

MASTER THESIS

**Collaborative Governance in Protected Area
Management at Forest Park Ir. H. Djuanda,
West Java, Indonesia**

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ABSTRACT

Forest Park Ir. H. Djuanda is a protected area in West Java, Indonesia, which involves all relevant stakeholders in managing it. The stakeholders' involvement can be seen as a challenge because each stakeholder has their own roles, interests, and goals. Therefore, this research aims to describe the existing collaborative governance in the management of Forest Park Ir. H. Djuanda. Data collection and analysis were carried out through a mixed method of qualitative and quantitative to obtain four information variables from the collaborative governance theory by Ansell and Gash. Surveys and interviews were conducted with relevant stakeholders, such as government agencies, private sectors, local communities, and local NGOs. The result shows that collaborative governance in the management of Forest Park has been going well due to stakeholders' motivation in involving the collaboration process (e.g., economic, environmental, social, or a combination of those three). In addition, the presence of lead stakeholders in the collaboration process can reduce the possibility of conflicts of interest between stakeholders because the lead stakeholders can be a bridge between stakeholders. The existing procedures and regulations related to collaboration are sufficient to overshadow the importance of collaboration. Moreover, face-to-face dialogue, sharing commitments, sharing understanding, and having intermediate outcomes show that the collaboration process has been implemented. To ensure the collaborative governance process runs smoothly, it is necessary to schedule regular meetings between stakeholders because regular meetings can identify problems that may happen faster. Hence, the solution to those problems will be provided immediately.

Keyword: Collaborative governance, Collaboration, Stakeholder, Forest Park, Protected Area.

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CHAPTER 1. INTRODUCTION

1.1 Background

Nowadays, an increased population leads to pressure on the environment. This pressure also occurs in the protected area. The IUCN (International Union for Conservation of Nature) defines a protected area as “a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (Dudley, 2008). Indonesia has 554 protected areas with 27.42 million hectares, consisting of 22.10 million hectares in land and 5.32 million hectares of marine protected areas (MoEF, 2020). Protected areas located in land are surrounded by 6,381 villages out of 74,946 villages in Indonesia (MoEF, 2020). Most of the population depends on the existence of these protected areas as a place to meet their economic needs and meet their daily needs (MoEF, 2020).

One of the protected areas in Indonesia is Forest Park Ir. H. Djuanda, located in West Java, Indonesia. The forest park is under the management of the provincial government. As a protected area, forest parks are responsible for complying with several regulations, such as Law Number 5/1990 regarding the conservation of living natural resources and their ecosystems, Law Number 41/1999 regarding forests, and Law Number 32/2009 regarding environmental protection and management. These regulations instruct that protected areas must be managed to protect and preserve nature (plants and animals) and make sustainable use of natural resources and their ecosystems. Moreover, the policy also stipulates that the management of protected areas must involve all stakeholders related to the area.

The involvement of stakeholders in protected areas can be seen as a challenge. This challenge arises because each stakeholder has their own roles, interests, and goals. Therefore, protected area management activities must accommodate all the differences of each stakeholder.

1.2 Problem statement

Forest Park Ir. H. Djuanda is one of the protected areas that can preserve flora and fauna, secure infrastructure networks, improve air quality around the area, and support water and soil conservation (Saputra et al., 2019). Besides being a protected area, Forest Park Ir. H. Djuanda is also a tourist area that is quite attractive to the surrounding community. This location is near Bandung city (capital city of West Java Province) and can also reach from Jakarta (Capital city of Indonesia) within 2 hours. Because the

forest park is relatively easy to reach, this location has become one of the places for tourists to visit who want to experience the presence of the forest.

By becoming a tourist area, the pressure on this protected area increases, affecting its function and biodiversity. Some of the problems in this forest park are related to social, economic, and environmental issues because most of these locations are directly adjacent to residential areas. Some people who live near the forest park habitually dispose of their waste illegally to the forest park area, consequently disrupting the existing ecosystem. They did that because there is no provision of bins/containers by the local government in their village. Besides, the commercial sector, such as cafes and restaurants, also increases waste generation due to the high demand for tourism. Moreover, the habit of visitors who do littering further exacerbates the situation.

Due to many stakeholders influencing the decline in function and biodiversity in the forest park, there is a need for collaboration between stakeholders to reduce the impacts. According to Bodin (2017), one way of a collaborative approach to solving environmental problems is to know directly from each actor who collaborates. Therefore, this strategy must pay attention to who the actors are, their interests and motivations, with whom they collaborate, and how collaborative networks relate to the collective ability of each stakeholder to deal with various environmental issues. One of the collaboration models that can be used is through collaborative governance. Collaborative governance brings together various stakeholder groups in the same place with government agencies to make decisions based on general agreement (Ansell & Gash, 2008). Furthermore, protected areas in Indonesia are mandated to be managed centrally by one agency in the government (Forestry Law, 1999). Therefore, collaborative governance of protected areas has developed to respond to centralized environmental governance's failures (Koning et al., 2017). Subsequently, to improve the quality of Forest Park management, analyzing all stakeholder interests and their interrelationships become salient.

Management of Forest Park Ir. H. Djuanda, whether it is protection, preservation, or utilization, has involved various stakeholders, both from government agencies, private institutions, and community institutions (Saputra et al., 2019). Management by involving collaboration between stakeholders raises conflicts of interest due to different views on management. Several challenges related to collaborative governance arise in the management of Forest Park Ir. H. Djuanda. Conflicts of interest between Forest Park managers and other stakeholders have implications for the decline in the number of tourists, a decrease in environmental quality, the generation of plastic waste originating from settlements around the Forest Park, as well as the emergence of social inequality in the community around the Forest Park (Fitriani, 2016). Therefore, collaborative governance in the management of Forest Park Ir. H. Djuanda will

be investigated more deeply by paying attention to the collaboration that has occurred between stakeholders in Forest Park.

1.3 Research objective

The objective of this research is to describe existing collaborative governance in the management of Forest Park Ir. H. Djuanda. With this understanding, it is hoped that a more effective collaboration process can be achieved by recognizing diverse interests, exchanging positions, building trust, and finding mutual interest among stakeholders. Consequently, the function of protected areas to protect and conserve nature (plants and animals) and make sustainable use of natural resources and their ecosystems can be achieved optimally. Moreover, it can provide recommendations to the government and the Forest Park management team to improve its management.

1.4 Research question

Main research question:

“How collaborative is the governance of the Forest Park Ir. H. Djuanda?”

Sub-research questions:

1. What is the motivation of stakeholders to engage in collaboration at Forest Park Ir. H. Djuanda?
2. How do the lead stakeholders facilitate the collaboration process at Forest Park Ir. H. Djuanda?
3. What are the existing procedures and regulations related to collaboration at Forest Park Ir. H. Djuanda?
4. To what extent do stakeholders collaborate at Forest Park Ir. H. Djuanda?

1.5 Thesis outline

The thesis consists of seven chapters. Chapter 1 contains an overview of the research topic, problem statement, research objectives, and research questions are described. Subsequently, chapter 2 discusses the context literature review, including background information on the protected area and defining where the research was conducted. Next, chapter 3 discusses the main theoretical framework, the collaborative governance framework. Chapter 4 discusses the research methodology used to conduct the research. Then, chapter 5 presents the results and findings under the collaborative governance framework. Chapter 6 discusses the existing conditions related to collaboration between stakeholders in Forest Park Ir. H. Djuanda, in which stakeholder interests are represented, as well as discusses which

variables from the collaboration that occurred can be improved. Finally, chapter 7 provides a conclusion, recommendations, and suggestions for further research.

CHAPTER 2. CONTEXT

2.1 Protected Areas

Protected areas have a critical role in maintaining a healthy ecosystem and environment for humans and other species. Moreover, they are essential in conserving biodiversity, providing clean water and air, preserving culture, and providing livelihoods for traditional communities, bringing benefits to the sustainable development for millions of people through nature-based tourism, and they are a natural solution to climate change (Worboys et al., 2015). Protected areas appear in several different forms, including wilderness areas, national parks, and protected landscapes or seascapes (Dudley, 2008).

The IUCN has established an internationally accepted category system for protected areas by dividing them into six protected area categories based on management objectives (Borrini-Feyerabend et al., 2013; Dudley, 2008). The sixth category of protected areas is shown in **Table 1**.

Table 1. The IUCN protected area categories

Protected area category	Management objectives
1a - Strict Nature Reserve	Strictly protected areas are established to conserve biodiversity and geological and geomorphological features. For the protection of conservation values, in this area, human visits, resource use, and impacts are strictly controlled and restricted. This area also serves as an area for scientific research and monitoring.
1b – Wilderness Area	Large untouched or minimally modified areas that retain their original character and influence are protected and managed to maintain their natural condition without permanent or significant human occupation.
II – National Park	Large natural or near natural areas with complementary species and specific ecosystem characteristics are prepared to protect large-scale ecological processes and provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational, and visitor opportunities.
III – Natural Monument	Protected areas are designated to save a particular natural feature, such as a landform, sea mount, cave, or even a living feature, such as an ancient grove. They are typically very compact places with a high tourist, historical, or cultural importance.
IV – Habitat/ Species Management	Areas set aside for the conservation of specific species or environments. Many of these protected areas require ongoing, proactive management to achieve their objectives.

Protected area category	Management objectives
V – Protected Landscape/ Seascape	Areas where different characteristics and significant ecological, biological, cultural, and scenic values result from interactions between humans and nature over time, and the integrity of these interactions needs to be maintained and is critical to preserving nature and preserving other values.
VI – Protected Area with Sustainable Use of Natural Resources	Protected areas that protect ecosystems and habitats and the cultural values and traditional natural resource management systems connected with them. They are typically large, with most of the land remaining in its original environment and a part managed sustainably.

Source: *Borrini-Feyerabend et al., 2013*

The first two categories are Strict Natural Reserves and Wilderness Areas, which restrict resource exploitation. National Park and Natural Monument are ranked second and third, respectively. In both unmodified and naturally occurring habitats, that can be responsibly utilized. On the other hand, national parks enable the protection of large-scale undamaged nature, which includes the environment and its species, ecological processes, and cultural, spiritual, intellectual, and local tourism. The fourth is a Habitat/Species Management Area, which is a protected area with the purpose of reserving a specific habitat/species. The fifth category is Protected Landscape/Seascape. It refers to a protected area that has been modified as a result of human involvement in the area (Dudley, 2008).

2.2 Forest Park Ir. H. Djuanda

Forest Park Ir. H. Djuanda is a protected forest area that protects life support systems and preserves the diversity of native or non-native plant and animal species (Forest Park Ir. H. Djuanda Technical Unit, 2017). The uniqueness of the beautiful natural panorama can be used sustainably for conservation, collection, education, and recreation and can indirectly improve the surrounding socio-economic community. Forest Park Ir. H. Djuanda is a protected area with approximately 528 hectares. This forest park is located in three different administrative regions: Bandung Regency, West Bandung Regency, and Bandung City. There are eight villages located around the forest park area, with a total population in 2015 of 107,052 people (Forest Park Ir. H. Djuanda Technical Unit, 2017). According to the IUCN's protected area categorization, the Forest Park is classified as a "National Park." Therefore, the Park is responsible for preserving the unmodified environment while also providing cultural, scientific, and tourism possibilities (Dudley, 2008).

Forest Park Ir. H. Djuanda was initially part of the Mount Pulosari Protected Forest area. Its function was changed to the Curug Dago Tourism Park with the Decree of the Minister of Agriculture Number 575 in 1980. From 1980 to 1984, the function of the Tourism Park was upgraded to a Forest Park Ir. H. Djuanda to appreciate the national hero from West Java Province, Ir. H. Djuanda. Based on the Presidential Decree of the Republic of Indonesia Number 3 in 1985, the forest area of the Curug Dago Tourism Park was officially changed to a Forest Park Ir. H. Djuanda. The Forest Park area, based on regulations, is managed with a management zone system. This management zone is a spatial arrangement within Forest Park by considering examinations of the ecological, social, economic, and cultural aspects. There are three management zones in Forest Park Ir. H. Djuanda: protection zones, utilization zones, and collection zones (Forest Park Ir. H. Juanda Technical Unit, 2017). The management zone map of Forest Park Ir. H. Djuanda is presented in **Figure 1**.

