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The Role of Stakeholders and Framework in Partnerships: The Management of the Collective Protected Zone in Indonesia

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A B S T R A C T

This article reveals the experiences in Philippines, Ecuador, and West Papua-Indonesia, as well as the key contexts in East Java-Indonesia. The aim is to show that the management of a collective protected zone (CPZ) which is more appropriate in stakeholders' partnership, sharing roles and responsibilities, and having a management framework for conservation for ecological, economic, social, and cultural purposes. It is in line with the dynamics of post-reform decentralization of marine resource management. This article discusses the decentralization policy toward partnerships between the village government and fisherman groups in managing CPZ Bangsring waters in Banyuwangi. This study uses a qualitative descriptive approach with data collection techniques through observation, in-depth interviews, documentation, and focus group discussion. The analysis reveals that the decentralization policy towards partnerships for the management of CPZ waters has succeeded in building partnership capacity to address collective action problems through the development of incentive structures and social capital. To develop community participation in ZPB, five initiatives are recommended (1) accommodating local cultural values (2) involving community groups and local institutions (3) using conservation areas according to the standards (3) government policies that ensure the sustainability of ZPB waters to be more collaborative and innovative.

INTRODUCTION

The coral reef ecosystem is among the most diverse habitats on earth that provide important social and ecological services (White, C. M et al., 2022). Coral reef areas are threatened worldwide by population growth, tourism development, and the use of poisons and dynamite in fishing in areas adjacent to coral reefs. Therefore, collaborative management is developed as the main approach in the management of small-scale fisheries resources in several developing countries (Evans et al., 2011). Global marine conservation targets have increased Marine Protected Area (KKP) programs in recent decades (Brown, 2010). The establishment of KKP is the strategy to overcome the problems in coastal and marine areas (Elliott et al., 2001). This is done by establishing small marine protected areas (KKP), such as in the Philippines since 1974 (Balgos, 2005; White, A.T, et al., 2005). The strategies have been proven to increase fish yields for traditional fishermen and protect and maintain coastal coral reefs in Philippine and Colombia so that they are economically beneficial for sustainable conservation (Ramirez, 2016; White, A. T. et al., 2002).

Much literature shows that in the Southeast Asian region, conservation area management always involves the community (Indrawan et al., 2014) . It highlights key aspects of the collective protected zone, involving stakeholders from the outset (Boumaour et al., 2018; Cárcamo et al., 2014). Stakeholder engagement has shifted from conventional to collaborative patterns involving local and traditional communities, civil society, scientists, the private sector and research institutions (Maretti et al., 2019). This study focuses on the management of a joint protected area initiated by the local community (ornamental fish fishermen) and the village government, which successfully became a marine conservation area

Community-based coastal management is a response to the failure of a more centralized approach, starting in the Philippine and spreading to other countries in Southeast Asia and to Ecuador in the 1980s (Weeks et al., 2014). Studies show that collaboration between management agencies and communities has the potential to increase the legitimacy of the establishment process and increase support for KKP (Hoelting et al., 2013; Vokou et al., 2014). It gives different difficulties in enforcing restrictions on the use of natural resources through instrumental compliance mechanisms in areas as vast and remote as the ocean (Nøstbakken, 2008), and the forms of governance and management institutions must involve and support local community and stakeholder, thereby contributing positively to welfare and conservation (Dawson et al., 2021; Hoelting et al., 2013).

Equitable conservation to empower and support the environmental management of indigenous people and the local community is the key strategy for effective sustainable biodiversity conservation. This protected area involves a traditional, diverse, and dynamic local community. Furthermore, conservation can be effective through increased focus on the type and quality of management, and promotion solutions that strengthen the roles, capacities, and rights of indigenous people and local community, and provide socio-economic benefits (Bennett & Dearden, 2014; Dawson et al., 2021).

Conservation issues have become a global concern as well as a strategic issue in various countries including Indonesia the largest archipelagic country in the world. It has 17,499 islands with an area of around 7.81 million km2. The area is 3.25 million

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km2 is the ocean and 2.55 million km2 is the Exclusive Economic Zone which has enormous marine and fishery potential (https://kkp.go.id/djprl/artikel/21045-konservasi-perairan-sebagai-upaya-menjaga-potensi-kelautan-dan-perikanan-indonesia). This potential has high economic value but the use of coastal areas for tourism and economic interests often overlaps, so it often creates problems for its preservation. For this reason, stakeholder participation is needed in maintaining the sustainability of water areas to realize the objectives of establishing KKP, namely protection, preservation, and utilization of community welfare.

