



## RESEARCH PAPER

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## Revitalization on local wisdom of Wetu Teli community in forest management of Bayan, North Lombok, West Nusa Tenggara

Edi Muhamad Jayadi<sup>1,2\*</sup>, Soemarno<sup>1,3</sup>, Bagyo Yanuwidi<sup>1,4</sup>, Mangku Purnomo<sup>1,5</sup>

<sup>1</sup>*Environmental Science and Technology Graduate Program, Brawijaya University, Indonesia*

<sup>2</sup>*Department of Educational Biology, Faculty of Tarbiyah and Education, IAIN Mataram, Indonesia*

<sup>3</sup>*Department of Soil Science, Faculty of Agriculture, Brawijaya University, Indonesia*

<sup>4</sup>*Department of Biology, Faculty of Mathematics and Natural Science, Brawijaya University, Indonesia*

<sup>5</sup>*Department of Agricultural Socio-Economy, Faculty of Agriculture, Brawijaya University, Indonesia*

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### Abstract

Participation of Wetu Telu Community in indigenous forests management of Bayan, proved success maintains the forests. It implied in the success of Bayan Area as: 1) the largest number of indigenous forests; 2) the largest indigenous forest; 3) the least loss of indigenous forest in North Lombok; 4) First Winner on *Permata* competition, 2011. This is due to the local wisdom-based management via application of *awig-awig*. This study purposed to assess the revitalization efforts on local wisdom of Wetu Telu Community in the management of community forests in Bayan District – Bayan and Karang Bajo village. Of the two selected villages, we choose four sub-villages by *purposive sampling*. Key informants are Wetu Telu elders, bureaucrats, NGOs and religious leaders, selected via *snowball sampling*. Data collection was carried out with observation, interviews, documentation, and then analyzed descriptively. Measured variables were revitalization of local wisdom, which consists of institutionalization, reinforcement, and empowerment. The results show that: 1) practitioner of indigenous civilizing activity only from families, communities, and traditional institutions; 2) cooperation between customary institutions of Bayan with stakeholders, new private sector, with NGOs, incorporated company, and government still has not been built; 3) an increasing participation of indigenous people by traditional institutions in forest management after the reformation era, yet still local people is positioned as indigenous forest management object by the government; 4) government policies that do not concern the fulfillment of the basic rights of indigenous peoples is the greatest threat in the management of community forests in Bayan.

\*Corresponding Author: Edi Muhamad Jayadi ✉ [jayadiedi75@yahoo.co.id](mailto:jayadiedi75@yahoo.co.id)

## Introduction

Community participation in forest management of developing countries, besides providing direct benefits of ecological, economic, social or cultural aspects, can also reduce the potential conflict between the various parties related to forest management. Involvement of the community undergo the provision of more access to local people, proved ensure forest sustainability better (Ribot and Peluso, 2003; Ros-Tonen *et al.*, 2008; Sahlan, 2010) because they have their own wisdom in managing the forest. Practices of their local culture, which emphasizes the principles of balance and sustainability of forest positively impact on forest conservation.

The pattern on forest management of Wetu Telu Community in Bayan Area is a success example of community-based forest management, especially in Lombok Island. Communities that living in Bayan, North Lombok Regency, West Nusa Tenggara province is managing community forests based on local wisdom, by applying customary rules (*awig-awig*). Evidence of this pattern success, shown by research data of Research and Assessment Team of West Lombok (2006) which puts Bayan as districts with the highest number of indigenous forests, i.e. 16 or 55,17% from 29 remained number of indigenous forest in four districts of North Lombok. In addition, Bayan also has the largest community forests, i.e. 251,2 ha or 65,28% of the existing total area (384.81 ha) at North Lombok.

