



Learning from the actors and roles in coastal management collaboration to increase the fisherman life

Author Name(s): Dewi Casmiwati, Wildan Taufik Raharja, Suprayitno Paendri Dayu, Aisiah Cici Faridah

Publication details, including author guidelines

URL: <https://jurnal.iicet.org/index.php/jppi/about/submissions#authorGuidelines>

Editor: Alief Laili Budiyo

Article History

Received: 27 Apr 2025

Revised: 5 Nov 2025

Accepted: 10 Nov 2025

How to cite this article (APA)

Casmiwati, D., Raharja, W. T., Dayu, S. P., & Faridah, A. C. (2025). Learning from the actors and roles in coastal management collaboration to increase the fisherman life. *Jurnal Penelitian Pendidikan Indonesia*. 11(3), 291-302.

<https://doi.org/10.29210/020255659>

The readers can link to article via <https://doi.org/10.29210/020255659>

SCROLL DOWN TO READ THIS ARTICLE



Indonesian Institute for Counseling, Education and Therapy (as publisher) makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications. However, we make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors and are not the views of or endorsed by Indonesian Institute for Counseling, Education and Therapy. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Indonesian Institute for Counseling, Education and Therapy shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to, or arising out of the use of the content.

JPPPI (Jurnal Penelitian Pendidikan Indonesia) is published by Indonesian Institute for Counseling, Education and Therapy comply with the [Principles of Transparency and Best Practice in Scholarly Publishing](#) at all stages of the publication process. JPPPI (Jurnal Penelitian Pendidikan Indonesia) also may contain links to web sites operated by other parties. These links are provided purely for educational purpose.



This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

Copyright by Casmiwati, D., Raharja, W. T., Dayu, S. P., & Faridah, A. C. (2025).

The author(s) whose names are listed in this manuscript declared that they have NO affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript. This statement is signed by all the authors to indicate agreement that the all information in this article is true and correct.

JPPPI (Jurnal Penelitian Pendidikan Indonesia)

ISSN: 2502-8103 (Print) | ISSN: 2477-8524 (Electronic)



Learning from the actors and roles in coastal management collaboration to increase the fisherman life

Dewi Casmiwati^{*}, Wildan Taufik Raharja, Suprayitno Paendri Dayu, Aisiah Cici Faridah

Public Administration Study Program, Faculty of Social Science and Political Sciences, Hang Tuah University, Surabaya, Indonesia

Article Info

Article history:

Received Apr 27th, 2025

Revised Nov 5th, 2025

Accepted Nov 10th, 2025

Keywords:

Coastal management

Actors collaboration

Fisherman

Sidoarjo

ABSTRACT

The study starts from the problems in collaboration of coastal management and the various efforts have not been able to improve the welfare of fishermen optimally. This study aims to analyse the actors and their roles in coastal management collaboration in Gisik Cemandi, Indonesia. The type of research is qualitative research with a case study in Gisik Cemandi with aims to reveal phenomena according to the setting and reality. The data used are in the form of primary data and secondary data. The informants consist of Village Head and officials, heads of Village Community, stakeholders and fishermen. The data analysis technique uses thematic analysis techniques, namely through determining themes, data classification, data interpretation and data analysis based on themes. This study found that the actors and their roles in coastal management collaboration are varies. The actors consist of private sectors, universities, government institution. Private sectors provide training, public goods that are needed by fishermen, universities are doing education and training for small enterprises, preserving their sustainable and clean environment, free medical treatment, and increasing the public service quality. Government institution was giving education, training, providing fishing tools and information, guarding the beach security. The private sector and university did all the programs based on trust and community based coastal management, whilst the government collaborate based on formal regulations. The impact of the collaboration can improve fisherman's skill, fishing livelihood, fish processing product and in social, the fisherman can increase their participation in organization. The challenge of collaboration comes from its continuity. Most of the programs were done in certain time and temporary. Only the programs are coming from government that is continue, so this study recommends to enhance sustainability in collaboration for all actors.



© 2025 The Authors. Published by IICET.

This is an open access article under the CC BY-NC-SA license
(<https://creativecommons.org/licenses/by-nc-sa/4.0>)

Corresponding Author:

Dewi Casmiwati,

Hang Tuah University

Email: dewi.casmiwati@hangtuah.ac.id

Introduction

Gisik Cemandi, Sidoarjo Regency is a coastal area characterized by a combination of land and sea characters, with the majority of the population being fishermen as many as 225 participants having an area of 58,756 hectares (Monograf Desa Gisikcemandi, 2024). Currently, the potentials that are used for the development, namely human resources as well as natural resources in the fisheries, marine and tourism sectors (Dian Savitri et al., 2022). Some of these developments include sea fishing (Buchan & Yates, 2019; Çeliker et al., 2006), fish management (Sumarmi & Untari, 2022; Untari, 2024), and not only that, there are river and mangrove tours guided by local fishermen (Arisandi, 2001; Çeliker et al., 2006). This village not only has superior fishery products, but also has the potential to become a very prospective marine ecotourism area.

Similar to other coastal areas, the Gisik Cemandi Village government has made various efforts to improve the welfare of fishermen (Çeliker et al., 2006), including cooperation and collaboration with various stakeholders (Rahmawati, 2020; Untari, 2024), both private, academic and other government agencies (Suhardono et al., 2023). Various activities have been carried out by the them, such as processing fishes into semi-finished or finished food ingredients, producing processed products from shellfish, besides providing training to process fish products (Hassoun et al., 2023).

