Collaborative governance in managing plastic waste in Bali

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Abstract. Collaborative governance is a concept that is considered to be able to give a big contribution in solving various problems in society, including waste management. Waste management is an urgent matter today because more than 400 thousand tons of waste is generated every year with only ten percent being recycled and the rest ends up in the ocean. Indonesia, as one of the countries with the largest population in the world, also has the largest contribution in producing plastic waste. Bali is one of the provinces in Indonesia that contributes the largest plastic waste. To answer these problems, this paper uses a qualitative approach with a library study data collection method, to analyze how collaborative governance processes proceed for a sustainable environment. The results obtained show that collaborative governance in the management of plastic waste in Bali and its legal basis have been running well but community participation and compliance are still lacking because of a common goal between actors that have not yet been formed. The high amount of plastic waste in Bali's sea is also caused by weak law enforcement and a lack of public awareness and mutual understanding.

1. Introduction

Nowadays, people around the world produce about 400 million tons of plastic annually [1]. The high use of plastic is because plastic is considered to have advantages compared to other materials, namely plastic has functional properties where plastic can be used disposable with high hygiene and production costs are cheap, durable, strong, and lightweight [2–4]. The excess plastic makes people have dependency properties that are actually able to produce negative impacts, especially for health and the environment [5,6]. One example is the pollution of plastic waste at the sea.

Parts of the world's oceans have been polluted by plastic waste. About 400 million tons of plastic in the world, only about 10% of it is recycled, some are dumped in landfills and/or rivers, with 90% of them (estimated to reach 8 million tons) ending up at sea [7,8]. Based on a report from The International Coastal Cleanup (2020) [9], of the total garbage collected in the world, there are approximately 32,485,488 items of marine debris weighing up to 9,422,199 kilograms with 12,381,108 items or 38 percent of which are plastic waste [9]. The phenomenon of plastic waste in the sea is becoming an alarming condition. Behind the advantages that plastic has, plastic has properties that are difficult to decompose so that plastic is able to pollute the environment. These properties make plastic able to fill aquatic areas and even damage the beauty of nature and marine ecosystems.

Indonesia is a country that feels the impact of the phenomenon of plastic waste in the sea. The amount of plastic waste in Indonesia's seas can reach 3.2 million tons annually [10]. Indonesia even ranks
second, after China, as the world’s largest plastic waste producing country whereas in Law No. 18 of 2008 it is listed on waste management [10]. This condition has implications for the decrease in tourists visiting Indonesia’s sea area due to the deterioration of the beauty of the sea caused by plastic waste [11]. Bali is one of the provinces in Indonesia that has the greatest tourism potential. This decade, beaches in Bali were plagued by pollution derived from plastic waste. This is evidenced by research conducted by Systemiq (Non-Profit Environmental Organization) which notes that plastic waste production in Bali reaches 829 tons per day and 11% or about 89 tons of plastic waste ends up in the sea [12]. The large amount of plastic waste in the Sea of Bali makes many foreign tourists complain about the declining quality of the environment in Bali [13].

The problem of plastic waste in the Sea of Bali is the result of poor governance, especially governance in terms of the preservation of the marine sector which is important. Governance is defined as a series of processes consisting of government and private actors in using power and power in order to influence and enforce policies in social and economic development [14]. In the phenomenon of plastic waste in Bali, government collaboration with the private sector and the public can help in addressing the problem of plastic waste in the Sea of Bali. Emerson in Purnomo [15] states collaborative governance as a process and structure of public policy making and governance involving the public, private parties, and Non-Government Organizations (NGOs) from various institutions and levels to formulate difficult objectives. This is reinforced by what McGuire [16] stated that collaborative governance is a government management effort that facilitates problem solving together by involving parties outside the government in its implementation.