Application of customary rules by Wetu Telu in forest management of Bayan has been fluctuative, because it is influenced by the pattern of forest management policy, regional and central government. For example, the Law enactment No. 5/1979 on Village Government, which requires all regulations to subject and integrated into national law (Avonius, 2004; Purnomo, in 2011; Syarifudin *et al.*, 2011), create custom rules to be helpless. It's also happened after the reformation era, because it is still in transition and euphoric atmosphere, causing a lot of people looting, even occupied the community forests and

state forests (FWI/GFW, 2001; Avonius, 2004; Nawir *et al.*, 2008; Nawir and Rumboko, 2008). Uncertain conditions negatively affected the community forest conservation efforts. Evidently, during this period, several community forests function-changed, as used as residential areas, gardens and fields by local residents and newcomers. Research and Assessment Team of West Lombok (2006) stated that 17 community forests in North Lombok has function-changed and occurred in three districts, i.e. 3 in Bayan (17,65%), 4 in Gangha (23,53%), and 10 in Kayangan community forests (58,82%).

Cases of community forest loss (as happened in the past), is due to the neglection of local rules in forest management, which should not happen again. Some results of previous studies related to the application of local knowledge in forest management, including Baduy, Banten (Senoaji, 2003); Wana, Central Sulawesi (Sahlan, 2010); tribe of Ban Nong Hua Khon, and Tambon Nong Muen Than, Roi-et Province, Thailand (Burrirat and Thamsenamupop, 2010), and in Tengger, East Java; prove that the application of local wisdom to preserve the harmony of local ecology, economic, and socio-cultural aspects. Therefore, the revitalization of the local wisdom communities, including *awig-awig* of Wetu Telu, is absolutely necessary.

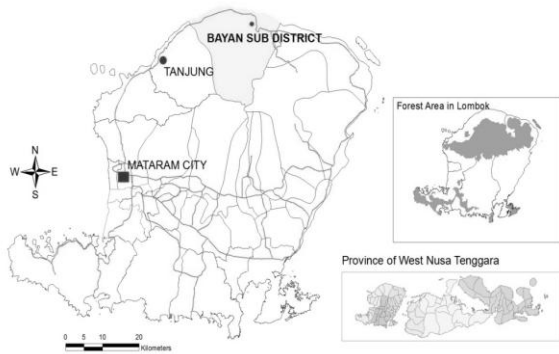
The presence of Act No. 22/1999 on Regional Autonomy, open a new opportunities and new hope to revive the local wisdom in the management of natural resources (Markum *et al.*, 2004; Susilo, 2006). It is including the forest management case of Wetu Telu Community. Revitalization of Wetu Telu local wisdom intended to remain relevant to the present context so that it can role optimally of community forests management in Bayan.

This study is aimed to assess the revitalization efforts of local wisdom in Wetu Telu forest management in Bayan, North Lombok, West Nusa Tenggara. The study focused on institutionalization, strengthening and empowerment of local wisdom.

## Material and method

### Study Area

Location of the study is in Karang Bajo and Bayan villages, Bayan subdistrict, North Lombok regency, West Nusa Tenggara Province (Fig.1). Both villages were chosen by *purposive sampling* because both are *Beleq Bayan* area, the main base of Wetu Telu (Suliadi, 2011). From both villages, we selected four sub-villages that have community forests. Bayan village were represented by Mandala (*Pawang Mandala*), Teres Genit (Pawang Bangket Bayan), and Batu Jompang (Pawang Tiu Rarangan). While Karang Bajo village represented by Ancak Timuk (Pawang Singang Borot). The study was conducted from February to June 2013.



**Fig. 1.** Study Area of Bayan, North Lombok.

### Determination of respondents and key informants

Respondents were selected from two elements, the head village and youths by focus group discussions, in separated sessions. In addition, key informants also selected through *snowball sampling*, consisted of Wetu Telu elders, Village and District Head, Department of Forestry, education professionals, NGO's leaders on Environmental Care (*Koslata*), and *Tuan Guru* as religious leaders and tutor of local Boarding School.