There are various problems found related to coastal management collaboration in Gisik Cemandi, namely that there is no continuity of cooperation carried out mainly by the private sector and actors (Rahmawati, 2020; Untari, 2024). The actors provide goods and training, counselling, mentoring, research, community service and other activities in short time (Sinta, 2022). Therefore, the results the activities in the community have not been visible. The impact is Gisik Cemandi is categorized as Developing village category, in which the composite index is formed from three indicators, namely the Social Resilience Index, Economic Resilience Index and Ecological/Environmental Resilience Index, with a result of 0.6603 (Battaglia et al., 2010; Bourguignon, 2003). Means, the collaboration has not been improved the fishermen condition, who are mostly still in a pre-prosperous condition (Brown, 2013; Casmiwati, 2020; Sumarmi & Untari, 2022). These researches are only focusing on the collaboration between the village government and private sectors, meanwhile this study is not only involving the private sector, but also the other stakeholders such us university and the Navy. Beside that the focus of Bourguignon (2003) is on composite index of Gisik Cemandi village development, meanwhile whis study is on the actors and their roles in coastal management collaboration.

To answer the problem, this study uses the concept of coastal management according Turner et al., (1998) in which coastal management can be seen as a strategy to achieve human-centered development (Sumarmi & Untari, 2022). This becomes new approach in the study of coastal management. Besides that, the centre for decision making regarding the sustainable use of resources (Sumarmi & Untari, 2022; Untari, 2024), and this is supported by the existence of a society that has strong cultural roots and is usually united in its beliefs (religion). Community-based management actually starts with cooperative, advisory, and sharing (Rahmawati, 2020). Cooperative means that one party and the other party discuss and carry out cooperation oriented towards the same goal, and cooperation places the interacting parties in a position that is balanced, harmonious and in harmony so that there is integration (Kusnadi et al., 2022). Advisory means that various stakeholders, those who are there gather and express their aspirations to each other (Difta Yasah et al., 2024). Sharing which means that all parties who agree and are involved in the cooperation process must be open and transparent in the information aspect so as not to give rise to unwanted information variables in the future (Buchan & Yates, 2019). Thus, in collaboration, the emphasis is on cooperation, participation and openness (Casmiwati, 2013b). According to the previous study showed that the collaboration amongst actors is already having same destination, to improve fishermen condition, based on their interest and transparent in implementing the programs (Maulana & Yulianti, 2022). The only problem is the meeting amongst the actors is rare, and not certain. Seemly, the communication is not going well in expressing their aspirations to each other (Casmiwati, 2013a). Thus, this study emphasizes more on how the actors collaborate and their roles in collaboration.

Moreover, according to Weber et al. (2005), in the *Journal Society And Natural Resources "Collaboration Enforcement And Endangered Species: A Framework For Assessing Collaborative*

Problem Solving Capacity", 18:677-698, suggests that successful collaboration emphasizes the integration of various bureaucratic functions (Noer & Madewanti, 2020), across policy arenas and levels of government and includes citizens, communities and non-governmental organizations in the problem solving and implementation process (Storrier & McGlashan, 2006; Sumarmi & Untari, 2022). There are three dimensions of collaboration, namely the vertical dimension, the horizontal dimension and the partnership linkage dimension (Rahmawati, 2020; Untari, 2024). The vertical dimension reflects the relationship between government agencies and institutions, citizens and other non-governmental organizations in a top-down relationship (Rahmawati, 2020). The horizontal dimension emphasizes equal relationships between organizations, fosters democratic participation, and encourages collaboration among stakeholders. This approach is crucial in contexts where diverse entities, such as government agencies, NGOs, and groups, are engaged in the shared goal of effectively managing coastal resources (Buchan & Yates, 2019; Suryanto et al., 2023). From here Weber emphasizes the role of linkages between government bureaucracies by involving citizens in collaboration (Ho & Chang, 2022). This is similar to the Polder Model, where in collaboration, the decision structure is characterized by institutionalized discussion, negotiation between groups towards consensus and government involvement. The key to the process of this model is trust and the middle way (Rahmawati, 2020).

Moreover, to identify the actors and their roles, Butler and Coleman proposed a model of collaboration based on the dimension of interaction level and group size. Based on these two dimensions, five models are produced, namely library, solicitation, team, community and process support, which is useful for selecting a context-appropriate collaboration strategy; recent studies emphasize that the selection of this model must also account for power dynamics, shared goals, and resource availability (Laustsen et al., 2025).

So far, there is no previous research that is exploring the collaboration of actors in coastal management, neither in term of dimensions of collaboration in Gisik Cemandi. Therefore, this study tries to discover the actors and their roles in coastal management with location in Gisik Cemandi, Indonesia as described in this figure 2.1. below. Beside that by finding the actors and their roles, it can be identified the impact of collaboration for fisherman lives condition in economic and social aspects.

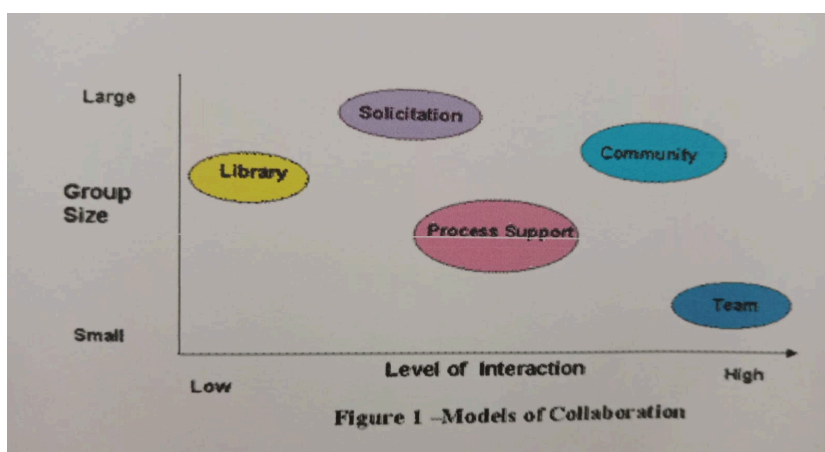


Figure 1 Buttler and Coleman Collaboration Model Source: Buttler and Coleman, 2003

Method

This research uses a qualitative approach with descriptive methods. A qualitative approach is a research method that is a natural discovery process where researchers make in-depth interpretations of the meaning of phenomena that occur in their context (Creswell & Creswell, 2014). This approach emphasizes that qualitative research focuses on a thorough understanding of individuals or groups in their natural environment. (Swift, 2022) stated that the qualitative approach involves various data collection methods such as interviews, observations, and document analysis that aim to explore the meaning and in-depth interpretation of the subject under study. Bogdan and Biklen (Morgan, 2024),

added that the qualitative approach allows researchers to explore the nuances and complexities of social life.

