# Strengthening of Local Agroforestry Policy towards Food Security for the Community around the Marga Forest in Lampung Province1)

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# Strengthening of Local Agroforestry Policy towards Food Security for the Community around the Marga Forest in Lampung Province<sup>1)</sup>

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### **ABSTRACT**

In Indonesia, there is a right forest which is could be individual or customary forest. In Lampung, the two areas referred to "marga" forest since it is located outside of state forest. Generally, structure of the vegetation in "marga" forest consists of various trees species that can be called a forest managed by agroforestry. In West Lampung was known to have "marga" forests that formed as customary forests and also individual forests which are managed by community at surrounding village. Community maintaining their customary forests in order to keep it sustainable with existing customary rules and had received government awards for its maintained sustainability. To meet the daily needs, they take from individual forests. Until now the two forests do not have a legal framework that making it vulnerable to possibilities of changes in land use in the region if the authorized government wanted it. These changes can have an impact on the change of land use from agroforestry into a monoculture plantation and/or housing and can reduce the food security that has been there. Based on that, the research that was conducted at Sukarame, Bedudu and Bakhu villages in November-December 2015 is to obtain alternative policies development that can ensure the functions sustainability of the two forests.

Keywords: agroforestry, local policy, marga forest, land use

### **Backgrounds**

The areas of "marga" forests are scattered like small spots in some areas of West Lampung. Part of the "marga" forest is recognized as belonging to the *Buay Belunguh* clan, an indigenous community that has long dwells and recognized as one of the clan in Lampung. Two of the forests which is belong to *Buay Belunguh* clan has a total area of 816,283 hectares covering Pematang Bakhu Forest (of 750,948 hectares) and Sukaraja Forest (of 65,335 hectares), located

in the sub-district of Belalau and Batu Brak, West Lampung. The ownership status of the forests are owned by the Indigenous People or *Ulayat* (Kecamatan Batu Ketulis, 2010).

Topographically, "marga" forest which is located in the village or Pekon of Sukarame, Bedudu and Bakhu located in Pematang Bakhu and has an area of 750,948 hectares and located at the altitude between 800-1120 meters above sea level (Kecamatan Batu Ketulis, 2010). The forests have become source of water for the paddy fields underneath and also for which in the surrounding pekon. For the community in the three pekon, maintaining their "marga" forest has become a liability because it is according to the customary conditions and they can take the timber for building their houses from this "marga" forest once in a lifetime of maximum 5m<sup>3</sup>. In addition they can also take the non-timber forest products from this "marga" forest for example fruits.

The main livelihood of the community in Pekon of Sukarame, Bedudu and Bakhu is as the farmer of coffee and pepper that were planted in the yard or people forests belong to the individual which planted by agroforestry system. The outcome of the main livelihood from coffee and pepper based agroforestry are used to meet the needs such as for schools, or household daily needs, and also to fulfill the needs of tools and agricultural inputs. Thus they meet their life needs from two forest lands that is "marga" forest and people forests or private forests or rights forest. In other words, the food securities of three pekons depend on the function sustainability of the two forests.

The existence of "marga" forest is inherited by generations of their clan ancestors. The highly dependent on the timber availability make the local people strongly adhere to their clan rules, especially in the use of timber. For their rights forests, they do an intensive maintenance because they also depend of these forest products as a source of family income. It means that the community has an understanding that forest resources have become part of their life system. According to them, the forests have a function that is directly related to the daily life, that is: Forests as timber reserves for the needs of the houses, Forests as a buffer from landslides, and Forest as a water reserve area.

For the community of Sukarame, Bedudu and Bakhu, maintaining their "marga" forests is not a difficult thing, as long as the prescribed rules adhered together. So far, the existing customs rules

are considered to be able to conserve their "marga" forests from security disturbances internally or from pekon community.

On the other hand, the external interference, economic demands that is directly proportional with the urging pressure on the forest areas by the loggers or people from outside pekon is a heavy burden apart for local communities, especially in terms of maintaining the security of their forests. It doesn't even rule out the possibilities of pressure from Pekon internally to convert their "marga" forests. Local communities face the fact that the preservation and land fertility of the customary forest areas are teasing other parties to make a pressure to open the "marga" forest by the people from outside. For example, in 1988 there was other group of local communities, namely "Sugihan" clearing land in the forest in Sukarame Pekon areas. Lucky that it could be prevented by customary leaders together with pekon leaders and local communities of Sukarame. It is proved that maintain and manage "marga" forests is not a difficult thing for the local community, although there are growing concerns related things that might happen and how to overcome them are beyond their capabilities.