### Data Collection and Data Analysis

Data was collected through field observation, interviews, focus group discussions, and documentation. Then data were analyzed descriptively using the model of Miles and Huberman, with stages of data reduction, data

display, and conclusion. Validity test of the data and information is done by triangulation (methods, sources, and researchers) and peer examination in discussion.

### Observed Variable

The observed variables in this study are the revitalization of local wisdom, which assess the revitalization efforts by Wetu Telu Community on their local knowledge of forest management. Revitalization were divided into three sub-variables: 1) institutionalization; 2) strengthening (two indicators); and 3) empowerment (two indicators).

Institutionalization of local wisdom is reviewing Wetu Telu efforts to civilize the indigenous communities in forest management. These activities were done through family, community, indigenous organizations, and educational institutions.

Strengthening of the local wisdom is evaluated the Wetu Telu efforts to strengthen local wisdom in forest management. Strengthening efforts is limited to two indicators: 1) operational framework of customary rules; and 2) collaboration with *stakeholders*.

Empowerment of local wisdom is evaluated Wetu Telu efforts to empower their local knowledge in forest management. Empowerment is focused on two indicators: 1) assessment on the potential self-development efforts and the creation of participation opportunities; and 2) assessment of the efforts to protect against all challenges of local wisdom.

## Result and discussion

### Institutionalization of local wisdom

Implementation of local wisdom institutionalization is still limited to three elements, i.e. family, community, and customary institutions, while the Institute of Education/Schools is still not involved (Table 1). Family and community are the two most dominant elements in the process of institutionalization of local wisdom because they can

interact directly and conduct surveillance of public activities related to the forest.

**Table 1.** Institutionalization of Local Wisdom in Wetu Telu Community on Forest Management in Bayan.

No.	Practitioners	Activities	Efectivity of Institutionalization Activities
1.	Family	a. Invitation b. Modeling c. Habituation	Effective, besides as parents responsibility, it is also entrust family's reputation
2.	Community	Surveillance to the citizens who interact with the forest. If there are indications of irregularities then a warning given, but if ignored, then reported to the Indigenous Institute.	Effective, especially in overseeing community activities related to the use of forest resources
3.	Customary Institution	. Through the head of village and sub-village, and Stakeholder; constantly reminded every time there is a meeting with the community b. traditional procession	Effective, through traditional procession implementation, enforcement of customary rules/ <i>awig-awig</i> , and application of traditional sanctions
4.	Educational Institution/School	Have not done yet because of the limited resources to prepare materials about indigenous wisdom of Mulok	Ineffective yet, because it has not engaged in local wisdom institutionalization

Family has a central role in the institutionalization of local knowledge in Bayan area. Values of local knowledge was first introduced and practiced in families. Therefore, not to called as failed parents, then every parent in Bayan has the responsibility to always encourage, give an example and accustom the children to maintain ancestral traditions, one of which is to live in harmony with nature. Efforts which they are doing, including the involvement of family members in activities related to forest conservation, e.g. reforestation, springs salvation (*rowah oloh*), ceremonies for rain, ceremonies on determination of customary sanctions, and other cultural activities. Family as the primary institution in the institutionalization of local knowledge, are also found in Baduy (Suryadi *et al.*, 2011) . the reason is children are being more interact relatively with the family, either directly or indirectly, in comparison with others.

Society also plays an active role in the institutionalization of local wisdom. It is shown through surveillance activities in the utilization of forest resources, adherence to customary rules, and active participation in any efforts to conserve forests (afforestation and traditional procession).

Role of Customary Institutions in the process of institutionalization of local knowledge is still relatively limited. According to the head of Bayan Village, *Raden Hadi Kusuma*, is due to the limited activities of traditional ceremonies, which allows direct interaction between traditional institutions and communities. However, as the head of the village administration and as an element of customary institutions, it continues to develop a culture of mutual *perengat* (reminder of each other), which always remind every meeting/activities not to drift towards forest management.

