

Intergenerational Public Goods Approach for Decentralizing Forestry Affairs

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Abstract

Forest, as one of determinant life support and people's prosperity resources, tends to deteriorate, and as the effect, its existence must be optimally and sustainably maintained. Accommodating the dynamic of the people's aspiration and participation is a must in maintaining the sustainability of the forest. The paper attempts at analyzing the process of decentralization of forestry affairs in Blora, Central Java and all stakeholder's opinion about forest for the present and future generation. The findings show that the Central Government focuses on the efficiency and externalities as consideration in renewing delegation of authority in forestry affairs. However, that was not enough. There should be a fundamental exchange in the stakeholders' perspectives. The stakeholders should start seeing forest as intergenerational public goods instead of common pool goods. Intergenerational public goods means that forest should be managed not only for present generation interest but also for future generation needs. Sustainable forest management is needed for intergenerational benefit. The principles of sustainability should be added to the existing principles in decentralization in order to realize sustainable forest management.

Keywords: division of authority, intergenerational public goods, sustainability principle.

INTRODUCTION

The purpose of the article is to propose sustainability as a new principle for decentralizing governmental affairs. This will complement the existing principles externalities, efficiency, and accountability. Sustainability is a very crucial aspect to be considered for an affair categorized as intergenerational public goods. Forest management is a good case for intergenerational public goods. Forest Management is very important not only for present generation interest but also for future generation needs. Sustainable forest means bring sustainability of intergenerational stakeholder.

According [1] for more than thirty two years during the New Order era, forest management in Indonesia was really centralized where the Central Government had all of the authorities. The central government's ownership of the forests began in the era of colonialism when the Dutch occupied Indonesia and is continued until Indonesia reached its independence and established its independent government [2]. In a small scale, forest has an important role as source of life for local communities [3]. Forest also has ecological function for balancing the

climate and as water preservation, soil retention, carbon storage, and habitats for various different plants and animals [7].

The 1999 Law number 41 on forestry states that the forest functions as one of the life support systems and the sources of prosperity for the people should be optimally maintained and be taken care of carefully and professionally in order to ensure its sustainability.

However, the practices of forest management are highly vulnerable to over exploitation. The risk and negative impact of over exploration affects the local community and create poverty. When a company starts exploiting natural resources in certain areas, the economic benefits of the region gets turned out to be much smaller than the cost that has to be spent for now and in the future [8]. Those forests degradation occurs due to the development that is solely oriented on economic growth supported by legal instrument and repressive policies [9].

Recently, studies on Indonesian forest mostly conducted outside Java Island since 97% of Indonesian forest are located in those areas. Even though Java is vulnerable to ecological disasters, studies on the forests located in Java are rarely conducted. As a matter of fact, Java plays such an important role in Indonesian forest management. The pattern of Indonesian forest management also started in the island [10].

Based on Government Regulation number 72 of 2010 on Perum Perhutani (Indonesian State-

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owned Forest Enterprise) that 4 technicals forest management by Perhutani are (1) Arranging forest and Planning of Forest Management, (2) Forest Utilization, (3) Rehabilitation and Restoration of Forest, and (4) Forest Protection and Nature Conservation. Furthermore, according on company's articles of association by Perhutani reveals aiming for Public utilization of the supply of goods and/ or services related to forest management and quality forest products with affordable prices to community through Sustainable Forest Management and principles of good corporate governance.

According to ex-director of Forest Watching Indonesia (FWI) says "currently, large of forest in Java has 11% or 13 million hectares than large Java totally" [11] and they play an important role for the lives of more than 135 million inhabitants, or 67.16% of the entire population in Indonesia [12]. Whereas, in 1992, forests located in java occupy 25% of the island [10]. Beside the deforestation fact, the impact of the bad forest management will be shown in the form of natural disasters, especially floods, landslides and drought. Around 30 trillion rupiahs were lost due to floods, landslides and tornado; ten of trillion of which lost due to floods in Jakarta and the north coast of Java [13].