However, the level of public awareness of the dangers of plastic waste for the sea is still very lacking, so the Bali Provincial Government must conduct more massif socializations so that the public can understand that plastic waste has a negative impact on the environment [17]. Socialization conducted by the Provincial Government of Bali has been quite a lot, as for some kinds of socialization that the Provincial Government of Bali does as follows: based on Circular Letter No. 12 of 2019 dated November 26, 2019 concerning the Prohibition of The Use of Disposable Plastic Drinking Water Packaging and/or Plastic Bags in the Ministry of Education and Culture, this policy was carried out during a meeting on the preparation of the program that will then continue its socialization to students and students so as not to use single-use plastics and intended to use materials that can be recycled [18]. Further socialization is carried out in traditional markets, related to the implementation of The Governor Regulation (Pergub) Bali No. 97 of 2018 on Restrictions on the Occurrence of Plastic Waste, people in Bali especially traders and buyers in the traditional market many do not know that the existence of the policy so that plastic bags are still widely used [19]. The problems that occur are very related to the implementation of policies related to waste management. The policy on marine sustainability is stipulated in Local Regulation No. 6 of 2018 on Waste Management.

Handling the problem of waste in the sea of Bali is not only the responsibility of one party, but must involve all elements, namely the community, government and private where the existence of community-based waste management groups, as well as other stakeholders are expected to be the driver of the achievement of the Bali sea free of plastic waste [20]. Through collaborative governance by involving stakeholders will be a solution in addressing the problem of plastic waste in the sea of Bali [21]. Collaborative Governance is a government that regulates public institutions in collectively formal decision making that aims to plan and implement public policies in order to manage programs or public assets oriented to consensus and deliberation [22]. Another definition came from Emerson, Nabatchi and Balogh [23] which explains that collaborative governance is the order of processes and management structures in the formulation and decision of public policy to achieve inclusive public goals from various levels involving the public both in governmental order, institutions, community institutions, private institutions to civil society. Therefore, based on the description above, it can be explained that the Bali Provincial Government still has difficulty in collaborating, especially in the management of plastic waste in the sea due to the implementation of policies and low public awareness so as to make the problem related to this waste unresolved until now. Therefore, researchers are interested in formulating the
problem, namely "How is the Collaborative Governance Process in Plastic Waste Management in Bali Province?"

2. Methods
This research was conducted using a qualitative approach by presenting an analysis of the collaboration process and the role of each policy actor. This research is included in descriptive research, namely to describe the existing phenomena and aims to describe in general the social environment and relationships studied [24]. The benefits of research are purely for academic purposes that use abstract concepts in the context of developing knowledge [24]. This research used secondary data from many literary works that are related, such as articles, books, regulations, and other sources. The data analysis technique in this study is that there is a process of comparing theory with the findings from a literature review and other sources. Used collaborative governance model by Ansell and Gash [22] as the basis of the analysis that contains four dimensions: starting condition, facilitative leadership, institutional design, and collaborative process. The model can be seen in Figure 1.

Ansell and Gash [22] illustrates that in Collaborative Governance there are dimensions that are at the core of the collaboration process, namely Starting Conditions, Facilitative Leadership, Institutional Design, and Collaborative Process. Each dimension has variables that can support the Collaborative Governance process [22].

Starting Condition or initial condition is an effort to facilitate cooperation among existing stakeholders by paying attention to the imbalance of resources owned by each stakeholder and providing incentives for stakeholders to participate. In the initial conditions, Ansell and Gash [22] narrowed down the three initial condition variables, namely, (1) Imbalances between the resources or power of different stakeholders, namely the condition that there is an imbalance of resources that arises when other stakeholder actors are in the organization, (2) The incentives that stakeholders have to collaborate. Usually, incentives will increase if stakeholders assess a direct relationship between their participation and real and effective policy outcomes. Here, there are two additional forms of the model in the contingency relation. First, collaborative governance will only work if actors see themselves as requiring cooperation in building a relationship. Second, if interdependence is conditional on existing collaboration forums, then supporting actors must do more work to create alternative forums in the context of respecting and appreciating the ongoing or ongoing collaboration process, (3) The history of conflict or cooperation among stakeholders, namely when conditions are created where stakeholders are
highly interdependent, high levels of conflict will occur and can be a strong incentive for collaborative governance.