Meanwhile, descriptive method is a research approach that aims to describe phenomena or events that occur in detail and systematically. According to (Sugiyono, 2017), descriptive methods are used to describe a phenomenon or reality as it is without providing special treatment or manipulation of the variables under study. This method focuses on collecting comprehensive data to provide a clear picture of certain conditions or phenomena. Moreover, (Stanley, 2023) explains that the descriptive method serves to describe and interpret the object of research based on existing facts.

The data used are primary and secondary data, which are obtained by in-depth interviews, observation and documentation (Ribeiro dos Santos, 2021), while secondary data are obtained by documentary review of various programs that are currently being implemented in Gisik Cemandi Village. The number of informants is 15 consist of Head of Village Government (1 person), Staff of Village Government (1), staff of Fishery Institution (1 person) who are selected by purposive sampling; Navy members (2 people), fisherman (4 people), Head of Fisherman organization (1) who are selected by Snowball sampling. Beside that informants are universities (3 people), State Electricity Company (2 people) who are chosen by accidental sampling. All informants are chosen based on rich information and data. However, the observation is done through participant observation that provide the researcher to explore the data deeply and close to the informants. It takes 6 months, and each week is 2-3 times in observation. The aspects that are becoming focus in observation are the location surrounding Gisik Cemandi, boat parking place, fisherman houses, road, public facilities, fish market, activity inside the fish market, training activities, fish product processing, meeting in the village, meeting amongst fisherman.

Meanwhile, the data analysis technique uses thematic analysis techniques, namely through determining themes, data classification, data interpretation and data analysis based on themes (Naeem et al., 2024). A theme explains something important about the data that relates to the research question and presents some patterns and meaning of the (Braun & Clarke, 2006). The themes are role, activity, kind of collaboration, duration of collaboration, economy impact, training, fishery livelihood, social impact, participation. Then the instrument used in this research is the researcher himself. This is as stated by (Merriam, 2009) in qualitative research, the researcher is the main instrument in collecting data, analysing and making conclusions. To reach data validation, this research used triangulation in term of methodological and data triangulations. Methodological triangulation was done by combine the interview, documentation and observation in searching the data. Data triangulation was done by asking each question to different informant, so the data can be crossed and checked (Vera Nurfajriani et al., 2024).

Results and Discussions

Characteristics of Gisik Cemandi Fishermen

Fishermen in the coastal area of Gisik Cemandi, Sidaorjo, Indonesia are small-scale fishermen who are characterized by using traditional fishing, small boats, and one day fishing (Untari, 2024). They depend on fishing, aquaculture and fishing (Putri & Widiyarta, 2023; Untari, 2024). Some of the fish caught are sold directly at markets and fish auctions, and some are processed into crackers. Meanwhile, the existing fishing businesses use traditional and existing facilities, meaning that they have not been built. They are also incorporated into the Fishermen's Association group according to their catch. For fishermen who catch snapper fish, they are members of the Snapper Fishermen Association, for grouper fish they are members of the Grouper Fishermen Association and for shellfish producers they are members of the Shell Fishermen Association group. The reason for this grouping is for deliberation in order to solve common problems encountered. If the group is not legally binding, there is no obligation as a member. Only if there are issues such as marketing, adequacy of fishing gear or if there is assistance, it will be channelled through the group, not individuals (Akbar et al., 2023).

In addition, fishermen in Gisik Cemandi Village are very dependent on the season to fish in the sea. They will stop fishing during the high tide season, and will go to sea during the low tide season. From

March to May, it is the season for Bawal, Payus, Mayung, fine shrimp, clams, and stingrays. In September to November, they can catch all kinds of fish and catches. As for December to January, it is the season for Wangkang/lobster, tiger prawns, sungkur prawns. Additional results of pomfret, mayung, Sembilang, snapper, mackerel, kupang, clams, squid, and stingray. Only from June to August, they do not go to sea at all, and this season is known as the west wind (see Table 1).

Table 1. Catches by Month

Month	Catch Results
March-May	Bawal, Payus, Mayung, fine shrimp, clams, stingrays
June-August	Not catching
September-November	All catches
December-January	Wangkang/lobster, tiger prawns, sungkur prawns. Additional results of pomfret, mayung, Sembilang, snapper, mackerel, kupang, clams, squid, stingray

Source: Processed by Researcher, 2024-2025

It is this dependence on the season that causes the catch to vary from time to time, both in terms of quantity and type of catch. During the low tide season, fishermen can earn an average of IDR. 200,000.00 or USD 12.5 to IDR 400,000.00 USD 16 but during the high tide season, fishermen have no income at all because they do not go to sea. This then has an impact on their uncertain income. If they are then included in the poor, their condition is called seasonal poverty (Lukum et al., 2023; Lukum et al., 2023).