The Model of "marga" forest management applied by local community has been recognized by the local government, both Lampung Province and West Lampung District. In 2003, the local community of 3 pekon got the award of environmental saviors from the Provincial Government of Lampung. Also in August 2009, the Governor of Lampung awarded the Kalpataru Trophy (environmental savior) to the local community of "Marga" Forest Pematang Bakhu managers, that is "marga" forests which is maintained the community of Pekon Sukarame, Bedudu, and Bakhu. Although it has been awarded from the District Government of Lambar, but the government's concern on the sustainability of "marga" forests is still minimal because so far almost all forest development program in 3 pekons are the initiative of the local community and had nothing to do with government programs in pekon level.

This condition makes the existence of "marga" forest and right forest vulnerable anytime to any any zoning changes or function changes, from the forests managed by agroforestry into homogenous forests or settlements. It means that this is necessary to have a policy as the legal basis for the sake of management function sustainability of these two forests managed by agroforestry. Based on the reasons described, the purpose of this study is to analyze policy

development alternatives at local level that will ensure the sustainability of "marga" forests and rights forest in the study sites to be managed by agroforestry.

### Methods

The study was conducted in pekon of Sukarame, Bedudu and Bakhu, West Lampung District in November-December 2015. The method used is descriptive qualitative methods according to the collection of data by interviewing the key actors and a desk study of relevant policies and references (Yin, 2008). The samples that would be interviewed were determined by purposive sampling method. Adequacy of materials collected through interviews using the snowball method so that there is no limitation on the number of key actors interviewed (Rianse, Usman and Abdi, 2010).

### **Results and Discussion**

### Agroforestry that Applied in Marga Forest

Forests resources become part of the life system of the farmers in Sukarame and Bedudu Pekon in the Belalau Sub-districts and Bakhu Pekon in Batu Ketulis Sub-district, West Lampung District. In the region there are "marga" forests and private forests managed by farmers. "Marga" forest is a term used by local farmers for the forests owned and managed by indigenous or *ulayat*. While Pekon is a local term used in West Lampung District to replace the term of village (Wulandari and Cahyaningsih, 2010). "Marga" Forest of Pematang Bakhu managed by the community of those 3 villages has a role as a buffer zone that serves as a water reservoir areas. Farmers are much relying on the availability of water from "marga" forest to fulfill the water needs for households, agriculture including irrigating the paddy field in pekon and surrounding areas. In addition, "marga" forest has the potential of non-timber forest products (NTFPs) that can be utilized by farmers. The type of NTFPs commonly used by farmers is rattan that used as raw material for the manufacture of handicrafts (Wulandari and Cahyaningsih, 2010).

The existence of "marga" forest is perceived by the community to be able to provide considerable benefits for the life of the community around the "marga" forest settlement. In this

"marga" forest there are various types of vegetation in the form of timber. According to Tampubolon (2011), the dominant vegetation in the "marga" forest of Pematang Bakhu including klutum (*Verbenace sp*), balam (*Payena sp*), banyan (*Ficus benjamina L.*), bunu (*Colona scabra*), pasang (*Quercus sundaica*), forest amber (*Agathis sp*), medang (*Litsea sp*), suren (*Toona sureni Merr*), perakit (*Homalanthus*), dan walnut tree (*Canarium sp*).

Besides the timber forest products, "marga" forest of Pematang Bakhu also has the potential of non-timber forest products, such as rattan (*Calamus sp*) dan bamboo (*Bambussa sp*). Rattan and bamboo are utilized by the farmers personally to make fences, rice cover and walls of the house. The existence of "marga" forest more emphasizes to its sustainability function so it is not used as the main source of income. This is because farmers do not adopt the use of "marga" forests in financial to increase revenue. However, "marga" forest became part of the life system of the farmers. The functions of "marga" forest are as wood reserves for the needs of the houses, a buffer from landslides, water reserves areas and as the windbreak, particularly in coastal areas.

