

## RESEARCH ARTICLE



## The Role of Stakeholders in Managing Social Forestry Business Development in FMU South Bandung, Indonesia

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### Article History

Received 07 May 2024

Revised 03 July 2024

Accepted 11 July 2024

### Keywords

forest business development, forestry policy, role of stakeholders, social forestry





### ABSTRACT

Social forestry symbolizes a sustainable forest management strategy, where local communities are important in strengthening socio-economic aspects, namely welfare and environmental sustainability. Increasing community welfare depends on collective efforts of social forestry, regional regulations, institutional structures, and cooperative with various stakeholders. Subsequent analysis employed the stakeholder analysis model, which scrutinizes stakeholders' roles in natural resource management. The examination compares roles outlined in policy with stakeholders' actual engagement. Consequently, the research provides insights into how stakeholders contribute to social forestry business development based on two critical factors: interest and influence. Results indicate that stakeholders' roles and contributions are substantially influenced by policy, especially concerning their interests and impact on community business ventures in social forestry. Stakeholder analysis reveals that governmental bodies, as mandated by policy, predominantly occupy quadrant II, tasked with aiding community groups in advancing social forestry businesses. However, quadrant I also encompasses governmental entities, albeit with limited involvement in community group activities. Quadrants III and IV underscore the diverse roles stakeholders assume within their respective domains, reflecting their interests and influence on business development initiatives to empower the community and improve the livelihood. This research aims to formulate tactics to enhance stakeholder involvement in implementing nation policies for fostering social forestry enterprises within the FMU South Bandung. The tactics need support of each party, especially the social forestry regulation in developing the business and capacity agency in measurement of accessible market, business plan, valuable product and good forest institutions.

### Introduction

The potential for natural resources in Indonesia's forest areas is very large. However, activities carried out by communities around the forest can cause deforestation and forest degradation to increase [1]. Conflicts of land tenure also often occur due to difference in perspective between the communities and forestry policy makers. Economic issues are also a concern, with most of the poor population living around forests. According to research by Kastanya et al. [2], there are 59.82% or 24 million poor people living within and surrounding forest areas. To overcome this problem, the government through the Ministry of Environment and Forestry (MoEF) introduced the Social Forestry or we usually called "*Perhutanan Sosial*" Program. This program aims to increase community participation in natural resource management. The PS program is contained in the National Medium Term Development Plan (RPJMN/*Rencana Pembangunan Jangka Menengah Nasional*) for 2020 to 2024. Social forestry involves local communities in sustainable forest management, with the aim of improving welfare and good environmental conditions.

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Based on MoEF Regulation No. 9 of 2021 [3], to strengthen the development of social forestry businesses, the government created and introduced the Social Forestry Business Group (*KUPS/Kelompok Usaha Perhutanan Sosial*). KUPS is responsible for product certification, marketing promotions and business network development. Social forestry programs are also expected to be able to overcome land tenure conflicts between communities [4] and provide accessibility to communities to manage social and economic rights from forest areas legally [5]. During the process, there were several problems in implementing this program, namely the level of welfare of communities around the forest was still low after the social forestry program [2] and institutional failure in forest management was one of the main factors in the failure of this program. On the other hand, people's income has not increased but has provided a new additional source of income for the communities [6].

To increase the effectiveness of social forestry programs, well institutions and great stakeholders role are needed [7]. For example, on kind stakeholders role, another program that has performed well in empowering forest farmers is the sustainable palm oil management strategy. Role of all stakeholders and their relationships had influenced the sustainability strategy used and sustainable policies who agreed upon by all stakeholders is a key to a successful program due to good institutions and well-social capital aspect [8]. In the other hand, lack of communication and social capital aspect of stakeholders in watershed management, such as Ciliwung watershed management on upstream condition. This is impacted to the planning and implementation of watershed management not running in an integrated manner or still running sectorally so that the perception, vision and mission in watershed management do not run simultaneously [9]. With experience in developing programs, good communication and institutions are needed to involve all parties to participate in the program.

Business development in social forestry can involve various sectors such as agroforestry, NTFPs (Non-Timber Forest Products), ecotourism and environmental services [10]. The government continues aims to improve and strengthen program implementation through the latest policies. This research was conducted to examine the effectiveness of social forestry programs and the role of stakeholders in developing businesses in communities around the forest. This is in line with various studies that guaranteeing environmental rights such as land and resources is important for the success of social forestry. Community-level stakeholders benefit from compliance with official regulations and guidelines, and they tend to have an interest in conserving forest resources.

