

Hero & Ikhsan, 2017

Volume 3 Issue 3, pp. 280-291

Date of Publication: 5<sup>th</sup> December 2017

DOI- <https://dx.doi.org/10.20319/pijss.2017.33.280291>

This Paper Can Be Cited As: Hero, Y., & Ikhsan, M. (2017). *Analysis of Stakeholder's Behavior towards Management of Community Forest in West Bogor Area, Indonesia*. *PEOPLE: International Journal of Social Sciences*, 3(3), 280-291.

This work is licensed under the Creative Commons Attribution-Non-commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

## **ANALYSIS OF STAKEHOLDER'S BEHAVIOR TOWARDS MANAGEMENT OF COMMUNITY FOREST IN WEST BOGOR AREA, INDONESIA**

**Yulius Hero**

*Lecturer, Department of Forest Management, Faculty of Forestry, Bogor Agricultural University, Bogor, Indonesia*  
[yus\\_hero@yahoo.com](mailto:yus_hero@yahoo.com)

**Mahtuf Ikhsan**

*Undergraduate Student, Department of Forest Management, Faculty of Forestry, Bogor Agricultural University, Bogor, Indonesia*  
[mahtuf123@gmail.com](mailto:mahtuf123@gmail.com)

---

### **Abstract**

*Community forest has played an important role in supplying the needs of rural timber in Java Island, Indonesia since a long time ago. This forest produces 70 % of the community's wood demand for the island. West Bogor is a potential area of community forest development in Bogor Regency. The development of community forest enterprises is also followed by the development of various stakeholders on the management of this forest with various forms of behavior and their respective interests. The objectives of the research are analysing involved stakeholders and their roles and also analysing the behavior of involved stakeholders with their interest and power. The method used in this research is based on institutional approach that using Situation-Structure-Behavior-Performance approach. Research result shows there are 17 stakeholders who are related to the development of community forest in West Bogor area. The behavior*

*analysis suggests that most of the farmers who own community forest (outside the farmers group) agreed (Perception) and will realize actions/ agreed (Action) on the development of community forest in the farmer groups. Stakeholder key players include owner farmers, tenant farmers (land owned by external villages), local traders and rental industry. Whereas context setters are local government. Behavioral analysis also shows that the Rimba Lestari farmer group in Leuwiliang District is preferred by the surrounding community outside this group compared to the Barokah farmer group-Rumpin sub-district. From the research results, it is expected to become the policy recommendation for the government towards the development of community forest enterprises in Bogor regency.*

### **Keywords**

Community Forest, Organization, Behavior, Stakeholders

---

## **1. Introduction**

Community forest has played an important role in supplying the needs of rural timber and increasing income by 10 % and 12.5 % of employment absorption in Bogor Regency, Indonesia. This forest produces 70 % of the community's wood demand for the region. West Bogor is a potential area of community forest development in Bogor Regency. Based on data from Agriculture and Forestry Office of Bogor Regency in 2009 recorded the width of community forest in this area around 10,642.66 hectares and spread over 40 districts. The area of community forest is 40 % of the total area of Bogor Regency.

Hardjanto *et al.* (2010) mentions that West Java's energy forests tend to increase revenue by 10 % and contribute to poverty reduction through labor absorption of 12.7 %. The community forest business in dry land at West Bogor area is preferred by fruit crops due to several factors, namely: low cost business, easy maintenance, good selling price, and there is not many pest of disease (Hardjanto *et al.*, 2011). The community forest business produces various commodities that are very helpful to the community in fulfilling various needs, such as: food sources, food additives, animal feed sources, as family saving, as a source of building materials and mebel (Awang *et al.*, 2001).

The efforts of community forest in West Bogor increased rapidly and the number of production began in the 1980s in line with the technological upgrading of the sawmill industry (Khairiah 2012). The main actors of community forest business in West Java include: farmers, industry, brokers, and government (Hardjanto *et al.* 2011). Various research on institutional

issues in the development of community forest shows that smallholder farmers have not been the main actors in the policy formulation process (Mulyaningrum *et al.*, 2013); Community forest credits through low-cost government interventions have many failures in achieving their goals but also failures in achieving return performance (Braverman and Guasch 1989 referred in Syukur 2002); and community forest in Wonogiri Regency, Central Java, there is no institutional capacity building mechanism in relation to production activities, although the community or farmer groups have been affected by the market economy (Ekawati *et al.*, 2005).