The farmers' income is not only derived from the "marga" forest, but also can be obtained from the private forests. In the private forests in Belalau and Batu Ketulis sub districts, the use of agroforestry patterns types in land management are in the form of agrosilvikultur and agrosilvopastura. Agrosilvikultur is a form of agroforestry that combines activity or commodity of forestry with agriculture on a land management unit, while agrosilvopastura is the combination of forestry plants, crops, and livestock (Wulandari, 2013). Revenue obtained from private forests in this study was defined as the income of farmers from the sale of private forests products such as the harvest of coffee (Coffea spp), petai (Parkia speciosa), durian (Durio zibethinus), mangosteen (Garcinia mangostana), areca nut (Areca catechu), avocado (Persea americana) and pepper (Piper nigrum) which is always there in the private forests.

### **Customary Forest Regulations in Research Area**

Pekon of the study site is a regional division of Turga Pekon and declared as a definitive village in 1934 and as it was still an administrative region of North Lampung District. In 1991, when the West Lampung District was formed as a division of North Lampung District, Turga Pekon then turned into part of the administrative region of West Lampung District. The community of 3 pekons is descended from the same clan that is *Buay Belunguh* Clan.

Descent successor of *Buay Belunguh* Clan living in the 3 pekon call their "marga" forest with its own name, that is "*Pelutihan*". In 1982, it was validated a custom regulations on Procedures for Customary Forest Management. Things regulated under the custom regulations are regarding to access in the use of timber for the new comers (FPP, 2009).

If there are outsiders, who later married the girl or flunky coming from local communities of pekon, and then decided to settle in the pekon, then the person is considered to have become a community of Pekon, then that person becomes co-own the rights to use the timber from pelutihan to build their homes. But they have to build the house only inside pekon and the timber taken is not to build houses outside the pekon. But if married, then go out from pekon or migrated and not settled within the pekon, then they have no right to use the timber from the "marga" forest. Such regulations are made for reasons in addition to settlements for the new families, it is also to prevent the timber brought out of Pekon and then utilized commercially.

Progress in the sustainability of "marga" forest and rights forest ecosystem, do not spin out of control by customary elders and local leaders. Wisely, those leaders issued regulations and then documented in the form of local policy or pekon policies, which is then adhered by the entire clan. Only 3 written customary regulations that are relevant to the management of forest resources in the pekons of research sites up to 2016, are: (1.) Decision of Village Head or Peratin Pekon Sukarami, No. P/004/KPTS/IX/2002, on "Sukarame Protection Forest and Fishery Products and Village Security", (2.) Regulation of Pekon Bedudu, Belalau sub district, West Lampung District Number 03 year 2005, on Forestry, Plants and Fruits Management, and (3.) Regulation of Pekon Bakhu, Belalau Sub district, West Lampung District Number 141/003/KPTS/BKH/H/Year 2006, on Management of Community Forest/Hutan Marga of Pekon Bakhu.

### Local Agroforestry Policy Development in Research Area

As we know that the forest is an ecosystem unity in the form of landscape with the content of biological natural resources dominated by trees in their natural environment, cannot be separated one another (Comia *et al*, 2015). It means that the definition of forests cannot be separated by

any interference in its management as well as biodiversity in the forests. Based on the regulation of Ministry of Environment and Forestry Number 32/Menlhk-Setjen/2015 is known that the forests which are encumbered to a specific right and referred as rights forest. Thus, this rights forest is of course could mean that this forest was managed by a group of community both individuals and groups. When the forest is managed by the customary peoples then it referred to as customary forest.

More details in Minister Regulation 32/2015 states that customary forest is a forest located in the area of customary legal community. While the so-called customary legal communities are communities that have historically by generations settled in a particular geographical area because of the ties to the ancestral origin, the existence of a strong relationship with Environment, and the system of value system which define the system of economic, political, social and law. Based on these definitions, then communities who live around the "marga" forest can be called as customary legal communities.

