

ANTI-DEFORESTATION MODELS ON SOCIAL FORESTRY SYSTEMS IN INDONESIA

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Abstract: *The social forestry programs introduced by the government are controversial. Some argue that there is a paradigm shift on forest resource management leading consequently to economic equality for instance. However, many experts are worried about the deforestation that may be caused. The current research aims to find out the anti-deforestation models on social forestry systems by involving the roles of the regional government. In real, the groups of farmers are unknowledgeable to what they have to do, and they feel that the central government “ignored” them after receiving the social forestry certificate. This research employed two sources of data: primary and secondary. Primary data are associated with depth interview with the groups of famers receiving the certificates and secondary one includes the regulations that are relevant to the problems studied. The chosen data were prescriptively and qualitatively analyzed by applying the theories of forest resource management proposed by Ostrom.*

Keywords: *Anti-deforestation, social forestry, government*

I. INTRODUCTION

Social Forestry programs introduced by the government through the Minister of Environment and Forestry Regulation No: P.83 P.83/MENLHK/KUM.1/6/2016 about social forestry (Ministerial regulation KLHK 83/2016 and the Minister of Environment and Forestry Regulation No: P.39/MENLHK/KUM.1/10/2017 about social forestry in Perhutani work area (Ministerial regulation KLHK 39/2017) mandate that the society has right to manage the land. It aims to support the people’s productivity and to achieve an economic equality. Its development is based on the typical conditions of the regions. However, the shift of forest functions follows. Chocolate plants, beans, eucalyptus, and fishing areas are examples of forest function shift due to the deforestation.

The groups of farmers receiving license of forest resource management are restricted to cultivate the land in definitive areas only as printed out in the Ministerial Decree. The chief of the groups is in charge to any kinds of violations committed by an individual and or other members of the group in meeting their rights and obligations. It is also banned to shift the forest’s functions, to trade, to pawn, and to enlarge the areas without the Minister’s agreement. Based on the interview, the certificate holders confess that the government “ignores” them, and they have no idea what to do next unless doing plantation as stated in the Ministerial Decree.

The given conditions demonstrate that the inquired reports and controls towards activities are poor so that to how the government is sure that they are loyal on the Ministerial Decree or, in contrast, violate the agreement such as committing the deforestation, remain questionable. The Minister of Environment and Forestry Regulation No: P.30/Menhut II/2009

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about the subtraction procedures on the deforestation and forest degradation defines deforestation as a permanent change from forest areas to non-forest areas due to human activities. Indonesia dictionary defines it as logging activities. It occurs when the rain forests are destroyed and are shifted their functions. Septian (2019) indicates the deforestation as the destroying activities that replace the main function of the forests to the next such as agriculture, animal husbandry, or housing.

To ensure that Social Forestry programs do not lead to deforestation, the regional government must show their commitment to make accountable and transparent forest resource management systems.

II. MATERIALS AND METHODS

This article is sociological juridical research basis that used both primary and secondary data. To collect the primary data, we did interviews on the groups of farmers who accepted social forestry certificates. The secondary data, on the one hand, were regulations that are relevant to the issues studied. Both data were subsequently analyzed qualitatively.

III. RESULT AND DISCUSSION

Social Forestry Policies in Indonesia

Perhutanan Sosial (Social Forestry) is the forest management systems that are applied in the state's forest areas or right forest/customary forests committed by indigenous people as the main actors. The systems are to achieve people's welfare, environmental balance, and cultural and social dynamic. The forms of the systems refer to Hutan Desa (Village Forest), Hutan Kemasyarakatan (Community Forests), Hutan Tanaman Rakyat (People's Forests), Hutan Adat (Customary Forests) and Kemitraan Kehutanan (Forestry Partnership).

The Ministerial Regulation No: P.83/MENKLH/SETJEN/KUM.1/10/2016 (Ministerial Regulation KLHK 83/2016) about Social Forestry, in part of consideration, states that that regulation aims to reduce the poverty rates, unemployment, and inequality in forest management. Therefore, Social Forestry activities legally recognized are required. The social forestry schemes include: (1) Pengelolaan Hutan Desa (Village Forest Management); (2) Hutan Tanaman Rakyat (People's Forests); (3) Hutan Adat (Customary Forests); (4) Kemitraan Kehutanan (Forestry Partnership). Article 3, the Minister of Environment and Forestry Regulation No: P. 83/MENKLH/KUM.1/10/2016 about social forestry rules the principles: (1) principles of justice; (2) sustainability; (3) legal certainty; (4) participation; (5) accountability.

