

## STAKEHOLDER MAPPING IN THE DEVELOPMENT OF COASTAL AREAS BASED ON BLUE ECONOMY IN BIMA CITY

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### ABSTRACT

*The concept of the blue economy provides opportunities to harness the potential of marine resources in a sustainable manner; however, its implementation often faces significant challenges. This study aims to map stakeholders involved in the management of coastal areas based on the blue economy in Bima City, West Nusa Tenggara, in order to address issues such as conflicts of interest and unsustainable resource exploitation. Using a qualitative approach that includes interviews and document analysis, the study identifies three categories of stakeholders: core, supportive, and contextual. The analysis of the power-interest matrix highlights the importance of strategic collaboration among stakeholder groups to establish inclusive and sustainable blue economy governance. Research recommendations include the establishment of dialogue forums, technical training, private sector partnerships with local communities, and strengthening the role of NGOs in supporting environmental sustainability, community welfare, and local economic growth.*

### KEYWORDS

*Blue Economy, Marine, Stakeholder Mapping*



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### INTRODUCTION

The concept of the blue economy has received global attention as an approach to maximize the potential of marine resources in a sustainable manner (Cohen et al., 2019; Reinertsen & Asdal, 2019). The concept emphasizes the integration of economic activities such as fisheries, marine tourism, renewable energy, and conservation into a coherent sustainable development framework, highlighting the importance of the sustainable development of the maritime sector, including marine transportation, coastal tourism, and ocean-based renewable energy (Duret et al., 2023). The blue economy can also support economic growth, environmental

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conservation, and the welfare of local communities; however, the management of coastal and marine resources based on blue economy principles faces significant challenges, ranging from conflicts of interest to a lack of integrated governance. In many cases, key economic interests—such as the fisheries or tourism sectors—dominate the policy-making process, limiting the role and influence of local stakeholders. Fragmented coastal management can exacerbate these problems, often overshadowing the interconnectedness between terrestrial and marine ecosystems (Mele et al., 2019). This situation frequently leads to social injustice, conflicts among stakeholders, and unsustainable exploitation of resources (Jouault & Fuentes, 2020).

Coastal areas play a strategic role in economic, social, and ecological development, particularly in supporting a sustainable blue economy model (UNDP, 2021). Bima City, located in West Nusa Tenggara, is one of the coastal areas with significant economic potential. The main activities in this region include traditional fisheries, trade, and tourism, with the number of households dependent on the fisheries sector—especially fishing—reaching more than 4,000. Fisheries production, both capture and aquaculture, continues to grow, making a significant contribution to the Gross Regional Domestic Product (GRDP) (BPS, 2023). The coastal area of Bima City plays an important role in supporting the local economy through the fisheries, maritime trade, and tourism sectors (Hilyana et al., 2021). Therefore, the urgency of this research is based on the strategic role of coastal areas in economic, social, and ecological development, especially in supporting a sustainable blue economy model. Bima City faces challenges in coastal resource management, including stakeholder conflicts, unsustainable resource exploitation, and social injustice. Addressing these challenges, stakeholder identification is a crucial step to understand the roles, interests, and influence of each party. With a stakeholder-based approach, blue economy management can be designed to safeguard marine ecosystems, reduce conflict, and provide more equitable economic benefits for communities.

Research by Depellegrin et al. (2022) emphasizes the importance of understanding the stakeholder landscape to support collaborative and equitable blue economic growth. Despite new policies from the European Commission, 72% of stakeholders are not yet aware of the socio-economic potential of the blue economy, while public institutions and research organizations continue to dominate. Therefore, stakeholder mapping not only helps to identify key actors but also establishes knowledge-based management mechanisms that can strengthen the roles and involvement of each stakeholder. Stakeholder mapping in blue economy management is highly relevant in the context of decentralization and the division of authority between provincial and district/city governments. Based on Law No. 23 of 2014, authority in the fisheries and marine sector is specifically divided:

provincial governments are responsible for managing marine resources in waters up to 12 nautical miles from the coastline—including zoning, capture fisheries management, and marine ecosystem protection—while district/city governments have authority over onshore activities that support the fisheries sector, such as aquaculture, fish markets, and the empowerment of small-scale fishers. By mapping the roles, interests, and strengths of stakeholders, blue economy governance can be aligned with the regulated division of authority, thereby reducing authority conflicts, strengthening synergy between parties, and supporting the sustainability of marine resource management.