Educational institutions has not been maximized in the process of institutionalization of local wisdom. The limited role of educational institution, recognized by one of stakeholder/traditional leaders of Bayan, *Raden Gedarip*, that they has not indirectly involved in the formulation of local wisdom to produce local content in school's teaching materials. When confirmed to the Secretary of Education, Youth and Sports of North Lombok, he argued that the activities are limited to seminars and sending envoys to the meeting on the *Mulok*, but the results just achieved to form new concepts that are still abstract and not implemented in the field due to limited resources.

The limited role of educational institutions in the process of institutionalization is unfortunate, though according Kongratsertamorn (2007), in Thailand, educational institution is very effective in the institutionalization of local wisdom. Through education institutions, students are introduced early to the local wisdom so that later as adults, they are familiar with their ancestral heritage as well as to integrate with modern science.

*Customary Rules*

Customary rules/*awig-awig* of Wetu Telu rhat is used in forest management consists of five components: 1) the things that are not allowed (13 terms); 2) the things that are allowed (five points); 3) the things that are required (three terms); 4) sanctions; 5) mechanisms of sanctions application (Table 2).

*Strengthening of Local Wisdom*

**Table 2.** Component of awig-awig in Wetu Telu Indigenous Forest of Bayan.

No.	Component of <i>awig-awig</i>	Description
1.	not allowed things	if this component violated, there will be penalized
2.	allowed things	This component is allowed only for the benefit of customary institutions, science, and tourism with the prior approval of the Elders
3.	Required things	This component is mandatory for villagers in an effort to preserve, conserve, and develop local knowledge
4.	Sanctions	Given sanctions adjusted to the severity of the offense
5.	mechanisms of sanctions application	This mechanism needs to be explained, so that not all villagers do punishment to the perpetrators, are also intended to give more deterrent effect

(Source: Primary Data; Village Regulation of Bayan, 2006; Lanang and Mukarom, 2011).

*Awig-awig* was designed in details to set indigenous people in interacting with the indigenous forest. Customary rules contained in it is intended for the aspects of prevention, surveillance, and prosecution. Prevention and control aspects are described into

three things (not allowed things, permitted things, and the things required) (Table 2); and enforcement aspects, organized into two terms; the type of violation and sanction (Table 3), and sanction mechanisms (Table 4).

**Table 3.** Violations and sanctions are applied in Wetu Telu Community on Forest Management of Bayan Area.

No.	Types of Violation	Violation Level	Forms of Sanctions
1.	Willing to violate	Light	Oral reprimanded
2.	Once violation	Moderate	a. a chicken b. a buffalo c. a sack of rices d. a package of brown sugar e. 244 pieces of Kepeng coin f. plant 10 seedlings as the same species of logged trees
3.	a. Repeatedly violate b. No willingness to pay the sanction that has been decided by traditional institution	Heavy	a. Excluded from the customs and expelled from the indigenous area b. Getting no village's services

(Source: Primary Data; Village Regulation of Bayan, 2006; Lanang and Mukarom, 2011).

**Table 4.** Mechanism of Sanctions Implementation against Violation in Bayan Community Forests.

No.	Sanctions Settings	Description
1.	Basic determination	Sanctions imposed if a breach does occur: 2 witnesses and evidence
2.	Parties are entitled to determine	Traditional Institution
3.	Determination process	Carried out after the meeting ( <i>Gundem</i> ) by the Traditional Institution
4.	Legality of custom trial	Custom trial is stated as VALID if it's attended by all custom components (Stakeholder, Suppliers, Religious Leaders, the Elders – <i>Toak Lokak</i> ) and offenders of <i>awig-awig</i>
5.	Appropriation	The results of the paid sanctions are used for traditional ceremonies (re-purification: nature and perpetrators), accompanied by an apology to nature and ancestors

(Source: Primary Data; Village Regulation of Bayan, 2006; Lanang and Mukarom, 2011).