The development of community forest enterprises is also followed by the development of various stakeholders on the management of community forest with various forms of behavior and their respective interests. Behavioral study is the object of institutional research. This paper describes the stakeholder's behavior in the development of community forests in the area of West Bogor. The purpose of this research is to analyze the involved stakeholders and their role in community forest management at West Bogor area and to analyze stakeholders behavior in managing community forest at West Bogor.

## **2. Methods**

The method used in this research is based on institutional approach of Situation-Structure-Behavior-Performance (Schmid 1987). The research was conducted in two locations in West Bogor, namely: BP3K Leuwiliang and BP3K Rumpin. BP3K Leuwiliang is a representative of community forest management that has access to a good area by the road. While BP3K Rumpin is a representative of community forest management that has access area is relatively far from the highway. The execution time of this study is eight months from March to October 2016.

The scope of the study is based on the institutional approach by using the Situation-Structure-Behavior-Performance (Schmid 1987), includes : 1) Conducting stakeholder studies and their role in community forest management; 2) Conducting a review of laws and regulations in the management of community forests; 3) Conducting a stakeholder behavioral study in community forest management; and 4) Providing policy input materials in the form of regulations and rules of play in the management of community forests in Bogor Regency. Data needed in this study, including: primary data and secondary data. Primary data is collected directly from the implementation of this research. While secondary data is collected indirectly from data of various related parties or relevant sources to this research.

The data required in this study is related to the institutional approach of Situation-Structure-Behavior-Performance (Schmid 1987), including:

1. Data and information that related to actors and their role in community forest management:
  - a. Actors that related to community forest management, among others: owner farmers, farmers, landowners, brokers, wood processing industries, material stores, the government (village, sub-district, district, extension unit, etc.), banking and business credit, university, and so on.
  - b. The role of actors that related to community forest management.
2. Data and information that related to the structure (rule of law and rules of the game) in community forest management:
  - a. Legislation that related to community forest management.
  - b. The rules of play that related to community forest management.
3. Data and information that related to behavior (behavior of related parties) in community forest management :
  - a. Perceptions (thoughts or opinions) of stakeholders in community forest management.
  - b. Attitude (opinion choice) from stakeholders in community forest management.
  - c. Behavior (form of action) from related parties in community forest management.

## **2.1 The Way to Collect the Data**

Primary data collection is done directly through structured interviews by using questionnaires to respondents. Respondents are stakeholders that related to forest management, among others: owner farmers, farmers, landowners, brokers, wood processing industries, material stores, government (village, sub-district, district, extension unit, etc.), banking and credit businesses, NGOs, Universities, and so on.

Secondary data collection is done indirectly through recording data that has been collected by various relevant parties with this research, among others: Ministry of Forestry, Bogor regency government, district and local village government, and so forth.

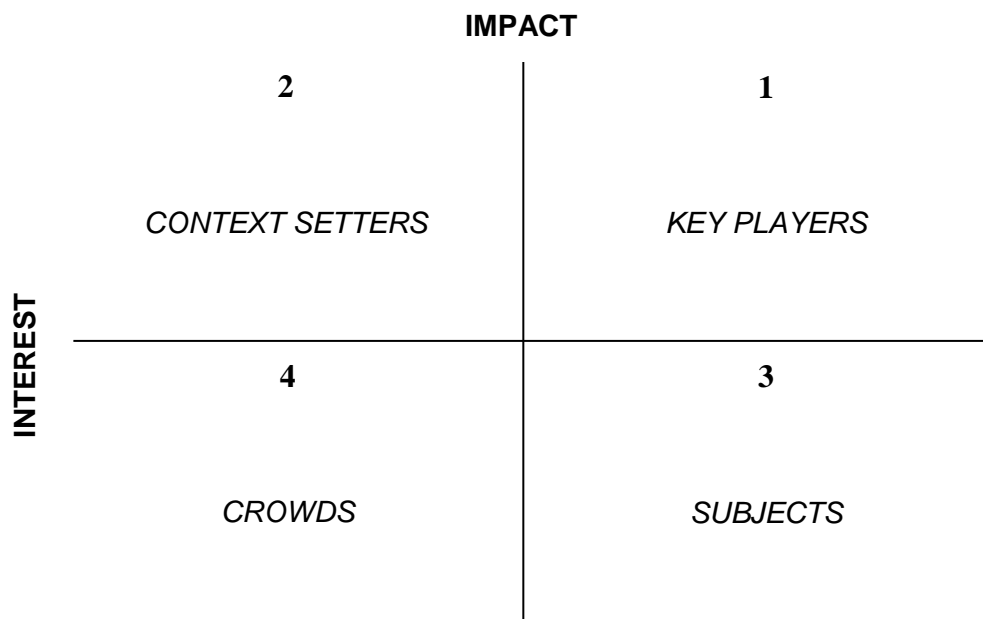
## **2.2 Analysis of Stakeholders and their Roles**