One of the key elements in effective blue economy management is stakeholder mapping (*stakeholder mapping*), which is the process of identifying and involving various parties directly or indirectly engaged in the management of natural resources in coastal areas (Catzín-Tamayo, 2019). The involvement of diverse communities—including local communities, governments, and conservation organizations—has helped create policies that not only support ecosystem sustainability but also provide economic benefits to surrounding communities (Adimu, 2020). This model highlights the importance of transitioning from a centralized hierarchy to a more participatory and inclusive governance structure. This process allows for the integration of *bottom-up* and *top-down* approaches in public participation, creating a balance between local needs and national agendas (Sahoo, 2021). This dual approach is essential to address the complex dynamics of resource use, power asymmetry, and equity among stakeholders. Such integration facilitates the achievement of global goals, such as the Sustainable Development Goals (SDGs), while adapting strategies to local contexts (Depellegrin et al., 2022). Stakeholder mapping is an important tool in addressing these challenges, as it can help identify key actors and the relationships between them, as well as direct decision-making processes towards more inclusive and equitable governance (Astuti, 2021). This research offers a novel stakeholder mapping approach that integrates coastal resource management with onshore economic activities, which is relevant to support the development of the blue economy in Bima City. Using the Interest-Power Matrix, the study maps the relationships of power, interests, and influence among stakeholders in depth, providing a new perspective on reducing conflicts and enhancing cross-sector collaboration. In addition, this approach is designed to address the challenges of governance fragmentation, creating more cohesive and efficient governance through the identification and alignment of roles via cross-sector collaboration.

By understanding the roles, interests, and influences of each party, blue economy management can be oriented to meet the needs of local communities while maintaining ecosystem sustainability. Therefore, a stakeholder-based approach is not only relevant in a global context, but also a crucial framework for blue economy

management at the local level, such as in Bima City, Indonesia. Through effective collaboration between government actors, coastal communities, and the private sector, sustainable development goals can be achieved, ensuring that marine resources remain a valuable asset for future generations. Based on this, the problem statement in this study is: How can the involvement of various stakeholders be optimized in the management of the blue economy in Bima City? The aim is to analyze the optimal role and contribution of each stakeholder in the management of the blue economy in Bima City. The results of this research can serve as a guide for the government, coastal communities, and the private sector to optimize stakeholder involvement in blue economy management in Bima City. This will help design inclusive, effective, and collaboration-based policies, thereby improving the welfare of local communities and maintaining the sustainability of marine ecosystems. This study aims to map stakeholders in the management of coastal areas based on the blue economy in Bima City, West Nusa Tenggara, in order to overcome challenges such as conflicts of interest and unsustainable resource exploitation.

## RESEARCH METHOD

The method of mapping stakeholders in the development of the blue economy can be carried out through a qualitative approach using various techniques, such as in-depth interviews, focus group discussions (*FGDs*), and participatory observations. This approach enables researchers to explore the views, needs, and interests of various parties involved; therefore, this mapping aims to identify key stakeholders—such as local governments, fisheries industry actors, local communities, and environmental organizations—as well as to understand the dynamics of relationships among them (Reed et al., 2009). Qualitative research also allows researchers to uncover the challenges and opportunities present in the implementation of blue economy policies at the local level, thus providing a deep understanding of the social, economic, and political contexts that influence these policies (Bryman, 2016). In-depth interviews and *FGDs* are useful for facilitating inclusive and evidence-based decision-making (Popoola & Olajuyigbe, 2023). A qualitative approach helps identify social, economic, and environmental impacts holistically (Depellegrin et al., 2022). Therefore, an approach to identify the needs and perceptions of stakeholders, as well as the empowerment of local communities, is crucial in the context of blue economy development.

**Table 1 Interview respondents**

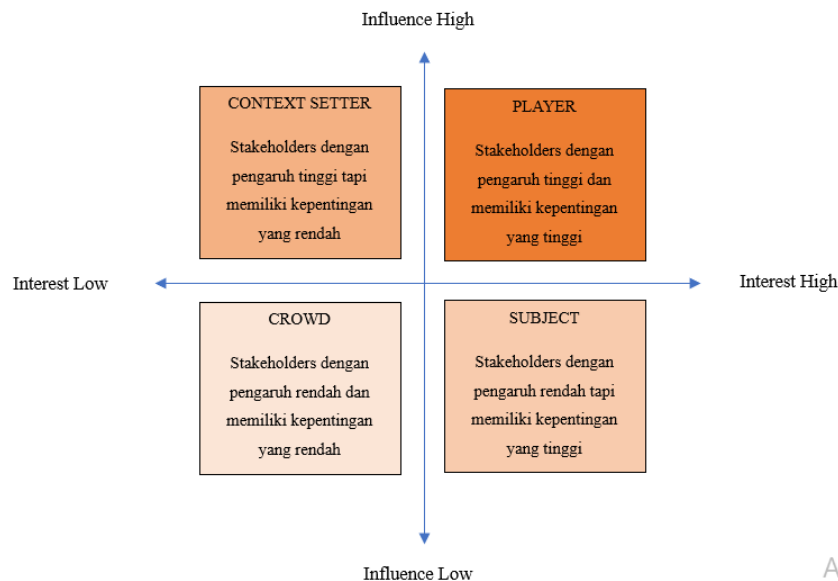
No	Respondent Code	Agency/Organization	Position	Category
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1.	R01	Bima City Marine and Fisheries Service	Head of Service	Local Government
2.	R02	Bima City Regional Planning and Development Agency	Head of Physical, Infrastructure, and Infrastructure	Local Government
3.	R03	Local Fishermen Group	Group Leader	Local communities
4.	R05	Local Non-Governmental Organizations (NGOs)	Director	Local Community
5.	R06	Fishery Business Actors	Business Owner	Private sector
6.	R08	Coastal Youth Community	Community Chair	Local Community