Increasing the level of program success requires the role of relevant stakeholders to work effectively and optimally with government support through appropriate policies. The roles of the parties have power and interests, either directly or indirectly, in institutions, organizations or groups and can influence or be influenced by the achievement of goals [11]. The right policy will provide political will to each stakeholder to be willing to develop business in communities around the forest. This research aims to analyze the role of stakeholders based on policies and field implementation in the development of social forestry businesses. The dynamics of program implementation will have different problems between regions. Through this research, it is hoped that optimal barriers and roles of stakeholders can be found to increase the effectiveness of social forestry programs and improving the business process for communities around the forest.

## **Materials and Methods**

This research was conducted in FMU (Forest Management Unit) South Bandung, West Java Province at August 2022 to January 2023. The location was chosen purposively, namely 2 Social Forestry Groups (SFG) in FMU South Bandung, namely Bukit Amanah Groups or SFG Bukit Amanah (Platinum of KUPS class) and Alam Endah Groups or SFG Alam Endah (Platinum and Gold of KUPS class), with the following criteria: (1) potential for community interaction with forest areas, (2) differences in KUPS classification levels, and (3) diverse commodity business patterns. The focus of the business pattern chosen is coffee agroforestry at the research location. The tools and materials used include questionnaires, maps and interview guides. This questionnaire includes stakeholder analysis components, namely the components of interest and influence. These components have been adapted to the latest conditions in the development of social forestry business processes, especially coffee agroforestry. This analysis is key to pinpointing which processes can better influence and support the group. Stakeholder analysis is also used to understand the diverse and potentially conflicting interests of stakeholders [12].

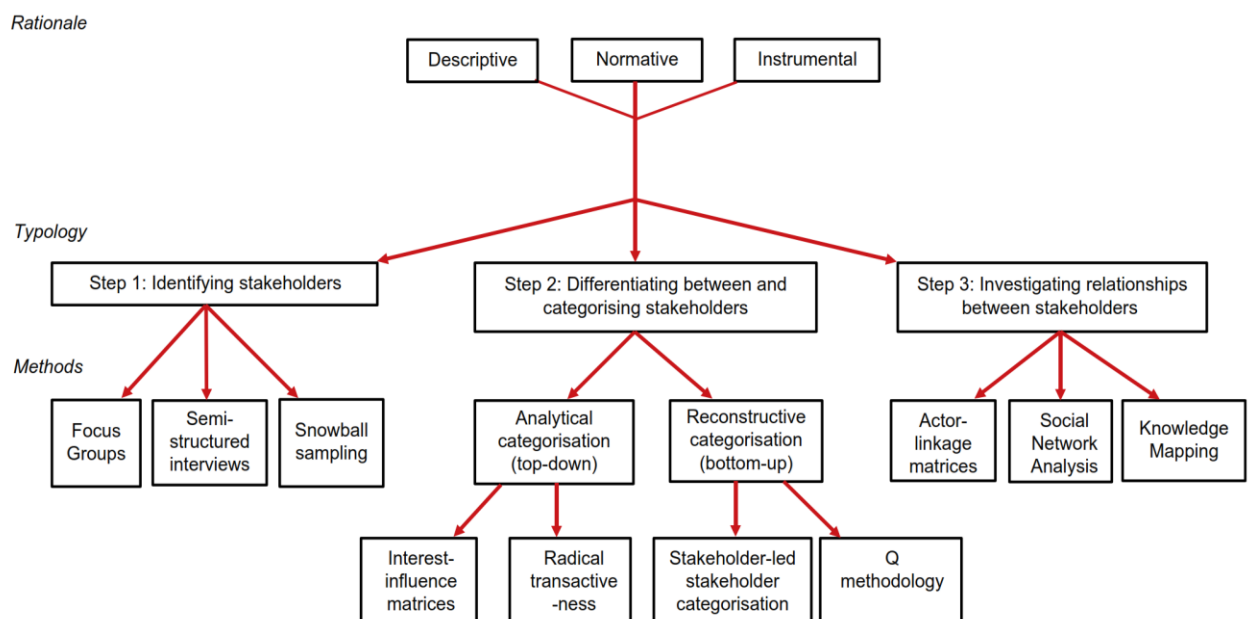
The selection of respondents was carried out deliberately using a snowball sampling method, namely a data source sampling technique with certain considerations [13], with the selection of respondents namely the chairman/head of the KUPS board, KUPS assistants, and several KUPS members. In process of data collection, the respondents were appointed by head of SFG reference which they were members of farmer groups who from the start helped in the formation of KUPS so that their knowledge and experience could help in this research so that the results were in line with expectations. The number of respondents was 60 people, namely 30 SFG Bukit Amanah members and 30 SFG Alam Endah members. The majority of key informants were also interviewed on behalf of each institution to find out the role of each institution in developing social forestry program efforts.