Table 2. Average Income of Fishermen

Season	Average Income
Low tide	IDR. 200.000,00-400.000,00 or USD 16-25
High tide	IDR.0 - 50,000.00 or USD 0-3.125

Source: Processed by Researcher, 2024-2025

Actors and Roles of Stakeholders in Coastal Management Collaboration

Then related to the collaboration carried out by fishermen so far, it is obtained and guided by the Gisik Cemandi Village Government, as the main actor and fishermen as the beneficiaries of the collaboration (Dewulf & Elbers, 2018; Rahmawati, 2020). The Village Government, particularly the Village Head, is the first party contacted by external stakeholders regarding collaboration with the Gisik Cemandi Community. This is because all matters require permission from the Village Head. Therefore, the Village Head holds a strategic position in building collaborations with external parties. So far, the Village Head has been very open to programs that have a positive impact on the community, such as collaboration on fish processing training conducted by the University. Furthermore, collaboration with the Indonesian Navy (TNI AL) provides parking for fishing boats. The role of the Village Head will become increasingly important going forward, given the community's continued dependence on leadership.

It's just that not many private companies are working with fishermen, only PT. Pertamina. They provided disaster response tools worth IDR 40,000,000 or equivalent to \$2,541.78 USD. training and mentoring to fishermen. As a follow-up to this collaboration, the Village government formed a Disaster Response Task Force consisting of 40 fishermen. This collaboration indirectly benefits fishermen, given that disasters don't occur regularly and their timing is unpredictable. However, fishermen already have equipment in case a disaster occurs. The reason for the lack of collaboration with the private sector is the location of Gisik Cemandi Village itself, which is inland, meaning it's not located on a main road. Furthermore, the private sector is unaware of Gisik Cemandi's potential. They are more familiar with areas close to the airport and easily accessible, such as Kalang Anyar Village. Gisik Cemandi's area is also narrow compared to other surrounding villages, making it less attractive for development and promotion by the private sector. The current trend is for the private sector to prefer villages with potential for growth. Gisik Cemandi will have opportunities if it collaborates with surrounding villages, such as Banjar Kemuning, which has many new housing developments and serves as a main route out of the area to other areas, the airport, and downtown Surabaya.

Furthermore, academic roles vary, for Hang Tuah University conducting research and input for policy. Muhammadiyah University of Sidoarjo conducted a community service program. Ciputra University 2023 provided training and equipment for cooking, STIKES Hang Tuah public health socialization knew 2022; Bhayangkara University, Sunan Giri University, Adibuana University, Sebelas November Institute of Technology and STIKOSAH did KKN for 1 month. The collaboration between the Gisik Cemandi village government and universities has had a positive impact on the lives of fishermen. Fishermen receive various training and facilities to develop marine products. Therefore, the collaboration is voluntary and not coerced, tailored to the fishermen's needs. The only issue is that this collaboration is temporary and occurs at an uncertain time.

Then collaboration with the Central Government, namely the Maritime and Fisheries Service provides fishing gear in the form of nets, and other fishing gear; the Indonesian Navy plays a role as a forum for maritime potential training, empowering maritime defence areas, maritime area resilience training, as well as providing the Nusantara Bahari Village program to the community (Arentama et al., 2024). Similar to the collaboration between universities, the Gisik Cemandi Village government and the Navy have been more voluntary in their support of fishermen, resulting in a positive impact. The collaboration is more long-term because the Navy has programs to empower coastal communities, and the relationship between the Navy and the village government is horizontal. The matrix of actors and roles of each stakeholder in their collaboration with fishermen in Gisik Cemandi Village can be seen in the following table.

Table 3. Actors and Stakeholder Roles

<i>Stakeholders</i>	<i>Actor</i>	<i>Role</i>	<i>Impact</i>
Private	Pertamina	Training respond disaster	Not yet utilized
		Provision of Equipment disaster response	Not yet utilized
Academics	Hang Tuah University	Research, training	Improve skills and knowledge
	Ciputra University	Training	Increase knowledge
		Provision of Equipment	Used by fishermen's wives
	STIKES Hang Tuah	Cook	Used by fishermen's wives
		Assistance	Used by fishermen's wives
	University Muhammadiyah Sidoarjo	Community Service for health	Improving Public Health
	Adi Buana University	Training for fisherman	Improving fishermen's knowledge and skills
	Sunan Giri University	Training for fisherman	Improving fishermen's knowledge and skills
ITS	Training for fisherman	Improving fishermen's knowledge and skills	
Government	Department Marine and Fisheries NAVY	STIKOSA	Improving fishermen's knowledge and skills
		Provision of fishing gear	Utilized by fishermen
		Extension	Utilized by fishermen
		Assistance	Utilized by fishermen
		Fishing area allocation	Utilized by fishermen

Source: Processed by Researchers, 2024-2025

The table above shows that the role of actors in collaboration varies. Some are temporary such as training provided by the Academic Community and long-lasting such as the allocation of areas by the Navy.

Learning from Coastal Management: Trust-Based Collaboration

Next, the novelty of this study is that the existing collaboration shows that the collaboration model in Gisik Cemandi cannot be approached with the model that has been developed in previous literatures. The collaborating stakeholders provide goods and services to the fishing community in Gisik Cemandi which are trust-based collaboration and voluntary, that means do not expect certain benefits from the collaboration built together. This fact is certainly different from the previously developed concept, where collaboration is characterized by the existence of a common goal of the parties holding the collaboration (Domenico et al., 2020). This common goal becomes the foundation for all parties to work together effectively, support each other, and unite their resources and expertise to achieve optimal results (Santi et al., 2023). Each party has a stake in the collaboration, either in the form of money/goods/services provided to the other party, so that each party must benefit from the collaboration in the form of both material and non-material benefits (Salehzadeh, 2020).