The second dimension is Facilitative Leadership, where Ansell and Gash [22] explains that facilitative leadership can be a unifying and encouraging collaborative among stakeholders. Furthermore, Ansell and Gash mentions that there are three components in effective collaborative leadership, namely, (1) adequate process management in the collaboration process, (2) maintaining technical credibility, and (3) ensuring that collaboration is empowered to make a decision that is convincing and acceptable to all parties. Collaborative leaders also need to possess skills such as promoting broad and active participation, ensuring broad influence and control, facilitating productive group dynamics, and broadening the scope of the process.

Institutional Design is the third dimension of Collaborative Governance. Ansell and Gash [22] explained that institutional design refers to basic protocols and basic rules for conducting collaboration which is very effective because it is important for procedural legitimacy when the collaboration process is carried out. There are two core processes of legitimacy, namely, (1) opportunities for stakeholders to negotiate with other parties regarding policy outcomes, and (2) claims that policy outcomes represent all actors involved.

Collaborative Process is the fourth dimension of Collaborative Governance. Collaboration is often seen as only referring to the achievement of ideal goals, but in the process it is necessary to understand several communication processes that are carried out well, including; (1) Face to face, namely being the initial building in starting the collaborative governance process which aims to identify opportunities for mutual benefit while eliminating stereotypes and barriers in communication, (2) Trust building is the most prominent aspect in the collaboration process and is very difficult to develop, (3) Commitment to process from stakeholders is an important aspect in the success or failure of the collaborative governance process because the more often involved, stakeholders will have a high level of commitment and ownership so as to increase interdependence between stakeholders, (4) Shared understanding is a stage that aims to develop an understanding of mutually achievable outcomes. Shared understanding here is defined as a shared mission, common basis, common goals, shared vision, shared ideological direction to a clear and strategic direction or alignment of core values to defining problems and how to solve them, and (5) Intermediate outcomes are said to exist if relatively there is success from the collaboration process itself. These interim results are usually referred to as small wins and are very important for the sustainability of the collaboration process because they represent the output of the collaboration.

3. Findings and discussion
The concept of collaborative governance focuses on the interaction of actors who collaborate with each other in an interdependent relationship to achieve common goals. Collaborative analysis will focus on how interactions occur between actors, starting from differences to a common goal in a collaborative relationship. Efforts to achieve good and environmentally friendly governance in the case of marine waste management in Bali Province are able to involve various actors, both public and private sector actors.

3.1. Starting condition
The initial condition is an effort to facilitate collaboration between stakeholders so that there is a way to pay attention to the imbalance of resources owned by each stakeholder and provide incentives for stakeholders to participate [22]. In this regard, the initial conditions of plastic waste management in Bali Province were made with a good strategy. One of the efforts made is to involve other stakeholders so that it is difficult to manage in dealing with plastic waste in the sea. This is of course supported by the commitment of the Bali Provincial Government in tackling or overcoming the problem of waste, especially plastic waste. To get to Bali free and clean from plastic waste, there are several strategies that can be done and also improved. The regional regulation makes efforts to include inclusiveness, namely by expanding the rules for regional coverage and expanding the types of coverage of prohibited plastic use [25]. The rules for prohibiting the use of plastic bags are not only focused on one district/city but
are comprehensive in all districts/cities in Bali Province. The handling of plastic waste has follow-up actions related to the prohibition of plastic flower wreath boards, plastic food containers, and so on\textsuperscript{[25,26]}. Community character development is also a focus because it is related to the importance of cleanliness, being aware of disposing of waste in its place and reducing the use of plastic. How to make the awareness of throwing garbage in its place a culture, not just to comply with government regulations, or out of fear of fines and other criminal threats\textsuperscript{[25]}. On the other hand, there is also collaboration between stakeholders consisting of the government, private sector, community/customary leaders, and it is necessary to increase the goal to make Bali free and clean from plastic waste\textsuperscript{[27]}. The government plays an important role in providing education and socialization of environmental conservation, including socialization of cleanliness, waste management and the dangers or impacts caused by plastic waste\textsuperscript{[28]}. In addition, the government also has the authority to facilitate plastic waste management and environmental conservation activities. That the private sector and indigenous peoples play a role in the government's continued socialization of waste management to the community and comply with government regulations on waste management and the environment, as well as take part in concrete actions to reduce waste, for example by participating in beach clean-up actions, reducing the use of plastic in the work area, making competitions for cleanliness and plastic waste-free innovation, and so on\textsuperscript{[25]}.