*Source: Authors*

The determination of sampling in this study uses the purposive sampling method, which allows researchers to select respondents based on certain criteria that are relevant to the focus of the research, such as knowledge, experience, or roles that are directly related to the phenomenon being studied (Patton, 2015). This approach allows the collection of data from respondents who have deep insights related to the topic discussed, so that it can enrich the analysis in a multi-stakeholder context (Bryman, 2016). Through semi-structured interviews, researchers can delve into the deeper perspectives of each stakeholder group regarding the issues being studied, including their priorities, the challenges they face, and their expectations for the development of a particular policy or program (Kvale & Brinkmann, 2009).

Based on the results of the interviews, the next stage in conducting stakeholder mapping is to identify stakeholders. One of the most common frameworks divides *Stakeholders* into three main categories: *primary*, *secondary*, and *primary stakeholders* (Mainardes, et al., 2012). This is done through initial interviews, document analysis, and discussions with related parties. The next step is to categorize and group *Stakeholders* based on their level of interest and power. Techniques such as the Interest-Strength Matrix help group *Stakeholders* into four quadrants: quadrant I (high importance and power), Quadrant 2 (high importance, low power), Quadrant 3 (low importance, high power), and Quadrant 4 (low importance and power) (Kutywayo, et al., 2018).



Source: Authors based on Kutywayo, et al., (2018)

**Figure 1 Stakeholder Interest-power Matrix**

The matrix groups stakeholders into several groups, namely *Context Setter*, *Player*, *Crowd* and *Subject* based on the influence and power of each stakeholder. After grouping, an engagement plan is developed for each *Stakeholder*, to understand the dynamics of power, influence, and potential conflict or collaboration (Prell et al., 2009). The final stage is the validation and evaluation of the mapping through group discussions or workshops to ensure the results are relevant and adaptable to evolving dynamics (Bryson, 2004). This systematic approach is important to ensure inclusive and sustainable decision-making in a particular project or program. Based on this classification, the next step is to determine the role of each stakeholder in the development of the blue economy in Bima City.

## RESULT AND DISCUSSION

### Stakeholder Analysis in the development of the Blue Economy in Bima City

The development of a blue economy-based area in Bima City involves various stakeholders ranging from the government, the private sector, to the local community. There are six stakeholders who play a role in this development, including the Bima City Marine and Fisheries Service, the Regional Planning and Development Agency (Bappeda), Local Fishermen Groups, Local Non-Governmental Organizations (NGOs), Fisheries Business Actors, and Coastal Youth Communities. Based on the results of research on implementation in the field, these six stakeholders have complementary roles and contributions, both in terms of planning, implementation, and community empowerment in the coastal area of Bima City.



This study identifies stakeholders into three, which according to Jones, et al. (2018) stakeholder identification can be grouped based on their level of influence and importance into core stakeholders, supporting stakeholders, and contextual stakeholders.

### **1. Core stakeholders**

Core stakeholders are parties who have a direct and intrinsic relationship with the implementation of blue economy-based regional development projects in Bima City. They play an important role in ensuring program visits, organizing operational activities, and supporting the achievement of the strategic goals of the project. In this context, stakeholders include the Bima City Marine and Fisheries Service, Local Fishermen Groups, and Fisheries Business Actors. These three parties are the main actors whose existence greatly determines the success of sustainable management of marine resources.

As a local government institution, the Bima City Marine and Fisheries Service has the main responsibility in managing, regulating, and developing the marine and fisheries sector in the region. The role of this agency includes policy formulation, program planning, and supervision of practices related to the use of marine resources. They ensure that the management of marine resources is carried out in a sustainable manner in accordance with the principles of the blue economy, including the conservation of marine ecosystems and the improvement of the welfare of coastal communities. In addition, this agency is also often a liaison between the central government, other local governments, and local communities in the implementation of strategic programs.