The goal of the stakeholders is to help the fishing community, without expecting to make a profit (Svolkinas et al., 2023). Initially they studied the condition of the Gisik Cemandi community, then examined and heard what was needed for the advancement of their lives. This stage is the basis for stakeholders to develop programs needed by the fishing community. So, fishermen become the main subject of collaboration and all activities whether in the form of counselling, training or mentoring as well as direct physical assistance are answers to the needs of fishing communities, this is as stated by several informants.

Thus, collaboration reflects the participation of the community in building community resilience through the management of common pool natural resources (Musavengane & Kloppers, 2020). Well as the realization of community-based coastal management. The impact of collaboration is quite good for the community both in terms of economic, environment, and social (Alderwick et al., 2021; Collier, 2020). The involvement of a wide range of stakeholders in the co-management as an ecosystem would eventually increase shared motivation, trust, effectiveness, coordinated collective action, and collaboration (Fathima Mafaziya Nijamdeen et al., 2023; Masud et al., 2022).

The impacts of the collaboration are diverse, with some directly benefiting fishermen, while others remain untapped due to their links to disaster management. However, overall, the impacts have been positive for fishermen's lives, economically, socially, and security-wise. Economically, productivity has increased with the help of fishing gear, averaging Rp. 500,000. Furthermore, approximately 20 MSMEs are selling seafood products, with the added value resulting from skills training increasing by 300% compared to before. Seafood previously sold directly at the market is now processed into meatballs and other products. This is consistent with previous research, fish and catches that were previously sold directly are processed and have value added (Anshor, 2013; Arisandi, 2001; Halidah, 2007). Fishermen can do the processing partly because of the training provided by the collaborating actors. Economic sustainability from a development perspective has two main things, both of which are closely related to the goals and desires of other people. Macroeconomic sustainability ensures continued economic progress and promotes economic efficiency through structural and national reforms (Setiawan, 2022). Even more than that, Ciputra University assists MSMEs processing shellfish so that they can sell their products outside Gisik Cemandi. Currently there are a number of MSMEs in Gisik Cemandi that can market their processed shellfish.

Likewise, with the assistance of goods, it provides its own benefits to fishermen because the money should be spent to provide fishing gear can be used by fishermen to meet their daily needs. This is similar to research by Suryadi & Sufi (2019) with the results of research that the strategy used by the government by providing fishing gear and boats, conducting socialization on how to use fishing gear and the mechanism for aiding, is considered constrained due to the lack of assistance facilities provided, lack of human resources and lack of supervision to fishermen so that the assistance provided is uneven and inefficient. Meanwhile, according to Yuliandi Surya (2021), in his research results show that simultaneously Government Assistance, Experience and Business Environment have a significant effect on the work productivity of fishermen.

This model provides another aspect of collaboration that is more based on trust, mainly from stakeholders provided by stakeholders to recipients, namely fishermen in Gisik Cemandi Village. PT Pertamina. Then from a social perspective, collaboration also provides positive benefits for the fishing community. Socially, collaboration has an impact on increasing community participation in program planning, implementation, and evaluation (Riyanto & Kovalenko, 2023), especially in fishermen empowerment programs, fishing training, providing goods needed by fishermen, and environment conservation programs. This is as stated by the Head of Gisik Cemandi Village. This is certainly very positive for fishermen, considering that they had never previously participated in village activities. With various activities, such as training and mentoring from the Indonesian Navy and universities, the fishermen's wives have gained the courage to speak up.

Community participation is also visible when formulating the annual program which invites all Village officials and related institutions such as Village Community Institutions, Village-Owned Enterprises, community leaders, Heads of Rukun Warga and Neighborhood Associations, PKK and representatives of fishing communities to make decisions. This decision is further strengthened by Village Regulations for implementation and evaluation. Besides that, there is development potential based on local wisdom.

Factors that encourage and hinder Coastal Management in Gisik Cemandi Village

Several things that encourage coastal management in Gisik Cemandi Village can be described as follows. The main factor is the willingness of the local community to progress. According to the head of Gisik Cemandi Village, the community really wants their village to progress, so if they are invited to a meeting or any activity it is very much appreciated easy. One of the reasons for this is the formation of a Tourism Awareness Group since 2018 called "Pesona Bahari" with the symbol of a shell statue. The aim of this group is to increase participation, develop village community initiatives for community creativity, protect nature and increase mutual cooperation and togetherness in the community. Protected areas are considered key to conserving ecosystems and safeguarding biodiversity worldwide. Local stakeholders' involvement in decision-making in area-based conservation approaches may help to mitigate environmental inequalities and to improve social and ecological outcomes (Huber et al., 2023).

The will of the people of Gisik Cemandi to move forward is also proven by their willingness to pick up rubbish from their homes and rubbish combing is held in the Gisik Cemandi area every week. Municipal household waste management (MHWM) is crucial for urban governance and sustainable development (Zhu et al., 2023). Villagers are also required to pay fees and will then be provided with rubbish boxes in front of residents' houses. The aim of this is so that waste can be managed well and there is no illegal burning of waste which can cause environmental pollution. The difficulty encountered in waste management is that the burning process cannot be maximized because the village has a small stove and to overcome this the village government has provided a budget of 80 million for the construction of a new stove.

Another driving factor is the existence of a sufficient Village budget to carry out various empowerment and development programs (Marhaeni et al., 2024). Apart from the leadership factor which always supports the progress of its citizens. The Village Budget provided for empowerment is around Rp. 300,000,000.00 or USD 20.000 consisting of various training programs, mentoring, improvements to fisheries infrastructure (Rahmawati, 2020). Meanwhile, the leader of Gisik Cemandi Village has experience as the leader of the All-Indonesian Fishermen's Association which always provides innovation to the community and its staff.