Then, what is the government consideration to decide for decentralizing forest functions? The Law Number 41 of 1999 article 21 states that forest management is essentially the authority of the government or the local authorities. There are 3 (three) main reasons for the central government to keep control over forest resources, namely (1) its scale and nature as public goods, (2) lack of local government capacity; and (3) political interference. Government needs to create political order and stability for achieving economic growth [14] so when natural resources are centralized, then the government will do the distribution, allocation, and equalization on these [15]. Central government is considered more appropriate to handle public service and to protect public goods such as forest, related to its authority, and intergenerational and transnational impact, while the local government should focus on the economic value of the forest and put agriculture as priorities as the long term national interest [16].

The centralization of power brought economic disparities, gaps upon the central and the local government, and the oligarchy of power [14]. Centralized administration also has

limitations, especially when facing conditions of large area and population [17]. These limitations make decentralization seen as favorable choice in public policy in many countries. That was the notion that a decentralized system will be physically closer to the decision makers and understand the need of their constituents [18], reduce transaction costs, encourage the active participation of various stakeholders in the policy making process and more accountable [19] [20] [21].

The transfer of authority in the Law Number 32 of 2004 about Local Government used broad, real and responsible autonomy principles. There were two types of functions. Absolute functions which entirely belong to the central government, and shared (concurrent) functions between the central and local Government. Central Government applied principles of externalities, accountability and efficiency for sharing functions to local government.

The implementation of management by considering only the criteria of externalities, accountability and efficiency may only be applicable for recent time. Since the forest has great functions and gives huge impacts to our lives, forest and the environment can not only be categorized as a public good, but as an intergenerational public good [22]. Thus, the implementation of forest management is not solely assessed based on spatial externalities, recent accountability and efficiency, but it also has to consider the interest of future generation, as most of us inherit the forest from our ancestor.

Besides that, [23] explicitly categorized forest as common pool goods where the use and responsibility for its management still rely in current generation. Since forest has multiple values like ecologic, economic, social and cultural values [24], it has the nature of intergenerational public goods as defined [22]. None of the studies uses intergenerational public goods approach in studies on decentralization of forestry functions.

MATERIAL AND METHOD

The study used qualitative method. The situs of the study was Blora Regency, Central Java Province. The key informants in the study were officers from the central government that were from the Ministry of Home Affair, the Ministry of Environmental and Forestry, and the Indonesian State Owned Forestry Enterprise which manages most of the forests in Java. The researchers also

collected some information from the provincial and regency government, local forest people, as well as other stakeholder related to forestry. The interactive data analysis [56] was used. Data collection method and source of data triangulation were conducted to improve credibility.

Data Collection

a. Concept of Decentralization and Central-Local Government Relation

Since the beginning of decentralization policies through “decentralisatie wet” in 1903, Indonesia has many decentralization pattern from structural efficiency model to local democracy model [25]. Decentralization refers to delegation of administrative and political authority from the central government to the local government [26] [27] [28] and, then, to the people to build local institutions [29]. Decentralization is an effective instrument to increase efficiency and revenue. Through decentralization, expenditure and revenue may increase the resources allocated in the public sector by local government [30] [31] [21]. From political point of view, decentralization is a reaction from huge centralized bureaucracy [30] and part of democratization [32]. In the jurisdiction given by Stigler [33], the closer government representative is to the people, the better it runs, and people should be given the authority to choose type and quantity of public services they desire.

Responsive and increasing accountability, a decrease in transaction cost, establishment of community-oriented needs service [18], mobilizing local knowledge, developing coordination and resources [28]. However David Slater argued that decentralization reduces fiscal redistribution to other areas in need, creates inequities in collective consumption across region and inhibits democracy. Through the decentralization, capitalist may dominate local government [34] and bring capitalism at the local level [25]. [35] stated that the lack of human, financial and technical resources may be obstacles in the decentralization of public services [18].

An authority can be divided by areal division of power [25], which is influenced by social structure, economic situation, structure and role of political party, bureaucracy, and geographical condition [36]. Decentralization requires the division of government functions between central government and local government. Based

on the 2004 law number 32 which has been replaced by the 2014 law number 23, the division occurs due to efficiency, accountability, externalities and national strategic interest principles. Efficiency and accountability principles are derived from economic efficiency and democratic effectiveness, while externalities principle can associated with subsidiarity principle [37] and range of impacts result in the implementation of the government functions [15].