As one of the core stakeholders, the Bima City Marine and Fisheries Service has a strategic role in implementing this legal foundation through concrete policies and programs that support sustainable management of marine resources. This agency is tasked with translating national and regional regulations into the form of operational policies that are in accordance with local conditions, such as the preparation of coastal area zoning, management of marine protected areas, and empowerment of fishermen. With reference to Law Number 32 of 2014 concerning Marine Affairs, this agency ensures that fishing, marine aquaculture, and other coastal activities are carried out without damaging the ecosystem. In addition, through the direction of Government Regulation Number 23 of 2021 concerning Forestry Administration, which covers aspects of marine and coastal ecosystem protection, this agency also plays an important role in overseeing the protection of coastal ecosystems, including mangroves and coral reefs, which are important elements of the blue economy. The role of the Marine and Fisheries Service in integrating the legal basis with the needs of the community makes it a key actor in ensuring that the development of blue economy-based regions can run according to sustainability principles. Examples are the procurement of environmentally friendly

fishing gear, training for fishermen, and the establishment of marine protection areas. Their role is not only important for daily operations but also to maintain the long-term stability of the marine sector in Bima City.

One of the other core stakeholders in the development of the blue economy in Bima City is the local fishermen group. The local fishermen group is the main actor directly involved in the operational activities of the marine-based economy. They carry out daily activities such as catching fish, harvesting marine products, and preserving the marine ecosystem. Their role is very important because fishermen are the parties most affected by government policies and changes in marine ecosystems, such as climate change, pollution, or overfishing. In blue economy projects, local fishers are often involved as strategic partners in training and empowerment programs, such as the introduction of sustainable fishing technologies or the diversification of income through marine aquaculture. Their active involvement ensures that the policies and programs designed are truly tailored to the needs of the local community. Fishermen groups are also part of a community that maintains maritime traditions and culture rooted in the coastal area of Bima City.

Other stakeholders are fisheries business actors, fishery business actors, such as seafood processing business owners, fish traders, and exporters of fishery products, have a key role in the blue economy supply chain. They are in charge of processing, distributing, and marketing marine products, so that their economic value can be increased. With the existence of fishery business actors, the catches of local fishermen can be processed into value-added products, such as canned fish, frozen products, or other processed marine products, which can be marketed both domestically and internationally. In the context of Bima City, fishery business actors often collaborate with the government and fishermen to improve the quality and quantity of fishery production, for example through the provision of facilities such as refrigerated warehouses or seafood processing training. In addition, they also play an important role in creating jobs for coastal communities and contributing to local economic growth.

These three core stakeholders are interrelated and have an inseparable role in the successful development of the blue economy-based region in Bima City. The Marine and Fisheries Service acts as policy direction, while local fishermen groups and fisheries business actors carry out operational activities that support the realization of the strategic objectives of the blue economy program. The close collaboration between these three parties is the main foundation in maintaining the sustainability of the marine ecosystem while improving the welfare of coastal communities.



## **2. Supporting Stakeholders**

Supporting stakeholders play an important role in creating a social, economic, and cultural environment that is conducive to the successful development of blue economy-based areas in Bima City. Although they do not have direct involvement in day-to-day operations, their contributions are invaluable in building broader support, strengthening project legitimacy, and facilitating the implementation of strategic programs. In this context, supporting stakeholders include Local Non-Governmental Organizations (NGOs) and Coastal Youth Communities, each of which has a specific role in community empowerment and sustainability advocacy.

Local NGOs in Bima City act as a liaison between the government, coastal communities, and private actors. They are often pioneers in fighting for the rights of coastal communities and advocating for sustainable environmental management. One of the main contributions of local NGOs is the implementation of community empowerment programs, such as fisheries skills training, small business management, and education on the importance of preserving marine ecosystems. Through these activities, NGOs help increase the capacity of local communities to actively participate in the development of the blue economy. In addition, local NGOs also have an important role in ensuring transparency and accountability in the implementation of blue economy programs. They monitor the implementation of government policies and ensure that the needs of the community are really a priority. In some cases, NGOs act as facilitators in resolving conflicts between governments and communities regarding marine zoning policies or resource exploitation. With their independent positions, local NGOs are able to provide objective input to create equitable and sustainable solutions.