The inhibiting factor in maximizing the results of community-based coastal development in Gisik Cemandi is the uncertain fishing season, which has an impact on the uncertainty of working and organizing time for fishermen. Sometimes they can be invited to a meeting in the morning, sometimes they can't because they have to go to sea. Apart from that, what hinders community-based coastal management is excessive high tide seasons which cause tidal floods. This flood is a scourge for sea and pond fisherman. Often several hectares of pond harvest do not succeed because they are hit by tidal floods. Efforts to prevent tidal flooding have been made through planting mangroves and building embankments. Only during the last decade, the height of the tide has increased more than the height

of the mangroves and embankments created by the village government together with the community. As a result, coastal management, which was originally planned for fish farming, ponds, and so on, became unworkable.

Conclusions

This research concludes that collaboration in coastal management in Gisik Cemandi, Sidoarjo Regency, Indonesia, has involved various actors from the local government, the private sector, academia, and the Navy. Collaboration is also based on community interests and considers long-term environmental sustainability. The problem that arises is its temporary period, especially in the case of collaboration between village governments with universities and the private sector. Nevertheless, the collaboration with the Navy is long-term in nature because it is related to the use of land for fishing boats. Thus, the element of collaboration is not fully fulfilled by various actors. In addition, collaboration has had a positive impact on increasing fishermen's income and marine resource management businesses, as well as increasing community participation.

Therefore, in the future, the research recommends to increase longer-term collaboration so that the Gisik Cemandi community can feel the impact, and further research needs to be conducted on collaboration models that are more suitable for fishing communities in coastal management.

References

- Akbar, I., Sulandjari, K., Program, F. A., Agribisnis, S., Pertanian, F., Karawang, S., Ronggowaluyo, J. H., Timur, T., & Karawang, K. (2023). Effectiveness and outcomes of fishing gear assistance on fishermen's income in pedes district karawang. *AGRITEPA*, *10*(2), 371–386.
- Alderwick, H., Hutchings, A., Briggs, A., & Mays, N. (2021). The impacts of collaboration between local health care and non-health care organizations and factors shaping how they work: a systematic review of reviews. *BMC Public Health*, *21*(1), 1–16. <https://doi.org/10.1186/S12889-021-10630-1/TABLES/1>
- Arentama, R., Rianto, B., & Casmiwati, D. (2024). Community Empowerment Through The Kampung Bahari Nusantara Program To Accelerate Growth Banyuwangi Regional Economy With Using The Pentahelix Method. *Journal Asro*, *15*(01), 01–09.
- Arisandi, P. (2001). *Mangrove Jawa Timur. Hutan Pantai yang Terlupakan. Ecological Observation and Wetlands Conservation (ECOTON)*.
- Battaglia, P., Romeo, T., Consoli, P., Scotti, G., & Andaloro, F. (2010). Characterization of the artisanal fishery and its socio-economic aspects in the central Mediterranean Sea (Aeolian Islands, Italy). *Fisheries Research*, *102*(1–2), 87–97. <https://doi.org/10.1016/j.fishres.2009.10.013>
- Bourguignon, F. (2003). The Measurement of Multidimensional Poverty. *The Journal of Economic Inequality*, *1*(1), 25–49. <https://doi.org/10.1023/A:1023913831342>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. <https://doi.org/10.1191/1478088706qp0630a>
- Brown, C. (2013). The poverty of Grand Theory. *European Journal of International Relations*, *19*(3), 483–497. <https://doi.org/10.1177/1354066113494321>
- Buchan, P. M., & Yates, K. L. (2019). Stakeholder dynamics, perceptions and representation in a regional coastal partnership. *Marine Policy*, *101*, 125–136. <https://doi.org/10.1016/j.marpol.2018.12.017>
- Casmiwati, D. (2013a). *Menguak Permasalahan Penguatan Lembaga Formal di Kedung Cowek*. Penerbit Brilliant PT Menuju Insan Cemerlang. .
- Casmiwati, D. (2013b). Partisipasi Istri Nelayan Pada Organisasi Formal. *JIANA: Jurnal Ilmu Administrasi Negara*, *11*(2), 189–201.
- Casmiwati, D. (2020). "Poverty Amongst Fisherman in Surabaya City." Universiti Utara Malaysia.
- Çeliker, S. A., Korkmaz, Ş., Dönmez, D., Gül, U., Demir, A., Genç, Y., Kalanlar, Ş., & Özdemir, İ. (2006). *Socio-economic analysis of fishing enterprises in the black sea region republic of turkey ministry of agriculture and rural affairs aeri agricultural economics research institute*. Ankara.