The damage to the coral reef on the north coast of East Java starts in Tuban, Lamongan, and Gresik. Furthermore, the coast of Madura is very concerning because almost 60% of the coral reefs in the area are seriously damaged (Dinas Kelautan dan Perikanan, Propinsi Jawa Timur dalam Kompas.com, 2013). In 2009, the coral reef covers in Bangsring Waters, Wongsorejo was 3,800 hectares. This area is 49% of the total area of coral reef covers in Banyuwangi Regency, of the 3,800 Ha, of which 19% are in very good condition, 24.5% are moderate and 56.5% are damaged. The results of the research in three locations, namely Bangsring Waters (Banyuwangi); Gili Noko Island Bawean (Gresik); and Kramat Island (Sumenep) found that the average coral reef in East Java waters ranged from 38.93 ± 10.77% – 57.07 ± 3.23%, with the highest coral reef in Bawean waters; while the lowest coral reef was in Bangsring waters (Nugraha et al., 2020). If the condition is not supported by the application of appropriate management policy, it can reduce the ability of coastal ecosystems and small islands as providers of sustainable natural resources. For this reason, stakeholder synergy is needed in the management of coastal areas.

The presence of Law Number 23/2014 concerning regional government as a change from Law Number 32/2004 indicates a shift in authority in the management of potential marine and fishery resources from district government to provincial government authority, Article 27 (paragraphs 3 and 5) (table 1), and decentralization is a prerequisite for co-management (Shivakoti & Shivakoti, 2008; Subianto et al., 2020). The enactment of Law Number 23/2014 concerning regional government stipulates that district government does not have the authority to manage coastlines within a four-mile radius as well as local KKP. This policy has implications for regional effectiveness in managing local KKP. Furthermore, the management of the coastal area is regulated in Law Number 1/2014 concerning Amendments to Law Number 27/2007 concerning the management of coastal areas and small Island, while community participation in managing coastal areas is regulated in the regulation of the minister of maritime affairs and fisheries (Permen KP) RI Number 21 Permen KP/2015 concerning partnership for the management of the marine protected area. This provision forms the basis for community participation in KKP management, namely protected water areas managed by a zoning system to realize sustainable management of fish resources and their environment (Article 1 paragraph 1).

Most of the territory in East Java has water areas including Bangsring waters, Wongsorejo district, and Banyuwangi has developed a collective protection zone (CPZ) since 2009, stipulated in the village regulation (Perdes) Number 02/429.405.01/2009 concerning the management of joint protection zone (ZPB) in Bangsring village marine resources. From 1970 to 2007 ornamental fish fishermen experienced difficulties in obtaining catches and were increasingly far from the coast due to the damage to coral reefs, and the use of explosives and potassium (see Table 1).

Tabel 1. Development of Bangsring Waters Area

Year	Condition	Impacts
1970-2007	Ornamental fish catching by fishermen using explosives and potassium	The damage to coral reefs reached 82.5% of 140 km of Bali Strait
	There is a concern for the children of ornamental fish collectors, Ikhwan Arief, and other fishermen from Kranjan I in Bangsring that fishermen are getting farther away to get their catches.	The initiation to improve Bangsring waters area
2008	Fishermen group meeting at MTs. Miftahul Arifin in Bangsring provides an agreement to form a fisherman group with an environmental perspective and become the Ornamental Fish-Samudera Bakti Group (KNIH-SB). The members are not only ornamental fish fishermen.	The formation of KNIH-SB is supported by Pelangi Indonesia Foundation and Pilang Institute.
2009	Coral reef cover in Bangsring waters in Wongsorejo covering an area of 3,800 Ha, is 49% of the total coral reef area in Banyuwangi. 3,800 Ha and 19% are in very good condition. 24.5% is moderate and 56.5% is damaged (Data from East Java Maritime Affair and Fishery Office, 2009)	Ornamental fish catches are further away, so fishing costs are increasing.