Data collection was carried out in three ways, namely literature studies in the form of reviewing activity report documents or research results and other related documents; questionnaires and in-depth interviews, namely the process of obtaining detailed information or information according to research objectives through direct questions and answers with sources or informants; and field survey. Apart from that, field survey is carried out to directly observe the behavior and activities of the communities.

Data analysis will be carried out using a quantitative approach. This approach is used to analyze stakeholder analysis (Figure 1). The material studied is policies that regulate the technical development of social forestry businesses and stakeholder implementation in the field. Stakeholder analysis uses the influence-interest model developed by Reed et al. [14] which includes three stages, namely (1) Identification of stakeholders and their interests using semi-structured interviews; (2) Differentiate and categorize stakeholders using an interest influence matrix; and (3) Investigating relationships between stakeholders using an actor linkage matrix.

### Figures and Illustrations

Figure 1 shows the method to rationalize the theoretical basis for stakeholder analysis (related to Reed et al. [14] approach). In descriptive, normative and instrumental approaches have applied in natural resource management contexts which is in social forestry management. These 3 steps as method used for: i) identifying stakeholders; ii) differentiating between and categorising; and iii) investigating relationships between stakeholders. This research will collect data using semi-structured interviews due to the face-to-face approach to each respondent and the stakeholder will be categorizing by the role in natural resources management [15] (step 1). Then map stakeholders with an interest influence matrix to categorize them into four quadrants with different types (step 2). Finally, the actor linkage matrix will display the role of each community group stakeholder in forestry business development (step 3).



**Figure 1.** Schematic representation of rationale, typology and methods for stakeholder analysis.

## Tables

Table 1 shows the components to assess the interest-influence of the stakeholders. To determine these levels, each stakeholder was scored based on data gathered through interviews and further refined by in-depth discussions with key informants. This dual approach of general and focused interviews allowed for a comprehensive evaluation of stakeholders' roles and their potential impact on the project's goals. The scoring process provided insights into which stakeholders have high levels of influence by each component, enabling more targeted engagement strategies. Ultimately, this analysis aids in identifying priority stakeholders whose interests and influence can significantly shape project success.

**Table 1.** Interest-Influence component in stakeholder mapping.

No.	Component	Sub-components
<b>Interest aspect of stakeholder</b>		
1	Stakeholder involvement in social forestry management	Program planning Implementation of the program Management supervision Management evaluation
2	Benefits obtained from PS management for stakeholders	Social Economy Forest sustainability
3	Stakeholder interests in PS program policies and objectives	Implementation of the PS program Support agency performance Increasing the level of welfare of communities around the forest Reduce the degradation forest Protect the forest areas
4	Dependence of stakeholders in forest management on the PS program	Community empowerment by stakeholders Sustainability of forest management with the community
5	Suitability of the main tasks and roles of each stakeholder in PS business development	Institutional strengthening Development of group entrepreneurship Business development cooperation Community group empowerment
<b>Influence aspect of stakeholder</b>		
6	The strengths each stakeholder has in PS management	The authority to make social forestry regulations The authority in management actions Influence on group decisions
7	Stakeholder position in KUPS decision making	The impact of the decision on the group Presence in the process
8	Resources provided for social forestry management	Financial Facilities & infrastructure Labor/Human Resources
9	Stakeholder support in social forestry management	Group mentoring/assistance Institutional strengthening Counseling in developing group capacity
10	Stakeholder interaction with groups for social forestry management	A program development Helps in solving problems Train and develop Human Resource facilities Monitoring program sustainability Increased group marketing

Table 2 shows the quantitative measure of the stakeholders' interests and influences in the context of business social forestry. This section interprets the interest-influence matrix by assigning scores to each stakeholder, providing a measurable perspective on their roles. Stakeholders are then categorized based on their specific interest and influence levels, offering clarity on how each group may impact or be impacted by the business social forestry initiative. The scoring system allows for a systematic grouping of stakeholders, making it easier to prioritize engagement efforts. This structured approach enhances the understanding of stakeholder dynamics, guiding strategies that align with both their interest levels and influence capacities.

**Table 2.** Quantitative measure of the stakeholders' interests and influences.

Score	Value	Criteria	Description
<b>Interest</b>			
1	0–5	Low	Does not support the development of social forestry businesses
2	6–10	Not high enough	Lack of support for the development of social forestry businesses
3	11–15	High enough	Enough to support the development of social forestry businesses
4	16–20	Tall	Supporting the development of social forestry businesses
5	21–25	Very high	Strongly supports the development of social forestry businesses
<b>Influence</b>			
1	0–5	Low	Does not affect the development of social forestry businesses
2	6–10	Not high enough	Less influence on the development of social forestry businesses
3	11–15	High enough	Enough to influence the development of social forestry businesses
4	16–20	Tall	Influence the development of social forestry businesses
5	21–25	Very high	It greatly influences the development of social forestry businesses