Another supporting stakeholder is the coastal youth community, which consists of young people who have concerns about the sustainability of the coastal environment and the empowerment of local communities. As the next generation, they have the passion and energy to be the driving force for change in coastal communities. One of the main roles of the youth community is to create collective awareness among the community about the importance of protecting marine ecosystems. They are often involved in environmental campaigns, such as beach cleanup movements, mangrove plantings, or coral reef rescue. This activity not only has a direct impact on environmental conservation, but also builds a positive image of the coastal area as an area that cares about sustainability. In addition, coastal youth communities also play a role in the development of a creative economy based on local resources. They often initiate small businesses such as ecotourism, seafood processing, or handicrafts that use materials from the sea. By utilizing digital technology and social media, these communities are able to promote their products and regional potential to a wider market. Their role in innovation and

entrepreneurship helps create new economic opportunities while supporting the achievement of the blue economy goals in Bima City.

### **3. Contextual Stakeholders**

Contextual stakeholders are external parties who are not directly involved in the day-to-day operations of the project, but have a major influence on the strategic environment in which the blue economy development project is implemented. They include entities that set policies, set regulations, or form frameworks that affect the sustainability of a project. In the context of developing a blue economy-based region in Bima City, contextual stakeholders include the Regional Planning and Development Agency (Bappeda). This right plays an important role in creating opportunities or managing risks that may arise in the implementation of the blue economy.

The development of blue economy-based areas in Bima City is inseparable from the legal basis which is the main guideline in its implementation. In the regional context, this development is carried out in accordance with the Bima City Regional Regulation on Regional Spatial Planning (RTRW), which integrates blue economy principles into the regional development plan. As a contextual stakeholder, the Regional Planning and Development Agency (Bappeda) of Bima City has a strategic role in supporting the development of blue economy-based areas in Bima City. In this context, Bappeda Bima City acts as a macro policy maker at the regional level that integrates sustainability principles, as mandated by legal foundations such as Law Number 32 of 2014 concerning Marine Affairs, Law Number 27 of 2007 concerning the Management of Coastal Areas and Small Islands, and Bima City Regional Regulations on Regional Spatial Plans (RTRW). This role is very important to ensure that the management of marine and coastal resources is carried out holistically, covering economic, social, and environmental dimensions.

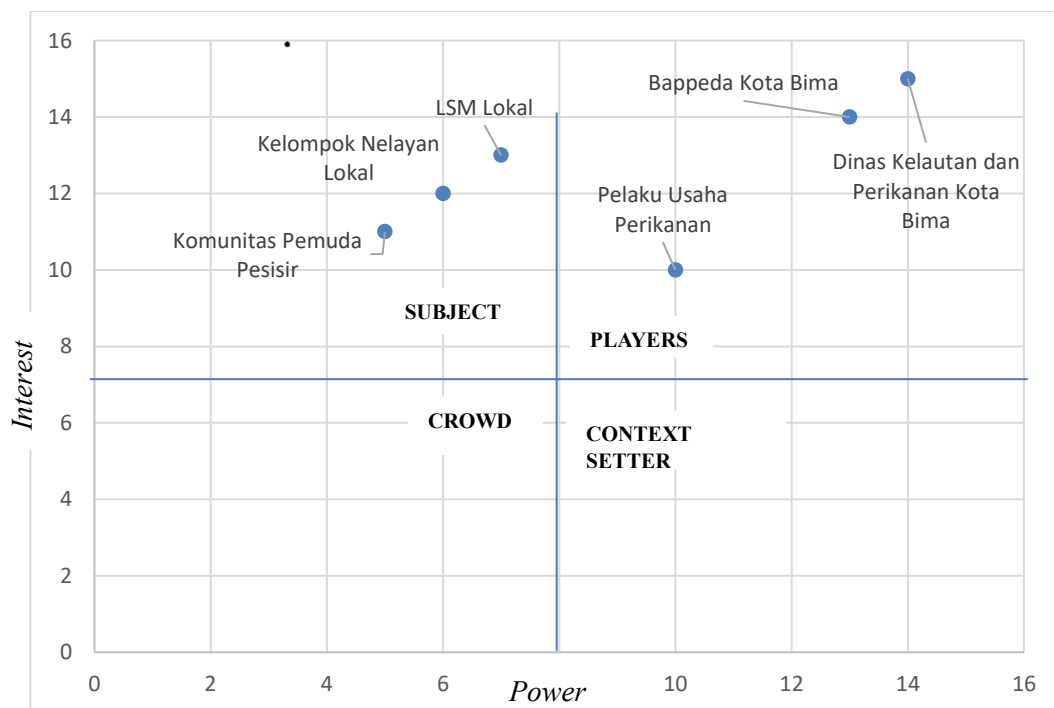
As a development planning institution at the regional level, Bappeda has a strategic responsibility in designing the direction of regional development, including the integration of blue economy principles into the Regional Medium-Term Development Plan (RPJMD) of Bima City. The role of Bappeda in this context includes the formulation of macro policies that support the sustainability of marine and coastal resource management, budget allocation for blue economy programs, and supervision of the implementation of sustainability-based development policies. In addition, Bappeda also functions as an inter-stakeholder coordinator at the regional level. They bridge communication between local governments, the Marine and Fisheries Service, community groups, and business actors to ensure that all programs are in line with the vision of regional development. With its role as a development strategy regulator, Bappeda ensures

that blue economy initiatives in Bima City not only focus on improving the economy, but also on environmental preservation and the welfare of local communities.