Analysis of stakeholder uses a diagram of the interests of Eden and Ackermann (1998) that divide stakeholder into four positions: Key Players, Context Setters, Subjects, and Crowds. Key Players are stakeholders who have a great influence and interest in the integration of production and the rural wood industry. Key Players need to be handled intensively because they have significant influence and importance on the achievement of integration goals. Context

Setters are stakeholders who have great influence but have little interest in the integration of production and the timber industry. Context Setters are the risks (opponents) and opportunities (supporters) that have a significant impact on the achievement of the objectives.

Subjects are stakeholders who have little influence but have a great interest in the purpose of integration. Generally the positions of these subjects are helpful, but their influence is relatively small. Crowds are stakeholders who have little influence and interest in integration. Crowds position is relatively small in influencing the integration of production and the rural wood industry.

The influence of nature is slowly changed with the time. The impact of changes on the integration of production and people's wood industries needs to be carefully reviewed and scrutinized. Stakeholders can form resisting alliances (opponents) or supporting (support) of the integration of production and the rural wood industry. The four actors in the stakeholder analysis of the diagram of the effects on the development of community forest enterprises through the integration of production and smallholder timber industries are : Key Players, Context Setters, Subjects, and Crowds in the form of interest-affected diagrams are shown in **Figure 1**.



**Figure 1:** *Diagram of Stakeholder Analysis on Power-Interest*

### **2.3 Analysis of Behavior for the Stakeholders that Involved in Community Forest Management**

Analysis of behavior for stakeholders that related to community forest management is done by using Perception, Attitude, and Action approach. Perception is the thoughts or opinions

of stakeholders on community forest management. Attitude is the choice of opinion from stakeholders on the management of community forests, and Action is a form of concrete action from related parties to community forest management in Bogor Regency. The question of behavioral analysis for Perceptions, Attitudes and Measures is directed to 30 community respondents outside the farmer group (Rimba Lestari and Barokah).

#### **2.4 Policy Recommendation for the Community Forest Management**

Based on the results of stakeholders analysis, analysis of structure for the laws and main rules, and also analysis of behavior stakeholders that related to community forest management, it can get the policy recommendations through regulation or main rules for the development of community forest in Bogor Regency.

### **3. Results and Discussion**

The Perpetrators (actor) of community forestry based on their role in the development of community forest in the research location can be divided into two, namely: primary/ principal actors and secondary actors. Primary/ principal actors are community forest business actors who play a major role in the sustainability of community forest management. The absence of the main actors has resulted in the community's forest farming is being unable to function properly. Secondary actors are players who play a role in assisting the implementation of community forest management. The role of secondary actors is expected to help the progress and smoothness of community forestry. The absence of secondary actors does not result in community forestry farming is not working.