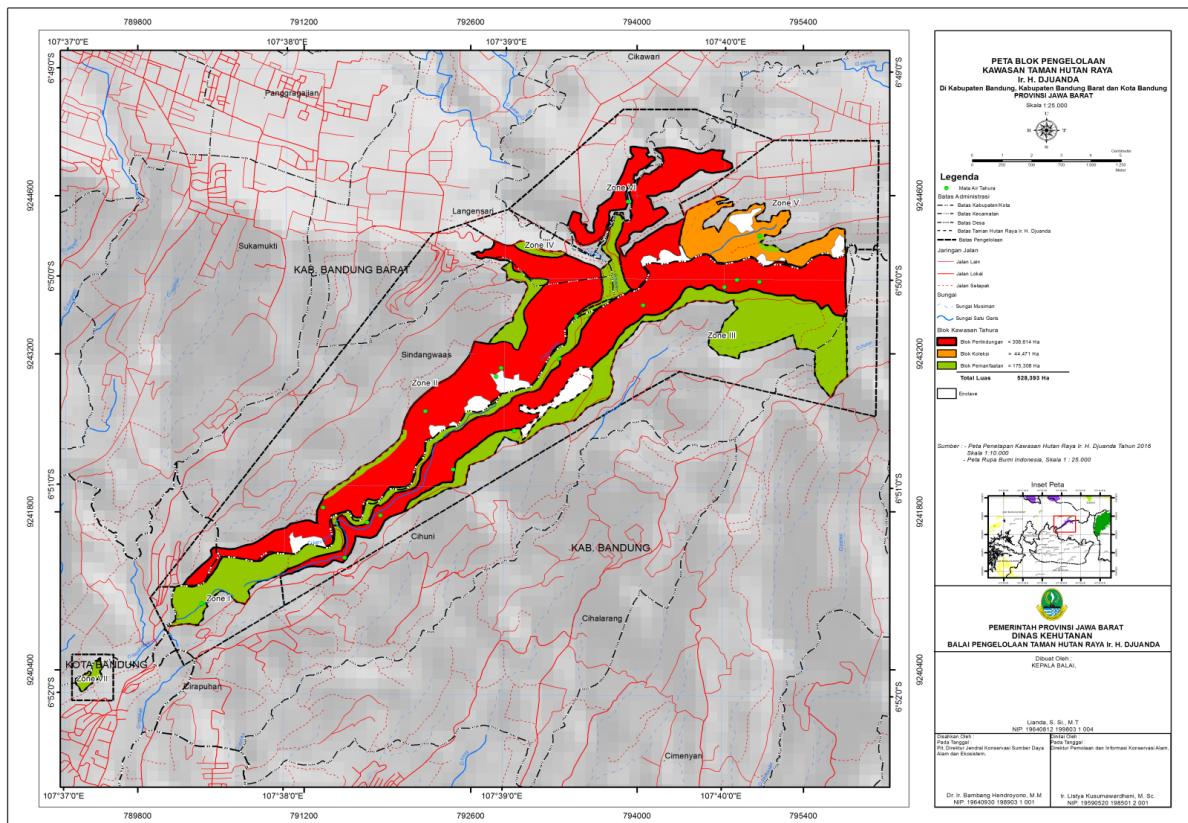


Figure 1. The management zone map of Forest Park Ir. H. Djuanda (Forest Park Ir. H. Juanda Technical Unit, 2017)

Forest Park Ir. H. Djuanda is a secondary natural forest and plantation forest that has a quite varied flora and fauna potential. In addition to the diversity of flora and fauna, Forest Park Ir. H. Djuanda's potential is also a natural and artificial tourist attraction. The existence of a tourist attraction in the Forest Park area allows the use of natural and artificial resources both directly and indirectly. With the tourism potential, this area has become one of the places that tourists often visit. The number of tourist visits to this forest park was around 290,000 to 340,000 people per year from 2017 to 2019 (West Java Provincial Forestry Agency, 2017; West Java Provincial Forestry Agency, 2018; West Java Provincial Forestry Agency, 2019).

Forest Park Ir. H. Djuanda has a vision of managing the long-term development plan to make Forest Park Ir. H. Djuanda a world-class Forest Park in 2024 (Forest Park Ir. H. Juanda Technical Unit, 2017). One of the actions is to provide opportunities for relevant stakeholders and communities around forest areas to participate in developing the Forest Park Ir. H. Djuanda.

CHAPTER 3. THEORETICAL FRAMEWORK

3.1 Literature review about collaborative governance

Collaborative governance arises when the government has limited time to deal with complex problems that require collaboration with external actors (Charalabidis et al., 2012). The government does not rely only on its internal capacity to implement a policy and program. Limited capabilities, resources, and networks that are supporting factors for implementing a program or policy encourage the government to collaborate with various parties. This collaboration can be carried out with fellow governments, the private sector, and the community to achieve policy goals collaboratively.

Ansell and Gash (2008) state that collaborative governance is a new strategy in governance that makes various stakeholders gather in the same forum to create a mutual agreement. Collaboration is described as a joint effort to solve problems by involving concerned government and non-government agencies. In addition, collaborative governance is also described as a decision-making process and structure that involves stakeholders from various sectors and levels to carry out public goals that cannot be achieved easily and solve problems that cannot be easily solved by a single organization (Emerson et al., 2012).

Collaborative governance is also defined as the availability of institutions that encourage regular interaction between government and non-government actors without a monopoly by state actors in problem definition, goal setting, or implementation methods (Culpepper, 2002). However, this is usually contradictory in practice because it cannot be denied if the government becomes the leader and policy maker, so there is a possibility of more domination even though it still requires the participation of other stakeholders. Meanwhile, collaborative governance is also defined as a collective and egalitarian process where every participant has substantial authority in decision-making, and every stakeholder has the same opportunity to reflect on their aspirations in the process (Robertson & Choi, 2010).

Collaborative governance can also be described as a situation where there is dependence between actors. The limitations possessed by the actors raise the desire to do collaborative governance. Then, these actors need to express their desire and willingness to forge closer relationships with other actors. Recognition of the legitimacy of each actor needs to be considered. A sense of shared ownership of any collaboration process needs to be built after the actors have expressed their commitment to collaborate (Ansell & Gash, 2008). Collaborative governance promoted by Ansell and Gash (2008) emphasizes that participation between government institutions and non-governmental institutions is

essential. They also emphasize that the government is the main actor in taking formal initiatives in reaching out to non-governmental actors to collaborate.

The use of collaborative governance has been adopted in several sectors, including the management of protected areas. Through the formation of alliances and partnerships between stakeholders (government, private sector, local communities, and non-governmental organizations), collaborative governance of protected areas has the potential to promote sustainable land use, biodiversity conservation, and poverty alleviation (Munthali, 2007). Furthermore, the development of these alliances can be used to foster consensus and efficiently deploy available skills and resources (Munthali, 2007). In addition, collaborative governance also emphasizes public policymaking and administration by integrating competitive and collaborative decision-making, not by replacing it (Sranko, 2011). A case study on forest agreements conducted by Sranko (2011) shows that collaborative coalitions empowered by public agreements can legitimately force governments to renegotiate a policy at issue, even though state actors are often reluctant to give up control.

The collaborative governance model by Ansell and Gash (2008) defines a special role for public agencies. Public agencies in this model are said to be able to start collaborative forums either to fulfill their own goals or comply with applicable laws and regulations (Ansell & Gash, 2008). Public institutions that are included in public agencies such as bureaucracies, courts, legislatures, and other governmental bodies at the local, state, or federal level (Ansell & Gash, 2008). By mentioning public agencies specifically, the collaborative governance model is deemed appropriate to be applied as a framework in this research. This happened because the management of Tahura Ir. H. Djuanda involves many public agencies in its management, and Forest Park Ir. H. Djuanda Technical Unit, as a public agency, is the main stakeholder who has a direct interest in a policy, program, and project (Saputra et al., 2019).

3.2 Ansell and Gash's collaborative governance model

Collaborative governance is the process of governing government by involving non-state stakeholders together with one or more public institutions in a formal, consensus-oriented, and deliberative collective decision-making process in making or implementing public policies, managing programs, or managing public assets (Ansell & Gash, 2008). Collaborative governance brings together a diverse group of stakeholders in a common venue with government agencies to make decisions based on consensus (Ansell & Gash, 2008). With the collaboration that involves various stakeholders with their respective interests, it is hoped that it can help break the deadlock in governance (Bodin, 2017).

Ansell and Gash (2008) emphasize six criteria in collaborative governance. First, the forum is initiated by a public institution. Second, participants in the forum must include non-government actors. Third, participants must be directly involved in policy making and not merely “consult” with the government. Fourth, the forum must be formally organized and have regular meetings. Fifth, the policies taken must be based on consensus. And sixth, the collaboration focuses on public policy or public management.

As seen in **Figure 2**, Ansell and Gash (2008) developed a collaborative governance model based on four major variables: starting conditions, institutional design, leadership, and collaborative process.

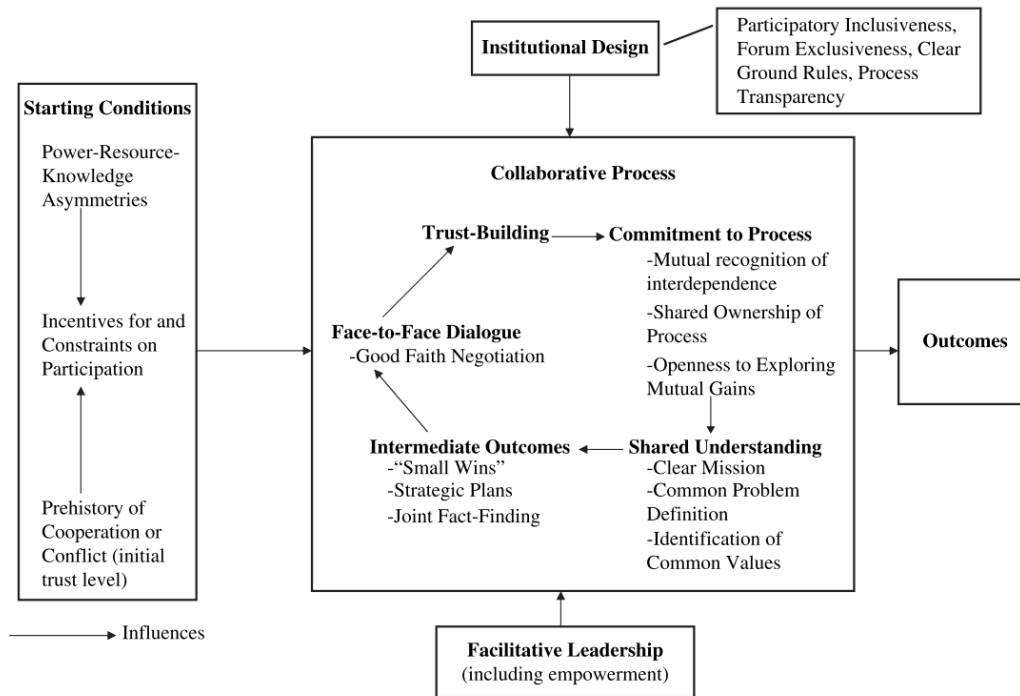


Figure 2. A model of collaborative governance (Ansell & Gash, 2008)

In the collaborative governance model issued by Ansell and Gash (2008), several dimensions form a cycle and influence each other. Variables in each dimension, as follows, can influence the collaborative governance process (Ansell & Gash, 2008).

1. Starting condition

At this point, various variables and motivation will be identified that influence the collaboration's stakeholders' participation. According to Ansell and Gash (2008), there are several factors that influence the motivation of stakeholders to engage in collaboration, including the imbalance between

the resources or strengths of different stakeholders, the incentives stakeholders have to collaborate, and a history of conflict or previous cooperation between stakeholders.

2. Facilitative leadership

Facilitative leadership can bring people together and encourage collaboration among them. According to Ansell and Gash (2008), effective collaborative leadership entails three components: (1) effective process management within the collaboration process, (2) maintaining technical credibility, and (3) ensuring that collaboration has the ability to make decisions that are convincing and acceptable to all parties. Collaborative leaders must also be able to encourage broad and active involvement, maintain broad influence and control, facilitate effective group dynamics, and expand the scope of the process.

3. Institutional design

Institutional design refers to the fundamental procedures and norms that govern collaboration, which is incredibly beneficial because procedural legitimacy is crucial during the collaboration process. According to Ansell and Gash (2008), there are two primary mechanisms of legitimacy: (1) opportunities for stakeholders to negotiate policy results with other parties and (2) assertions that policy outcomes represent all stakeholders.

4. Collaborative process

a. Face to face dialogue

Because of the process of reaching an agreement, face-to-face dialogue as a method of communication becomes vital in collaboration (Ansell and Gash, 2008). Direct communication (face to face) is an attempt to eliminate the perception of actors who see the negative side of other actors and to promote actor respect. The actors in a collaboration become more objective in their interactions when they have direct communication.

b. Trust building

Building trust is a necessary condition for building solid collaboration. According to Ansell and Gash (2008), building trust takes time, as teamwork necessitates extensive communication and adaptability to changing circumstances resulting from the re-emergence of previous disagreements (prehistory antagonism). Policymakers and stakeholders must budget time for effective remedial trust-building. If not, the collaboration should be avoided.

c. Commitment to process

According to Ansell and Gash (2008), the importance of commitment in the collaborative process cannot be overstated. The original motivation of the actors in the collaboration is closely tied to commitment. The process of achieving commitment means giving confidence that a process with good intentions for mutual benefit is the best way to produce the desired policy. Commitment to an established process defines how clear, fair, and transparent a procedure is. Good commitment between stakeholders depends on trust in other actors to respect the viewpoints and interests of other actors which creates a sense of mutual responsibility in the process.

d. Shared understanding

To achieve common goals, it is critical to have a shared understanding. According to Ansell and Gash (2008), a common mission, common purpose, common objectives, and shared vision are all examples of shared understanding. The understanding in concern is the unification of thinking and similar objectives to reduce the possibility of misunderstandings between actors.

e. Intermediate outcomes

According to Ansell and Gash (2008), if the collaborative process is successful in general, intermediate outcomes are considered to exist. These intermediate results, known as small wins, are critical for the collaboration process's long-term sustainability because they represent the collaboration's output.

CHAPTER 4. RESEARCH DESIGN

4.1 Research strategy

4.1.1 Research unit

Research units for this research consist of stakeholders that affect or are being affected the Forest Park Ir. H. Djuanda. These stakeholders are divided into four major groups: government agencies, private sector, local communities, and local NGOs. The selected government agency is an agency that has the main tasks and functions that will have an impact on the Forest Park. Next, the selected private sector is a sector that utilizes Forest Park's natural resources to run its business. The selected local communities are communities that come from people living in villages around the Forest Park area who have concerns and take advantage of the existence of Forest Park for the benefit of their community. Finally, the selected local NGOs are communities that are not from around the Forest Park but have a concern for the sustainability of the Forest Park.