The development of a blue economy-based area in Bima City requires synergy between various stakeholders grouped into core, supportive, and contextual stakeholders, according to the classification based on their roles and levels of involvement. Core stakeholders, such as the Marine and Fisheries Service, fisherman groups, and fisheries business actors, are directly involved in the operation and success of the program. Supporting stakeholders, such as local NGOs and coastal youth communities, play a role in empowering communities and creating a conducive environment. Meanwhile, contextual stakeholders, such as Bappeda, establish a macro policy framework that supports the sustainability of programs and activities.

### Stakeholder Mapping in the Development of the Blue Economy in Bima City

The stakeholder analysis in this study uses a *power versus interest* grid matrix. According to Kutuwayo, et al. (2018), stakeholder analysis can be carried out by grouping stakeholders into a two-by-two matrix based on their level of *interest* in the development of the blue economy in Bima City and their level of *power* in influencing decision-making. Stakeholders involved in the development of the blue economy in Bima City will be classified into four quadrants.



Source: Own Compilation

Figure 1 Interest-Power Matrix

*The power and interests* of each stakeholder involved in the development of the blue economy in Bima City need to be clearly mapped. The *interest-power* matrix is a visual representation of the results of *the power* and *interest* assessments that have been carried out. The matrix is divided into four quadrants based on *stakeholder power* and *interest* levels. The analysis presented through the *power* versus *interest* grid matrix reveals that in the context of the development of the blue economy in Bima City, stakeholders are grouped into two main categories based on their level of *power* and *interest*, namely *players*, and *subjects*.

### 1. **Subjects**

Stakeholder groups in this category are groups with high *interest* but low *power*. Stakeholders in this category include Local Fishermen Groups, Local NGOs, and Coastal Youth Communities. They have a strong interest in coastal resource management due to their direct impact on their lives, but have limitations in influencing decisions due to lack of access to resources, technology, and decision-making processes.

Local Fishermen Group has a high interest because the sustainability of marine resources is a vital aspect for their livelihoods. As direct users of coastal ecosystems, they are greatly affected by policies related to fishing zones, marine ecosystem sustainability, and access to markets. However, *their power* is low because they do not have a formal position in decision-making and rely on others, such as the government or the private sector, for financial and policy support.

In addition, Local NGOs are also included in this category because they often focus on empowering coastal communities, such as environmental education, advocacy, and economic empowerment. *Their interest* is high because the success of the coastal area management program has a direct impact on the sustainability of the communities they assist. However, *their power* is relatively limited because they often rely on partnerships with more influential actors, such as governments or business actors, to implement their programs.

Finally, the Coastal Youth community also has a high interest because the sustainability of the coastal area greatly affects the future of the young generation in the region. However, they face challenges in gaining formal recognition and sufficient resources to support their initiatives. With the right approach, these communities can become powerful agents of change through active participation in coastal management programs. To increase the effectiveness of these groups, empowerment strategies are needed, such as training, access to resources, and inclusion in the decision-making process. Thus, they can become strategic partners in realizing inclusive and sustainable blue economy-based regional management.

## 2. *Players*

This group is a stakeholder with high *power* and *interest*. The *Players* category includes Bima-City Bappeda, Bima City Marine and Fisheries Service, and Fisheries Business Actors. They have a major role in the management of coastal areas because of the great influence they have, both through policy, planning, and available resources. In addition, their *interest* is also high because the success of coastal management has direct relevance to their responsibilities and goals.

The Bima City Marine and Fisheries Service is the main technical authority directly responsible for the management of coastal and marine resources. With high *power* supported by regulatory authority and resource allocation, they have great ability to direct policy. Their *interest* is high because coastal area management is a core task that is closely related to the achievement of the development target of the marine and fisheries sector. Then the Bima City Bappeda has high *power* because this institution is in charge of preparing regional development planning, including the management of coastal areas based on the blue economy. Their *interest* is very large because the sustainability of coastal areas has an impact on the long-term development vision that includes the economy, social, and environment. As a key player, Bappeda has a strategic role in integrating various stakeholder interests into coherent policies.

Meanwhile, fishery business actors have high *power* because they often have financial, technological, and network resources that allow them to influence the dynamics of regional management, for example building distribution networks that connect their products to domestic and international markets, which can accelerate local economic growth. Their *interest* is also high because the sustainability of coastal and marine resources is the basis of their economic activities. As economic actors, they can contribute in the form of local investments, but also need oversight to ensure that their practices support sustainability goals.