[26] Divides the central and local government relationship in terms of the division of authority on shared functions into 3 (three) namely (1) law and administration approach that focus on institutional and procedural change in the distribution of power among levels of government; (2) community politics approach that focuses on the ability of the political community; and (3) interorganizational politics approach where the central government sometimes is unable to control local governments because they have resources. Therefore, the central and local government relationship in this approach is more in cooperation, collusion, and competition as well as coercive if the situation forces them to. Their relationship should be at a good balance. Central Government should help strengthening and adjusting local institutions and insufficient resources. Central and local government had to be partners for the sake of the community welfare and their partnership should no longer be based on hierarchical superior and subordinates, instead it should be based upon collaboration between them because one cannot replace the other and they need each other [36].

However, there is no guarantee that decentralization will strengthen local people and local institutions [38] especially in forest management. Distrusts followed by fears of over-exploitation, doubts on the local institution capabilities in forest management, and the fear of horizontal conflict occurs in the central government level [39]. The distrusts occurs not only between the government and local agencies, but also between the local community and the central government due to the lack of community involvement in forest management [40] [41]. However, decentralization of forest management should give confidence to local authorities who represent the public [42].

Having reviewed various related studies, the writers are still looking at the entire forest as common pool goods where the use and

responsibility for its management lie in the hands of the current generation. In the cases of forests with multiple values such as ecological, economical, social and religious value, the forests has been proven to have the nature of "intergenerational goods". [22] has mapped the properties of "intergenerational goods" which have benefits and impacts beyond the boundaries of the state. The writers also emphasize on the altruistic nature of the current generation since it is instrumental for the survival of intergenerational goods which leads to benefits or impacts that will be accepted by future generations.

Almost none of previous studies on decentralization of the management of forestry are using intergenerational public goods approach with the assumption of the forest as common pool goods, putting an emphasis on accountability, efficiency, and externalities in determining forest management sharing. This assumption was not entirely true; it turns out after studies on intergenerational public goods emerge, there are still obstacles in the setting of decentralized forest management altruistic for future generations.

b. Concept of Public Goods, Externalities and Sustainability

Understanding the concepts of private and public goods is important for all stakeholders in the context of forest management. The concept is important because it will describe the motives and actions of people, both individually and collectively, which is mainly related to the property rights, externalities, free riders, and tragedy of the common. The concept can be used to determine to whom this public goods are managed, whether state, private or community, who should pay, and what benefits are obtained. The study of private and public goods can also be used to determine the amount of tax or fee to be imposed on society [43].

Public and private goods [25] are two dichotomous natures. They are derived from how to consume it, and its excludabilities. Non rivalry consumption means that if the goods is consumed by a person, it does not affect other people's consumption of goods, while the non excludability means that a person can not be excluded from the benefits of the goods. But not all goods can be easily applied into nature exclusion [44]. In short, if the exclusion can not be done, then it may not be applicable to the goods prices [45]. In the next development, public goods classification becomes more detail

by accommodating what [22] and [47] called partially rival and partially excludable.

Everyone needs public goods. Unfortunately, individuals usually can not measure its value and how much they should pay. So, individuals will maximizes his own desires to consume, but they will try to pay as little as possible but take as much public goods as possible for himself or herself [48]. Around the 1990s, studies of public commodities have evolved along with the rise of globalization. Globalization affects the types of externalities and interdependence among nations, and arises the concept of a public goods beyond the territorial boundaries of a region or country. The concept is often referred to as the Regional Public Goods [49] [50], the Global Public Goods and Intergenerational Public Goods [47]. Basically, the public good exists across the region and the generation of externalities is based on the nature of the public commodity. To gain a more comprehensive understanding on these externalities, several issues related to externalities in public sector's economic standpoint were presented.