Not only that, but the private sector is also involved in making programs and funding innovations as well as in the management of plastic waste, one of which is the Local Waste Processing Site (TOSS) and the Reduce, Reuse, and Recycle Waste Processing Site (TPS 3R). In detail, the TOSS program is Indonesia Power’s CSR program by involving the community and non-governmental organizations in overcoming waste problems\textsuperscript{[29]}. In 2021 this program will begin to be intensively implemented because public compliance and awareness begins to decline in paying attention to waste wells that dispose and sort waste with a focus on land or sea areas. One of the sub-districts that implements this program is Klungkung Regency, where there are officers who carry out monitoring to ensure that people dispose of waste in accordance with applicable regulations\textsuperscript{[30]}. The TPS 3R program is a program created to see and monitor the seriousness of the government of all districts/cities in the Province of Bali in terms of waste management\textsuperscript{[31]}. One of the two districts that have successfully implemented this program is Gianyar and Klungkung, where public interest is very high in terms of supporting the socialization of this program by the district/city government.

3.2. Facilitative leadership

Actors in collaborative governance are placed in equal power. Collaboration processes are able to work if that condition is fulfilled from the first process of collaborative governance by Ansell and Gash\textsuperscript{[22]}, starting condition. Equal power can be seen by each actor's influence in the decision-making process. On the other hand, sharing power and goals are difficult things to achieve in the context of collaboration. Many cases, the interest from each actor is all different. Other words, they strive to achieve collaborative decisions that are going to represent their interest. This process is often called “political process” in the context of a policy cycle that could lead to conflict between actors. Conflict that happens can be described as a process of exchanging opinions. This process is going to produce chaos or joint decisions. To collaborate and achieve sharing power and goals, collaborative governance needs one actor that could lead all actors to be unity. The possible actor that can be positioned for that role is Bali Provincial Government. Government known as a welfare actor that prioritized the welfare of its society. Bali Provincial Government could be the initiator of the collaborative process between actors such as corporate, community, and society itself. That role could be done by the government because they have data and information about their own territory conditions. Data and information could give power for the government to reach planning about environmental management and how urgent environmental problems are. Facilitative leadership will include at least how the government is able to act as the initiator of collaboration activities, intervention policies for the continuation of collaboration, inclusivity, and maintain integrity during the collaboration process.
Initiatives from the government can be seen in various collaborative activities, the first step being taken by the Bali Provincial Government. Discussions with other actors were carried out in order to convey goals and equalize perceptions. Dialogue initiated by the Bali Provincial Forestry and Environment Service (DLHK) by conducting socialization and coordination with various Regional Apparatus Operations (OPD) to various stakeholders carried out in nine regencies/cities throughout the province [28]. Collaboration is also based on a memorandum of understanding signed by both parties as a form of understanding in carrying out a program or activity. Jembrana Regency signed a memorandum of understanding and officially welcomed Project STOP and the Alliance to End Plastic Waste as output from the dialogue [32]. That output shows that the Bali Provincial Government as an actor initiates communication with other actors who then use a memorandum of understanding as a basis for reference.