As key actors, stakeholders in this category are expected to lead the implementation process of blue economy-based management strategies. However, they need to engage the *Subjects* group to ensure that the policies taken reflect the needs and aspirations of the local community. Cross-sector collaboration is essential to strike a balance between environmental sustainability and economic benefits.

The balance between *Subjects* and *Players* is very important for the successful management of blue economy-based areas in Bima City. *Subjects* need to be empowered so that they can increase their influence and actively contribute. On the other hand, *Players* need to lead policy implementation while opening up wider collaboration spaces with all stakeholders. With this approach, coastal area management can run in an inclusive, sustainable, and beneficial manner for all parties involved.

## Discussion

The mapping of stakeholders in the development of the blue economy in Bima City underscores the importance of cross-sector collaboration to ensure the sustainability of marine and coastal resource management, this is in line with the statement of Spadaro, et al. (2023), that the participation of every *Stakeholder* is essential for sustainable development and can increase trust and quality of interventions and broaden perspectives by involving various sectors, thus creating a more inclusive planning process. In this study, stakeholders are grouped into three main categories: core, supportive, and contextual stakeholders, each of which has a strategic role in supporting the blue economy program. Core stakeholders consist of the Marine and Fisheries Service, local fishermen groups, and fisheries business actors. The Marine and Fisheries Service, as the main authority, is responsible for policy formulation, marine resource management, and supervision of sustainability-based practices. Local fishing groups play a vital role in daily operations, such as fishing and marine ecosystem management, while fisheries business actors contribute to the processing and marketing of value-added marine products, thus supporting local economic growth.

Supporting stakeholders such as local NGOs and coastal youth communities not only act as independent actors, but also provide direct support to core stakeholders. For example, local NGOs often assist the Marine and Fisheries Service in socializing government programs to coastal communities. They also support local fishing groups by providing training and technical assistance to improve their productivity and well-being. On the other hand, coastal youth communities make a significant contribution in building social support for government programs and fisheries business actors. Through their campaigns and initiatives, these communities help create a wider acceptance of blue economy policies. Their role as a driver of social change makes them a strategic partner in ensuring the success of long-term programs. With the various contributions they make, supporting stakeholders have a very important position in creating synergies between the government, the community, and the private sector. The support they provide helps ensure that the development of blue economy-based areas in Bima City is not only oriented towards economic outcomes, but also on social and environmental sustainability.

Meanwhile, the existence of contextual stakeholders, even though they are not directly involved in the implementation of the program in the field, greatly determines the success of the development of blue economy-based areas in Bima City. Bappeda ensures that the direction of regional development remains on a path in accordance with the vision of sustainability. Collaboration between contextual stakeholders, core, and supporters is key in creating synergies that ensure that marine resource management not only generates economic benefits, but also



maintains environmental sustainability and social sustainability in the coastal area of Bima City.

The dynamics of the relationship between these three stakeholders is the key to the success of the program. Based on the analysis *of the power versus interest grid*, stakeholders who play a very important role, such as the Marine and Fisheries Service, fisheries business actors, and Bappeda, are categorized as *Players* because they have high strength and interest in policy implementation. In contrast, local fishing groups, NGOs, and Coastal Youth Communities are included in *the Subjects*, which have high interest but low strength. To optimize the involvement of all stakeholders, collaboration between stakeholders is needed, both those who are members of the *player* group and *the subject* group.