Source: interviews with administrator and KNIH-SB document

Based on table 1, shows that the southern coastal community in Banyuwangi which is initiated by the fishermen youth (Ikhwan Arief) together with the fishermen, held a meeting to form a fisherman group with an environmental perspective as an effort to garner support to improve and maintain coral reef habitat in Bangsring waters.

Co-management and Decentralization

Research on the partnership between the government and the community in joint management of marine resources conservation areas was conducted by (Abelshausen et al., 2015; Freitas, 2014; Hoelting et al., 2013; Petursson & Kristofersson, 2021; Prasita et al., 2019; Raman et al., 2015; Rudianto, 2014; Solihin et al., 2020). In this literature review, we have found some studies on the partnership between government and community in the joint management of marine resources protected areas in a decentralized perspective in the Philippines, Ecuador, and Indonesia. Research conducted by G. R. Russ & A. C. Alcala (1999) in Sumilon Island marine reserve, Apo Island, and Philippine use a historical approach to socio-political factors of community support. Whereas, Beitl (2017) in El Oro province-Ecuador analyzes the impact of the interaction between informal customary norms in fishing and formal norm regarding the

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TURFs (Territorial use rights in fisheries) system related to custodians (mangrove concession) after the enactment of the law (1999) that supports the decentralization of mangrove conservation. The research conducted by Atmodjo et al.,(2020) in Raja Ampat of West Papua-Indonesia, adapts governance from Arnouts et al. (2012) through two aspects, namely governance arrangement involving international and national LSM, local community, and the private sector. Furthermore, devolution of authority for marine conservation is conducted by adopting a shift from state governance through collaborative governance to non-state governance, however, it requires decentralization in governance where national marine conservation authority is transferred to local entities.

The difference in this study is the focus on the management partnership of ZPB involving the KNIH-SB, and Bangsring village government in a decentralization perspective, using co-management theory from Wells et al. 1992 in (Freitas, 2014). It includes some aspects, such as the active involvement of stakeholders, the division of roles and responsibilities in management, as well as the management framework for the conservation of ecological, economic, social, and cultural objectives. An interesting finding is that the management of ZPB in Bangsring is at the local level by involving fishermen groups, and the village government. Additionally, the mechanism is regulated in the village regulation.

This study is aimed at describing and investigating the management of ZPB Bangsring waters in a decentralized perspective through two processes: First is the partnership between the village government and KNIH-SB as the main component supporting ZPB. Second, is the management and utilization of fisheries and marine resources by KNIH-SB which is following village regulations, before and after the implementation of Law Number 23/2014 and KP ministerial regulation number 21/2015. An important finding from this study is to prove the implementation of co-management in ZPB Bangsring waters which takes place for more than a decade.

Co-management is understood as a joint decision-making arrangement between the state and local communities in that the actors negotiate, define, and guarantee fair distribution of management function, rights, and responsibility for a particular area or set of natural resources (Berkes, 2004; Borrini-feyerabend et al., 2004). A partnership is a strategic relationship that is deliberately designed or built between parties to achieve predetermined goals, mutual benefits, and high interdependence (Mohr & Spekman, 1994). Some experts define co-management as sharing power and responsibility between the government and local resource users Shivakoti and Shivakoti, (2008). Partnership or co-management is one of the strategies commonly used to support the successful implementation of modern management. A partnership is not only translated as a collaboration but has a strategic pattern in realizing success (Freitas, 2014).

The research focuses on specific aspects of collective protected zone, related to Co-management is also called collaborative management, participatory management, or community-based management. Participatory management is based on three main parts (Wells, et al., 1992 in Freitas, (2014): (1) all stakeholders are allowed to be actively involved in management, intended to guarantee commitment and participation, accommodate their knowledge, aspirations, and experiences in management (2) the distribution of roles and responsibilities in management varies depending on the special condition of each region. In some cases, more authority lies with community institutions, meanwhile, in other cases more authority lies with government agencies (3) Management framework for conservation ecological, economic, social, and cultural purposes. Particular attention needs to be paid to the needs of those who are resource-dependent, balanced, and participating.