## Results

### Social Forestry in FMU South Bandung

Social Forestry has an institution in fostering community group activities, namely Social Forestry Groups (*KPS/Kelompok Perhutanan Sosial*), in this case LMDH or *Lembaga Masyarakat Desa Hutan* as a KPS because it has received permission from the minister of environment and forestry. Prior the establishment of social forestry, LMDH had developed by local community to engage and collaborate with the partners in PHBM (*Pengelolaan Hutan Bersama Masyarakat*) Program, which in this case is Perum Perhutani (State-Owned Enterprise in the form of a Public Company). With the PHBM Program, PHBM is a collaborative activity in which Perum Perhutani provides access to the community to participate in collaborative forest management. In PHBM, the community is allowed to plant agricultural crops in forest areas on the condition that they maintain the main forestry plants.

Social forestry in the FMU South Bandung area is found in 4 LMDH, namely LMDH Bukit Amanah, LMDH Alam Endah, LMDH Campaka Bentang, LMDH Sasaka Patengan, and LMDH Tambagguruyung. In its development, 51 KUPS have been formed in the FMU South Bandung area based on SK. 9179/MENLHK-PSKL/PKPS/PSL.0/12/2018. The research objects were carried out at three KUPS in LMDH which were selected purposively, namely LMDH Alam Endah and LMDH Bukit Amanah (Table 3) with the assumption that the KUPS at the selected locations had carried out business activities from forest resources. KUPS classes have various classifications ranging from Silver, Gold and Platinum.

**Table 3.** Object of research.

No.	Object of research	Members	Business type	KUPS class
1	KUPS Wisata Awi Langit (LMDH Alam Endah)	15	Environmental Services (Ecotourism)	Platinum
2	KUPS Mekartani 1 (LMDH Alam Endah)	24	Coffee agroforestry	Gold
3	KUPS Bukit Amanah (LMDH Bukit Amanah)	34	Coffee agroforestry, Ecotourism	Platinum

### Stakeholder Analysis

The development of social forestry businesses at FMU South Bandung involves 11 stakeholders from various government agencies, private institutions, academics, the community group and community-related (Table 4). Based on MoEF Regulation No. 9/2021 [3], it is stated that each stakeholder can provide assistance with various background interests, ranging from central/regional government assistance to local community leaders. The presence of these involved stakeholders provides evidence that everyone from the government to the private sector has been involved in social forestry business development activities.

**Table 4.** Stakeholder identification.

No.	Stakeholders	Status
1	Directorate General of Social Forestry and Environmental Partnerships, MoEF	Central Government
2	Forestry Agency of West Java province	Local Government
3	Perum Perhutani West Java and Banten Regional Division	Natural Resource Manager
4	FMU South Bandung	Central Government
5	Center for Social Forestry and Environmental Partnerships for Java, Bali and Nusa Tenggara*	Central Government
6	Plantation Sector, Agriculture Agency of West Java province	Local Government
7	Academics (IPB University, Padjajaran University, Telkom University, Bandung Islamic University and Subang State Polytechnic)	Education & Research
8	NGOs	NGOs
9	Partners (Pertamina EP, Telkom Indonesia)	Business
10	LMDH Bukit Amanah	Developers
11	LMDH Alam Endah	Developers

\*At the time of research, it was still the identity before the change (Java, Bali and Nusa Tenggara Social Forestry Center to Java Social Forestry Center).

According to Gusliana et al. [16], Sustainable Forest Management (SFM) is highly dependent on policy, legal and institutional conditions, all of which are included in the principles of Good Forestry Governance. Good Forestry Governance must regulate various actors involved in implementation of sustainable forest management. The implementation of social forestry programs involves a complex interplay of business management, and regulatory programs. Tajuddin [17] emphasizes the importance of business management in improving the welfare of communities, highlighting the need for stakeholder partnerships, simplified regulations, and access to capital. This related with this research that the role of stakeholders regulated in social forestry in the current policy does not specifically regulate the development of social forestry businesses. Social forestry locations have the status of protected forest functions, the authority of which is of course owned by the Indonesia national government so that the roles and contributions of stakeholders are influenced by national policies. A review of the roles regulated by policy (Rule in Form) and the role of stakeholders in the field (Rule in Use) will show performance of the role of each stakeholder in implementation in the field.