The Bali Provincial Government builds a joint relationship with the private sector in the context of waste management. The private sector as an actor in the form of a profit or profit-oriented company. This orientation places the government to build mutually beneficial relationships to be able to build collaborative relationships. The relationships can be seen in the project of Waste Management using a Crusher Machine into Pellets to be Developed into Electric Fuel. The project will involve PT Indonesian Power [33]. In general, the process that will be carried out is involving the Village Government to process waste into pellets using a chopping machine. The cooperation with the private sector will take the form of delegating the results of the pellet production to the company to be the raw material for electricity production. This form of cooperation will result in a mutually beneficial relationship. The relationship that occurs will provide benefits for the Bali region with the presence of a waste management system and will benefit the company in terms of providing raw materials for production.

The involvement of actors in the context of waste management is also present in the Tempat Olah Sampah di Sumbernya (TOSS) program. This program is implemented based on regulations related to waste reduction, especially plastic waste. TOSS involves the government from the lowest level, namely the village government, to implement a waste management system in all levels of society. According to research results, the TOSS program has succeeded in bringing about an efficient waste management method with a fast-processing process and can be said to be an innovation with the fastest recycling method [34]. This shows that the TOSS Program itself has been well planned. The TOSS program has also sufficiently involved government and community actors in it. This program shows that the government is the initiator that moves other actors in the context of managing plastic waste in Bali.

The Bali Provincial Government uses various intervention efforts to mobilize collaborative actors. The Bali Provincial Government issues various policies that cover various aspects of waste management. The regulation applied is the Bali Governor Regulation Number 97 of 2018 concerning Restrictions on the Generation of Plastic Waste and Denpasar Mayor Regulation Number 36 of 2018 concerning Reducing the Use of Plastic Bags which is able to become the basis for the behavior of actors. Another policy from the Bali Provincial Government that is intended to be able to intervene to mobilize actors in the context of waste management is to allocate the Waste Retribution Fund budget through the APBD as a form of intervention policy [35]. The budget allocation is intended to support the construction of waste management infrastructure.

The collaborative process in waste management in the Bali region that was facilitated by the Bali Provincial Government has shown inclusiveness. Many of the actors who participated indicated that the Bali Provincial Government has facilitated the collaboration process well, by involving a wide sector of actors. The thing that is lacking is the Bali Provincial Government is still not able to mobilize the community to achieve its goals. The condition that occurs is that people's perceptions and priorities still have differences with the goals. This is shown from the results of research by MacRae [36] that social, cultural, and political aspects have more influence on the success of waste management in Bali when compared to technical and economic aspects. This shows that good governance cannot guarantee the success of a program but is determined by policy actors who are able to support the running of a program. Similarly, the results of research from Kristina et al. [37] that education on the importance of environmental sustainability by reducing waste generation is the most important thing that is considered
capable of achieving success in waste management efforts. The size of the population is also one aspect of the difficulty of the government to mobilize the masses.

In the facilitative leadership dimension, the aspect of integrity becomes one of the important things. The aspect of integrity that can be seen is the disclosure of information from various activities carried out by the government. In the concept of governance, information disclosure is also referred to as transparency which requires openness to various data and information except those that are excluded in the laws and regulations. Data and information related to waste management activities can be in the form of data on the amount of daily waste production and sources of waste. Information disclosure from the Bali Government can be said to be quite good which can be judged from how information can be open to the public, either through the mass media or the official website of the institution.

3.3. Institutional design

In this dimension, the existence of Denpasar City Regulation No. 3 of 2015 becomes one of the legal bases for waste management in Bali. The regulation explains that community participation in the process of managing waste is needed. Dinas Lingkungan Hidup dan Keutan (DLHK) Denpasar conducts socialization to the community as an effort to prevent environmental pollution by not littering and prioritizing environmental hygiene [38]. Socialization to the community related to government programs needs to be done. Reviewing previous research reveals that the socialization of the program has an important position because it relates to the optimal or not a policy, public understanding of approaches by the government and communication between the government and the community.

Kencana and Ayuningtyas [39] proves that socialization activities such as seminars and counseling through print media and social media (websites) in the alleviation of waste at the sea can be a way for a policy to be accepted by the community so that the public can actively participate. The lack of socialization by the Bali Provincial government is also evident from the results of research conducted by Putra and Sudharma [40] which shows the lack of socialization in managing waste problems is also found in indigenous villages in Denpasar which has an impact on low awareness of indigenous peoples both in the lowest level of family.