Social forestry policies are mandated in the Minister of Environment and Forestry Regulation No: P.83/MENKLH/KUM.1/10/2016 and No: P.39/MENLHK/SETJEN/KUM.1/6/2017. Etymologically, policy is defined as a series of concepts and basis that become reference and guidance of profession, leadership, and ways of

acting. Policy can also mean political mechanism, management, finance, or administration to achieve explicit goals (Wartiningsih & Nunuk, 2019).

In social forestry context, policy is defined to be a series of concepts and basis that underlie the implementation of social forestry. What we mean by policy model constructions in this research is the policy as a result of interpretation to the decree of the Minister of Environment and Forestry Regulation No: P. 83/MENKLH/KUM.1/10/2016 about Social Forestry perceived from the aspects of its implementation methods (Wartiningsih & Nunuk, 2019).

The coverage areas of cultivation belong to groups of the farmers are only limited on what have been explicitly stated in the Ministerial Decree. The chief of the groups of farmers is responsible to any violations committed by an individual or other members in the same group in meeting their rights and obligations as the license holders. Furthermore, shifting functions, trading, pawning, and expanding the areas are illegal without the Minister's agreement.

This research covers four districts in Madura: (1) Bangkalan; (2) Sampang; (3) Pamekasan, and (4) Sumenep. There are 62 Village Forest Community Institutions in Madura. There are, however, 6 from 10 areas targeted found.

There are 138 institutions in Malang and there is only one inactivated, that is "Wono Harjo", Sumbermanjing sub-district, Sumber Agung village. There are five groups of farmers that have got social forestry utilization permits.

Perum Perhutani in Probolinggo assists 166 Village Forest Community Institutions. There are 9 groups of farmers that receive social forestry utilization permits and there is only one institution that gains permit of KulinKK. Those licenses were conferred at 2017. The current research reveals a number of issues: the groups of farmers were given social forestry utilization permits and KulinKK as a pilot project but they lack of innovation due to:

1. The groups of farmers getting license felt that they are "ignored" so that they are not well informed of what they need to do even though the Minister of Environment and Forestry Regulation explicitly states that the government will have annual monitoring and take evaluation every five years.
2. They have no ideas that innovation budget to the forest lands can be allocated from village fund as mandated by Article 63 the Ministerial Regulation LKH Nomor: P.83/MenLHK/Setjen/Kum.1/10/2016 about Social Forestry stating that the village fund can cover the financial costs of Social Forestry arrangement. Therefore, the local people who receive either the social forestry utilization permits or KulinKK can take advantage of the village fund for purposefully activities such as tourism.
3. Even though the committees of Lembaga Masyarakat Desa Hutan (Village Forest Community Institutions) or the groups of the farmers who are not loyal to the Ministerial Decree consistently wish that Kesatuan Pengelolaan Hutan (Forest Management Unit) needs to be involved from the very beginning, from the proposing process, not included in verification team only. This is because Forest Management Unit has extra responsibilities towards license deferred by the Director General of

Social Forestry and Environment Partnership (Dirjen Perhutanan Sosial dan Kemitraan Lingkungan).

Deforestation

Forest is genetic sources of plants and animals. Logical consequences when it is destroyed are the extinction of living things and their varieties (Indriyanto, 2006:8). Derouin defines the deforestation as the permanent removal of trees to make room for something besides forest. This can include clearing the land for agriculture or grazing, or using the timber for fuel, construction or manufacturing. (<https://www.livescience.com/27692-deforestation.html>).

Illegal logging leads to deforestation. Paulina Lam states that illegal logging in Indonesia gives a short-term benefit for those who have less \$ 1 income a day. But it loses the people's livelihood who relied on the forest. Indonesia is one of the biggest wood exporters and about 80% are illegal. It is assumed that organized crimes gain between \$ 10-15 milliard benefit from illegal logging each year (<https://www.onegreenplanet.org/animalsandnature/5-big-causes-of-deforestation-and-how-you-can-stop-it/>).