This analysis was obtained based on in-depth interviews with individuals in community groups and shows the potential that stakeholders can still develop to contribute to community groups. Reviewing the role of each stakeholder based on policy and implementation in the field will provide an overview of implementation results in achieving output from social forestry. In implementing business development, it is still found that programs are not implemented in the field by stakeholders. This provides information about obstacles to achieving program success. In this case, it is in line with Mekuria et al. [18] who understands that more serious obstacles and challenges come from within the implementing organization in natural resources management, such as apathy and inconsistency of actors in acting outside of mutual agreement. This raises notes to stakeholders regarding the technical implementation of social forestry business development in accordance with policy expectations. In Mugwagwa et al. [19] said that: *"If we are to meet or exceed expectations in the implementation of research and innovation policies for environment (or any other policies), resources must be provided to strengthen the government's role in policy coordination and ability to hold actors in the policy arena to account"*.

These arguments and research provide evidence that structuring the roles of stakeholders in coordinated policies is very influential in implementation in the field. Also, Bloomfield et al. [20] indicate that stakeholder capacity building (tailored training, awareness workshops, and experience sharing activities) is essential to support stakeholders in addressing social forest development and ecosystem management. In accordance with this case, because the social forestry program is in a forest area that is specifically regulated and authorized by the central government through the MoEF. Thus, the issuance of MoEF Regulation No. 9/2021 [3] provides technical information on community business development in social forestry programs. Apart from that, the political will factor is also important in encouraging the success of a program [21], in this case the development of social forestry businesses. Political will be influenced by the interests and influence/power of each stakeholder.

Identify the parties being analyzed then arrange the stakeholders in a matrix according to the stakeholder's interest in a problem and the stakeholder's influence. The level of interest referred to is based on the level of involvement, benefits, collaborators, policies and level of dependency. Meanwhile, the level of influence referred to is the power of stakeholders in influencing or making policies and regulations. This mapping is provided based on the results of interviews with 11 stakeholders who are generally involved in developing social forestry businesses in FMU South Bandung. Stakeholder mapping was carried out based on the components in the questionnaire which measured the level of interest of each stakeholder (Table 5) and the level of influence of each stakeholder (Table 6).

**Table 5.** Level of stakeholder interest.

Stakeholders	A1	A2	A3	A4	A5	Total	Average	Level of interest
Directorate General of Social Forestry and Environmental Partnerships, MoEF	4	4	4	5	3	20	4	High
Forestry Agency of West Java province	3	3	4	3	2	15	3	Fairly high
Perum Perhutani West Java and Banten Regional Division	4	4	4	4	3	19	3.8	High
FMU South Bandung	4	3	4	4	3	18	3.6	High
Center for Social Forestry and Environmental Partnerships for Java, Bali and Nusa Tenggara*	4	3	2	2	2	13	2.6	Fairly high
Plantation Sector, Agriculture Agency of West Java province	3	2	3	2	2	12	2.4	Fairly high
Academics (IPB University, Padjajaran University, Telkom University, Bandung Islamic University and Subang State Polytechnic)	2	2	2	1	2	9	1.8	Low
NGOs	1	2	2	2	2	9	1.8	Low
Partners (Pertamina EP, Telkom Indonesia)	2	2	3	1	2	10	2	Low
LMDH Bukit Amanah	3	2	3	2	4	14	2.8	Fairly High
LMDH Alam Endah	2	2	3	2	4	13	2.6	Fairly High

\*Note: A1=Program involvement; A2=Program benefits; A3=Organized program; A4=Willingness of stakeholders; A5=Conformity to main tasks/rules.

**Table 6.** Level of stakeholder influence.

Stakeholder	B1	B2	B3	B4	B5	Total	Average	Level of influence
Directorate General of Social Forestry and Environmental Partnerships, MoEF	5	4	2	2	2	15	3	Fairly high
Forestry Agency of West Java province	2	2	2	2	3	11	2.2	Fairly high
Perum Perhutani West Java and Banten Regional Division	3	4	3	3	3	16	3.2	High
FMU South Bandung	3	4	3	4	3	17	3.4	High
Center for Social Forestry and Environmental Partnerships for Java, Bali and Nusa Tenggara*	3	2	2	2	2	11	2.2	Fairly high
Plantation Sector, Agriculture Agency of West Java province	2	3	2	3	3	13	2.6	Fairly high

Stakeholder	B1	B2	B3	B4	B5	Total	Average	Level of influence
Academics (IPB University, Padjajaran University, Telkom University, Bandung Islamic University and Subang State Polytechnic)	2	3	2	2	2	11	2.2	Fairly high
NGOs	2	1	2	3	2	10	2	Low
Partners (Pertamina EP, Telkom Indonesia)	2	2	4	2	3	13	2.6	Fairly high
LMDH Bukit Amanah	4	4	3	4	4	19	3.8	High
LMDH Alam Endah	4	4	3	4	4	19	3.8	High

\*Note: B1= Influence of agency authority; B2=Stakeholder policy type; B3=Strategic resource power; B4=Expertise/specialization of agency/institution; B5=Influence on program sustainability.