Policies on the decentralization of marine resource management

Reforms in Indonesia's political system after the New Order in 1998, led to fundamental changes in the structure of government and civil administration. This change has brought a new perspective on local government management in this case decentralization. Decentralization has been justified as a tool for the improvement of democracy and political stability, an instrument for increasing efficiency, a means for managing heterogeneous societies, or a guarantee for territorial and social cohesion. The substance of decentralization is not the transfer of function and resources from a higher level of government to a lower level, but it is a relationship of interdependence between levels of government. It means that each level can reach a certain extent, creating conditions for the functions of the others (Ruano & Profiroiu, 2017).

Law Number 22/1999 concerning regional government (regional autonomy) has a revision, namely Law Number 32/2004. After 25 years, it was revised to become Number 23/2014. The need for decentralization and a more participatory application approach in the management of Indonesia coastal areas arose more than a decade ago. Therefore, joint management is the right approach to managing Indonesia coastal areas because it allows the development of a model that contains the balance of power between the government, society as a whole, and various individual stakeholders (Siry, 2011; Subianto, 2014).

The authority to manage natural resources in the sea since 1999 that the area bordering the sea area is as far as 3 miles from the high seas. According to Otoda Law in 2014, this authority belongs to the provincial government (Law Number 23/2014), Article 27 paragraphs 1 to 5. However, this policy still provides an opportunity for the institutionalization of cultural values and local community institutions in managing coastal resources as mentioned in Article 27 paragraph 5.

Coastal management has been regulated in Law Number 1/ 2014 concerning the amendments to Law Number 27/2007 concerning the management of coastal areas and small island, the implementation of which is regulated by Permen KP RI No. 21 Permen KP/2015 concerning the partnership for the management of marine protected areas. This regulation is the implementation of regulation for the provision of Article 18 paragraph 2 in government regulation number 60/2007 concerning the conservation of fish resources. Article 18 paragraph 1 stipulates that in managing water conservation areas, the regional government can involve the community. This community participation is carried out through the partnership between the management organizational unit and community group and indigenous people, non-governmental organizations, corporations, research institutes, and universities. This arrangement provides direction for the coastal community in developing and managing coastal areas following local wisdom.

METHOD

This research is analytical descriptive research that aims to understand the complexity of social phenomena and real-life

events (Creswell & Poth, 2016). Data findings are analyzed using the co-management theory from Wells et al.1992 in Freitas, (2014).

The case study researchers are allowed to choose informants to be interviewed according to research objectives (Sugiyono, 2010) based on their experience, role, and influence in managing ZPB water conservation partnerships, and twelve key informants are selected (Table 2).

Table 2. Informants

Main and supporting informants	Σ Informants	Representation of data sources
The chairman of Bangsring and the secretary	2	Village government
Administrator and member	3	KNIH – *Samudra Bakti*
Administrator	2	*Bina Sejahtera* village-owned enterprises
Administrator	3	*Pokdarwis*
Travelers	2	BUNDER (Bangsring underwater)

Source: processed by the author, (2022)

This study is based on a field study of ZPB waters in Bangsring, as well as to deepen partnership in participatory management. The focus of research on data collection is related to (1) stakeholder involvement in the management of Bangsring ZPB waters (before and after *Perdes* No. 2/2009); (2) Distribution of roles and responsibilities in the management according to the special condition of Bangsring ZPB waters (3) The framework for the management in Bangsring ZPB waters and the level of fishermen needs that depend on resources, balance and participation for conservation ecological, economical, social, and cultural purposes.

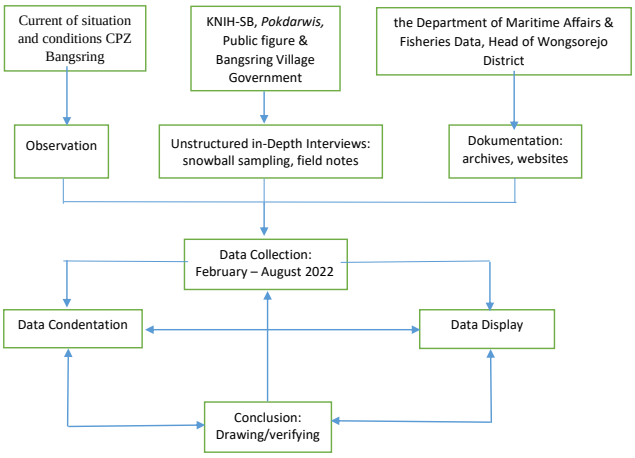

Figure 1. Research stage in visualization
Source: Analyzed by the authors and modified from Miles, M. B., Huberman, A. M., and Saldaña (2014)