- Collier, C. E. (2020). Enabling conditions for community-based comanagement of marine protected areas in the United States. *Marine Policy*, *122*, 104244. <https://doi.org/10.1016/J.MARPOL.2020.104244>
- Creswell, J. W., & Creswell, J. D. (2014). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* (Fifth Edition). SAGE Publications, Inc.
- Dewulf, A., & Elbers, W. (2018). Power in and over Cross-Sector Partnerships: Actor Strategies for Shaping Collective Decisions. *Administrative Sciences*, *8*(3), 43. <https://doi.org/10.3390/admsci8030043>
- Di Domenico, M., Tracey, P., & Haugh, H. (2020). The Dialectic of Social Exchange : Theorizing corporate-social enterprise collaboration. *Organizational Collaboration*, 100–118. <https://doi.org/10.4324/9781315881201-12>
- Dian Savitri, E., Hermanto, H., Rintaningrum, R., Saifulloh, S., & Satya Yoga, D. (2022). Strategi perencanaan pengembangan desa wisata pesisir “pesona bahari” Gisik Cemandi. *ABDI MASSA: Jurnal Pengabdian Nasional*, *2*(5), 37–43. <https://aksiologi.org/index.php/abdimassa/article/view/351>
- Difta Yasah, A., Syarifatul Ajuj, S., Kusuma Ayu Fardani, L., Rusdi Hidayat, I. N., & Ikaningtyas, M. (2024). Keterlibatan Pemangku Kepentingan Dalam Perencanaan Dan Pengembangan Bisnis Berkelanjutan. *Jurnal Media Akademik (JMA)*, *2*(4), 3031–5220. <https://doi.org/10.62281>
- Fathima Mafaziya Nijamdeen, T. W. G., Ratsimbazafy, H. A., Kodikara, K. A. S., Ashara Nijamdeen, T. W. G. F., Thahira, T., Peruzzo, S., Dahdouh-Guebas, F., & Hugé, J. (2023). Mangrove management in Sri Lanka and stakeholder collaboration: A social network perspective. *Journal of Environmental Management*, *330*, 117116. <https://doi.org/10.1016/J.JENVMAN.2022.117116>
- Hassoun, A., Jagtap, S., Trollman, H., Garcia-Garcia, G., Abdullah, N. A., Goksen, G., Bader, F., Ozogul, F., Barba, F. J., Cropotova, J., Munekata, P. E. S., & Lorenzo, J. M. (2023). Food processing 4.0: Current and future developments spurred by the fourth industrial revolution. *Food Control*, *145*, 109507. <https://doi.org/10.1016/J.FOODCONT.2022.109507>
- Ho, L.-T., & Chang, K.-C. (2022). Promoting relational collaborative partnership to implement coastal settlement revitalization. *Marine Policy*, *146*, 105242. <https://doi.org/10.1016/j.marpol.2022.105242>
- Huber, J. M., Newig, J., & Loos, J. (2023). Participation in protected area governance: A systematic case survey of the evidence on ecological and social outcomes. *Journal of Environmental Management*, *336*, 117593. <https://doi.org/10.1016/J.JENVMAN.2023.117593>
- Kusnadi, I. H., Luki, N., & Faqihudin, F. (2022). Efektivitas Penyelenggaraan Program Pelatihan Kerja Di UPTD Balai Latihan Kerja Dinas Tenaga Kerja Dan Transmigrasi Kabupaten Subang. *The World of Public Administration Journal*. <https://doi.org/10.37950/wpaj.v3i2.1228>
- Laustsen, C. E., Källström, L., Haak, M., & Westergren, A. (2025). Why are models for collaboration so confusing and difficult? Perceptions by health and social care professionals on developing and implementing models for collaboration. *International Journal of Healthcare Management*, *18*(3), 557–567. <https://doi.org/10.1080/20479700.2024.2346877>
- Lukum, R., Hafid, R., & Mahmud, M. (2023). Pengaruh Perubahan Musim Terhadap Pendapatan Nelayan. *JEBE JOURNAL of ECONOMIC and BUSINESS EDUCATION*, *1*(1), 115–123.
- Marhaeni, A. A. I. N., Sudibia, I. K., Andika, G., & Fahlevi, M. (2024). Impacts of Village Funding on Community Empowerment and Poverty in Klungkung, Bali. *International Journal of Sustainable Development and Planning*, *19*(3), 981–990. <https://doi.org/10.18280/IJSDP.190316>
- Masud, M. M., Shahabudin, S. M., Baskaran, A., & Akhtar, R. (2022). Co-management approach to sustainable management of marine protected areas: The case of Malaysia. *Marine Policy*, *138*, 105010. <https://doi.org/10.1016/J.MARPOL.2022.105010>
- Maulana, D., & Yulianti, R. (2022). Multi-Actor Collaboration in Improving the Economy of the Fishing Community in Karangantu Coastal Area of Serang, Indonesia. *Journal of Contemporary Governance and Public Policy*, *3*(2), 87–100. <https://doi.org/10.46507/JCGPP.V3I2.80>
- Merriam, S. B. (2009). *Qualitative Research*. John Wiley & Sons, Inc. Jossey-Bass.
- Monograf Desa Gisikcemandi*. (2024).