Primary/ principal actors directly related to the community forestry farm at the study site, namely: 1) Owner farmers, 2) Farmers, 3) Farm laborers, 4) Brokers, 5) Loggers, 6) Transport businessman, 7) Owners of rental industry, 8) Owner of finished goods industry, 9) Material store, and 10) Consumer from outside Bogor. Secondary perpetrators who are not directly related to community forestry farms at the research sites are: 1) Village government, 2) BP3K, 3) Plantation and Forestry Office Unit, 4) BP3 Ciliwung-Cisadane Watershed, 5) Perum Perhutani KPH Bogor, 6) BPR, and 7) Land owners from outside the village (Jakarta and Bogor).

The results of behavioral analysis of smallholder farmers ownership outside the farmers group towards the development of community forest (Rimba Lestari-Leuwiliang and Barokah-Rumpin) are listed in Table 1.

**Table 1: Results of Behavioral Analysis of Stakeholders**

Description	Perception	Attitude	Action
<b>Rimba Lestari – Leuwiliang District</b>			
Agree	100%	92%	85%
Disagree	0%	5%	0%
Do not know	0%	3%	15%
<b>Barokah – Rumpin District</b>			
Agree	87%	81%	76%
Disagree	3%	5%	8%
Do not know	10%	14%	16%
<b>Summary</b>			
Agree	93,5%	86,5%	80,5%
Disagree	1,5%	5,0%	4,0%
Do not know	5,0%	8,5%	15,5%

The results of behavior analysis of stakeholders in Table 1 are as follows:

- 93.5 % of the farmers who own the community forest (outside farmer groups) was perceived good/ agree (Perception) to the idea of community forest management in the form of farmer groups (Rimba Lestari and Barokah).
- 86.5 % of the farmers who own the community forest (outside farmer groups) was decided to engage/ agree (Attitude) to the community forest management activities in the form of farmer groups (Rimba Lestari and Barokah).
- 80.5 % of smallholder farmers (outside farmer group) will realize the action of community forest management in the form of farmer groups (Rimba Lestari and Barokah).

Comparison from behavioral analysis of smallholder farmers ownership outside the farmer groups towards the development of community forests with partnership pattern shows that the farmers (outside farmer groups) Rimba Lestari-Leuwiliang are better than the Barokah-Rumpin farmer group. This is because the institutional arrangement of Rimba Lestari-Leuwiliang farmer group is already well and better organized than Barokah-Rumpin farmer group. The result

of Fajar's research (2015) shows that the superiority of Rimba Lestari-Leuwiliang farmer group is because the institution has been well-organized.

### **3.1 Stakeholders Interest and Power**

The results of the recapitulation from respondent's data on the community forest stakeholders can be illustrated in the diagram analysis of Eden and Ackermann stakeholders who divide stakeholder positions into four groups: Key Players, Context Setters, Subjects, and Crowds.

There are 17 stakeholders on the management of community forest in the West Bogor area, including: owner farmers, farmers, brokers, rental industry, farm laborers, loggers, businessman transport, finished goods industry, material store, local village government, BP3K Extension Unit, Forestry and Plantation Office Unit, BP DAS Ciliwung-Cisadane, Perhutani KPH Bogor, BPR (Bank Perkreditan Rakyat) and owners of land outside the village (See Table 2 and Figure 1).