Prevention and control function is a shared responsibility between families, communities, and traditional institutions, while the prosecution function is the responsibility and authority of customary institutions. This meant that the infringement case against the management of public forests can be prevented as early as possible. However, if there is a violation, then the society did not act arbitrarily and vigilante, submitted to the Indigenous Institution.

Traditional institutions realized that the clause of *awig-awig* that is most vulnerable to irregularities is the application of sanctions. Therefore, the application should not be selective. Anyone who violates the provisions of *awig-awig*, must be given appropriate and applicable sanctions. Verification of consistency for not selective in the application of this sanction, indicated by the findings of Research and Assessment Team of West Lombok (2006). In the sanctions case to the village head and Village Representative Body and the Institute for Rural Empowerment, for taking wood from fallen trees in Indigenous Forests *Bangkit Bayan* to repair Bayan village office and to build *Teres Genit* mosque in Bayan village. However, because it has not been approved by the traditional institution of Bayan, then they only seized the wood. Furthermore, decision from traditional institutions, the Head Village of

Bayan was penalized 1 chicken, 1 sack of rices, 2 coconuts, and 1 package of brownsugar; all were submitted to the traditional institutions.

From these cases, it is understood that although the timber extraction is an agreement between the head village and village officers, also from wood of fallen trees, and is intended to build a village and a mosque, but because not involving traditional institutions, then categorized as violated to *awig-awig*, so it should be penalized. Since the case, there has never been more disruption to indigenous forest.

Another effort made by Wetu Telu Community to strengthen *awig-awig* is making Village Regulation in every village that has indigenous forest. According to head of Bayan subdistrict, it is intended to suppress forest offense cases, because the offender is not only going to get customary/ social penalized but also of the administration of the village.

*Cooperation with Stakeholders*

Strengthening cooperation with stakeholders conducted by Wetu Telu Community, intended as an attempt to gain appreciation, recognition, and validation/legitimacy of the existence of traditional institutions, and cooperation with other parties. The fourth of these efforts are still limited in scope and has not established to the maximum (Table 5).



**Table 5.** Awards and Cooperation of Wetu Telu Community with Stakeholders on Indigenous Forests Management Bayan.

No.	Activities	Presence	Appreciator/Partner
1.	Award	✓	KLH
2.	Recognition and legitimacy	X	X
3.	Cooperated with:		
	a. other community	X	X
	b. non-governmental organization	X	X
	c. Private	✓	British Council/Mandiri Bank
	d. Incorporated Company	X	X
	e. Government	X	X
4.	Network Expanding:		
	a. Information	X	X
	b. Communication	X	X
	c. Economy	X	X
	d. Advocacy	X	X

(Source: Primary Data; Asjanom, 2011)

An awards that have been obtained by Wetu Telu Community is 1<sup>st</sup> winner of West Nusa Tenggara springs competition (*Permata*) in 2011, which was won by the Indigenous Forest of *Mandala*. This success improves motivation of Wetu Telu Community to manage other customary forests better in the following years. Proven, Pawang Bangket Bayan, District of Teres Genit, appointed to represent North Lombok in *Permata* competition in 2013.

Recognition and validation of managed public forests ownership as their ancestral forest, has not obtained until now. We confirmed to the Head of Processing and Marketing of Forest on Unity of Forest Protection Stakeholder of West Rinjani, Department of Forestry, West Nusa Tenggara. We obtained information that in 2008 is the first ever helped on forest protection (by taking measurements on every forests that managed by communities in North Lombok), while North Lombok is still a part of West Lombok. But because of the regional expansion process, then it becomes a crude attempt again. According to Junaidi, administrators of *Koslata* NGO (the NGO that advocate many interests of indigenous peoples in North Lombok), the regulation draft on the ownership of indigenous forests already arranged, but still wait to settle and discuss in Level II Parliament of North Lombok.