RESULTS AND DISCUSSION

Bangsring Profile and KNIH-SB

Bangsring village was administratively recognized as belonging to the Wongsorejo district on 25 July 1944. Banyuwangi consists of several villages, namely Krajan I, Krajan II, Paras Putih. Bangsring village is located in a lowland area with some boundaries, such as in the northern side: Bengkak village; eastern side: Bali strait; southern side: Ketapang village; western side: Perhutani forest or Bondowoso. Bangsring is the village with the largest area in Wongsorejo district, namely 125.49 Km2 with a population of 6,252 (BPS Kecamatan Dalam Angka, 2021).

The fishermen group of bakti ocean ornamental fish is abbreviated as KNIH-SB. It has the same goals, efforts, and interests. The location of KNIH-SB in Bangsring village is a coastal area that has very high marine resources. The existence of KNIH-SB began with the decrease in catches of ornamental fish and fishing activities further away so the costs to go to the sea are increasing due to damage to the marine environment (see table 1). This prompted the son of a fisherman who collects ornamental fish catches named Ikhwan Arief (IA) and other fishermen from Krajan I in Bangsring village to approach the fishermen group. Meeting at fishermen level on 6 January 2008 at MTs. Miftahul Arifin. It produces an agreement to establish a fishing group with an environmental perspective and develop into the fishermen group of Samudera Bakti ornamental fish (KNIH-SB).

KNIB-SB activities include anti-potassium and anti-environmental destruction campaigns for fishermen which is realized through the collaboration of KNIH-SB with the regional government. Banyuwangi, Pelangi Indonesia Foundation, and Pilang Institute in Bangsring village climate change adaptation program. The follow-up to this activity is to establish a coral reef conservation area with a core zone of 1 ha and a support zone around the core zone which is monitored jointly by the community, KNIH-SB, and the village government according to the ZPB village regulation. Furthermore, KNIH-SB applied internal activities and fostered, and developed the assisted groups namely: Bina Samudera Group, Bangsring village in 2010, East Armada Group, Alasbuluh village in 2012, Banyuwangi and Samudera Bakti Group, Puger village, Jember regency in 2011 and fishermen group named Mina Bakti, Bengkak village, Banyuwangi.

Partnership in the management of Bangsring ZPB waters.

The formation of Bangsring ZPB waters in 2009 involving KNIH-SB together with village government had succeeded in preserving Bangsring waters area so that it could be used as a Bunder or Bangsring underwater diving tourism destination. In addition, fishermen can catch ornamental fish in Bangsring waters outside the ZPB core zone.

> *"Initially, there were many complaints from ornamental fish fishermen that they were getting further from the coast to get fish. This encouraged me to initiate coral reef restoration even though it was at my own expense. At the same time, I also invited fellow fishermen to change the way they catch fish by not using 'potash' so as not to damage the coral reef. As a result, the coral reef recovered and the Bangsring area became an underwater tourism (BUNDER)" (Ikhwan Arief)*

> *"At the suggestion of Ikhwan Arief and ornamental fish fishermen, the village government supports environmentally friendly fishing methods to protect the coastal environment, through the Bangsring Village Regulation" (the Chairman of Bangsring)*

The existence of the activator in making changes and the people in Bangsring village are starting to realize the importance of preserving the environment. Moreover, the sea is the source of economy and life for the people so it can change the habits of fishermen to have a moral obligation to nature in which life is a valuable process (life-centered theory of environment) (Mautner, 2009). At the beginning of the recovery, it was carried out by

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Ikhwan using personal funds. The results have made changes to the environment so that they get the attention of the local government to support preservation and protect the environment.

ZPB was created as a spawning ground for reef fish by protecting living coral habitats. In applying the restoration of Bangsring waters ecosystem, activities can be done, such as changing the pattern of catching ornamental fish, coral reef preservation, development of Bangsring ZPB waters, restocking, counseling on the importance of environmental sustainability, development of Samudera Bakti community monitoring group or Pokmaswas (KNIH-SB).