The assessment data shows the role of stakeholders in their interests and influence in the development of social forestry businesses in FMU South Bandung by each level of interest-influence. Next, the value obtained by each stakeholder is then depicted in quadrants using a matrix. Stakeholder mapping is carried out by comparing the results of scoring the level of interest and influence of each stakeholder in the form of an interest and influence matrix using a stakeholder grid according to Reed et al. [14] (Figure 2). The categories in the matrix above can describe the position and role of each stakeholder in the development of social forestry businesses in FMU South Bandung.

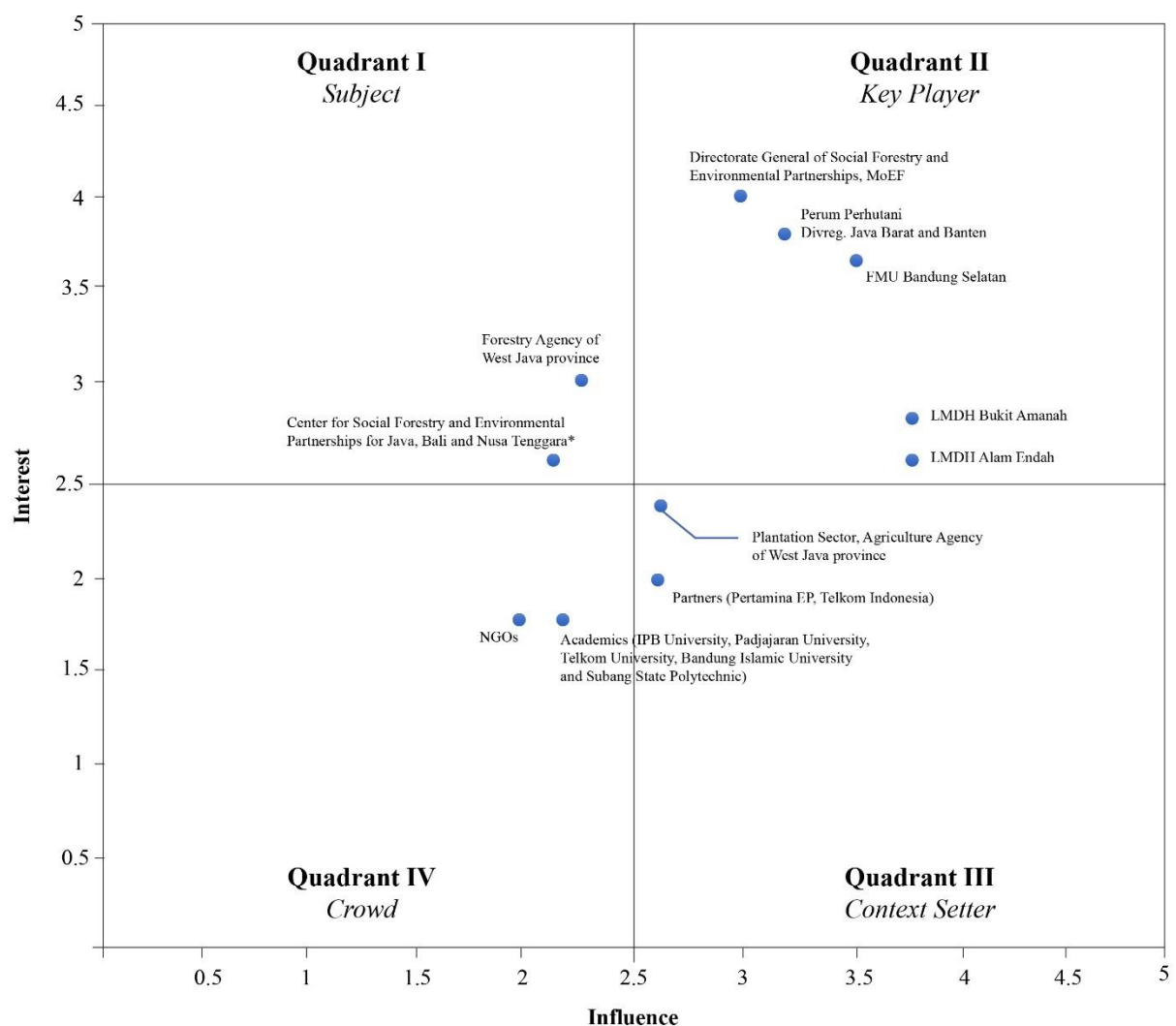


Figure 2. Stakeholder matrix in PS business development.