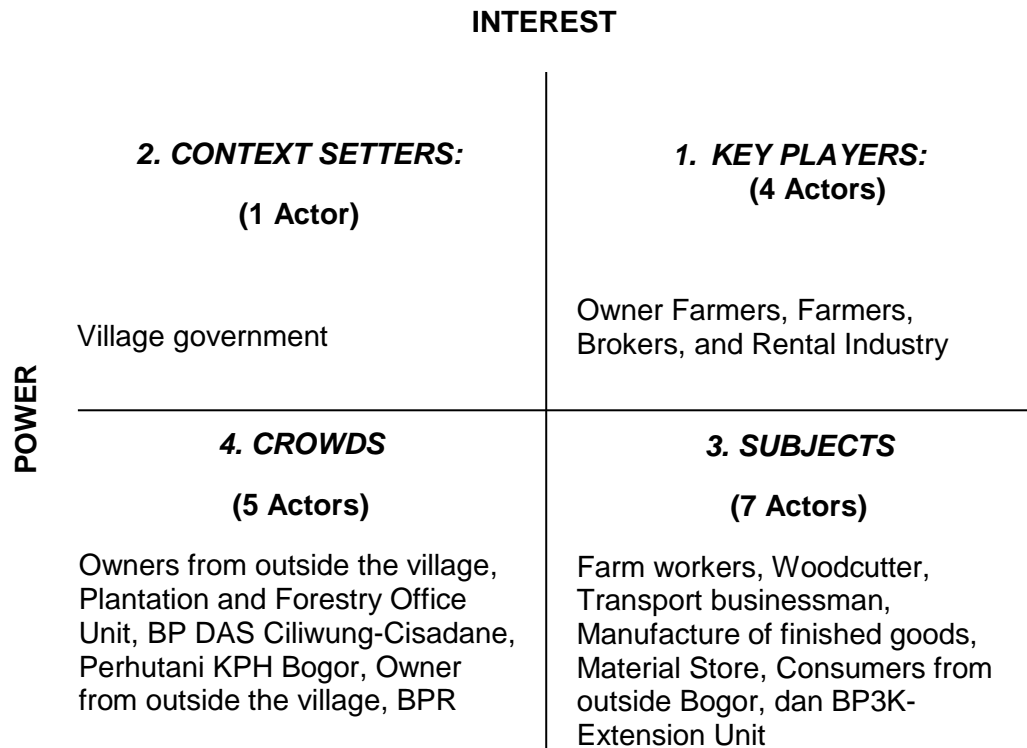
**Table 2: Power and Stakeholder Interest in Community Forest Enterprises**

No.	Stakeholders	Power		Interest	
		Big	Small	Big	Small
1.	Owner Farmers	V		V	
2.	Peasants (Other Owners' Land)	V		V	
3.	Brokers	V		V	
4.	Rental industry	V		V	
5.	Farm laborers		V	V	
6.	Woodcutter		V	V	
7.	Transport businessman		V	V	
8.	Industrial Finished Goods		V	V	
9.	Material store		V	V	
10.	Consumers from outside Bogor		V	V	
11.	Village government	V			V
12.	BP3K-Extension Unit		V	V	
13.	Plantation and Forestry Office Unit		V		V
14.	BP DAS Ciliwung-Cisadane		V		V
15.	Perhutani KPH Bgr		V		V
16.	BPR		V		V
17.	Owner from outside the village		V		V



Based on the analysis of Eden and Ackermann stakeholders shows that the position of stakeholders of Key Players forest business which has great influence and importance to the development of community forest enterprises, namely: owner farmers, farmers (land owned by outside village), brokers and rental industry. Key Players determine the success of community forest business development. Owner farmers, farmers, brokers and rental industry into one relationship chain that determines successful development of community forests in the area of West Bogor.

Local village government parties are Context Setters that have great influence, but their interest is small to the development of community forest. Village government can play a role in promoting the success of community forest development through policies that support the efforts of community forest. Conversely, the village government through its power can be a barrier to successful development of community forests through a policy of the nature burden and contra-productive to the community forest business.



**Figure 2: The Stakeholder Analysis Diagram**

Stakeholder subjects that have little influence, but have great importance to the development of community forests, including: farm laborers, loggers, transport businessman, the finished goods industry, material store, consumers from outside Bogor, and BP3K Extension

Unit. Stakeholders' subjects generally have a role to play in supporting the development of community forest because these stakeholders have a vested interest in the successful development of community forest, but have little power to oppose these efforts. Stakeholders crowds that have little influence and small importance to the development of community forest, including: Plantation and Forestry Office Unit, BP DAS Ciliwung-Cisadane, Perhutani KPH Bogor, BPR (Bank Perkreditan Rakyat) and owners of land from outside the village. Stakeholders crowds generally have a complementary role in the development of community forest because these stakeholders have little importance and power over efforts to develop community forest.

In general, the relationship between community forest business actors (Key Players, Context Setters, Subjects and Crowds) is good or no conflict between the stakeholders. Each stakeholder carries out their respective roles, rights and obligations well and mutually to support community forest management. The government needs to support in providing certainty to the village owners from land overseas so that their land is safe and secure from conflicts after being used by local community farmer groups for community forest enterprises. For example: district or village government is involved in "knowing" the community-owned forest management agreement from outside the village.