Stakeholder Involvement

The involvement of stakeholders in the management of ZPB waters is shown in Table 3 below

Table 3. Stakeholder Commitment and Participation in the ZPB management partnership

Stakeholder	Commitment	Participation	Benefit
Bangsring village government	Facilitating the needs of village community according to the functions and responsibilities of the village government	Organizing village-owned enterprises (BumDes) named *Bina Sejahtera* (2013)	Increasing economic activity; receiving support for facilities and infrastructure from DKP in East Java province
	Leading the implementation of village Government	Arranging and stipulating Perdes No. 02/429.405.01/2009 concerning the Management of ZPB of sea resources in Bangsring village.	The utilization of fishery resources in Bangsring ZPB waters ZPB has legal foundation
KNIH-SB	Ensuring the management of Bangsring ZPB waters so that they can be accounted for	Initiating the formation of Bangsring ZPB waters with village Government (2009); Doing supervision and monitoring, deciding on the types of sanction for violation of deliberation, granting the permission (Perdes article 2 paragraph 2 and article 8 paragraph 3); Making an accountability report on the development of ZPB per 6 months; Conducting socialization on the preservation of aquatic resources	Fisheries and marine resources can be preserved

Source: An interview with informants and Perdes No. 2/2009 and RI Permendagri No. 84/2015

Table 5 shows the commitment and participation of Bangsring village government and KNIH-SB so that they can gradually change the pattern of fishing for ornamental fish by local fishermen to an environmentally friendly fishing pattern. KNIH-SB has consisted of 40 fishermen of ornamental fish since its formation in 2009. Meanwhile, there have been 209 fishermen from Bangsring and Bengkak villages from 2014 to the present day. It indicates that Bangsring ZPB Waters has managed to gain community support.

The commitment has the support from the district government by accommodating water conservation areas in Banyuwangi regional regulation Number 8/2012 concerning regional spatial planning. Regional regulations regulate the management of protected areas harmoniously and sustainably (Article 5 paragraph 1), the management of areas that take into account in carrying capacity of the land, the capacity of the area and aspects of natural resource conservation; control and preservation of protected areas (Article 7 paragraph 2 in point h and j), in line with the regency area spatial planning strategy (Article 8 paragraph 11 in point e to i), and regulates zoning of designated fisheries areas, permits activities and constructs buildings that support fish cultivation, capture fisheries, research and tourism.

The distribution of roles and responsibilities in the management according to the special condition of ZPB Sea

The management of Bangsring ZPB waters involves the partnerships as stipulated in village regulation Number 02/2009 as well as the roles and responsibilities of the district, sub-district, village government, and fishermen groups (see Table 4).

Table 4. Distribution of roles and responsibilities for the management in Bangsring ZPB waters ZPB based on village regulation

ZPB administrator	Institution	Authority & Duty	Explanation
Advisor	Banyuwangi Regent; Wongsorejo District Head	Providing direction so that the objectives of ZPB are achieved	
Coach	Head of Fisheries and Marine Services in Banyuwangi	Coaching and providing technical advice on ZPB management	
Responsibility	Head of Bangsring village and Head of KNIH Samudera Bakti	Fully responsible for the success of ZPB	The village government facilitates the needs of the community following the Minister of Home Affairs Regulation (Permendagri) number 84 Year 2015.

Chief manager	Daily Management: Chairman, Secretary, Treasurer, and machinery	Technically responsible for ZPB, ensuring supervision and monitoring, deciding on types of sanctions for violation and consulting, granting permits for activities described in Article 2 paragraph 2, and Article 8 paragraph 3, and making an accountability report every 6 months regarding ZPB to the person in charge	The position period is 3 years and can be extended once
Supervisors	Coordinator: 1 person and embers: 13 people	Taking turns in keeping the zoning utilized as intended, reporting all forms of violations to the chief manager with at least 3 witnesses	
Monitoring	Group leader: 2 people and members: 5 people	Providing data on ZPB conditions periodically every 3 months to the chief manager	

Source: village regulation number 2/2009

Bangsring ZPB waters management framework

The implementation of ZPB Bangsring waters has been successful for more than a decade. The number of fishermen joining the KNIH-SB and the area of coral reefs are experiencing recovery and increasing the fishermen's welfare, as well as changes in fishing behavior patterns. Therefore, it achieves the goals of ecological, economic, and socio-cultural conservation (see Table 5). Although the activities of fishermen have changed their fishing location as a source of livelihood outside the ZPB core zone, KNIH-SB fishermen also earn other income as Bunder tourism implementors. This is a form of fulfilling the level of need and obligation of KNIH-SB members that the majority of fishermen from Bangsring and Bengkak villages are socially involved in HNSI, KNIH-SB, Pokdarwis, BumDes, and Bunder underwater tourism.