The partnership between Wetu Telu Community with the other parties is relatively limited. In the early of 2013 there was assistance from the private sector, British Council for 200 million Rupiah via Mandiri bank to build swimming pool nearby the *Mandala* spring. The swimming pool is expected to be a new destination especially for domestic travelers, and a new income source for indigenous peoples in Bayan. There is no partnership with universities, other than a regular activities, such as student service learning programs. Similarly, there is no regular development program from the government. Exceptionally, they got incidental funding from KLH, for certain competition, e.g. *Permata* competition (springs quality competition).

There has been no real effort made by Wetu Telu Community to expand the network of information, communication, economy and advocacy. It is implied on the lack promotion to introduce the tourism objects, either in the form of cultural heritage sites and indigenous forests as ecotourism destination, to attract tourists.

The lack of network cooperation owned by Wetu Telu Community, proving that their ability to establish cooperation with other parties are still weak. This is

thought to occur because people of Bayan tend closed minded to changes. The results of Siradz *et al.* (1995) showed that people of Bayan tend to *autonomous* and *closed minded*, even seem to be *exclusive*. Autonomous, because they felt assured its existence as a society with all its institutions, infrastructure and facilities. *Closed and exclusive*, implied in the attitude of its people who are less interested in changes, they reject new and unfamiliar things (objects, people, mindset, attitude and behavior) with suspicion and worry look. Bayan person always called as *family*, while no-Bayan person called as *beraya* (other people/guests), to whom they would never want to open. Information from outside Bayan key informants, who once interacts with the peoples of

Bayan also confirmed that they are generally relative difficult to open up to the presence of others .

*Empowering of Local Wisdom*

*Efforts of Potency Development and Participation Improvement*

Efforts of potency development and participation improvement of Wetu Telu Community on forest management in Bayan (Table 6), influenced by the pattern of government policy. Changes in the pattern of forest management policy in Indonesia, which *top-down* from 1950 to 1970, became more participative in 1990 (Nawir *et al.*, 2008; Nawir and Rumboko, 2008). It have a direct impact on the various efforts made by the indigenous peoples and traditional institution of Wetu Telu.

**Table 6.** Efforts for Self Potency Development and Participation Improvement in Forest Management of Bayan.

No.	Activities	Forest Management Period		
		Old Order	New Order	Reformation Era
1.	Training	None	None	programmed
2.	Community's member involvement by government in determining forest management program			
	a. Planning	programmed	None	programmed
	b. Implementation	programmed	None	programmed
	c. Monitoring	programmed	None	programmed
	d. Evaluation	programmed	None	programmed
3.	Community involvement by government in determining forest management program			
	a. Planning	None	None	None
	b. Implementation	programmed	None	programmed
	c. Monitoring	programmed	None	programmed
	d. Evaluation	None	None	None

(Sourced: Primary Data)

Empowering the traditional institution of Wetu Telu Community by the government in forest management is fluctuative. Lowest access is felt during the New Order era compared to before and after. Wetu Telu Community access restrictions during the New Order can be understood, because the pattern of government policy in the forestry sector is still centralized, minimize the local indigenous community involvement. This case is not only experienced by Wetu Telu Community, but also almost all indigenous community in Indonesia

(Yasmi, 2003; Yasmi *et al.*, 2006; Yasmi *et al.*, 2009; Maryudi, 2012; Maryudi and Krott, 2012a).

The emergence of the decentralization policy in the forestry sector in reformation era, by giving greater authority to the Level II local government (Engel and Palmer, 2006; Poffenberger, 2006; Nomura 2008; Yasmi and Guernier, 2008; Yasmi *et al.*, 2009; Magdalena *et al.*, 2013). It was greeted enthusiastically by indigenous peoples particularly Wetu Telu Community. The emergence of these



policies, open up opportunities for them to participate once again to gain benefit from forest management activities.