4.1.2 Research boundaries and limitations

The limitations of this study are the capacity and time available. The scope of this research is focused merely on collaboration between stakeholders in a specific location, which is Forest Park Ir. H. Djuanda. Collaboration between stakeholders can be in the form of collaboration in the protection, preservation, and utilization of the natural resources for economic purposes, nature tourism, research, education, science, cultivation, and culture for the welfare of the community, or collaboration for the protection of biodiversity. The stakeholders interviewed are limited to those affecting and being affected by the existence of Forest Park Ir. H. Djuanda. The research participants were the persons who were involved in the collaboration process and, hence, have the knowledge or information related to the collaboration process. However, only a limited number of stakeholders were involved in this research. Therefore, even though a small sample size could obtain more detailed information, this research cannot be generalized to other Forest Park areas.

4.2 Data collection

Data was collected to answer the research and sub-research questions through survey, semi-structured interviews, and desk research. Desk research was used to analyze government regulations,

policies, and planning documents about collaboration in the forest park. Meanwhile, survey and semi-structured interviews were conducted with respondents who represent institutions/organizations that are stakeholders who collaborate in the Forest Park. As mentioned in **Section 4.1.1**, the stakeholders interviewed were those involved in the management or those interested in the Forest Park. The survey and semi-structured interview aim to gain an in-depth understanding of the collaborative process in Forest Park. **Table 2** summarizes the desired information, sources, and the technique for obtaining it for each sub-research question.

Table 2. Desired information and accessing method

Sub-research question	Desired information	Interview and survey questions	Accessing method
Q1. What is the motivation of stakeholders to engage in collaboration at Forest Park Ir. H. Djuanda?	<ul style="list-style-type: none"> • Stakeholder motivation • Collaborating background 	What aspects do you think are more important for your organization by collaborating in this Forest Park? Economic, social, or environmental? And why these aspects important?	Semi-structured interview
Q2. How the lead stakeholders facilitate the collaboration process at Forest Park Ir. H. Djuanda?	<ul style="list-style-type: none"> • The lead Stakeholder • The effectiveness of the lead stakeholders' role 	<ul style="list-style-type: none"> • Choose from the stakeholders below, who are the lead stakeholders that can lead the collaboration process in the Forest Park? (Choose max three stakeholders) • How effective are the lead stakeholders doing their role to facilitate the collaboration? 	Semi-structured interview
Q3. What are the existing procedures and regulations related to collaboration at Forest Park Ir. H. Djuanda?	Procedures and regulation	-	Desk research
Q4. To what extent do stakeholders collaborate at Forest Park Ir. H. Djuanda?	The existing condition of collaboration in Forest Park, including face-to-face dialogue, trust building, commitment, shared understanding, and intermediate outcomes within stakeholders	<ul style="list-style-type: none"> • Choose from the stakeholders below. Who are the stakeholders your organization had face-to-face dialogues with during the collaboration process? • How often are those face-to-face dialogues conducted? And how the discussion works? • How committed are you to this collaboration process? What kind of commitment do you give to collaborating? Type of commitment can be in the form 	Survey, semi-structured interview, desk research

Sub-research question	Desired information	Interview and survey questions	Accessing method
		of resources (time, money, skills, in-kind, etc.) <ul style="list-style-type: none"> • What are the drivers or barriers that affect the achievement of your collaboration goals? 	

Survey and Interviews were conducted online, and each lasted approximately 30 to 60 minutes. Consent forms were given to the respondents before the interview, and written consent forms were obtained. In addition to the consent form, the respondents were given a form containing survey questions before the interview. The selected respondents were the people who represent stakeholder organizations that have been identified and involved in the collaboration process. Hence, they have the knowledge or information related to the collaboration process in Forest Park. With this selection, it was ensured that the respondents could represent the collaborative relationship of their organizations. Before the interview, relevant government regulations, policies, and planning documents were analyzed so that appropriate background information about the current condition of the collaborative policies carried out in Forest Park could be known in advance.

The survey and interview questions, which are presented in **Appendix A**, consist of closed questions and open questions. Closed questions were used in order to keep respondents focused on a particular issue or aspect of the collaboration and as a tool to compare answers from different stakeholders. In comparison, the purpose of open questions was to provide opportunities for respondents to answer these questions freely by exploring more broadly related to certain issues.

Variables and different information from each respondent were taken based on seven interview questions in **Appendix A**. Question 1 is about the starting conditions of each stakeholder in collaborating in Forest Park. The stakeholder motivations of each stakeholder are quantified, and the background of each stakeholder in collaborating is explored more deeply. Quantification was done using a ternary diagram, where each stakeholder chooses their motivation in collaborating, which was then poured into a ternary diagram. Therefore, the number of stakeholders in each motivation can be known. Then Questions 2, 3, 6, and 7 asked about the collaboration process carried out between stakeholders. These questions are used to determine the existing conditions of the collaboration process that occurs in Forest Park. These questions are related to the communication network between stakeholders, the frequency with which they meet, the level of commitment from each stakeholder, as well as the drivers and barriers that affect the achievement of collaboration goals from each stakeholder. Then questions 4 and 5 investigate which stakeholders are the lead stakeholders in the collaboration process in Forest Park, their

role to what extent, and their effectiveness in bridging each collaboration process. Additional questions, in the form of open questions, were also asked to respondents to obtain more detailed and comprehensive answers to each question.

Based on the desk research, there are 29 stakeholders identified. However, one stakeholder stated they were not involved in Forest Park management. Furthermore, only 22 stakeholders responded to the survey and participated in the interview because the other six did not respond. Information regarding the interviewed stakeholders, stakeholder code, and interview date are presented in **Table 3**.

Table 3. Interviewed stakeholders list

No	Name of Stakeholder	Stakeholders Group	Stakeholder Code	Interview Date
1	Outdoor Academy Foundation	Local NGO's	YLR	18 May 2022
2	Holland Spot Restaurant	Private sectors	HSR	18 May 2022
3	Rimbawan Sejahtera Bersama Cooperative	Private sectors	KRSB	18 May 2022
4	Ciburial Village Administration	Government agencies	PD-CL	19 May 2022
5	Cibodas Village Administration	Government agencies	PD-CS	20 May 2022
6	Cimenyan Village Administration	Government agencies	PD-CN	20 May 2022
7	D'Pakar Café	Private sectors	CDP	20 May 2022
8	Tahura Coffee shop	Private sectors	KT	24 May 2022
9	Langensari Village Administration	Government agencies	PD-L	25 May 2022
10	Warung Bandrek Café	Private sectors	WBC	25 May 2022
11	Forest Ranger Partner Community	Local communities	MMP	26 May 2022
12	Martial arts academy	Local communities	LBTD	27 May 2022
13	West Java Provincial Forestry Agency	Government agencies	DK-PJB	27 May 2022
14	The Lodge Maribaya	Private sectors	TLM	30 May 2022
15	Bandung Mountaineering Community	Local NGO's	KPGRB	31 May 2022
16	372 Coffee shop	Private sectors	K372	31 May 2022
17	Wangunharja Village Administration	Government agencies	PD-W	2 June 2022
18	West Bandung Regency Environmental Agency	Government agencies	DLH-KBB	3 June 2022
19	Forest Park Ir. H. Djuanda Technical Unit	Government agencies	THRDJ	6 June 2022
20	Bandung Regency Environmental Agency	Government agencies	DLH-KB	7 June 2022
21	Bandung Regency Culture and Tourism Agency	Government agencies	DKP-KB	8 June 2022
22	Bengkok Hydroelectric Power Plant	Private sectors	PLTA-B	29 June 2022

4.3 Data analysis

4.3.1 Analysis method

This research uses a mixed method between qualitative and quantitative methods. The data collected to answer each sub-question was analyzed based on the criteria shown in **Table 4**.

Table 4. Data analysis methods

Sub-research question	Desired information	Method of analysis
Q1. What is the motivation of stakeholders to engage in collaboration at Forest Park Ir. H. Djuanda?	<ul style="list-style-type: none"> • Stakeholder motivation • Collaborating background 	<p><u>Quantitative</u>: analysing of stakeholder goals in collaborating using ternary diagrams.</p> <p><u>Qualitative</u>: analysing collaborating background from each stakeholder in collaboration using quotes from interview responses.</p>
Q2. How the lead stakeholders facilitate the collaboration process at Forest Park Ir. H. Djuanda?	<ul style="list-style-type: none"> • The lead Stakeholder • The effectiveness of the lead stakeholders' role 	<p><u>Quantitative</u>: analysing the frequency statistic from each stakeholder related to the lead stakeholders.</p> <p><u>Qualitative</u>: analysing effectiveness of lead stakeholder in facilitating the collaboration process using quotes from interview responses.</p>
Q3. What are the existing procedures and regulations related to collaboration at Forest Park Ir. H. Djuanda?	Procedures and regulation	<u>Qualitative</u> : analysing procedures and regulations using content analysis of policy documents.
Q4. To what extent do stakeholders collaborate at Forest Park Ir. H. Djuanda?	The existing condition of collaboration in Forest Park, including face-to-face dialogue, trust building, commitment, shared understanding, and intermediate outcomes within stakeholders	<p><u>Quantitative</u>: analysing density, degree centrality, closeness, and betweenness of collaboration process using social network analysis.</p> <p><u>Qualitative</u>:</p> <ul style="list-style-type: none"> • analysing the existing collaboration process using quotes from interview responses. • analysing planning documents related to any small wins that stakeholders achieved in the collaboration process.

Qualitative analysis was applied as a data analysis method to gain a more profound knowledge of the current collaborative governance at Forest Park Ir. H. Djuanda. Qualitative descriptive analysis was used to describe the facts, nature, and relationships between the phenomena encountered in systematic and accurate words. Data analysis was guided by the views of Milles and Huberman (1994), that qualitative analysis still uses words that are usually arranged in an expanded text. The qualitative analysis consists of three flows of activities carried out simultaneously, including data reduction, data display, and drawing conclusions and verification (Milles & Huberman, 1994).

According to Milles and Huberman (1994), data reduction refers to selecting, focusing, simplifying, abstracting, and transforming the data that appear in written-up field notes and

transcriptions. Qualitative data can be reduced and transformed through selection, through summary or paraphrase, and through being subsumed into a larger pattern. Thus, the data that has been reduced will provide a clearer picture and make it easier for researchers to carry out further data collection and look for it when needed. After the first step is complete, the next step is to display the data in the research with narrative texts that make it easier for researchers to understand what happened and plan further work based on what has been understood. The third step is drawing conclusions and verification. From the data obtained, researchers can try to draw conclusions. Verification is carried out to dig up data that has been collected or to look for other data to check the truth of a certain phenomenon.

Social Network Analysis (SNA) was used as a quantitative data analysis technique. Social network analysis identifies and measures relationships and describes information from each collaborating actor (Iriani, 2013). For the analysis of relational data, I used *Excel*, *UCInet*, and *NetDraw*. The data was obtained from answer number 2 in **Appendix A**. All respondents who received this question were asked to identify by marking the stakeholders who had face-to-face dialogue with their organization in the Forest Park management process. The question provided a complete list of stakeholders involved in Forest Park management. Meanwhile, if there were stakeholders who have not been included in the list, the respondent can add them to the section provided in the question form.

Data was stored in *Excel*. The data obtained from informants is related to the collaboration process between stakeholders, which was interpreted in code. Then an $n \times n$ matrix was made, showing their collaboration networks, where a value of 0 means no collaboration and 1 means collaboration between stakeholders.

Data from excel was then imported into *UCInet*, then visualized via *NetDraw*. The result of this data analysis was a sociography, which is a network showing the collaboration pattern of stakeholders. Further analyses were made to analyze network density, degree of centrality of actors, and betweenness of the collaboration process that occurs (Hanneman & Riddle, 2019).

Networks were analyzed at two levels: the network as a whole and the actors. An analysis of the network density and degree centralization values was carried out at the network level. This network density value is the number of ties on the network divided by the maximum number of possible ties on the network (Borgatti et al., 2013). Meanwhile, degree centralization is the ratio of the number of actual differences to the maximum number of possible differences, also known as the Freeman approach (Borgatti et al., 2013). At the actor level, degree centrality and betweenness centrality were analyzed. Degree centrality is the number of ties for each actor, usually distinguished by incoming and outgoing ties

(Hanneman & Riddle, 2019). Meanwhile, betweenness centrality is the probability that an actor is on the shortest path between any two actors in the network (Fliervoet et al., 2016).

4.3.2 Data validity

Data were validated using data source triangulation in order to confirm their validity by combining information from many sources. Data triangulation was accomplished by comparing data collected from stakeholder representatives during interviews with data received through desk research (Carter et al., 2014). Desk research and interviews were the primary sources of knowledge and data in this research. To validate the data, the desk research results were compared to the results of the interviews. Suppose the findings of desk research and interviews with individuals about specific problems and topics corroborate. In that case, this can be regarded as evidence of the validity of the data and information analysis.