#### **4. Conclusion**

There are 17 actors (stakeholders) related to the development of community forest in the area of West Bogor, including: owner farmers, farmers, brokers, rental industry, farm laborers, loggers, transport businessman, finished goods industry, material store, consumers from outside Bogor, local village government, BP3K Extension Unit, Forestry and Plantation Office Unit, BP DAS Ciliwung-Cisadane, Perhutani KPH Bogor, BPR (Bank Perkreditan Rakyat) and the owner of the land from outside the village.

Stakeholders Key Players, including: owner farmers, farmers (land owned outside the village), brokers and rental industry. While Context Setters are the village government. Stakeholders subjects are including: farm laborers, loggers, transport businessman, finished goods industry, material store, consumers from outside Bogor, and BP3K Extension Unit. Other stakeholders included into the Crowds category.

Behavioral analysis shows that most farmers who own community forest (outside farmer groups) agree (Perception), decide to engage/ agree (Attitude) and will realize action towards the

development of community forest in the form of farmer groups. Behavioral analysis also shows that the Rimba Lestari farmer group in Leuwiliang District is preferred by the surrounding community outside this group compared to the Barokah farmer group-Rumpin sub-district. This is because the institutional of Rimba Lestari farmer group has been arranged relatively well. From the research results, it can be expected that the government needs to support in providing certainty to the village owners from land overseas so that their land is safe and secure from conflicts after being used by local community farmer groups for community forest enterprises. For example: district or village government is involved in "knowing" the community-owned forest management agreement from outside the village.

### **References**

- A Awang SA, Santosa H, Widayanti WT, Nograho Y, Kustomo, Supardiono. (2001). *Gurat Hutan Rakyat di Kapur Selatan*. Yogyakarta (ID) : Debut Press.
- Eden C dan Ackermann F. (1998). *Making Strategy : the Journey of Strategic Management*. London (UK) : Sage Publications.
- Ekawati, S, N. Haryanti, D. Subaktini. (2005). The Effectiveness of Farmers Group in Community Forest Management (Case Study in Wonogiri Community Forest). *Info Sosial Ekonomi*. 5(2). Center for Socio-Economic Research and Policy Development. Bogor.
- Fajar M. (2015). Perception, Attitude, and Action of Community Forest Management with Partnership Pattern [thesis]. Bogor (ID) : Faculty of Forestry IPB.
- Hardjanto. (2001). *The Impact of Economic and Monetary Crisis on Community Forestry Enterprise : Teakwood and Albizzia in Java*. Bogor (ID) : Bogor Agricultural University.
- and Trison S. (2010). *Development of Community Forestry for The Provision of Wood Energy in The Framework of Poverty Alleviation*. Bogor (ID) : Institute for Research and Community Services IPB.
- , Hero Y., Trison S. (2011). *Institutional Design of Forest Smallholders to Create Forestry Business Sustainability Towards Rural Poverty Alleviation Efforts*. Bogor (ID) : Faculty of Forestry IPB.
- Khairiah A. (2012). Revenue progress in Community Forest Management at West Bogor Area [thesis]. Bogor (ID) : Faculty of Forestry IPB.

- Lastini T. (2012). Typhology of Community Village Forest : Case Study in Ciamis Regency [dissertation]. Bogor (ID) : Graduate School IPB.
- Mulyaningrum, Kartodihardjo H., Surati Jaya I.N., Nugroho B. (2013). Stakeholders Analysis of Policy-Making Process: The Case of Timber Legality Policy on Private Forest. *Jurnal Manajemen Hutan Tropika* XIX(2). <https://doi.org/10.7226/jtfm.19.2.156>
- Schmid AA. (1987). *Property, power and public choice: an inquiry into law and economics*. New York: Praeger.
- Streiner DL. 2005. *Finding Our Way : An Introduction to Path Analysis*. Can J Psychiatry, Vol 50, 2 February 2005. <https://doi.org/10.1177/070674370505000207>
- Syukur, M. 2002. Analysis of Sustainability and Economic Behavior of Poor Household Credit Scheme Participants [dissertation]. Bogor (ID) : Graduate School IPB.