Referring to the proposing definition of deforestation by Derouin, it is understandable then why many experts are concerned about Social Forestry Programs. The businesses that can be run stated in the certificate are: (1) the land utilization business; (2) wood forest product utilization business in plantation forest; (3) wood forest product utilization business in non-plantation forest; (4) water utilization business; (5) water energy utilization business; (6) nature tourism service utilization business; (7) nature tourism facility utilization business; (8) carbon sequestration utilization business in production forests; (9) carbon storage utilization business in production forests. And there is nothing more important than protecting trees.

Protecting trees benefits us in some ways: (1) the top soil is not slammed hard so that it keeps porous; (2) water reaches the top soil slower detained by the trunks of the trees so that the water absorption is good; (3) the wasting water is reducing because of good water absorption so that the risk of flood tends to be low (Syukri, <https://www.lintasgayo.com/17678/keuntungan-banyaknya-tegakan-pohon.html>).

(Tree) stands are a group of trees which have the same age, composition, and shapes. They consist of various kinds of plants which are similar in terms of species and ages living in a certain area. In more specific context, stands means a unit of forest tree (Saputra, 2016). When cutting trees occurs, destroying all tree stands follows (https://id.wikipedia.org/wiki/Hutan_primer).[10]

Article 1 No 4 the Minister of Forestry Regulation No: P.13/MENHUT-II/2009 defines (tree) stands as a group of trees as a result of rehabilitation in a particular area in production forests assigned.

Derouin, in The Guardian, states that the forest lost that is equal to the football field occurs every second. One of the deforestation purposes is for agricultural land and grazing

(<https://www.livescience.com/27692-deforestation.html>). Therefore, the agroforestry systems as a new paradigm are needed, as Amalia and Banowati (2019, in Sabarnuridin) suggested.

Forests as Common Pool Resources

Forests are common pool resources. Ostrom characterized them by:

1. **Subtractability:** It means once you are consuming or harvesting the given resources, you actually reduce the availability of the forest resources or steal others' allotment to take advantage of the resources.
2. **Rivalness:** It needs financial supports to forest resource access limitation so that other beneficiaries are also advantageous.
3. **Non-excludable:** It generates benefits for everyone, non-excludable, up to the resources missed out (<http://repository.ipb.ac.id/jspui/bitstream/123456789/55085/4/BAB%20Tinjauan%20Pustaka.pdf>).

Based on the given characteristics, Article 4 Law No 41 Year 1999 about forestry, government is a key in managing, licensing, and stating the law relations and law actions in relation to forestry. It reflects the nation-based forest management. The local people and government are conflicting in managing the forest resources. To minimize the conflict, a number of programs that is welfare-oriented made. One of them is Mantri-Lurah (Malu), Malang-Magelang (Ma-Ma), Pembangunan Masyarakat Desa Hutan (PMDH) (Nurjaya).

Furthermore, the Minister of Environment and Forestry Regulation No: P.83 P.83/MENLHK/KUM.1/6/2016 about Social Forestry (Ministerial Regulation KLHK 83/2016) and the Minister of Environment and Forestry Regulation No: P.39/MENLHK/KUM.1/10/2017 about Social Forestry in Perhutani Working Area (Ministerial Regulation KLHK 39/2017) confers rights to indigenous people to get a forest management license. It indicates that the community is engaged in managing the forests. However, it has a lot of drawbacks including the absence of the statement requiring the groups of farmers holding the certificate to protect the (tree) stands.

Anti-deforestation Policy Models in Social Forestry Systems in Indonesia

Indonesia, as a part of international communities in political and trading aspects, must update the international trends. Environmental sustainable development, as the current paradigm, puts emphasis on three pillars in making decisions: (1) economic development; (2) social development; (3) ecosystem supporting protection (Jimly, 2010:51).