Externalities is defined as anything that is done by an individual that has an effect on the other individual where the individual does not pay or paid on these things and has no authority in the decision making process for such actions [46] [51]. If these actions provide positive outcomes for those individuals, it is called positive externalities, whereas if it results in the negative effects for individuals, what is so-called negative externalities occurs [45]. To overcome the problem of externalities, the private sector has several solutions through the externalities that is by forming an economical unit which size is adjusted to the range of externalities that arise [45].

Problem in the division of forestry functions was not solely refer to externalities alone. Forest as common pool goods, of course, contains the common-pool goods nature, such as problem of supply [44]. The market mechanism can not provide common-pool goods. In the absence of the price that must be paid on these goods, and the absence of restrictions in consumption, then these public goods will reach its maximum extent. This overuse will encourage public goods to be vulnerable and deplete. Any goods, which obviously belong to public, tend to be consumed until they disappear. So, it needs the mechanisms for preventing those goods from extinction. EU countries using this mechanism require the export of Indonesian timber products

to qualify VLO (legal verification of origin) per 1 March 2013 and so is the United State that is applying the Lacey Act, which has been amended several times to prevent illegal forest products and environmentally unfriendly ones into the United States [52].

Those moves are based on changing the human perspective on the environment from anthropocentric to be ecosentric. Anthropocentric paradigm or often called HEP (Human Exceptionalism Paradigm) puts a man to be free from the power of environmental forces [53]. The shift in perspective makes people increase their attention to balance the nature because of its impact on human life itself. After the Rio Declaration on Environment and Development 1992, the concept of sustainable development started [53]. In a study on the sustainable development, the concept of sustainability itself is an exploration of the relationship between economic development, environmental quality and social equity. Furthermore, according to the World Commission on Environment and Development (1987) sustainable development has a meaning as development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. [54] [51] [55]. Shortly, to maximize economic goals, it should comply with environmental and social principles, to maximize environmental benefits should meet economic and social principles, and to maximize social benefits should comply with environmental and economic principles [51].

RESULT AND DISCUSSION

The findings of the study show that the implementation of forest management in Blera Regency was in accordance to the Law Number 32 of 2004 about the Local Government as elaborated in the Government Regulation Number 38 of 2007 which stated that forest management mainly becomes the responsibility of the Indonesian State Owned Forestry Enterprise as the representative of the central government. Neither provincial nor municipal government has an authority towards the forests located in their areas. An interesting fact is revealed that the local government brought up the strategic issues in the forestry sector even though they do not have any authority to do so.

Through the Law Number 23 of 2014 about the Local Government, the central government

through the Ministry of Home Affairs has currently changed the forestry function given to the local government. The regulation states that the central and provincial governments are the only ones responsible for forest management. The underlying causes behind the partial recentralization are the central government's distrusts toward the municipal government, efficiency and high forest management externalities.

The central government's distrust towards the implementation of forest management in municipality level is triggered by threats of over exploitation, conflicts, and the capabilities of the regency itself. It is similar to the findings of [39] study in Ghana. However, concerns over the abuse of authority done by the head of a region are the major threat in Indonesia. The wrong practice of forest management decentralization during decentralization period especially one taking place outside Java becomes the serious concern for the stakeholders. The examples of the misleading practices in the forest management are the absence of licensing regulation that guarantees business assurance, illegal fees, illegal hunting, corruption and elite capture, which is in line with CIFOR study [57] [3] [4] [58] [59], elevating numbers of illegal logging, conflicts between managements [60] [61], and the destruction of ecology [62]. Meanwhile the contributions of forest resources to one region have not always been significant [63]. The findings of [64] study in water resources utilization show that a region tends to apply policies that maximize the welfare of local communities. On the other hand, decentralization may also lead to severe reduction of the quality of the environment as the consequence of "destructive interjurisdictional competition."

Delegating forest management without the establishment of a required institution is commonly happened outside Java. There should be a good balance between human resources and the areas of the forests they would manage. Besides that, there is a mass euphoria because the access of the society was once strictly limited. As the result, when the society has a wide access to the forest, they tend to over claim half areas of the forest and over exploit the other half. The government denies the fact that the local government policies on forest management tends to follow the ones set by the central government [60]. When the government put more priority on timber extraction than

sustainable forest management, and the country does not both have the required regulations that emphasize on the welfare of the community or fully-committed law enforcement, the local and national elites dominate the economic benefit of the forest without paying attention to community needs.