In addition, in the alleviation of plastic waste at the sea, in Bali Province, there is a Regulation of the Governor of Bali No. 97 of 2018 on Restrictions on the Occurrence of Disposable Plastic Waste as an effort to control plastic waste in Bali. However, this rule shows setbacks due to various factors, one of which is lack of socialization. This was conveyed by the Head of Waste Division of Klungkung Ketut Darmawan Regency that Disposable Plastic Waste rules have not been massively socialized [26]. In fact, Indonesia along with 40 other countries in the world are part of the United Nations Environmentally Friendly Sea campaign to commit to reducing plastics in the oceans [41].

Furthermore, law enforcement related to plastic waste that is still not good from the Bali government also causes the regulations related to plastic waste in Bali does not run effectively and efficiently so that the process of collaboration between the government and stakeholders is difficult to be implemented. According to the research by the Centre of Remote Sensing and Ocean Sciences, the Faculty of Marine Affairs and Fisheries of Udayana University explained that the problem of plastic waste that is still a frightening scourge for the government is caused by law enforcement practices that the Bali government is still very weak. Law enforcement as one of the elements of governance that has not been running well in the province of Bali. One example that can represent that in carrying out the policy of prohibiting the use of single-use plastic bags in Bali makes irresponsible people take advantage of the opportunity to blackmail traders who still use plastic bags, the absence of the government to supervise the policy is a weakness of the government so that the government seems not to implement the policy preventively or repressively [17].

3.4. Collaborative process

The first process in collaboration is conducting face-to-face dialogue between stakeholders. Ansell and Gash [22] explain that face-to-face dialogue is the starting point for initiating a collaborative governance process that aims to identify opportunities for mutual benefit. In alleviating waste in Bali Province, there
is a face-to-face dialogue initiated by the Bali Provincial Forestry and Environment Service (DLHK) by conducting socialization and coordination with various Regional Apparatus Operations (OPD) to various stakeholders carried out in nine regencies/cities throughout the province. Bali Province [28]. In addition, briefings were also carried out by the Head of the Family Welfare Empowerment Team (PKK) virtually through online seminars regarding the importance of the movement to sort out source-based waste while at the same time providing an overview of Taro Village as an example of a successful 3R (Reuse, Reduce and Recycle) movement as an effort to reduce the volume of waste [33].

Dialogue also took place between stakeholders at a discussion forum initiated by the Perbekel or the Village Head of Dalung Village, North Kuta District, Badung Regency I Gede Putu Arif Wiratya in the Meeting Room of the Dalung Village Office together with the Director of the Waste Bank Mangu Srikandi of Dalung Village to make the handling and management program successful garbage in Dalung Village. This forum was also attended by representatives of the Bali Non-Governmental Organization (NGO) Wastu Lestari, who focused on waste management, represented by Desa Dalung [42]. This face-to-face dialogue is very important because it can be a step to remove stereotypes and barriers in communication in order to prevent the exploration of mutual benefits so as to build trust, mutual respect, mutual understanding and commitment in the collaborative process [22].

As quoted from the www.stopoceanplastics.com page, on February 11, 2021, Jembrana Regency signed a memorandum of understanding and officially welcomed Project STOP and the Alliance to End Plastic Waste as a form of mutual understanding in alleviating waste. This is done as a way to create a comprehensive waste management system and end marine pollution. The project also provides a concerned understanding of the marine environment and provides solutions to various environmental problems and involves the community in various activities [32].