4.4 Research ethics

All study that uses humans as subjects or participants, whether through surveys, interviews, or the use of potentially sensitive data, must comply with the Behavioral, Management, and Social Sciences (BMS) Faculty's ethics policy. As a result, consent forms were distributed to those involved, such as interviewees, and the interviewees were sent back the signed consent form before conducting the interviews. Participants in this research were voluntary, and they were given the freedom to choose to agree or disagree with the terms of their participation. The consent form address privacy and data confidentiality issues for the interviewee. Only the researcher and supervisors have access to interview data. Only data necessary for the study was disclosed with the prior consent of the participants. Furthermore, all personal information was kept anonymously if possible. The signed consent forms are attached in **APPENDIX B**. Besides, the gathered data were securely stored in accordance with BMS Data Lab Procedures.

CHAPTER 5. FINDINGS

This chapter presents the results based on the analysis of data collected related to collaborative governance in the management of Forest Park Ir. H. Djuanda. Firstly, this chapter discusses each stakeholder's motivation and background in collaborating to answer sub-question 1. Secondly, it discusses the lead stakeholder in facilitating the collaboration process to answer the sub-question 2. Then, procedures and regulations in collaborating to answer sub-question 3. Lastly, the collaboration conditions occurred in Forest Park to answer sub-question 4.

5.1 Stakeholder motivation

In stakeholder motivation, the variables identified by stakeholders are the motivations of each stakeholder in collaborating in Forest Park. The findings are presented in **Figure 3** as a ternary diagram.

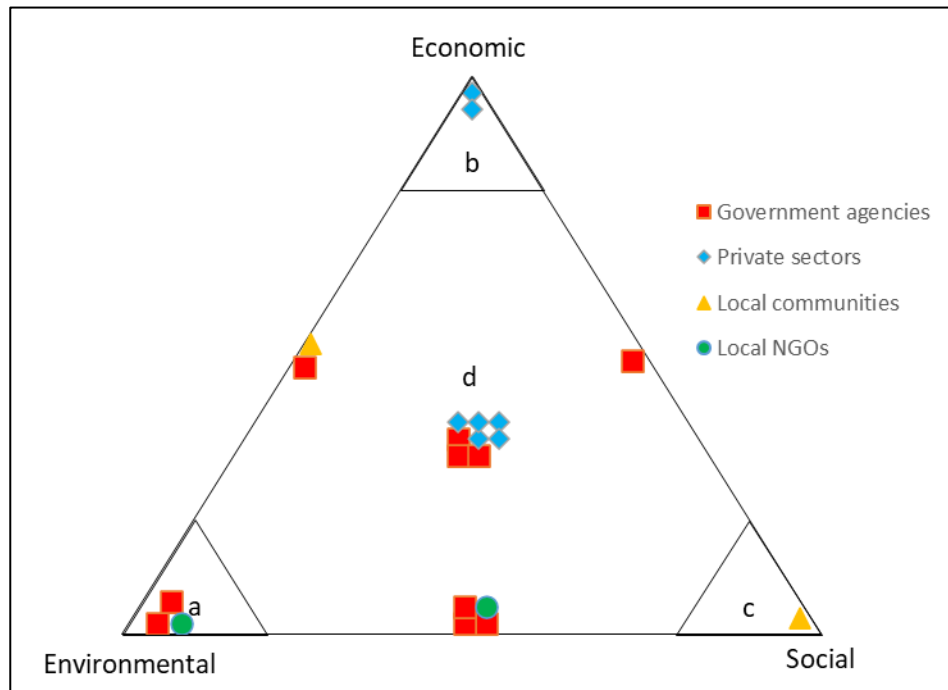


Figure 3. Ternary diagram of stakeholders from different sectors based on the purpose of collaborating

Figure 3 shows a ternary diagram of stakeholders from various sectors based on their primary motivation for collaborating. Each stakeholder was asked to choose their motivation for collaborating. There are three main motivations for collaborating: environmental, economic, and social. In the ternary

diagram, the stakeholders are divided into four groups, namely (1) stakeholders with main environmental motivations, (2) stakeholders with main economic motivations, (3) stakeholders with main social motivations, and (4) stakeholders with mixed motivations.

The first group (label a in **Figure 3**) consists of three stakeholders who focus on the environment as the motivations of their collaboration. This group contains stakeholders from government agencies and local NGOs. This group is focused on environmental management, especially waste originating from the residential area around the Forest Park area (Interviewee 18, 20). In addition, there is also a focus on controlling plant populations through the genetic preservation of plants in the Forest Park (Interviewee 15).

The second group (label b in **Figure 3**) consists of two stakeholders who focus on the economy as the motivation of their collaboration. This group is a stakeholder from the private sector and focuses on economic income for their organization. Moreover, this group uses the Forest Park to run their business by utilizing the land and scenery in the Forest Park (Interviewee 10, 14). The third group (label c in **Figure 3**) consists of one stakeholder who focuses on social as the motivation of their collaboration. This stakeholder comes from local communities that use the Forest Park as a place to develop the arts and culture of *Pencak Silat* (Traditional martial art from Indonesia) (Interviewee 12).

The fourth group (labeled d in **Figure 3**) consists of 15 stakeholders with a mix of two or three collaborating motivations. This group comprises stakeholders from four different sectors: government agencies, private sectors, local communities, and local NGOs. For example, stakeholders who focus on the environment and the economy put these two motivations as their primary motivation of collaboration because they care about the sustainability of Forest Park's existence. Besides, they are directly affected by the existence of the Forest Park and also use the Forest Park as a place to fulfill their daily lives (Interviewee 11). Stakeholders who focus on economics and social put these two motivations as the primary motivation of collaborating because they want to capture economic opportunities for empowering the community around the Forest Park by utilizing the potential of the Forest Park as a tourist attraction (Interviewee 21). Stakeholders who focus on the environment and social put both motivations as the primary motivation of collaborating because they care about the sustainability of the existence of the Forest Park as a place to support life and also care about local communities who want to contribute to saving the Forest Park (Interviewee 1).

From all the stakeholders interviewed, the stakeholders who chose the three motivations as their main collaboration motivations were quite dominant. Stakeholders in this position understand the existence of Forest Park as an area that must be protected on the one hand but can be used in a limited

way on the other hand. For example, one of the stakeholders makes socio-entrepreneurs their main basis for collaborating so that they not only focus on the economy but also on developing the resources of the surrounding community with the principle of protecting the environment (Interviewee 2).

After the main motivations of each stakeholder are known, it is continued by finding out more about the background that made them choose that motivation in collaborating in the Forest Park. This background exploration is important because it was the initial reason for these stakeholders to collaborate in the management of the Forest Park. The first reason is related to an organization's main tasks and functions (Interviewee 13, 18, 19, 20, 21). This reason is all owned by government agencies because they carry out statutory orders. The next reason is related to the proximity of residence (Interviewee 4, 5, 6, 8, 9, 10, 11, 12, 16, 17). Due to the proximity of their residential area to the Forest Park, these stakeholders affect and are being affected directly by the existence of the Forest Park. These stakeholders utilize the proximity of their residential area to the Forest Park to increase human resources, increase their economy, and preserve culture. Besides, there is also a reason to use Forest Park ecosystem services for economic purposes (Interviewee 2, 3, 7, 8, 10, 14, 16). Forest Park ecosystem services, in the form of clean and fresh air and beautiful natural scenery, are utilized by these stakeholders to attract customers to their place of business. The last reason is related to concern for the sustainability of the Forest Park as a protected area that must be preserved (Interviewee 1, 11, 13, 15, 16, 19). The Forest Park is a protected area that must be preserved, so these stakeholders are concerned about starting collaboration. Finally, it is related to the awareness that the management of the Forest Park must be carried out together (Interviewee 1, 2, 3, 13, 16, 19).

The motivations of each stakeholder to collaborate in Forest Park can be seen to be quite diverse. This can be seen by the representation of stakeholders in each motivation. The background of each stakeholder in choosing the motivation to collaborate is very clear. They are aware of the existence of this Forest Park, whose resources can be utilized, and the ecosystem must be preserved.

5.2 Lead stakeholder

The diversity of stakeholders with various backgrounds, goals, and interests causes different views in collaboration. On the one side, it leads to a conflict but, on the other side, could complement each other in achieving the collaboration goals. To collaborate with the various interests, it needs one lead stakeholder who can be a leader in the collaboration process. Therefore, several stakeholders could be chosen by each stakeholder who is collaborated in the Forest Park as a lead stakeholder in the collaboration process in Forest Park.

Most stakeholders (21 stakeholders) choose Forest Park Ir. H. Djuanda Technical Unit as the lead stakeholder in Forest Park. Forest Park Ir. H. Djuanda Technical Unit is a regional technical implementation unit under the West Java provincial government who responsible to manage Forest Park Ir. H. Djuanda. The second most chosen lead stakeholder is West Java Provincial Forestry, followed by Ciburial and Cimenyan Village Administration. The West Java Provincial Forestry Agency is a regional apparatus organization under the West Java provincial government, which has a responsibility in the forestry sector in the province of West Java. Meanwhile, Ciburial and Cimenyan Village Administration is a village administration under the authority of the Bandung regency government, which has an area directly adjacent to the Forest Park Ir. H. Djuanda. A lead stakeholder chosen by each stakeholder who is collaborating in Forest Park is presented in **Figure 4**.

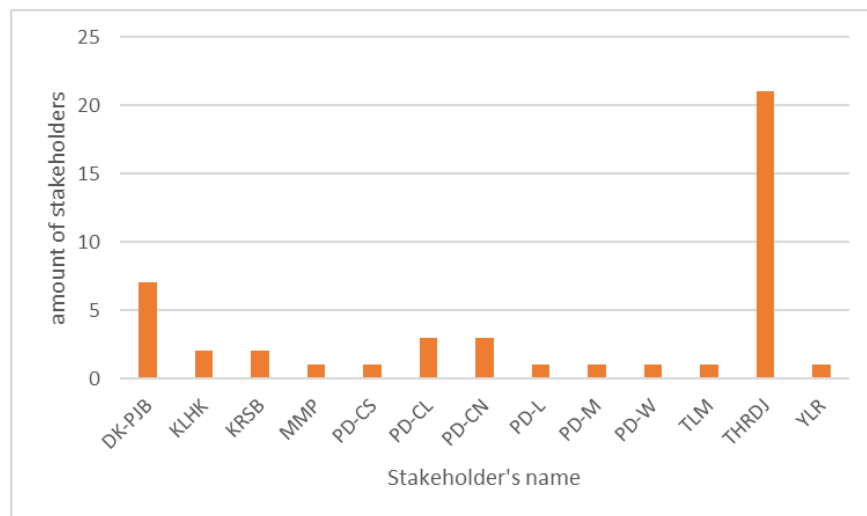


Figure 4. Lead stakeholder in the collaboration process

The existence of leadership shown by a lead stakeholder in the collaboration process in Forest Park has not facilitated all stakeholders collaborating in Forest Park, as seen in **Figure 5**. From the government agencies group, as much as 44% stated that there is not enough leadership. While the rest indicated that there was enough leadership from the lead stakeholders in facilitating collaboration.

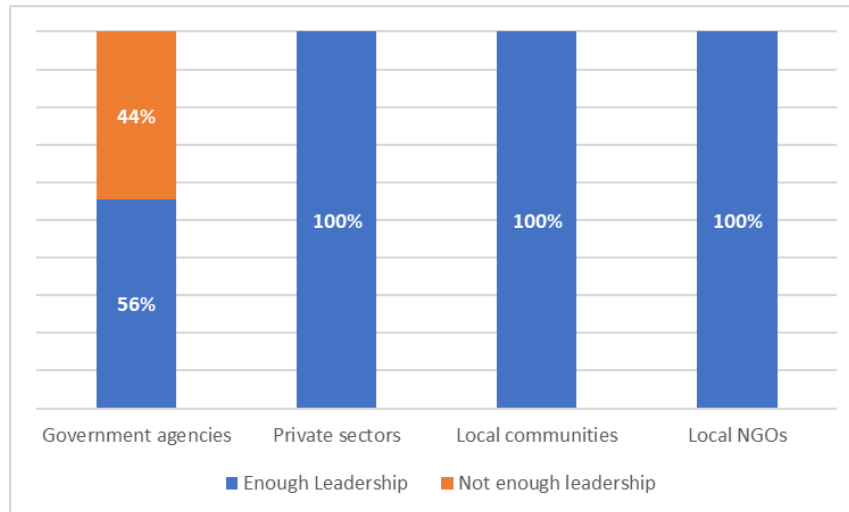


Figure 5. The existence of leadership by a lead stakeholder in the collaboration process

Compared with all stakeholder groups, for government agencies, almost half of them stated that these lead stakeholders did not sufficiently demonstrate their leadership in facilitating the collaborative process in Forest Park. It is quite interesting because those who stated it came from a village directly adjacent to the Forest Park area. The lack of leadership from the lead stakeholder occurred due to an impression of the lack of responsiveness from the lead stakeholders to implement the collaboration process (Interviewee 4). Hence, the existing collaboration process has not been legalized (Interviewee 4). For instance, collaboration in the use of water from the Forest Park area for local communities has not been legalized, albeit this use has been going on for quite a long time (Interviewee 4). Similarly, even though the community has used the land, the collaboration in land use for the economic development of rural communities has also not been legalized (Interviewee 4). Besides, the lack of communication built by lead stakeholders to other stakeholders also impacts the lack of leadership (Interviewee 6, 9, 17). Moreover, stakeholders feel the lack of communication built by the lead stakeholder because they feel the relationship built is merely carried out when there is a need, but the communication is not conducted routinely.