In this era, the involvement of indigenous peoples by traditional institution of Wetu Telu in forest management has increased. They involved since planning, implementation, monitoring and evaluation. This positively affected the forest conservation program, marked by the lack of violations committed by local residents in Bayan area, compared to the previous era. Positive impact on the success of forest management practices involving local communities like this (in Indonesia) (Poffenberger, 2006; Maryudi and Krott, 2012b), also reported in several countries, for example in Bolivia (de Jong *et al.*, 2006), in Vietnam and Cambodia (Poffenberger, 2006) in Amazon (Brazil) (Ros-Tonen *et al.*, 2008), in Madagascar (Laumonier *et al.*, 2008), in Iran (Zare *et al.*, 2008), in Thailand (Burirat and Thamsenamupop, 2010), in Nigeria (Jimoh *et al.*, 2012), and in Bhutan (Buffum, 2012).

Traditional Institution of Wetu Telu Community experienced different things, the emergence of the decentralization policy, does not necessarily improve their empowerment by the government. involvement in the indigenous forest management is still limited to the implementation and supervision. Not much effort is significantly participate or fully engage these institutions, especially in terms of planning and decision making. This condition according to Markum *et al.* (2004), proving that indigenous people still tend to be placed as an object because it is only required to accept any decision even though the decision was not in their favor. The same thing is expressed by Juani, a religious figure, a pioneer, practitioner of social and environment in West Nusa Tenggara/tutor of Haramain Narmada Boarding School, West Lombok. Government is supposed to put Wetu Telu Community as the subject of development so they can lift themselves of backwardness in economy, social, cultural and education, so that someday they can play an active

role in promoting development, particularly in North Lombok.

The limited guidance that provided by North Lombok Government and the Forest Service of West Nusa Tenggara to Wetu Telu Community in the management of public forests in Bayan prove the weakness of local governments to manage the forestry sector. The limited ability according to Department of Forestry of West Nusa Tenggara, is caused by several things: 1) the extent of the area is not proportional with the limited human resources and budget; 2) a comprehensive institutional structure of North Lombok has not been established, proved by forest service is still integrated in one department with some other services such as the fisheries, marine, food crops, etc. Thus limited the service capabilities to overcome. McCharty (2004); Wollenberg *et al.* (2006), and Yasmi *et al.* (2009) also showed that the weak ability of the apparatus and the limited infrastructure in the area are the constraints faced in the implementation of the decentralization policy in forestry sector in reformation era.

#### *Protection Efforts on Local Wisdom*

There are two factors that pose as threat in terms of weakening protection against the efforts of local wisdom, i.e. internal factors and external factors (Kasa, 2011; Jimoh *et al.*, 2012; Suryadi *et al.*, 2012). Of the two factors, the level of threat perceived by external factors more heavy for Wetu Telu Community (Table 7).

The obstacles of the internal factors are not perceived as a serious threat and burdensome, but because they effectively handled by traditional institution and the community has a spirit of mutual cooperation which is still relatively strong. To maintain the spirit of mutual cooperation, in every sub-village formed *Banjar* (group of residents). *Banjar* activities are funding and collecting daily needs materials (rice, coconut and others), which is used for certain ceremonies, such as death, marriage, and circumcision ceremonies.

