimize the potential resources of the resident so that their productivity level gets higher. Hence, the residents and their environment are able to actively participate in adding economical values. The residents coming from the middle and low economical condition are going to increase their potential. In short, we can say that the improvement of Pesanggem farmer's participation level does not only add the economical value, but also add the social and cultural values.

Managing the existing forest resources has to be done well and suitably in order to improve its empowerment so that its adding value affects the residents who actively involve in it. [Headley, 2001]. From the research findings regarding to the collaborative forest resources management between the local government and Pesanggem farmers, it is found that there is a paradigm which emphasizes on the local resources management that is well-known as

community-based resources management. From the data analysis and research findings, the researcher proposes that the sustainable and equitable forest development that is conducted by the local government of Pasuruan and Malang and Pesanggem farmers is the product of the residents' own creativity and initiative.

The managerial development notices this phenomenon as the product of the residents' creativity and initiative. The role of the local government in this case is to create an atmosphere which enable the residents to mobilize resources around them to fix the problems they might face, according to their priority. To improve the participation level of the local government and Pesanggem farmers to conduct the sustainable and equitable forest resources management, the social learning is also introduced. It means that social interaction among the residents who have strategic position in the institution (e.g. community institution of forest village) has to be established. It aims to develop their skills through the problem solving activities. It also aims to emphasize the importance of strategic management through developing organizations which enable them to adapt with the environment and fulfil the demand of their surrounding.

The strategic management does not attempt to control and program humans' behaviour. Instead, it helps to develop the residents' initiative to solve the problems that they face [Hanani, Jabal, Mangku; 2003; Said, 2003]. The strategic management tries to empower the residents and the member of institutions to actualize their potential. The condition above shows similar point to the residents' situation. The residents have experienced the emancipator position, in which they did anything based on their own initiative and creativity. They have already had the strength to carry out the sustainable and equitable forest resources management, but they are still unable to fully fix the problems they face. They still require helps and guidances from the outsider. The help and guidance from the outsider are needed to

stimulate their motivation. The help and guidance are mostly given by the local government, university academician, *NGO*, etc.

Organizing the human resources (the local government and *Pesanggem* farmers) is a planning mechanism of local people-centered development that emphasize on social learning technology and program-formulating strategy. It aims at the local government and *Pesanggem* farmers to improve their self actualization in conducting the forest resources management. After exploring the potential of the local people resources, the next thing to do is "acknowledging the rights" of the potential management. Without any acknowledgement of the potential management from the outsider, the development of the local people resources will be useless. The local government and the residents have to be given a freedom to develop their potential based on their bottom up. Therefore, they are able to improve their skill so that they can avoid the dependence towards others.

The sustainable forest resources development refers to the forest development aiming to fulfill the present generation's needs without doing any harms to the next generation. The risks and consequences of each forest development nowadays should not be inherited by the future generation. Yet it has to be fairly considered by the present and future generation, so the sustainable development can be carried out.

The model of the collaborative forest resources' management shows that the local government and the residents have put the efforts referring to people-centered forest development. They have to optimize the participation and improve the empowerment. It can be seen from the high level of participation of the local government as well as the residents in the forest resources management. This leads to the increasing level of participation of the local people in

improving their independence and defense towards their problems.

The local government that involve in the forest resources management can possibly collaborate with *Pesanggem* farmers to establish the sustainable and equitable forest development. This statement is in line with a theory by *Giddens*, [2005]. He stated that the local government have to involve the local people in the management of the forest resources to escalate the productivity of the organization/institution that have been created. A good and harmonious relationship between the local government and the residents will significantly support the sustainability of the forest resources management in the ecological and economical aspects.

In the higher step of running and developing this program, the residents might find more difficulties. In this step, they need an organizer who can encourage and support them. If we relate this with the analysis by *Moeljarto*, [2003], there are some similarities of the research findings to his. One of them is that the local government program in empowering the residents aims to increase their income level.

From the research findings, the phenomena can be analyzed with the concept of "three-direction-suitability." According to *Moeljarto*, [2003], the organization as the evaluation focus of the institution's dimension has to be able to provide programs to convert the ideas and the needs of the residents to the organization decision, complete the organization with many sources, and mobilize them to fulfil the residents' needs. The programs aims to increase the income level of the residents and improve the government's skill in developing techniques, organizing, planning, and implementing. Specifically, the program is to develop the decentralization model in the decision making. Bottom up planning involving the residents to participate in their needs'

decision making is expected to come up through the program.

By implementing the model of "three-direction-suitability", the empowerment of the residents living around the forest will reach its aim. This is shown from: (1) The local government program in empowering the residents living around the forest, and (2) Organization, which means the local government and the related institution (The Department of Forestry and Estate Crops).

To comprehend the real condition of the residents, we need to refer to the idea stated by *Friedmann*, [2004]. He said that there are two steps of empowerment, they are individual empowerment and interpersonal empowerment which is known as "spiral models."

The empowerment process is done individually or in groups. This process is the social changing that relates to the relationship of the people from different social level that is signed by the existence of economy polarization. Therefore, the individual with the same condition create a group and establish a "collective self-empowerment." The dialogical encounter is often carried out in the group to grow and improve their loyalty towards the group. Each member of the group grows his/her group identity and determines what their groups' interest. In addition, each member of the group strives to critically analyze their situation, including analyzing the political dimension and building power to change the situation. In this phase, consistence occurs. It is a term to explain about the stimulation process that transforms the self-critical awareness through the power of the collective/group activities. The activities can be done in the form of a group discussion or dialog within the member of the group. Each individual in the group will learn about how to describe something and express their opinion. In other words, they are learning about how to formulate a problem, analyze it, and design a problem solving to fix it.

CONCLUSION

The model of the collaborative forest resources management between the local government and Pesanggem farmers formulates the sustainable and equitable forest resources management that can boost the family income of the Pesanggem farmers in Pasuruan and Malang. The model is carried out through the social interaction among the local government and the residents living around the forest. Furthermore, the model also helps them to develop the skill of problem solving and strategic management. These skills are use to expand the organization which enables them to fulfill the needs of the surrounding as well as to empower the group member to actualize their potential. Therefore, the model of the collaborative forest resources management does not only increase the Pesanggem farmers' income, but also it improves the preservation of the environment.

Implications in research, a monitoring and evaluating program from the outsider (especially *Non Government Organization*) and the private institution) needs to be more intensively carried out. Thus, the organization in the lower level as the evaluation focus of the institutional dimension can provide certain programs to convert the aspiration and the residents' needs to the organization decision to complete the organization with enough sources and mobilize it to fulfill the residents' needs.

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