Table 5. The forms of partnership framework for conservation in ecological, economic, social, and cultural goals

Bangsring ZPB Partnership	Substance	Goals		
		Ecological conservation	Economy	Social and culture
Perdes Bangsring Nomor 02/429.405.01/2009 tentang ZPB	The management of marine resources	Maintaining and ensuring the management of ZPB following the provision/mechanism	It is permitted to catch ornamental fish outside the core zone	ZPB core zone can be entered for limited research activities of *Pelangi and Pilang* Foundations; Monitoring Team and KNIH-SB; KNIH-SB Supervisory Team
Incentive Structure	Restoration and preservation of coral reefs in Bangsring waters; The source of livelihood for the fishermen of ornamental fish in Bangsring village	Protection of spawning grounds for brood fish, especially fish, marine biota, and coral reefs in ZPB	KNIH-SB can still utilize fish resources outside the core zone; get a job as a tourist actor at *Bunder* tourist destinations (homestays, small and medium enterprises, parking, Snorkeling, and boat rentals, floating houses)	The behavior of fishermen catching ornamental fish has changed from previously using explosives and potassium to using scoops and nets (± 1,000 fishermen)
Social Capital	The involvement of fishermen in KNIH-SB from 40 people in 2009 to 209 people in 2014 until the present.	The condition of the damaged coral reef has recovered about 70%	Activities as ornamental fish fishermen and tourism actors	Changing the fishing culture from destructive fishing patterns to being environmentally friendly

Source: KNIH-SB report and interview, 2022

The novelty of the decentralization in Bangsring ZPB waters

Based on the Co-management perspective in managing the Collective Protection Zone/ZPB of Bangsring Waters, Wongsorejo District, Banyuwangi has succeeded in optimizing the participation of the KNIH-SB and the village government to build partnerships to repair water areas whose marine resources have been damaged to restore ecological, economic and conservation benefits. social and cultural community, where the initiation of the formation of environmentally friendly fishermen groups came from the youth of the ornamental fish fishing community. The partnership has been going on for more than a decade and has received support from the district and provincial governments. In the context of the partnership decentralization policy, the Bangsring Watershed ZPB is a water conservation activity by traditional fishermen (UU No. 23/2014 Article 27 paragraph 5).

The Village Government's partnership with KNIH-SB provides benefits for both parties (table 2), where the village

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government benefits because the existence of KNIH-SB participates in protecting and preserving the Bangsring waters area through the ZPB. Stakeholders can develop joint management so that potential power gaps can be overcome and increase the trust of partners. Besides that, fishing communities get other income from activities as tourism actors, socially fishermen are involved in various local institutions (table 5 and Table 6). The factor of the high commitment of the village government and the ornamental fish fishing community to be involved in the partnership contributed to the success of ZPB. The inhibiting factor for the partnership is the management framework of the Bangsring Waters ZPB, that the marine conservation area utilization activities have not fully implemented standards related to the carrying capacity of the conservation environment.

Table 6. Development of the decentralization of partnership for the management of Bangsring ZPB waters

Year	Development	Impacts
2009	The beginning of KNIH-SB fishermen establishment had 40 members	Ornamental fish fishermen were starting to realize the importance of preserving coastal areas.
	ZPB was set at 0.38 Ha compared to the entire coral reef in Bangsring which is 88.23 Ha	The damaged coral reef rehabilitation efforts. The potential for reef fish guarded by KNIH-SB was expected to restore the environment and fish resources
2014	The development of KNIH-SB consisted of 209 fishermen	Fishermen welfare increases; Fishermen earn other income as *Bunder* tourism actors
	ZPB Bangsring waters was developed into an underwater tourist destination	Destinasi Wisata Bangsring *Underwater* (BUNDER) merupakan wisata '*iconik*'
2017	The condition of the damaged coral reef had recovered about 70%	Marine biota including sea urchins (Echinoidea) were found in Bangsring waters
	KNIH-SB participated in coral reef protection in ZPB which was originally only 0.5 Ha, but now it has become 15 Ha.	Trust in KNIH-SB was increasing and it was widely recognized as a marine conservationist
2020	The income of KNIH-SB was around IDR 200,000,000 to IDR 1,000,000,000 per month, especially during the school holidays	The income of KNIH-SB fishermen had increased (around 300 thousand to 400 thousand per day)