For the other three groups, which are private sectors, local communities, and local NGOs, the existence of lead stakeholders felt sufficient to facilitate the collaboration process. It could happen because the lead stakeholder becomes a bridge or connector between one stakeholder and another in collaboration (Interviewee 2, 7, 11). Aside from that, the lead stakeholder has the initiative to gather all stakeholders and is also opened to communicating with various interested parties (Interviewee 8, 15, 18).

Finally, the lead stakeholders know the regulation regarding the collaboration process in Forest Park. As a result, it would be beneficial for other outsider stakeholders who need information about the collaboration process in the Forest Park area (Interviewee 1, 3, 14, 16, 21).

5.3 Institutional design

In this dimension, the procedures and regulations governing collaboration in the Forest Park area are adequate. The government has provided the laws and their derivative regulations because collaboration in the Forest Park area must be strictly regulated. Those regulations relate to the sustainability of the ecosystem, which should not be overexploited to avoid the disruption of the ecosystem balance and reduce the possibility of environmental degradation in the Forest Park area. The regulations related to the collaboration that is implemented in the Forest Park area shows in **Table 5**.

Table 5. Data analysis methods

No	Type and number of regulations	Content of regulation	Relation to collaboration
1	Law Number 5/1990	The conservation of natural resources and their ecosystems	Regulates who can be involved in managing the Forest Park area
2	Law Number 41/1999	Forestry	Regulates forest utilization rights that are granted through the issuance of permits
3	Law Number 32/2009	The protection and management of the environment	Regulates the role of the community in environmental protection and management
4	Government regulation number 7/1999	The preservation of plant and animal species	Regulates the collaboration with the community
5	Government regulation number 36/2010	The exploitation of natural tourism in wildlife sanctuaries, national parks, forest parks, and natural tourism parks	Regulates who can be involved, the obligations and rights in the exploitation of nature tourism in the Forest Park
6	Government regulation number 28/2011	The management of nature reserve areas and nature conservation areas	Regulates who can be involved in the management of Forest Park
7	Presidential decree number 3/1985	The construction of the Curug Dago tourist park as a forest park Ir. H. Djuanda	Contains the functions of Forest Park
8	Ministry of forestry regulation number P.19/2004	Collaborative management of nature reserves and nature conservation areas.	Governs the collaboration in the management of Forest Park, who can be involved and what activities can be collaborated

No	Type and number of regulations	Content of regulation	Relation to collaboration
9	West java provincial regulation number 2/2006	The management of protected areas in the province of West Java	Regulates involvement of communities and business entities in the management of protected areas
10	West java provincial regulation number 25/2008	The management of the Forest Park Ir. H. Djuanda	Regulates the collaboration with stakeholders
11	Governor of West Java Decree number 120/2009	The instructions for implementing the west java provincial regulation number 25/2008 regarding the management of the forest park Ir. H. Djuanda.	Regulates the detail of procedures for collaboration between managers and other stakeholders.

Table 5 shows that the regulations governing the collaborative process in Forest Park are very adequate. These regulations regulate which stakeholders can be involved in the management of Forest Park. In addition, the regulation also regulates the rights and obligations of each party involved in managing the Forest Park area. Moreover, the regulation already regulates the procedures for collaboration and their sanctions.

5.4 Collaborative process

The collaborative process in Forest Park is analyzed using social network analysis to understand the relationship among stakeholders in the collaboration process. Using the UCInet and NetDraw software for network analysis, **Figure 6** presents the collaboration networks among stakeholders in the management of Forest Park. The collaborative process starts with a face-to-face dialogue that aims to identify the opportunity for mutual benefits based on the collaborative governance model (Ansell & Gash, 2008). As a result, the network has 30.2% density and 228 ties which connects 28 stakeholders. The density value from a network affects the collective action potential of each actor in the network. The higher the density value of a network, the greater the potential for collective action from each actor in the network (Olsson et al., 2004). The low-density value from the network in **Figure 6** indicates the smaller the collective action of each actor in the network.

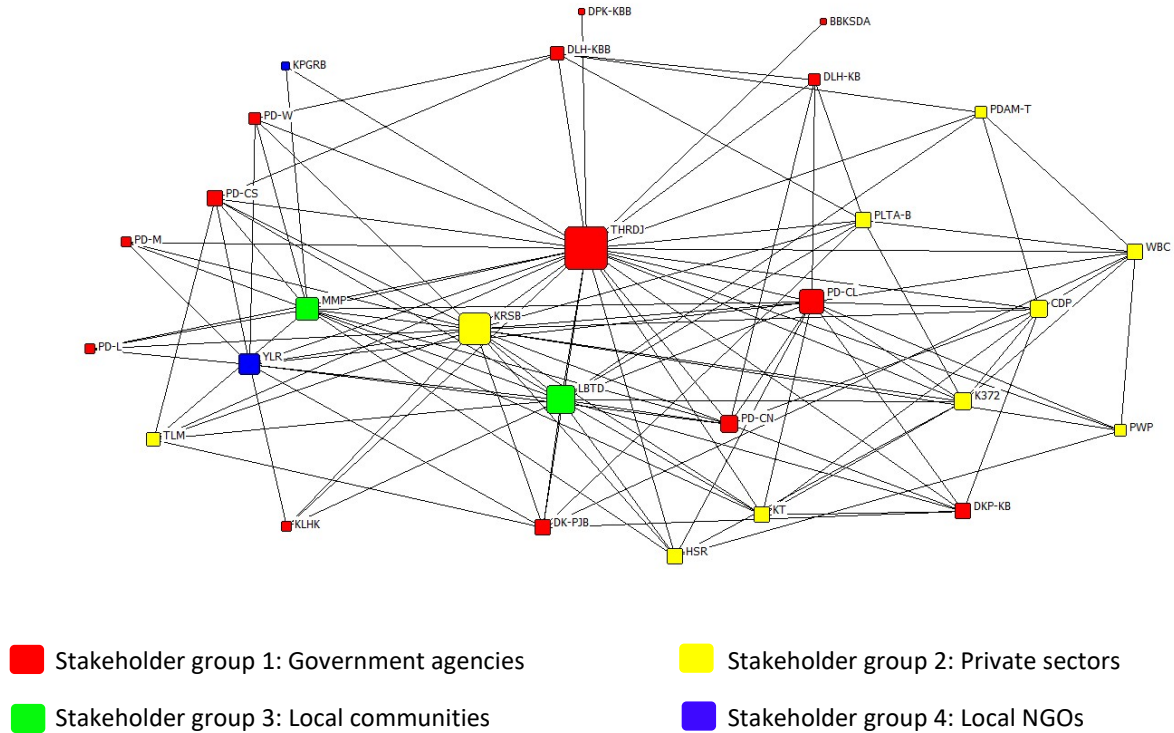


Figure 6. Collaboration network and stakeholder types

The lack of collective action is probably related to the value of centralization in the network. The centralization value of the network in **Figure 6** is 0.752. The centralization value close to 1 indicates that the network is centralized and dominated by certain actors (Borgatti et al., 2013). The dominance of one stakeholder in the network can also be seen from the value of the degree of centrality of each stakeholder. Furthermore, nodes in the network represent stakeholders colored based on stakeholder type and size based on degree centrality, while stakeholders with high degree centrality values have larger node sizes.

As presented in **Figure 6**, the sociogram assesses the composition and relationship within networks to find variables that determine the performance of each stakeholder by calculating three indicators, namely degree centrality, closeness centrality, and betweenness centrality (Wang et al., 2020). The calculation of degree centrality aims to measure the number of links that enter or leave a node. Therefore, the degree of centrality will show the relationship among stakeholders and provide information regarding the importance of stakeholders within the networks (Wang et al., 2020). Moreover, stakeholders with a higher number of ties can attain a profitable position because they tend not to depend on other stakeholders (Hanneman & Riddle, 2019). Hence, they can have various alternatives to fulfil their needs. Besides, stakeholders with a higher number of degree centrality will have

more access to resources within the network. Moreover, they could act as deal makers in the agreement with other stakeholders.

Figure 7 presents in more detail the degree centrality of each stakeholder in the form of a bar graph, where the stakeholder with a higher degree centrality significantly impacts other stakeholders (Wang et al., 2020). As seen in **Figure 7**, the stakeholder with the highest degree centrality among all stakeholder groups is Forest Park Ir. H. Djuanda Technical Unit (THRDJ), with a number of degree centrality 27. This means that the Forest Park Ir. H. Djuanda Technical Unit (THRDJ) are connected to all stakeholders. Besides, Forest Park Ir. H. Djuanda Technical Unit (THRDJ) also becomes the highest degree centrality within their group, the government agencies group. It shows that Forest Park Ir. H. Djuanda Technical Unit (THRDJ) has the highest number of ties among other stakeholders. Hence, it indicates that they become a key stakeholder with the potential of high power (Hanneman & Riddle, 2019). For other groups of stakeholders, Rimbawan Sejahtera Bersama Cooperative (KRSB), Martial arts academy (LBTD), and Outdoor Academy Foundation (YLR) are the stakeholders with the highest degree centrality within the group of private sectors, local communities, and local NGO's, respectively. Therefore, those three stakeholders have a significant impact on their groups. However, there are two stakeholders with the lowest degree centrality, West Bandung Regency Tourism (DPK-KBB) and Culture Agency and West Java Nature Conservation Agency (BBKSDA).

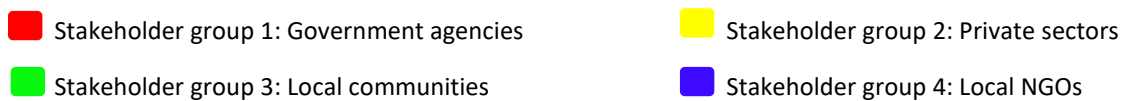
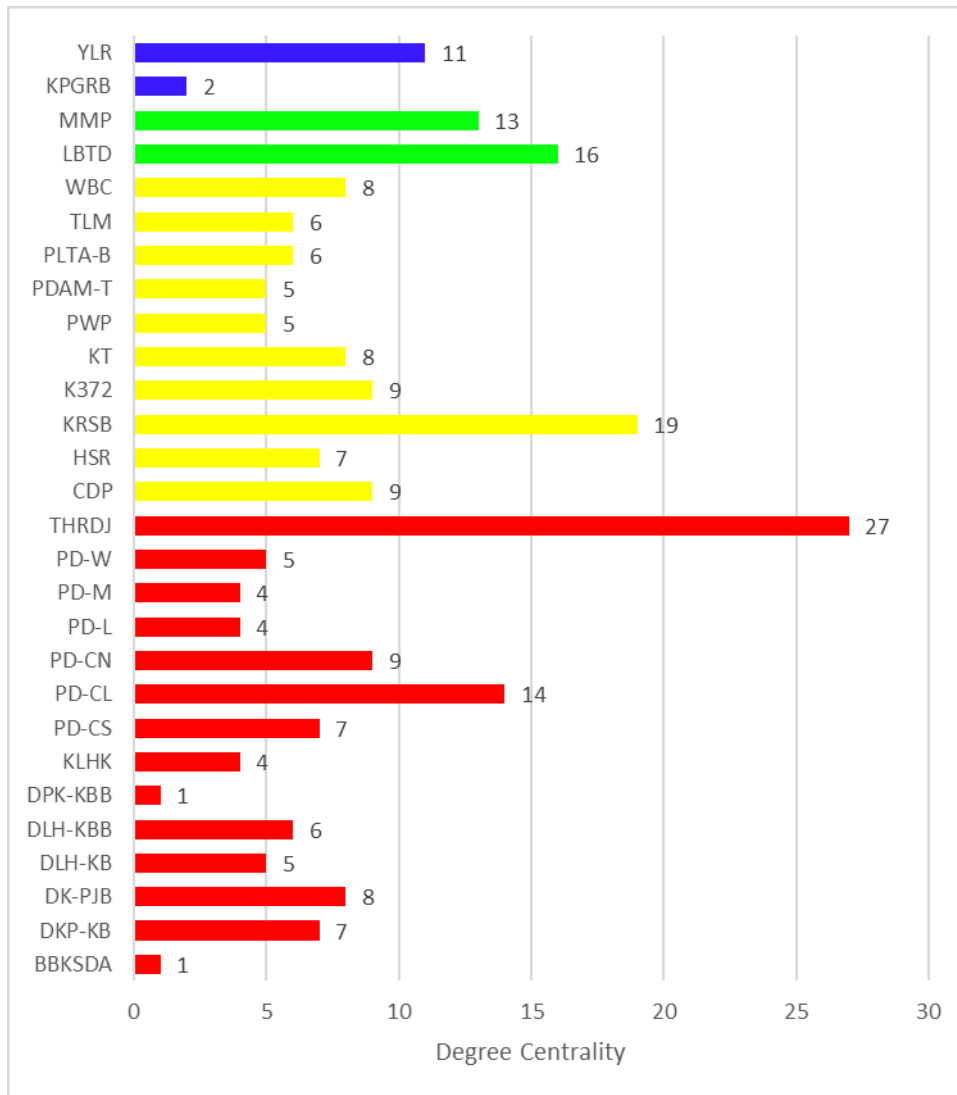


Figure 7. Value of degree centrality for each stakeholder

Almost all stakeholders had a face-to-face dialogue with Forest Park Ir. H. Djuanda Technical Unit (THRDJ) because they are the manager of the area (Interviewee 21) and key stakeholders in the collaborative process in Forest Park. Aside from that, there are other face-to-face dialogues among stakeholders, but it is conducted separately and irregularly (Interviewee 1, 2, 4, 8, 9, 10, 11, 12, 13, 19). As seen in **Figure 8**, 55% of stakeholders conducted meetings several times a year, and 45% of them merely conducted more than once a month.