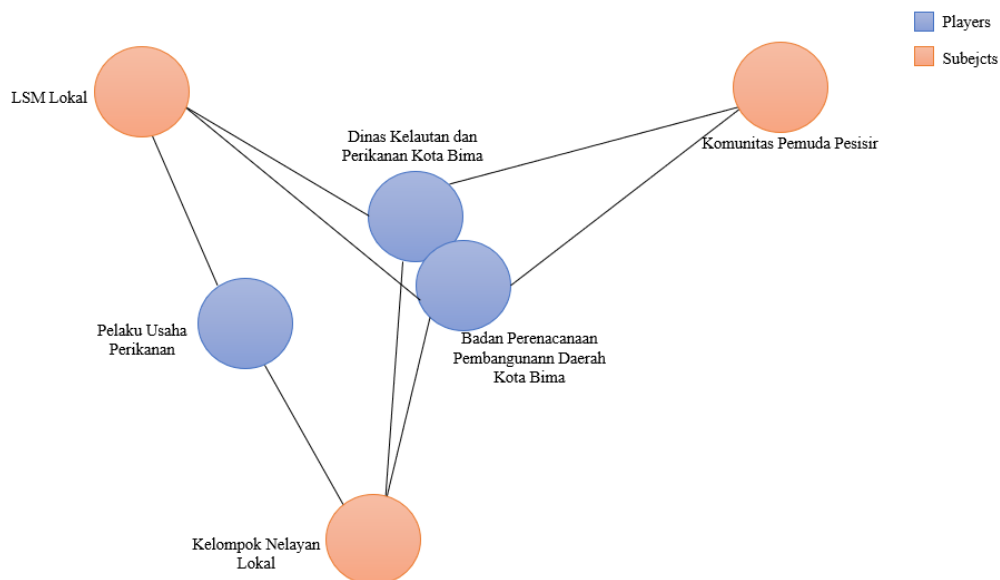


Figure 2 Network of relationships between stakeholders

The network of inter-stakeholder relations in the figure shows interconnected collaboration in the development of blue economy-based areas in Bima City. The Bima City Regional Development Planning Agency (Bappeda) and the Bima City Marine and Fisheries Service act as the driving center (main hub), which is the policy direction as well as the provider of support for other stakeholders. "*Subjects*" groups, such as Local Fishermen Groups, Coastal Youth Communities, and Local NGOs, have a high interest in the program but rely on the direction and resources from government agencies can be well facilitated so that they can support the development of the blue economy in Bima City. In addition, Fisheries Business Actors are in a strategic position as a liaison between Local Fishermen Groups and Local NGOs. This position shows that Fisheries Business Actors play an important role in integrating the operational needs of fishermen with advocacy support and programs initiated by Local NGOs. As strategic partners, Fisheries Business Actors

are likely to function to support the economic sustainability of fishers through access to markets, technology, or capital, while ensuring sustainable fisheries practices.

The visible relationship shows that collaboration and synergy between "*players*" (Bappeda and the Marine Service) and "*subjects*" (community groups and organizations) is the key to the success of program implementation. Overall, the network illustrates a clear distribution of roles, where government institutions lead the way for development, while community groups and local organizations act as implementers and strategic partners. To maximize the role of each of these stakeholders, several strategies and efforts need to be implemented. Groups of *players* such as the Bima City Bappeda and the Marine and Fisheries Service must initiate collaborative programs that involve *Subjects* in every stage of management, from planning to implementation through various efforts as follows:

1. The establishment of a regular dialogue forum that allows all parties to convey aspirations and inputs every certain period of time to unite ideas between stakeholders who belong to the group of *players* and *subjects* so that the development of a transparent and inclusive governance framework between stakeholders is formed
2. *Empowerment of Subjects* can be improved through technical skills training for Local Fishermen Groups, access to microfunding, and sustainable business assistance. For example, introducing environmentally friendly fishing technology or creating a more efficient supply chain to support their welfare.
3. The government can facilitate partnerships between fisheries business actors and local community groups to create inclusive business models that are not only profit-oriented but also support community-based development. For example, Business Actors can provide access to a wider market or provide entrepreneurship training for the Coastal Youth Community, thus creating a domino effect that benefits the community.
4. Strengthening the role of Local NGOs through government and private sector support in the form of grants or joint projects. Local NGOs can be strategic partners in running local data-based empowerment programs, as well as being a liaison between the community and the government. This can create a strong sense of ownership at the community level towards coastal area management programs.

By making these efforts, the relationship between *Players* and *Subjects* can be strengthened, so that the management of coastal areas based on the blue economy is not only efficient but also provides equitable benefits for all stakeholders. This

collaborative approach will ultimately support sustainability goals, both in terms of environmental, social, and economic aspects.

## CONCLUSION

The development of the blue economy in Bima City underscores the critical importance of cross-sector collaboration, achieved through effective stakeholder mapping that identifies core, supportive, and contextual actors and clarifies their strategic roles in sustaining marine resources. The use of the power versus interest grid matrix reveals that "Players"—such as the Marine and Fisheries Service, fisheries business actors, and *Bappeda*—hold significant influence and responsibility in policy implementation, while collaboration with "Subjects"—including local fishing groups, NGOs, and coastal youth communities—is essential to bridge power gaps and ensure inclusive participation. This collaborative governance approach not only enhances community involvement but also establishes a sustainability-based management model that balances economic growth, environmental conservation, and social well-being. Therefore, fostering strong cross-sector partnerships forms the foundation for sustainable blue economy management in Bima City, offering a model for inclusive, equitable, and resilient coastal area governance. Future research should explore mechanisms to further empower "Subject" stakeholders, investigate long-term impacts of collaborative governance, and assess how adaptive management strategies can enhance resilience to environmental and socio-economic changes in blue economy initiatives.

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