In practical terms, the certificate holders (the groups of the farmers) felt that they are 'ignored' even though they got assistance. Perum Perhutani, as the forest manager in the local level, thought that they work alone but do not have authorities to make policies. The regional government, as one of the eight (8) institutions executing the Presidential Instructions, should coordinate with other institutions. However, they never take the Forum Pimpinan Daerah (Regional Leader Forum) as a chance to address the forestry problems (Nunuk & Wartiningsih, 2012). It is in line with Sanafriawang' notion believing that:

“.. *the Regent Government (Bupati) never initiates to perform HKm because the Forest Service’ recommendation is absent. It is apparent that the Forestry Department and the Regional Government show different interests dealing with local forest management. This is because the Regional Government is concerned about the regional issues, not national ones (<http://sanafriawang.staff.ugm.ac.id/kehutanan-masyarakat-dan-problematika-lokal.html>).*”

Regarding the forest characteristics (subs tractability, rivalness, and non-excludable), Ostrom proposes 8 principles pertaining to the forest resource management (Cox, *at.all*, 2010)

1. *Principle 1: Well-defined boundaries.* It means that forest boundaries must be clear. In the certificate of the Social Forestry, the width of the areas of the forests must be explicitly stated.
2. *Principle 2: Congruence between appropriation and provision rules and local conditions.* In this context, the regional government plays significant roles in managing the Social Forestry by considering the local conditions.
3. *Principle 3: Collective-choice arrangements.* This principle designed to get the forest beneficiaries involved. In regards with the absence of the statement that obliges the groups of the farmers to protect the (tree) stands, based on this principle, the government must compel them to allocate hectares for trees. It refers to agreed activities covering: (1) the land utilization business; (2) wood forest product utilization business in plantation forest; (3) wood forest product utilization business in non-plantation forest; (4) water utilization business; (5) water energy utilization business; (6) nature tourism service utilization business; (7) nature tourism facility utilization business; (8) carbon sequestration utilization business in production forests; (9) carbon storage utilization business in production forests. Those activities seem to disregard the tree preservation.
4. *Principle 4: Monitoring.* The government in controlling the social forestry activities involves the users’ participation. The government monitors the activities annually and evaluates activities every five year. The regulations concerning the groups of the farmers’ obligation to protect the tress made by the government must warrant them to do so.
5. *Principle 5: Graduated sanctions.* There must be punishment for any law violation. Unfortunately, the punishment as stated in the certificate specifies to only forest function shift, trading, pawning, and no expanding the forest areas without the permission from the Minister of Environment and Forestry.
6. *Principle 6: Conflict-resolution mechanisms.* In fact, they are unavailable in the certificate of the Social Forestry.
7. *Principle 7: Minimum recognition of rights.* Its principle recognizes the rights to forest management. However, the obligation to protect the trees must be clearly stated to avoid deforestation.
8. *Principle 8: Nested enterprises.* There is a need to manage the nested enterprises within the big scale of the resource management. In addition to the recognition of

rights in managing the forest resources and doing related-resource management activities, the statement explaining the anticipation of the deforestation must be present.

Therefore, supports from the regional government are still needed. Menzies states that the groups of the farmers are susceptible and only contribute partially to the forest resource management (https://www.researchgate.net/publication/264999140_0777-A4_Partners_in_governing_the_forests_reviewing_community-based_forest_management).

When the Social Forestry introduced at 2017, the President of Indonesia expected not to stop on the level of Social Forestry license grant only, but it should be accompanied by sustainable programs also to empower the strength of local inhabitants, including the production facility provision, workshops, trading information access, technology, funding, and preparation of post cultivation (<http://ksp.go.id/menjaga-asa-reforma-agraria-untuk-pemerataan>). Up to this research undertaken, there is no further actions taken since the certificate deferred.

IV. CONCLUSION

Social forestry programs stated in certificates issued by the Minister of Environment and Forestry need more practical regulations. To guarantee that Social Forestry can lead zero-deforestation, anti-deforestation models are undoubtedly required: they give roles to the regional government to make regulations that reinforce anti-deforestation. Based on the analysis, agreement towards tree preservation has not been stated in the certificate. This point remains very important since trees can prevent the risk of flood because the top soil then absorbs water well and keep the land porous. Therefore, forest degradation does not take place both qualitatively and quantitatively.

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