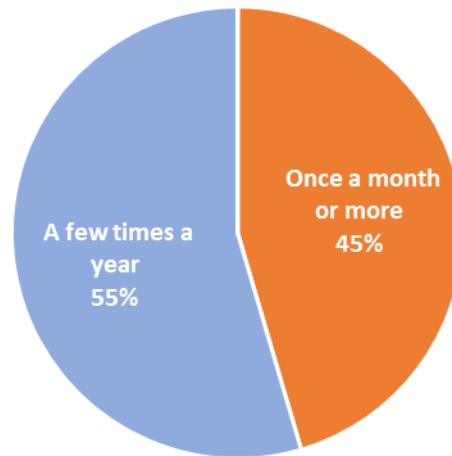


Figure 8. Frequency of face-to-face dialogue between stakeholders

A fragmented face-to-face dialogue is only conducted when a problem happens in the management of Forest Park. For instance, meetings were conducted to discuss household waste that is disposed to the Forest Park area (Interviewee 18, 20), tourism management in the Forest Park area and its surrounding villages (Interviewee 21), flood water runoff (Interviewee 4), forest security dan future business development plans (Interviewee 10), and potential collaboration with the stakeholder who is profit-oriented (Interviewee 2, 14). A discussion in the formal and informal face-to-face dialogue results in the same perception regarding the stakeholders' authority (Interviewee 21) and sharing information and problem solving to specific problems (Interviewee 1, 12). Moreover, this face-to-face dialogue is essential because it could become a step toward reducing stereotypes and barriers in communication. Eventually, it will build trust, mutual respect, mutual understanding, and commitment in the collaborative process (Ansell & Gash, 2008).

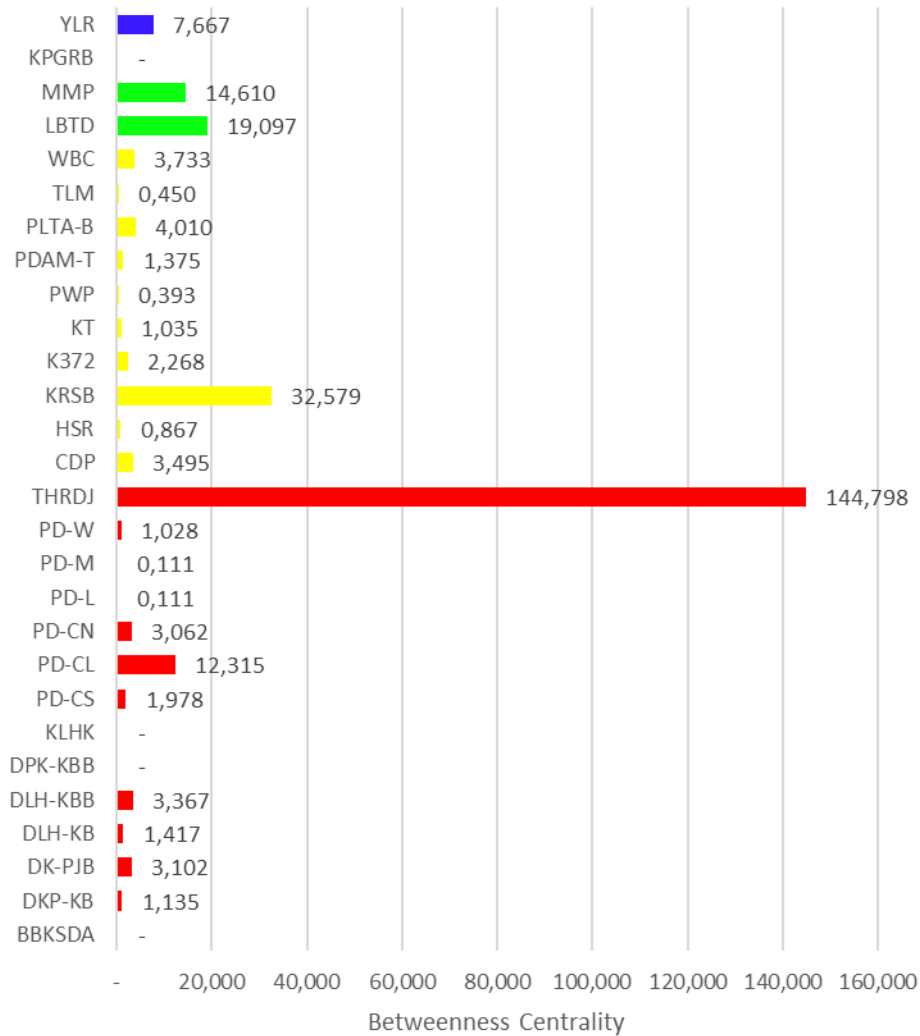
Previously, a forum gathered all stakeholders who collaborated in Forest Park, namely Forest Park Partner Forum (Interviewee 2, 16, 19). Nevertheless, during the year, the forum's membership has decreased, and the presence of its members has diminished. Currently, there has been no communication through the forum. There are several reasons why this forum was not conducted anymore: the Covid-19 pandemic and the absence of a grand design for the management of the Forest Park (Interviewee 2, Interviewee 16).

Accordingly, the absence of that forum to become a media for stakeholders to gather and share the information could be reactivated. Several stakeholders could become a communicator among stakeholders that could be seen based on the analysis of betweenness centrality. The betweenness centrality value is measured to determine how often a node has the closest path between two other nodes

that are not connected in the network. According to Wang et al. (2020), betweenness centrality is used as an indicator to find stakeholders who act as brokers who have the potential to connect disconnected groups in a system. Furthermore, the betweenness centrality could become an indicator to find the stakeholder who has a role as a bridge to connect unconnected stakeholders within the system (Bodin & Crona, 2009).

As presented in **Figure 9**, Forest Park Ir. H. Djuanda Technical Unit (THRDJ) is a stakeholder with the highest betweenness centrality, followed by Rimbawan Sejahtera Bersama Cooperative (KRSB), and Martial arts academy (LBTD), with the number of betweenness centrality 144,798, 32,579, and 19,097, respectively. This betweenness centrality value indicates the probability that an organization is on the shortest path between two organizations in the network (Fliervoet et al., 2016). Stakeholders with a high betweenness score serve to connect disparate groups and become brokers and liaisons that unite those who are disconnected. Besides becoming a broker, those stakeholders also become a center of information and knowledge within the network (Yan & Ding, 2009).

Based on the description above, it can be said that Forest Park Ir. H. Djuanda Technical Unit (THRDJ), Rimbawan Sejahtera Bersama Cooperative (KRSB), and Martial arts academy (LBTD) are the most critical brokers in this network. Aside from that, those stakeholders make it possible to flow information to all other stakeholders involved in this network. In addition, those stakeholders also have a significant role in correlating the idea and knowledge of unconnected stakeholders. Hence, the unconnected stakeholders could also be involved in the policy making process and attaining the information (Wang et al., 2020).



■ Stakeholder group 1: Government agencies ■ Stakeholder group 2: Private sectors
■ Stakeholder group 3: Local communities ■ Stakeholder group 4: Local NGOs

Figure 9. Value of betweenness centrality for each stakeholder

For the commitment level of stakeholders in the collaboration process, as seen in **Figure 10**, government agencies group has a varied commitment level, from highly committed, rather committed, neutral, to rather not committed. Highly committed stakeholders in the government agencies group come from the provincial and regency agencies. The stakeholder with the rather committed and rather not committed in commitment level is from the village government, which is adjacent to the Forest Park area. The commitments shared by the government agencies are still in the corridor of their agency's main tasks and functions. For example, the commitment to develop the tourism sector, especially for villages directly adjacent to the Forest Park area (Interviewee 21). Another example is the commitment to household

waste management for villages directly adjacent to the Forest Park area, thereby could reduce waste pressure on Forest Park’s ecosystems (Interviewee 4, 18, 20). The stakeholders who choose rather not to commit to this collaboration process only have a small part of their area directly adjacent to the Forest Park area (Interviewee 9).

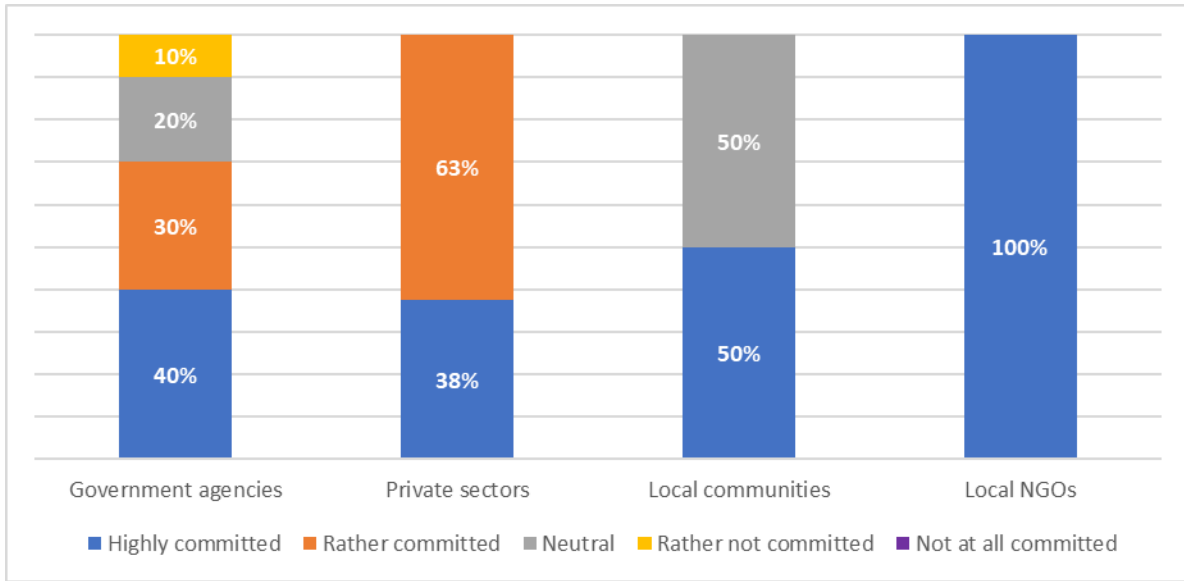


Figure 10. Commitment level of stakeholders in the collaboration process

For the private sectors group, almost 40% of stakeholders stated they were highly committed to the collaboration process, and more than 60% of stakeholders stated they were rather committed to it. This group shares various commitments to support the smooth collaboration process in the management of Forest Park, starting with money, skill, time, and in-kind. For example, commitment to profit-sharing with managers to support the improvement of facilities and infrastructure in the Forest Park area (Interviewee 2, 10, 22). In addition, commitment to assisting the development of human and cultural resources through the use of Corporate Social Responsibility (CSR) funds for the benefit of the management of Forest Park (Interviewee 2). Other examples are the commitment of stakeholders to help increase the number of tourist visits to the Forest Park area (Interviewees 3, 14), empowering rural communities from around the Forest Park area (Interviewees 2, 7, 8, 10, 14, 16), and help secure the boundaries of the area (Interviewee 8).

For the local communities’ group, 50% of stakeholders stated that they were highly committed, and 50% of stakeholders stated that they were neutral towards the commitment to the collaboration process. The commitment shown by stakeholders from local communities is time and capacity sharing.

For example, they provide 24 hours full of time to protect the Forest Park area from the threat of wood theft, fire, or other disasters (Interviewee 11).

For the local NGOs, all stakeholders are highly committed to supporting the smooth collaboration process in the Forest Park area, as shown in the ability to control the domination of one plant species (Interviewee 15). Besides, they also provide training for communities and other organizations that care about the sustainability of the existence of Forest Park (Interviewee 1).

The main objective of management in the Forest Park area Ir. H. Djuanda is the implementation of protection, preservation, and sustainable use of natural resources (Forest Park Ir. H. Djuanda Technical Unit, 2017). Protection is generally at ecology and systems that can support life, preservation is intended to preserve genetic diversity, and utilization is designed for species and ecosystems in forest areas to be used sustainably (Forest Park Ir. H. Djuanda Technical Unit, 2017). These are also the main goal of collaboration between stakeholders in Forest Park management. Each collaborating stakeholder has their own contribution to Forest Park management. It could be in protection, preservation, or utilization. Based on the interviews' results, each stakeholder's role in managing the Forest Park area is shown in **Table 6**.

Table 6. The role of each stakeholder in the management of Forest Park

No	Name of Stakeholder	Management of Forest Park		
		Protection	Preservation	Utilization
1	Outdoor Academy Foundation	√	√	√
2	Holland Spot Restaurant			√
3	Rimbawan Sejahtera Bersama Cooperative			√
4	Ciburial Village Administration			√
5	Cibodas Village Administration			√
6	Cimenyan Village Administration			√
7	D'Pakar Café			√
8	Tahura Coffee shop			√
9	Langensari Village Administration			√
10	Warung Bandrek Café			√
11	Forest Ranger Partner Community	√	√	√
12	Martial arts academy			√
13	West Java Provincial Forestry Agency	√	√	√
14	The Lodge Maribaya			√
15	Bandung Mountaineering Community		√	√
16	372 Coffee shop			√
17	Wangunharja Village Administration			√
18	West Bandung Regency Environmental Agency	√		√
19	Forest Park Ir. H. Djuanda Technical Unit	√	√	√
20	Bandung Regency Environmental Agency	√		√
21	Bandung Regency Culture and Tourism Agency			√
22	Bengkok Hydroelectric Power Plant	√		√

Table 6 shows that most stakeholders are still focused on the utilization of existing resources in Forest Park. Utilization of these resources is in the form of the use of land, water, and scenery for economic and tourism purposes. The main goal of the collaborative process in the management of Forest Park to protect, preserve, and utilize the forest park resources is obtained from the contribution of small wins achieved by each stakeholder in collaboration. Most stakeholders have stated their achievements, such as better ecosystem protection, controlled use of natural resources, meeting economic needs, empowering communities around the Forest Park area, and developing local culture.