**Table 7.** Efforts by Wetu Telu Community Against the Weakening of Local Wisdom in Forest Management of Bayan Area.

No.	Sources Weakening	of Efforts
1.	Internal Factors	
	a. Population	<ol style="list-style-type: none"> <li>1. Promotion of family planning programs</li> <li>2. Encourage their son/daughter to improve the quality of education at the same time delaying the age of marriage</li> </ol>
	b. The Minimum Livelihood	<ol style="list-style-type: none"> <li>1. Encourage residents to seek additional income outside Bayan</li> <li>2. Promoting the woven fabric craft, (additional income)</li> </ol>
	c. Poverty & Social Gap	<ol style="list-style-type: none"> <li>1. Agriculture intensification</li> <li>2. Non-wood crops, such as fruits on previously unproductive land</li> <li>3. Maintaining non-consumptive lifestyles</li> </ol>
	d. Community's low awareness	<ol style="list-style-type: none"> <li>1. Strengthening supervision aspects</li> <li>2. Intensify cultural/indigenous activities so that people not forget/lose their identity</li> </ol>
	e. Weak law enforcement	<ol style="list-style-type: none"> <li>1. The application of strict sanctions</li> <li>2. Strengthen the function of the Traditional Institution</li> </ol>
2.	External Factors	
	a. Government Policy	<ol style="list-style-type: none"> <li>1. Continue to stand for legislation on the ownership of Indigenous Forests</li> <li>2. Keep doing more intensive management to demonstrate the government that they could manage the forest if they involved seriously</li> </ol>
	b. Modern technology and Culture	<ol style="list-style-type: none"> <li>1. Selective to technology and exotic culture</li> <li>2. Maintain a simple lifestyle</li> </ol>
	c. Major Capital (free market)	<ol style="list-style-type: none"> <li>1. Keeping a common commitment to maintain the existence of indigenous forest</li> <li>2. Strengthen the function of the Traditional Institution</li> <li>3. Reject any program that does not involve Traditional Institution</li> </ol>

(Source: Primary Data)

Some internal conflicts, either in scale between the sub-village or intern villages; the escalation is not widespread because of the strong role of traditional institution of Wetu Telu Community. In many cases, people are even more trusting handling by traditional institutions compared to the government. Effective settlement of the conflict in the area of natural resources was managed by indigenous/local people without any interference from the state or outside investors. It was because they still cherishes the role of elders in decision-making (Yasmi *et al.*, 2007), they also compliance with the rules of customary/*awig-awig* (Syarifudin *et al.*, 2011), and they still maintained the conflict resolution mechanism that prioritizes the communal/collective interests than individual one (Mungmachon, 2012).

External factors are the toughest threat to efforts of local wisdom retain, especially the policy of the government – central or local government (Briggs and Sharp, 2004; Movuh and Schusser, 2012;

Mungmachon, 2012), as experienced by Wetu Telu Community, because it was out of their control. There is no certainty from the government regarding the legal status of their community forests are recognized as indigenous forests induce a feeling of giddiness in forest management. Clear evidence related to the case of the external factors, explained by Markum *et al.* (2004) and Magdalena *et al.* (2013) in the case of *Sesaot* Protected Forest, West Lombok, that despite the extraction of firewood and building materials by forest communities for at least a decade does not cause significant damage. Logging is done selectively in the quite extensive forest area. Conversely, licensing the use of wood waste (logged waste wood, stake of dead wood, and diseased wood) were authenticated by the Government. That lead to mass logging instead. The permit was ridden by certain parties that take the health wood one. The impact is more than 800 ha of forest have been cleared in less than one year.

We concluded that not all parties implement the empowering of local wisdom. Implementation of these activities is still limited, because it's only done by three elements, i.e. family, community, and traditional institutions. Cooperation of Bayan traditional institutions with the stakeholders is still very limited. It is only done with private cooperation, whereas with other potential stakeholders, such as NGOs, incorporated company, and the government still has not forged yet.

An increase was occurred in the involvement of indigenous people by traditional institutions in forest management after the reformation era than the previous era. However, within the same era, indigenous people still positioned as object in forest management by the government.

External factors, especially government policies that ignore the fulfillment of the basic rights of indigenous peoples are the greatest threat in the management of public forests in Bayan. External factors perceived as the biggest threat because it prefers the fulfillment of the economic aspects compared to other aspects.

### Recommendation

Based on the conclusions obtained, the proposed recommendations: 1) it takes an active role in the educational institutions civilizing efforts of local knowledge, 2) facilitation of various parties needed to improve cooperation KWT, 3) the government needs to reposition KWT as a subject in forest management, 4) government policies should not be based on considerations purely economic aspects, but also the ecological aspects and fulfillment of basic rights of indigenous peoples.

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