### **Quadrant I**

Subject (Quadrant I), who have a high level of importance but low influence placed on the West Java Provincial Forestry Service; and the Center for Social Forestry and Environmental Partnerships for Java, Bali and Nusa Tenggara. There is high interest in social forestry, because there is a mandate in the policy of the MoEF Number 9 of 2021 [3]. However, the existence of social forestry groups is not yet significant, causing low influence on these groups, even though the role of these stakeholders is very necessary in improving the economy of communities around the forest. This low attendance gives rise to the public's assessment that these stakeholders have not contributed as well to the group. The role as an extension of the central government and regional governments in monitoring and evaluating social forestry programs is important to strengthen information and data on social forestry businesses. However, these stakeholders must participate more actively and channel information on community needs to the central government. These in line with Curşeu and Schruijer [22], the stakeholders need to be actively supported to be able to participate in negotiation processes about natural resources use and management and to represent their own interests.

### **Quadrant II**

Key Player (Quadrant II), who have a high level of importance and influence are placed in the Directorate General of Social Forestry and Environmental Partnerships, MoEF; Perum Perhutani, FMU South Bandung; LMDH Bukit Amanah; and LMDH Alam Endah. This is because determining performance and activities is influenced by the authorities in forest area management and as policy makers, in this case the Ministry of Environment and Forestry of the Republic of Indonesia. Guidance, monitoring and evaluation activities are the key roles of stakeholders in this quadrant in social forestry programs. This high level of interest is because the government's authority and obligations in regulating forest ecosystems are mandated by the Capital Government (MoEF) and assisted by other BUMN/*Badan Usaha Milik Negara* stakeholders (FMU and Perum Perhutani). The role of FMU as a regional government is very important as an extension of the central and regional governments. Fitria et al. [23] said that the role of FMU is important and is considered important for the community to obtain legality over the land they manage. In addition, LMDH as a SFG has a key role at the site level to mobilize individual forest farming communities so that the program is successful, because the influence of the group leader on individual farmers is a real consideration in the process group decision. Accompanied by high influence in the form of coaching, monitoring and evaluation activities carried out by stakeholders, these stakeholders have a very important role in social forestry programs.

### **Quadrant III**

Context Setter (Quadrant III), namely stakeholders who have a low interest category but have high influence placed in the Plantation Sector, Agriculture Agency of West Java Provincial; and Partners (Pertamina EP, Telkom Indonesia). Low interest due to the absence of a direct mandate to stakeholders. However, the real influence on business development is their presence and contribution to the group. Providing training, mentoring, providing seeds and marketing products contribute to the activities provided. The role of Foster Partners in contributing to the development of the PS Program by providing funding and access to marketing of NTFPs products from the group. Pertamina EP in CSR/Corporate Social Responsibility Program provides grinders in the process of making ground coffee as proof of its contribution to community empowerment.

### **Quadrant IV**

Crowd (Quadrant IV), who have low interest and influence categories are placed in Academics (IPB University, Padjajaran University, Telkom University, Bandung Islamic University and Subang State Polytechnic) and NGOs. Interest from academics and NGOs is low because they are not actively involved in groups. The low interest of academics and NGOs means they have little influence on KUPS efforts and they are not actively involved in the group. Minimal influence with no activities related to business development, but contributing to other activities in the form of establishing other locations. Contributions in the form of research, studies and studies towards the development of social forestry programs continue to be developed. However, the community does not receive financial results directly, causing the following assessments from stakeholders to not contribute to improving the community's economy.

## **Discussion**

Stakeholder analysis from reviewing the level of importance and influence, there are 4 quadrants that display the role of each stakeholder, namely Subject, Key Player, Context Setter, and Crowd. The role and contribution of stakeholders are interested by national policy, this is because the research location has the

status of a protected forest function whose authority belongs to the Indonesia national government (which is a centralization policy). The research results are in line with policy mandates in regulating the roles of stakeholders and implementation in the field. So, stakeholders in quadrant II (key players) are dominated by government agency stakeholders and community groups as program subjects. This shows the high intensity of communication related to the program because of the policy mandate regulating stakeholders' role in business development. This shows that gaining political support at various levels is very important for the successful of natural resource management [24]. However, local stakeholders in the field fail to manage the development of social forestry businesses as good forestry governance due to a lack of governance capacity and a lack of personnel for each stakeholder.

It is related with the common situation in Indonesia, lack of personnel for SF assistance, and lack of appreciation of the competence of SF instructors and facilitators are the problem of process in social forestry development [25]. For this research area, until now the community has not been able to develop community businesses independently due to limited capacity. So, the resulting product is only sold to middlemen in seed form. There has been no change in conditions of economy since social forestry was founded. This provides a crucial position for stakeholders in enabling communities to run their businesses independently. So more high contributions are needed from each stakeholder, such as identifying potential forest products, developing business mechanisms, increasing capacity, and empowering communities in KUPS institutions. That will be successful because this activity has been successful in Nepal [26], providing access and management rights to forest resources to local communities has succeeded in improving livelihoods and other benefits for these poor communities.