- Morgan, H. (2024). Menggunakan Triangulasi dan Kristalisasi untuk Membuat Studi Kualitatif Trustworthy and Rigorous. *Laporan Kualitatif*, 29(7), 1844–1856. <https://doi.org/10.46743/2160-3715/2024.6071>
- Musavengane, R., & Kloppers, R. (2020). Social capital: An investment towards community resilience in the collaborative natural resources management of community-based tourism schemes. *Tourism Management Perspectives*, 34, 100654. <https://doi.org/10.1016/j.TMP.2020.100654>
- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2024). Demystification and Actualisation of Data Saturation in Qualitative Research Through Thematic Analysis. *International Journal of Qualitative Methods*, 23. <https://doi.org/10.1177/16094069241229777>
- Noer, K. U., & Madewanti, N. L. G. (2020). Too many Stages, Too Little Time: Bureaucratization and Potential Impasse in the Social Safety Net Program in Indonesia. *Jurnal Studi Pemerintahan*, 11(3). <https://doi.org/10.18196/jgp.113120>
- Putri, E. D. S., & Widiyarta, A. (2023). Strategi Pemerintah Kota Surabaya Dalam Pengelolaan Sentra Ikan Bulak Di Wilayah Pesisir. *Jurnal Governansi*, 9(2), 135–143. <https://doi.org/10.30997/JGS.V9I2.7394>
- Rahmawai, R. (2020). Stakeholders Involvement through a Partnership Model for Sustainability Tourism Development. *International Journal of Psychosocial Rehabilitation*.
- Rahmawati, R. (2020). Stakeholder involvement through a partnership model for sustainable tourism development. *Article in International Journal of Psychosocial Rehabilitation*. <https://doi.org/10.37200/IJPR/V24I8/PR280826>
- Ribeiro dos Santos, D. (2021). Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects. *International Journal of Academic Research in Management (IJARM)*, 10(1), 10–38. <https://doi.org/10.34894/VQ1DJA>
- Riyanto, M., & Kovalenko, V. (2023). Partisipasi Masyarakat Menuju Negara Kesejahteraan: Memahami Pentingnya Peran Aktif Masyarakat Dalam Mewujudkan Kesejahteraan Bersama. *Jurnal Pembangunan Hukum Indonesia*, 5(2), 374–388. <https://doi.org/10.14710/jphi.v5i2.374-388>
- Salehzadeh, R. (2020). Leader–member exchange in public organizations: a qualitative study. *International Journal of Public Leadership*, 16(1), 59–87. <https://doi.org/10.1108/IJPL-08-2019-0054/FULL/XML>
- Santi, Y., Purnaweni, H., & Priyadi, B. P. (2023). Analisis public-private partnership sebagai upaya pengembangan wisata Nepal Van Java. *Journal of Public Policy and Management Review*, 12(4), 79–98. <https://doi.org/10.14710/JPPMR.V12I4.40946>
- Setiawan, I. (2022). *Implementasi Kebijakan Pengelolaan Wilayah Pesisir Berbasis Sustainable Development*. Universitas Hang Tuah.
- Sinta. (2022). *Kolaborasi Antar Stakeholder Dalam Penanganan Tindak Kekerasan Terhadap Perempuan Dan Anak Di Provinsi Lampung*.
- Stanley, M. (2023). Qualitative Descriptive: A Very Good Place to Start. *Qualitative Research Methodologies for Occupational Science and Occupational Therapy: Second Edition*, 52–67. <https://doi.org/10.4324/9781003456216-4/qualitative-descriptive-mandy-stanley>
- Storrier, K. L., & McGlashan, D. J. (2006). Development and management of a coastal litter campaign: The voluntary coastal partnership approach. *Marine Policy*, 30(2), 189–196. <https://doi.org/10.1016/j.marpol.2005.01.002>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV. Alfabeta.
- Suhardono, E., Wahyudi, A., & Musleh, Moh. (2023). Analisis pengembangan ekowisata bahari dengan pendekatan soft system method di desa Gisik Cemandi Kecamatan Sedati kabupaten Sidoarjo. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 9(3), 1241–1252. <https://doi.org/https://doi.org/10.29210/0202312611>
- Sumarmi, S., & Untari, S. (2022). Ungapan Beach: Partner Based Management to Improve a Sustainable Economy. *Fronteiras: Journal of Social, Technological and Environmental Science*, 11(1), 181–193. <https://doi.org/10.21664/2238-8869.2022v11i1.p181-193>
- Suryadi, A. M., & Sufi, S. (2019). Strategi Pemberdayaan Masyarakat Nelayan Dalam Peningkatan Kesejahteraan Nelayan (Studi di Kantor Camat Muara Batu Kabupaten Aceh Utara). *Negotium: Jurnal Ilmu Administrasi Bisnis*, 2(2), 118. <https://doi.org/10.29103/njiab.v2i2.3062>

-
- Suryanto, J., Rahmayanti, A. Z., Purwanto, P., & Nadjib, M. (2023). Building Partnership for Social Innovation in Rural Development: Case Studies in Coastal Villages in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 1153(1), 012020. <https://doi.org/10.1088/1755-1315/1153/1/012020>
- Svolkinas, L., Holmes, G., Dmitrieva, L., Ermolin, I., Suvorkov, P., & Goodman, S. J. (2023). Stakeholder consensus suggests strategies to promote sustainability in an artisanal fishery with high rates of poaching and marine mammal bycatch. *People and Nature*, 5(4), 1187–1206. <https://doi.org/10.1002/pan3.10490>
- Swift, A. (2022). Being Creative with Resources in Qualitative Research. In *The SAGE Handbook of Qualitative Research Design* (pp. 290–306). SAGE Publications Ltd. <https://doi.org/10.4135/9781529770278.n19>
- Untari, S. (2024). Public-private partnership model to manage coastal tourism in indonesia: can it improve the community welfare? *Public Administration Issues*, 5(5), 163–177. <https://doi.org/10.17323/1999-5431-2024-0-5-163-177>
- Vera Nurfajriani, W., Ilhami, M. W., Mahendra, A., Sirodj, R. A., Afgani, W., Negeri, U. I., Fatah, R., & Abstract, P. (2024). Triangulasi Data Dalam Analisis Data Kualitatif. *Jurnal Ilmiah Wahana Pendidikan*, 10(17), 826–833. <https://doi.org/10.5281/ZENODO.13929272>
- Weber, E. P., Lovrich, N. P., & Gaffney, M. (2005). Collaboration, Enforcement, and Endangered Species: A Framework for Assessing Collaborative Problem-Solving Capacity. *Society & Natural Resources*, 18(8), 677–698. <https://doi.org/10.1080/08941920591005034>
- Yuliandi Surya. (2021). Pengaruh Pengaruh Bantuan Pemerintah, Pengalaman Dan Lingkungan Usaha Terhadap Produktivitas Kerja Nelayan Koperasi Perikanan Sinar Mutiara Samudra Di Desa Swarangan Kecamatan Jorong Kabupaten Tanah Laut. *KINDAI*, 17(3), 466–486. <https://doi.org/10.35972/kindai.v17i3.627>
- Zhu, C., Fan, R., Lin, J. C., Chen, R., & Luo, M. (2023). How to promote municipal household waste management by waste classification and recycling? A stochastic tripartite evolutionary game analysis. *Journal of Environmental Management*, 344, 118503. <https://doi.org/10.1016/J.JENVMAN.2023.118503>