Source: interview results; KNIH-SB document, 2022; Kompas.com, 2013

The analysis of partnership in the management of ZPB waters from the decentralization perspective

The success of the partnership between the Bangsring Village Government and KNIH-SB in the Co-management perspective of Wells et all. (1992) in (Freitas, 2014), supported by the factor of active stakeholder involvement, the division of roles and responsibilities of partnerships and supported by the existence of a management framework for the Bangsring Village Waters ZPB. The results showed that the success of ZPB was due to the support of ornamental fish fishermen groups and the village government, so environmental sustainability and fisheries resources provide economic benefits, as the results of research by Russ and Alcala (1999), that socio-political factors have influenced community support so that the marine reserve conservation area on Apo island became successful.

This research also reveals that fishermen groups and local institutions have an important role in the success of ZPB, even though there are dynamics of changes in decentralized marine management policies, as Beitl, Christine (2017) states that the interaction of the TURFs (Territorial use rights in fisheries) system is related to custodians mangrove concessions after the government implemented conservation decentralization which had implications for fisheries productivity and economic benefits, also in line with the results of research by Atmodjo et al., (2020) that the reality is that there are dynamics in managing marine conservation governance, but community groups (NGOs) still play an important role in MPA management.

The implications of the results of this study reveal that based on the ZPB, fishermen are not allowed to catch fish in the core zone of the conservation area, but outside the ZPB, as the results of research by Beitl, Christine (2017), and Atmodjo et al., (2020). Important lessons from the research results show that the support of the community and local institutions is an important factor in the success of sustainable MPAs.

This research has implications for further researchers, and it is necessary to develop research in the field of institutions, especially the role of institutions and local cultural values related to the preservation of sustainable fisheries resources. This research is limited to the practice of partnerships related to decentralization, especially joint protection zones that are jointly managed between fishermen's groups and the village government so that they do not represent all types of water conservation. We suggest that to ensure a sustainable partnership, the government needs to consider several aspects: first, the management of ZPB Waters should accommodate local cultural values by involving local community groups and institutions; secondly, the government needs to guarantee the sustainability of ZPB Waters, through the necessary policies and facilitation, such as the application of standards for the use of conservation areas more collaboratively and innovatively.

The findings of this study support the research results of G. R. Russ & A. C. Alcala (1999), Shivakoti, Yonariza & Ganesh P. Shivakoti (2008), dan Beitl, Christine M (2017) that the success of marine conservation area management is supported by decentralized management and involves local communities

CONCLUSION

This article aims at the decentralization policy toward partnerships between the village government and fisherman groups in managing CPZ Bangsring waters in Banyuwangi. The results of the study revealed that the driving factors for success in collaborative management of marine ZPB are to overcome

collective action problems, by developing incentive structures and social capital, to ensure the realization of sustainable marine conservation.

The Village Government's partnership with KNIH-SB in managing the Bangsring Waters ZPB has been successful for more than a decade, according to *Perdes* No. 02/429.405.01/2009 and KP Ministerial Regulation No. 21/2015. The success of this partnership is because it is supported by the important role of fishermen groups (KNIH-SB).

Village Government Partnership with KNIH-SB before and after Law no. 23/2014 can still be implemented by fishermen, supported by the Banyuwangi Regional Regulation No. 8/2012 concerning Banyuwangi RTRW 2012-2032 and East Java Province Regional Regulation No. 1/2018 concerning the 2018-2038 Zoning Plan for Coastal Areas and Small Islands of East Java Province and East Java Governor Regulation No. 111/2018 concerning Implementation Regulations for the East Java Province Regional Regulation No. 1/2018.

Partnerships in the management of MPA for Marine Conservation are successful and have the potential to realize sustainable marine conservation and can build partnership capacity to address collective action issues, through the development of incentive structures and social capital.

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