Other government agencies such as the Forestry Agency of West Java Province and Center for Social Forestry and Environmental Partnerships (CoSFE) for Java, Bali and Nusa Tenggara are in Quadrant I (subject) due to they are considered not yet active and are not contributing enough to community groups even though there is already a mandate in the policy. This agency has lower influence because it only functions as a key player, distribute and conduct of business development information set by the central government. The role of stakeholders that has been regulated in the policy is still not implemented appropriately, this is due to limited personnel and accompanying capacity. In fact, the role in this regulation is that the Forestry Agency as a regional government can carry out and act as a companion in developing businesses for community groups. This stakeholder must be increased the awareness of benefit program for community. Regarding Bálíková et al. [27], Slovakia in managing natural resources is effective for improving the community's economy, relevant stakeholders must realize the importance of the advisory role and support innovative approaches in business development and institutional innovation, as well as play a role in supporting the formation of forest owner cooperative structures or across sectors. Then, high-skilled assistance is very important, especially for targeting target community groups, namely in business development, market access and institutional strengthening [28].

Stakeholders in Quadrant III (context setter) and Quadrant IV (crowd) have their respective roles and contributions to the group. This role takes the form of mentoring, strengthening institutions, facilitating capital, improving marketing, market access and community empowerment, as well as research and research in business development. However, people still think they have not contributed because people think that stakeholders who contribute are those who can improve their economy. Related to other research in Lawlor et al. [29], the Payment scheme for Ecosystem Services (PES) is the main current need of communities regarding the economy consideration. While the creation of new jobs and revenue streams is important, it is important to note that the amounts of payments transferred to date is not very large. The activities of stakeholder should be aims to improve the economy. In related to Ludvig et al. [30], Monetary and non-monetary support, consultation and social networks are essential to support forest ecosystem services across Europe.

To name a few, in the Swedish context, the strong support for targeting among stakeholders is interesting because it represents a new combination of actions involving stakeholders in developing management plans through deliberative practices and implementing optimal business development [31]. Not only government agencies, private parties and NGOs must be involved in this action with trust and social modals to empower community groups. The focus on improving the community's economy greatly impact each local community in this program. This is because community groups do not have the budget to realize this plan. Budget limitations are a crucial aspect in program implementation. The community does not receive budget support from any party. Stakeholders must be involved to resolve this issue. This also happens in some areas, such as

in Ethiopia [32]. Tight budget, mistrust, lack of participation, inefficient communication, tight budget, and miscommunications have been important constraints.

In this case, the policy in regulating stakeholders for the development of social forestry businesses does not provide specific restrictions so that it allows many parties to contribute to the development of social forestry businesses and the freedom for each of them to contribute in many ways to social forestry programs. Related to Berry [33], argue that environmental policy and project success depend on stakeholders' participation since stakeholder participation is critically important for sustainability and environmental security. So, this review can provide information in the form of data that there are still very few stakeholders involved and open up opportunities for other development partners to be involved in the process of developing social forestry businesses. Also, regarding the issue, the policy needs to improve with state the involvement and strategic of all stakeholder is the key successful of the program. With the political will and social capital to measurement of business plan social forestry will be increasing the awareness and participation consideration about the program benefits. This is align with Abazović and Mujkić [34], the factors influencing political will are as the behavior, role, and relevance of individual actors and the general characteristics of the society itself and mobilizing the necessary political will for the successful implementation of the action.

## Conclusions

The review of stakeholder roles is reviewed based on Reed's influence-interest method. From the results of stakeholder analysis, gaps and obstacles are still found in the role of stakeholders between policy (MoEF Regulation No.9/2021) and implementation in the field. Review of the level of importance and influence in 4 quadrants which display the role of each stakeholder, namely Subject, Key Player, Context Setter, and Crowd. Business development assistance from the management side is still dominated by government institutions, non-government institutions have not contributed much to this process. Even so, government agencies have not played a good role in developing social forestry program efforts. Therefore, government agencies need two things, namely political will and social capital. In increasing political will, trust is required to successfully implement each program. This optimal role continues to be carried out and the capacity of stakeholders is needed to improve the welfare of communities around the forest. So, assistance from other parties is required to accelerate institutional strengthening and business development.

## Author Contributions

**FRH:** Conceptualization, Methodology, Data collection, Writing – Review, and Editing; **B:** Conceptualization, Review, and Supervision; **ST:** Conceptualization, Review, and Supervision.

## Conflicts of Interest

In this case, researchers ensure there are no conflicts of interest.

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