At a later stage in the collaboration process, Ansell and Gash [22] explain that it is necessary to build trust because and requires actors who can invite or provide support for other actors to participate. Based on a study conducted by Mustika et al. [43] there are community service activities initiated by the Warmadewa University Community Service Institute in Sebunibus Hamlet, Sakti Village which involve the Sebunibus Hamlet Tourism Awareness Group and the Sakti Village head as partners show that socialization and management education activities organic waste for community empowerment in general runs optimally and effectively. The activity was carried out from August to October 2020 which could not be separated from the active role of the partners involved so that community empowerment could be carried out properly [43]. Trust Building is also closely related to the support from various stakeholders to facilitate the collaboration process [22]. To increase the trust of stakeholders, the Bali Provincial Government has collaborated with the private sector in efforts to handle plastic waste. At the very least, the Bali Provincial Government involves the Bali Hindu Dharma Student Union (KMHDI), Bali Peradah, Bali Cleaning, and Trash Hero in the context of the government socializing the Bali Governor Regulation Number 97 of 2018 concerning Restrictions on the Generation of Single-use Plastic Waste [5].

This support related to alleviating the waste problem in Bali Province received support from various parties. One of them, from Rosa Vivien Ratnawati as Director General of Waste, Waste, Toxic and Hazardous Material Management (PSLB3), argued that the problem of plastic waste on the coast of Bali is the responsibility of all parties and there is cooperation between the Ministry of Environment and Forestry and several packaging companies to provide drop boxes, the emergence of the movement to reduce plastic bags by several non-governmental organizations (NGOs) to a study by the Coordinating Ministry for Maritime Affairs with the World Bank conducted in 20 locations in Bali [44]. Efforts from other stakeholders came from academics, namely the Denpasar Unmas Community Service Team, led by I Gede Cahyadi Putra with 31 students to conduct socialization and counseling related to plastic waste management in rural communities in Sembung village, Mengwi, Badung [45].

In one of the publications by the Coordinating Ministry for Maritime Affairs and Investment of the Republic of Indonesia, KLHK also established a Regional Capacity Center for Clean Seas (RC3S) in Bali which has the aim of providing protection to coastal and marine ecosystems from various problems or pollution originating from land [46]. Various parties are actively involved in alleviating waste in Bali.
During the National Waste Care Day (HPSN), Danone-Aqua in collaboration with National Geographic Indonesia, Malu Dong Community, Systemiq and Octopus conducted research.

The final stage of the collaboration process is how interactions between actors are able to produce intermediate outcomes (see Table 1). The interaction between the government and the private sector is able to produce mutually beneficial relationships or can be called win-win solutions created by the Government of Bali to create collaborative relationships with the private sector. On the other hand, interactions between government and society are bound and governed by governor’s regulations. These activities require the actors to behave in accordance with what has been regulated in the legislation. In contrast to the interaction that is built in the TOSS program, awareness is needed from each actor to be able to play an active role in the program because the relationship that is formed is not a mutually beneficial relationship or a binding relationship.

Table 1. Actor involvement in policy activities

| No. | Policy Activities                               | Actor Involvement                                                                 | Nature of Activities         |
|-----|------------------------------------------------|----------------------------------------------------------------------------------|------------------------------|
| 1   | Governor's regulation                          | All actors (government (include traditional village, private, and community))    | Bind and govern              |
| 2   | Waste Management using a Crusher Machine into Pellets to be Developed into Electric Fuel | City Government, Village Government, PT Indonesian Power                         | Mutually beneficial relationships |
| 3   | Tempat Olah Sampah di Sumbernya (TOSS)         | Government (include traditional village) and community                           | Program based relationships   |

Source: Author’s work (2021)

4. Conclusion
The results obtained indicate that Collaborative Governance in the management of plastic waste in Bali and its legal basis has been running well but community participation and compliance are still lacking. The condition that occurs is a shared goal between actors that has not yet been formed—to achieve the preservation of the marine environment free from plastic waste pollution. The collaboration process also involves many actors ranging from the Bali provincial government, district and city governments, the private sector, central government, non-governmental organizations, communities to international institutions. However, the high amount of plastic waste in the Bali sea is also caused by weak law enforcement and a lack of public awareness and understanding. Although the Bali Provincial Government's facilitation efforts have been carried out in an inclusive manner, the awareness and active participation of each remains the key to the success of the collaboration.

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