Based on the interviews with the representatives from the central government and Indonesian State Forest Agency, it is found out that the perceptions of seeing forest as common pool resources which should be well-protected and taken care of have become parts of the government policies. The government believes that the establishment of regulations as well as penalties for those committing crimes against forest sustainability is a part of protecting the ecological function of the forest as a public goods. The Law Number 41 of 1999 about Forestry and the Law Number 18 of 2013 on the prevention and eradication of forest destruction, are two of the regulations about protection of the forests. Good ecological function will prevent the numerous natural disasters that will directly affect the society, for example pollution, flood, erosion, landslides and other ecological disasters [58]

However, the government's motive in protecting the forest remains an open question for many related parties. There was a concern that the purpose of forest management program was to enable the government to take the economic benefits from the forest. Based on, the interviews and discussions, the priorities of the ecological functions are forest resources that can be harvested continuously and sustainable program that prevent the negative impacts of exploiting the forest to happen. When one takes a closer look, what stands out from the establishment of forest management delegation policy was how to run an efficient forest management function at all levels of government suitable with the externalities. There was a concern that wrong forest management in one region, it will give negative externalities for other regions. The government of the region is unable to limit the negative externalities to its region only.

The term forest as common pool resources is also stated by [23]. However, when government treats forest as common pool resource similar to [23], there is a consequence to bear that is any program the government has related to the forest should first reached public agreement. Based on the experts, the consequence has two

shortcomings. The first one related to free riding. When a group of people give necessary attention and action to preserve the ecological functions of the forest, other groups of people are only taking advantage without giving sufficient attention and action for preservation. The second one is what [65] called as tragedy of the commons. The condition represents a concern when over-exploitation take places to a public asset as the result of public consensus.

Unfortunately, it is what exactly taking place in the current forest management. The conflicts and forest degradation in Java occurred because the government has the same perspectives [66]. Since the forest is considered as a public resource, careful management is a necessity in order to prevent natural disasters. The principle is implemented by the Indonesian State Owned Forest Enterprise very well that it earned a certificate of sustainable forest management from FSC. However, one of the informants from a non-government organization expresses his criticism regarding the certificate. He mentions that it was too early for the Indonesian State Owned Forest Enterprise to get the certificate because the forest under the supervision of the state institution has yet been sustainable. [67] argues that the potential of forests in Java keeps declining, the function of protected forests in Java keeps falling, and the numbers of animals inhabiting the forest are also declining; some species even have been classified as endangered or even extincted animals. Nevertheless, the Indonesian State Owned Forest Enterprise has given considerable attention in conducting forest protection measures, and the institution also considers forest as a public good that should be protected.

The classification of forests as common pool resources is not suitable with the real characteristics of the forests. Based on its externalities, the forest is not purely a part of local community's property rights which turn the forest into local public goods. Instead, the forest surpasses the boundaries of local areas, and, as the result can be categorized into regional public goods. Regional public good means publicly owned asset of which existence is between national public goods and global public goods; when an asset is considered as regional public good an area may take benefit or shortcomings from other areas [49] [50].

In terms of forest ecological functions, forests in Java can be classified into national public goods because of the nature of externalities that

reaches nationwide. However, in terms of preservation of plants and endangered species, forests in Java is classified as "Global Public Goods," which means the forests exceed the country's territorial boundaries, where a country may get advantage or disadvantage from another country [47]. Furthermore, the forests can be classified as international environment when one uses [46] classification.

Referring to forest externalities characteristics particularly its various different ecological function, [68] state 6 (six) principles to use in designing policies, namely sustainability principle, polluter pays principle, precautionary principle, participation principle, equity principle and human rights principle. Based on the first principle, one should not overly exploit the forests since each of them has its own limitation. By taking it as consideration, it is going to be easier to carry out the renewable process that ensures their sustainability. The second principle, the polluter pays principle, requires countries or regions that generate pollution to give some funding to other countries or regions where forests are located in order to preserve the environment and water sources as well as maintain the climate. The principle has yet been discussed in terms of relationship among regions in Indonesia or one between the central government and the local government. The following principle, the precautionary principle, requires anticipative instead of reactive policies when ecological disasters take place.