To ensure the sustainability of "marga" forest, its forest land which managed by the community in 3 pekons, based on the Minister Regulation 32/2015 can be proposed for admission in the category of rights forest, both for private forest or the yard around the house and the "marga" forest which is jointly managed. According to Wulandari (2016), policy development is one important key for guarantee the program sustainability to be achieved. Recently "Marga" Forests could not be included or mentioned as customary forest due to located outside of state forest and not yet be recognized by any local or national government policy. It such as mentioned at Laws 41 year 1999. Under the field conditions, then communities in 3 pekon who currently manage the "marga" forests had just be called as the holders of rights forest.

As a next step so that this rights forest is recognized its customary rights then need to go through two processes, that is:

(1) to be defined by the government as it is written in Regulation of Minister Environemental and Forestry number 32/2015 Article 5 and the community groups in 3 pekon should established a cooperative first.

(2) the cooperative apply to be given a legal shelter in the form of local regulations so that it can be proceed to the central government and designated as customary forest complete with the communal rights. Of course the process of developing regulations will be a lot costly, exhausted time and energy, so it has to be prepared a long time before with carefully.

After the legal process for the rights forest and customary forest are done, then based on the Article 11 letter f, the local government and the general director of Ministry of Environment and Forestry or *Kementrian Lingkungan Hidup dan Kehutanan* (KLHK) have the authority to prevent the conversion of rights forest, so that the functions of individual rights forests and "marga" forest as a source of food security at the research sites are well maintained. Other advantages if it has been determined are the presence of various facilitation on technology development, social entrepreneurship capitalization, certification, and others to the making of customary forest maps.

From the economic side, if it has been designated as rights forest and customary forests, the government will not levy of Utilization of Forest Resource Products or Pemanfaatan Sumber Daya Hutan (PSDH), providing relief on property taxes, permitting ease of the utilization of forest products also export, and reorganize the use of environmental services in these forest areas (Article 14). When the rights forests and customary forests have been defined and managed as before that is by agroforestry then it will be a guarantee that it cannot be arbitrarily altered to the function of forests. It is expected there will be sustainability of food security in three pekon of research sites which the forests are managed through agroforestry. Food security will be happened at 3 pekon of research area such as mentioned at Law 18/2012. Definition of Food Security which mention in Laws 18/2012 is a condition of food fulfillment for the country to individual, which is reflected in the availability of sufficient Food, both in quantity and quality, safe, diverse, nutritious, equitable, and affordable and does not conflict with religion, beliefs, and culture, to be able to live healthy, active, and productive in a sustainable manner. As usual in community based forest management program in Indonesia, feeling secure in the heart of each community in managing the land will influence to their performance on forest products of Timber Forest Products (TFPs) and Non Timber Forest Products (NTFPs) management including agroforestry products from the forest will be assured (Wulandari and Budiono, 2016; FAO, 2009).

Conditions that are expected in the Laws Number 18/2012 above is in highly accordance with Government Regulation or *Peraturan Pemerintah* (PP) Number 17/2015. At article 1 of that PP mentioned that Food Security and Nutrition is the conditions of fulfillment by the Food and Nutrition for the country to the individuals, which is reflected in the availability of sufficient food, both in quantity and quality, safe, diverse, adequate levels of nutrition, equitable and affordable and does not conflict with religion, faith and culture, to achieve a good Nutritional Status in order to live healthy, active, and productive in a sustainable manner. More specifically mentioned in paragraph 2 that food is anything that comes from biological sources products, of agriculture, forestry, plantation, fisheries, livestock, and water, either treated or untreated designated as a food or beverage for human consumption, including ingredients of additional food, raw food, and other ingredients used in the preparation, processing, and/ or manufacture of food or beverages. Finally, based on logical descriptions above and several food security policies, it is revealed that strengthening of local agroforestry policy in Bakhu, Sukarame and Bedudu will guarantee the sustainability of the "marga" forest.

### **Conclusion and Recommendation**

It is immediately need to be done the process of designation proposal on people forests or private forests as the rights forests and "marga" forests which is managed in groups into customary forest which is managed communally. Once set its policies then both the forests will be protected from the conversion of forest function that had been managed by agroforestry. There is a guarantee that it will not be changed arbitrarily on its function so that food and nutrition security of the community in the three villages will be ensured. The designation of the rights forest and customary forest managed by *ulayat* have to go through the process of developing local regulation so it needs a well and carefully preparation in the aspects of time, substance and costs.

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