Based on the results of interviews with stakeholders, there are several drivers and barriers factors in achieving the goals of collaborative governance in the management of Forest Park Ir. H. Djuanda. Some drivers that can support the success of the collaboration process are as follows:

- a. The enormous and diverse potential resources owned by the Forest Park in the form of ecological, environmental, social, economic, and cultural resources can be used to support the protection, preservation, and utilization of Forest Park and the nearby people.
- b. Strong support and commitment from the management of the Forest Park.
- c. Strict regulation of the protected area is beneficial to maintain the sustainability of the existence of the Forest Park.
- d. Many communities are concerned about the utilization and management of the Forest Park.
- e. The location of the Forest Park is near the city centre.

Otherwise, some barriers that can hinder the attainment of the collaboration process are as follows:

- a. Lack of communication and irregular face-to-face dialogue among stakeholders.
- b. The quality of human resources in the management and the community around the Forest Park area are still low.
- c. Lack of operational budget for the management of the Forest Park area.
- d. Lack of information related to the area management planning for public.
- e. The awareness of the people who live adjacent to the Forest Park area is still low, particularly for waste management. Hence, the waste management issues disrupt the ecosystem in the Forest Park area.
- f. The Covid-19 pandemic has stopped all activities, thus disrupting the process of achieving collaboration in the Forest Park area.

The process of collaboration between stakeholders in the management of Forest Park Ir. H. Djuanda has been running with face-to-face dialogue, sharing commitments, sharing understanding, and

having intermediate outcomes from the collaborative process that is being carried out. The collaborative network model in Forest Park management is centralized. This can be seen from the existence of one strong, central stakeholder who is a key stakeholder in this collaboration process. Forest Park Ir. H. Djuanda Technical Unit (THRDJ), the area manager based on the regulation, carries out its role as a key stakeholder. This ongoing collaboration process shows some parts of the process that still need improvement so that it is expected to produce better collaborative governance. Dialogue between stakeholders that is still being carried out separately and unscheduled, lack of communication, and a forum among stakeholders that must be reactivated are some things that must be improved to produce a better collaboration process.

CHAPTER 6. DISCUSSION

The motivation of each stakeholder to collaborate in the Forest Park management is the starting condition of the collaborative governance model. The diverse motivations of each stakeholder raise the organization's interest in collaborating. Furthermore, the various motivation, such as economic, environmental, social, and a combination of those three, encourages each organization to collaborate. Therefore, each stakeholder's motivation from various backgrounds impacts a good collaboration.

The various motivations of each stakeholder can be a strength in achieving the goal of good collaboration in Forest Park management, namely the sustainable implementation of protection, preservation, and use of resources within the Forest Park area. The imbalance of resources owned by each stakeholder can be a trigger for collaboration. This is quite contrary to what was revealed by Ansell and Gash (2008), which states that the collaborative governance process will be vulnerable to manipulation by stronger actors when there are imbalanced resources. For instance, stakeholders from the private sector with strong economic motivation can use the existing resources in Forest Park sustainably for the community's welfare. Another example, stakeholders from local communities and local NGOs with strong environmental and social motivation can preserve the environment and culture in the Forest Park area by collaborating and utilizing the economic power of the private sector. Besides, stakeholders from the government agencies group who properly conduct their main tasks and functions can also become accelerators for collaborative governance. Hence, the collaboration between various stakeholders that takes advantage of each stakeholder's strengths and weaknesses can lead to a good collaboration.

Concerning the stakeholders' awareness, they already know that the Forest Park management should be managed together. For example, many stakeholders combine their collaboration goals not only on one aspect. Besides, all stakeholders already feel that this Forest Park's existence must be preserved because it can support the achievement of their collaboration goals. Thus, stakeholders from the private sector are concerned not only with economic benefits but also aware that they should maintain environmental sustainability and empower local communities.

There are various backgrounds that each stakeholder has that motivate them to collaborate. Starting from just carrying out the main tasks and functions of the organization, utilizing ecosystems for economic purposes, to realizing that the management of this Forest Park must involve various stakeholders. Accordingly, the varied backgrounds of stakeholders can be the initial basis for all stakeholders to implement collaborative governance in the management of the Forest Park area.

Furthermore, various stakeholders' motivations, backgrounds, and interests in collaboration lead to the need for the lead stakeholders who can facilitate the collaboration process. The existence of lead stakeholders who become leaders in the collaboration process can reduce the possibility of conflicts of interest between stakeholders. This is in line with what Ansell and Gash (2008) stated that this leadership is very important in establishing clear ground rules, building trust between stakeholders, facilitating dialogue, and exploring the possible benefits that will be obtained from the collaboration. Aside from that, the lead stakeholders can also combine their various interests to complement each other.

As mentioned in **Section 5.2**, Forest Park Ir. H. Djuanda Technical Unit (THRDJ) is chosen to be the lead stakeholder. It was the right choice because THRDJ is the manager of the Forest Park area. The same thing was also expressed by Saputra et al. (2019), which stated that Forest Park Ir. H. Djuanda Technical Unit is the primary stakeholder who has direct links with a policy and program implemented in Forest Park. Forest Park Ir. H. Djuanda Technical Unit (THRDJ) is the government representative body to manage Forest Park. This is also in line with the collaborative governance model promoted by Ansell and Gash (2008), which emphasizes the government as the leading actor to initiate reaching out to non-governmental actors to collaborate.

By choosing THRDJ as the lead stakeholder, other stakeholders who will collaborate will gain more understanding regarding the collaboration process in protected areas, particularly the strict regulation related to the collaboration process in the ecosystem preservation in the Forest Park area. The collaboration within the Forest Park area is different because Forest Park is a protected area, where every resource used must be limited to avoid overexploitation. In addition, any disturbance from outside parties to the Forest Park area will disrupt the ecosystem balance. Therefore, the collaboration in the Forest Park area will be tighter to accommodate those concerns. Moreover, in facilitating the collaboration process, the lead stakeholder can act as a bridge or liaison between stakeholders. For instance, they can take the initiative to gather all stakeholders to build communication to create mutual understanding and be a source of information for other stakeholders.

Furthermore, some stakeholders feel that the lead stakeholder is insufficient in facilitating the collaboration process in Forest Park management, albeit others feel otherwise. Interestingly, the stakeholders who feel that the lead stakeholder is still insufficient are stakeholders who are directly adjacent to the Forest Park area, whose existence will directly affect the sustainability of the Forest Park. The lack of leadership from the lead stakeholder arises from a lack of communication and responsiveness of the lead stakeholder to some collaboration processes. Therefore, improved communication and more

responsive lead stakeholders will have a good effect on all levels of stakeholders and the Forest Park ecosystem.

Moreover, the success of the collaborative governance process will be more decisive with the support of qualified regulations. Protocols and ground rules for collaborating have a critical position for the procedural legitimacy of the collaboration process (Ansell and Gash, 2008). The current procedures and regulations in facilitating the collaboration process in the Forest Park area are already comprehensive. From law, government regulation, presidential decree, ministry regulation, provincial regulation, to governor decree cover the collaborative process in the forest park area. These regulations regulate who is allowed to collaborate, the rights and obligations of each stakeholder in collaborating, administrative and technical requirements in collaborating, procedures for collaborating, and threats and sanctions when stakeholders disobey the regulations.

In addition, the obedience of each stakeholder in obeying the existing regulations is still low. Therefore, law enforcement is absent for the stakeholders who do not properly involve in the collaboration process. However, law enforcement is crucial because if it is not enforced, the possibility of stakeholders in violating regulations and not involve properly in the collaboration process can increase. Subsequently, it will impact the ecosystem balance in the Forest Park area. Accordingly, law enforcement should pay more attention because it is related to the sustainability of the Forest Park.

Collaboration in the management of Forest Park is something that cannot be avoided because it is mandated in existing regulations. The regulation mentions that the management of a protected area must involve all stakeholders related to the area. In addition, stakeholders' involvement is prominent because impossible to manage the protected areas only handled by one organization. This is in line with Emerson et al. (2012), which state that to facilitate the achievement of public goals and problem-solving must involve stakeholders from various sectors and more than one organization. Collaborative governance that occurred in the Forest Park Ir. H. Djuanda involved nearly 30 stakeholders from government agencies, private sectors, local communities, and local NGOs. The number of stakeholders involved in the collaborative management of Forest Park Ir. H. Djuanda seems to have increased from the previous number of around 24 stakeholders (Saputra et al., 2019).

Face-to-face dialogue between stakeholders has been running because this is a communication method to reach an agreement. The face-to-face dialogue in collaboration at Forest Park is still fragmented. There is no routine schedule for gathering together in order to equalize perceptions or understandings between stakeholders. Face-to-face dialogue that is carried out in a fragmented manner and is held when specific problems arise is not bad. Still, it would be better if all stakeholders could gather

together regularly to discuss current issues and the course of the collaboration process. By holding regular meetings, it is expected to evaluate the system of the collaboration process so that it can identify weaknesses that may arise during the collaboration process. By knowing these weaknesses, all stakeholders can take action to improve them so that the collaboration process will be better in the future.

The centralized network structure in the collaboration that occurs in Forest Park results in minimal collective action from each stakeholder in the network. This can be seen by the dominance of Forest Park Ir. H. Djuanda Technical Unit (THRDJ), which has the highest degree of centrality value. With one actor's dominance, the other actors' collective action will decrease. It can be seen from the face-to-face dialogue that occurs in a fragmented and unscheduled manner because other stakeholders are waiting for instructions from key stakeholders to discuss. These key stakeholders have limited resources to handle various matters. This is in line with Charalabidis et al. (2012), who revealed the need to share roles with external actors to deal with complex problems in collaborative governance. With the distribution of roles between stakeholders, it is hoped that there will be stakeholders who play a role in scheduling discussions between stakeholders in the management of Forest Park.

Implementing a good face-to-face dialogue will affect all variables in the collaborative process. Face-to-face dialogue is more than just a medium for negotiating. It is at the core of the process of building trust, mutual respect, mutual understanding, and commitment to the process (Ansell and Gash, 2008). A good face-to-face dialogue will build mutual trust between stakeholders and generate commitment from each stakeholder to carry out the collaboration process. The existence of interdependence between stakeholders, sharing ownership with other stakeholders to facilitate the collaboration process, and openness to explore common achievements can increase commitment to carry out the collaboration process well. In general, the commitment shown by each stakeholder who collaborates in the management of Forest Park Ir. H. Djuanda is already good. Almost all stakeholders expressed their commitment to the collaboration process. This can be seen from every stakeholder who has shared their commitment in the form of skills, money, time, or in-kind for a smooth collaboration process in Forest Park.

The commitment of each stakeholder in the collaboration process will lead to a shared understanding. A shared understanding between stakeholders will reduce misunderstandings and increase mutual understanding of each stakeholder's role in achieving this collaboration's goals. After a shared understanding emerges from each stakeholder, intermediate outcomes, which are small wins, can be achieved. Intermediate outcomes are small stages of successful collaboration before reaching a larger output which is the primary goal.

Small wins from each stakeholder who collaborated in Forest Park Ir. H. Djuanda most of it has been felt by each stakeholder. Stakeholders who collaborate in Forest Park have obtained intermediate outcomes. The intermediate outcomes obtained can be seen in the form of better ecosystem protection, controlled use of natural resources, fulfillment of economic needs, empowerment of communities around the Forest Park area, and development of local culture. This is in line with what was expressed by Munthali (2007), which revealed that alliances and partnerships between stakeholders could positively impact the environment and society. The achievement of these intermediate outcomes is a positive thing because every stakeholder feels a good impact of this collaborative governance. Thus, with this achievement, it is hoped that it can become a foothold towards achieving greater outcomes from collaborative governance in the Forest Park Ir. H. Djuanda.

Finally, because of the limited time, not all stakeholders were successfully interviewed. Small-medium enterprises that sell food and beverages in the area will also be interesting in being involved as the research respondents because they have direct contact with the existing ecosystem that has a more direct impact on the Forest Park area.

CHAPTER 7. CONCLUSIONS AND RECOMMENDATIONS

This chapter provides conclusions to answer the sub research questions that leads to answer the main research question. Besides, this chapter also provides the recommendations for the implementation of effective collaborative governance at Forest Park Ir. H. Djuanda and the future research needed related to this topic.

7.1 Conclusions

To conclude, this research aims to describe the existing collaborative governance in the management of Forest Park Ir. H. Djuanda. With this understanding, the collaboration process can be achieved more effectively by recognizing various interests, exchanging positions, building trust, and finding common interests among stakeholders. Data collection and analysis were carried out through a mixed method of qualitative and quantitative to obtain four information variables from the collaborative governance theory by Ansell and Gash (2008): starting conditions, leadership, institutional design, and collaborative process. Surveys and interviews were conducted with 22 stakeholders involved in the management of Forest Park Ir. H. Djuanda, consisting of government agencies, private sectors, local communities, and local NGOs.