The three following principles should also be taken into consideration to find out what types and how much society participates in the forest resource management. The participation principle requires a high level of participation from the society living in and around the forests in forest management. In a wide area with growing population, participation is the only way to maintain forest sustainability [17]. An expert in forest policy argues that the society who becomes silent eye-witnesses when outsiders are taking advantage of the forest around the area where they live in without leaving any for them tends to be more reactive. They are more forceful in making sure that they can protect their access to the forest and its resources and neglecting the forest sustainability. Numbers of raids taking place in the Indonesian State Owned Forest Enterprise areas between 1998 and 2002 are examples of the society's forceful action.

Besides the principle of participation, the principles of equity and human rights are

supposed to be the bases in maintaining the relationship between the society and the forest resources around the society. However, the society often has a more simple perspective about forest. The findings of the study reveal that most of the society still considers forest as their source of income. The perception of the society is not conflicting with [68] 6 (six) principles of environment. Rights to earn a living and good environment belongs to the human rights principle, as long as they did not neglect other principles. In the interviews, the informants from the society and the local government stated that the abandonment of the rights to earn a living will add to the long list of the conflicts and add more pressure to the forest resource itself. According to the traditional leader from "Kampung Samin," it has been the destiny of human beings to manage nature and has been their responsibilities to take advantage of the nature without damaging it.

However, for some other group of people who have proven the effect of reforestation towards the increasing number of water source, forests mean much more than source of income. They are the real source of living in terms that they provide oxygen, store water and prevent erosion. Their opinions replaced the previous anthropocentric perception the society once had in seeing the relationship between man and nature. [69] revealed that humans learn from their predecessors to see other living beings as no more than sources of food, and care more about human rather than other living creatures.

As previously stated, the majority of the stakeholders only pay attention to the current situations only. Most of the stakeholders' ecological conservation programs aims at preventing natural disaster that will cost damage to the society. The writers have yet found any stakeholder who considers the importance of forest management regulations for future generations. [47] comes up with "Intergenerational Global Public Goods" concept. Previously, he discusses global, regional, national and local public goods in reference to the spatial dimension of the externalities, which arises from forest management. [22] out the characteristics of the forest into "Intergenerational Global Public Goods" and he also adds temporal dimension into forest externalities.

There is an idiom that illustrates what [22] has mentioned that is "we borrow the forest from our future generations." The idiom is in line with the theory of public commodities across the

generations. Altruistic forest management will provide greater benefits and goes beyond the limitation of time and areas compared to the forest management restricted to the continuation of the forest commodities. From the description above, one can draw conclusion that describes the perceptions of stakeholders towards the forest. The perception of forest as common public resources will result in spatial pattern of the management only. Forest externalities is interpreted in any spatial dimension which includes local, national, regional and global dimensions. On the other hand, the temporal dimension that includes the future generation is not taken into consideration in the forest management sector.

CONCLUSION

The Government should change their perspectives in seeing forest as common pool goods to intergenerational public goods. The former perspective was failed to elaborate its external characteristics. The change should also be used as a fundamental principle to determine forestry management authority. However with the change in the authority's perspective, concurrent affairs decentralization using [37] and [26] principles of accountability and efficiency as well as [45] pattern of externalities as references does not guarantee forestry decentralization that emphasize on sustainable forest management. Based on [22] theory about intergenerational public goods, it is a necessity to propose new principle in decentralization which is called sustainability.

The principle of sustainability is a principle when delegation of authority should pay attention to the roles of each government in administering sustainable forest management. Assigning authority to one level of Government without involving others will result in not only slowing down forest sustainability but also leading to forest degradation and deforestation. Public and local authorities' ignorance is going to be an obstacle in realizing public-oriented forest management program as stated in the national constitution.

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