Based on the survey and interview results, this research answered each stakeholder's motivation to collaborate at Forest Park Ir. H. Djuanda. The motivation of each stakeholder was divided into four groups: environmental, economic, social, and a mix of two or three motivations. Stakeholders, who have environmental motivation, focus on handling waste from around the Forest Park originating from households and controlling plant populations so that they do not dominate in the Forest Park area. Stakeholders, who have economic motivation, focus on utilizing natural resources, both tangible and intangible, to run their organization's business. While stakeholders, who have social motivation, use the Forest Park area as a place to develop arts and culture from the local community. Finally, stakeholders with mixed motivations have realized that the existence of Forest Park must be protected so that they not only exploit its resources but also try to preserve them.

Aside from motivation, this research also answered related to the lead stakeholder in facilitating the collaboration process. All stakeholders interviewed chose Forest Park Ir. H. Djuanda Technical Unit as the lead stakeholder in the collaboration held at Forest Park Ir. H. Djuanda. This choice was deemed appropriate because Forest Park Ir. H. Djuanda Technical Unit is the manager appointed by the

government to manage the Forest Park area. Therefore, they know all the regulations regarding the collaboration process in Forest Park. In facilitating the collaboration process, not all stakeholders feel that the leadership of these lead stakeholders is sufficient to facilitate the collaboration process. Some of the underlined things were related to the lack of responsiveness and communication from the lead stakeholders. Otherwise, the existence of these lead stakeholders can be a bridge between stakeholders to collaborate in the Forest Park area, Ir. H. Djuanda.

Furthermore, this research also answered existing procedures and regulations related to collaboration at Forest Park Ir. H. Djuanda. At least 11 regulations have been identified that discuss the importance of collaboration in the management of Forest Park areas. These rules range from laws, government regulations, presidential decrees, ministerial regulations, regional regulations, and governor decrees regarding collaboration. Discussions related to collaboration in these regulations start from who can participate in Forest Park management, the rights and obligations of each participating party, and procedures for collaborating in the management of Forest Park. Hence, these regulations are considered sufficient to provide an umbrella for the collaboration process in the Forest Park area.

Finally, this research answered the extent to which stakeholders collaborate in Forest Park Ir. H. Djuanda. The collaboration process in Forest Park management has been running with the implementation of face-to-face dialogue, sharing commitments, sharing understanding, and having intermediate outcomes from the collaborative process. The collaborative network model in Forest Park management is a centralized model, with Forest Park Ir. H. Djuanda Technical Unit as the key stakeholder who is also the manager of the Forest Park area. The collaborative process that runs in Forest Park is not entirely going well. There are several shortcomings in this collaborative process, such as dialogue between stakeholders, which is still fragmented and not regularly scheduled, less intense communication, and the dissolution of the stakeholder forum. In terms of achievement, each stakeholder has experienced the intermediate outcome of this collaboration. Thus, with intermediate outcomes, which are small wins from the collaboration process, significant achievements are likely to be realized.

7.2 Recommendations

To ensure the collaborative governance process runs well in the management of Forest Park Ir. H. Djuanda, the Forest Park Ir. H. Djuanda Technical Unit must have collaborative planning with various stakeholders in managing the Forest Park Ir. H. Djuanda. Forest Park Ir. H. Djuanda Technical Unit, as the lead and key stakeholder, must be able to embrace all stakeholders to play an active role in the management of the Forest Park. Increasing human resources who understand forest management and

regulations related to collaboration must be a concern for Forest Park Ir. H. Djuanda Technical Unit. In addition, communication must be further improved, especially with stakeholders directly adjacent to the Forest Park area. Besides, an active communication must be well established with the village government around the area because they can be a driving force for the community to be more aware of the importance of the Forest Park area for their lives.

In addition, it is necessary to schedule regular meetings between stakeholders. The need for reactivation of the previously existing stakeholder forum could be the key to planning this regular meeting. Through regular meetings, shared perceptions regarding the management of the Forest Park Ir. H. Djuanda will be bridged and will be conveyed easily to other stakeholders. Regular meetings can also quickly identify problems that arise during the collaboration process and jointly can find solutions to these problems. In addition, by holding regular meetings, information will be conveyed about the rights and obligations of each stakeholder in collaborating in Forest Park Ir. H. Djuanda. Therefore, by knowing the rights and obligations of each stakeholder, the target of managing the Forest Park area will be more easily achieved.

For future research, because this research uses the Ansell and Gash model as its collaborative governance model, it would be interesting to research using other collaborative governance models, such as the collaborative governance regime issued by Emerson, Nabatchi, and Balogh (2012), so that they can see the collaboration process from a different perspective. Additionally, increasing the number of samples/interviewees for the data collection process will be advantageous to explore deeper information because, in the future, the stakeholders involved in forest park management will differ throughout the year. For instance, there will be an increase or decrease in the number of stakeholders involved or the type of stakeholders involved will be changed.

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APPENDIX A. INTERVIEW QUESTIONS

1. What is the main goal of your organization in collaborating in this Forest Park? Economic, social, or environmental? And why these goal/goals are important for your organization?

<p>Answer:</p> <p>Goal: <input type="checkbox"/> Economic <input type="checkbox"/> Social <input type="checkbox"/> Environment</p> <p>Reason:</p>

2. Choose from the stakeholders below. Who are the stakeholders your organization had face-to-face dialogues with during the collaboration process?

If there are stakeholders missing, please add them to the bottom of the list and indicate with an “x” if you think you had face-to-face dialogues with the stakeholders.

Stakeholders	
<input type="checkbox"/>	Forest Park Ir. H. Djuanda Service Unit
<input type="checkbox"/>	Ministry of Environmental and Forestry
<input type="checkbox"/>	West Java Nature Conservation Agency
<input type="checkbox"/>	West Java Forestry Office
<input type="checkbox"/>	Bandung Regency Culture and Tourism Agency
<input type="checkbox"/>	Village Administration Office of Ciburial
<input type="checkbox"/>	Village Administration Office of Cimenyan
<input type="checkbox"/>	Village Administration Office of Mekarwangi
<input type="checkbox"/>	Village Administration Office of Langensari
<input type="checkbox"/>	Village Administration Office of Wangunharja
<input type="checkbox"/>	Village Administration Office of Cibodas
<input type="checkbox"/>	Local Water Company (PDAM Tirtawening)
<input type="checkbox"/>	State Electric Company
<input type="checkbox"/>	Holland Spot Restaurant

Stakeholders	
<input type="checkbox"/>	D’Pakar Café
<input type="checkbox"/>	372 Coffee shop
<input type="checkbox"/>	Tahura Coffee shop
<input type="checkbox"/>	Shop owner association
<input type="checkbox"/>	The Lodge Maribaya
<input type="checkbox"/>	Rimbawan Sejahtera Bersama Cooperative
<input type="checkbox"/>	Forest Ranger Partner Community
<input type="checkbox"/>	Martial arts academy (Landas bina tahura djuanda)
<input type="checkbox"/>	Outdoor Academy Foundation
<input type="checkbox"/>	Bandung Mountaineering Community
<input type="checkbox"/>	Bandung Regency Environmental Agency
<input type="checkbox"/>	West Bandung Regency Environmental Agency
<input type="checkbox"/>	West Bandung Regency Tourism and Culture Agency
<input type="checkbox"/>	Warung Bandrek Café

3. How often are those face-to-face dialogues conducted? How would you describe the quality of interactions (conflictual/productive) among participants in the face-to-face meetings?

<p>Answer:</p> <p><input type="checkbox"/> Once a week or more <input type="checkbox"/> Once a month or more <input type="checkbox"/> A few times a year <input type="checkbox"/> Once a year</p> <p>Reason:</p>
--

4. Choose from the stakeholders below, who are the lead stakeholders that lead / can lead the collaboration process in the Forest Park? (Choose max three stakeholders)

If there are stakeholders missing, please add them to the bottom of the list and indicate with an “x” if you think they are the lead stakeholders.

Stakeholders	
<input type="checkbox"/>	Forest Park Ir. H. Djuanda Service Unit
<input type="checkbox"/>	Ministry of Environmental and Forestry
<input type="checkbox"/>	West Java Nature Conservation Agency
<input type="checkbox"/>	West Java Forestry Office
<input type="checkbox"/>	Bandung Regency Culture and Tourism Agency
<input type="checkbox"/>	Village Administration Office of Ciburial
<input type="checkbox"/>	Village Administration Office of Cimenyan
<input type="checkbox"/>	Village Administration Office of Mekarwangi
<input type="checkbox"/>	Village Administration Office of Langensari
<input type="checkbox"/>	Village Administration Office of Wangunharja
<input type="checkbox"/>	Village Administration Office of Cibodas
<input type="checkbox"/>	Local Water Company (PDAM Tirtawening)
<input type="checkbox"/>	State Electric Company
<input type="checkbox"/>	Holland Spot Restaurant

Stakeholders	
<input type="checkbox"/>	D’Pakar Café
<input type="checkbox"/>	372 Coffee shop
<input type="checkbox"/>	Tahura Coffee shop
<input type="checkbox"/>	Shop owner association
<input type="checkbox"/>	The Lodge Maribaya
<input type="checkbox"/>	Rimbawan Sejahtera Bersama Cooperative
<input type="checkbox"/>	Forest Ranger Partner Community
<input type="checkbox"/>	Martial arts academy (Landas bina tahura djuanda)
<input type="checkbox"/>	Outdoor Academy Foundation
<input type="checkbox"/>	Bandung Mountaineering Community
<input type="checkbox"/>	Bandung Regency Environmental Agency
<input type="checkbox"/>	West Bandung Regency Environmental Agency
<input type="checkbox"/>	West Bandung Regency Tourism and Culture Agency
<input type="checkbox"/>	Warung Bandrek Café

5. Do you think there is enough/strong leadership in this collaborative process? Can you explain more about your answer?

Answer: Yes No
Reason:

6. How committed are you to this collaboration process? What kind of commitment do you give to collaborating? Type of commitment can be in the form of resources (time, money, skills, in-kind, etc.) Do you share these commitments for other stakeholders to use to achieve common goals?

Answer:
Commitment level
 Highly committed Rather committed Neutral Rather not committed
 Not at all committed
Type of commitment
 Time Money Skills In-kind

7. What are the drivers or barriers that affect the achievement of your collaboration goals?

Answer:

APPENDIX B. CONSENT FORM

PERSETUJUAN UNTUK IKUT AMBIL BAGIAN DALAM INTERVIEW PENELITIAN
 CONSENT TO TAKE PART IN RESEARCH STUDY INTERVIEW

**"Collaborative Governance dalam Pengelolaan Kawasan Konservasi
 di Taman Hutan Raya Ir. H. Djuanda, Jawa Barat, Indonesia"**

*"Collaborative Governance in Protected Area Management
 at Forest Park Ir. H. Djuanda, West Java Indonesia"*

- | | Ya
Yes | Tidak
No |
|--|--------------------------|--------------------------|
| - Bersama dengan ini, saya, _____, menyetujui untuk berpartisipasi dengan sukarela pada penelitian ini
<i>I, _____, voluntarily agree to participate in this research study interview.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa dalam partisipasi ini, saya dapat menarik informasi yang saya berikan sewaktu-waktu atau menolak untuk menjawab tanpa ada konsekuensi apapun.
<i>I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa saya dapat menarik izin penggunaan data dari wawancara saya, dalam hal ini materi akan dihapus.
<i>I understand that I can withdraw permission to use data from my interview after it, in which case material will be deleted.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya telah mendapatkan informasi terkait maksud dan tujuan penelitian dan saya dapat mengajukan pertanyaan terkait penelitian tersebut.
<i>I have had the purpose and nature of the study explained to me and I have had the opportunity to ask questions about the study.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya setuju wawancara saya direkam dengan audio-video.
<i>I agree to my interview being audio-video-recorded.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa semua informasi yang saya berikan untuk penelitian ini akan dijaga kerahasiaannya.
<i>I understand that all information I provide for this study will be treated confidentially.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa identitas saya dalam penelitian ini akan tetap anonim jika saya menginginkannya. Hal ini dilakukan dengan tidak secara eksplisit menyebut nama saya dan menyamarkan detail informasi yang dapat mengungkap identitas saya ataupun orang yang saya bicarakan.
<i>I understand that in any report on the result of this research my identity will remain anonymous if preferred to be so. This will be done by not explicitly mentioning my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa saya memiliki hak untuk mengakses informasi yang saya berikan setelah diskusi.
<i>I understand that I am entitled to access the information I have provided after the interview.</i> | <input type="checkbox"/> | <input type="checkbox"/> |
| - Saya memahami bahwa saya dapat menghubungi siapapun yang terlibat dalam penelitian ini untuk meminta klarifikasi dan informasi lebih lanjut.
<i>I understand that I am free to contact any of the people involved in the research to seek further clarification and information.</i> | <input type="checkbox"/> | <input type="checkbox"/> |

Berikut adalah nama-nama orang yang terlibat dalam penelitian ini yang menjamin persetujuan penggunaan persetujuan ini dan jawaban yang diberikan selama wawancara.

Here as follow the names of the people involved in this research who guarantee the agreed use of this consent and the answer provided during the interview.

Peneliti:
 Researcher:

Oki Gunawan Safari

Tanda tangan partisipan:
 Signature of Participant:

Tanggal:
 Date

Pembimbing:
 Supervisor:

Dr. Florence Metz, MA
 Dr. Victoria Daskalova, LLM

Untuk informasi lebih lanjut terkait penelitian ini, silahkan email: okigunawansafari@student.utwente.nl
 For more information on this research, please email:

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