

IMPLEMENTATION OF THE COLLABORATIVE PRINCIPLES ON MARINE TOURISM: LESSONS FROM MUD ISLAND, INDONESIA

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Abstract

This paper aims to examine marine tourism as an empirical phenomenon. To gain insight into the systemic conditions of the collaboration process, it is observed from the point of view of the principles of the collaboration process from Roberts, Van Wyk & Dhanpat. The authors identify the principles implemented in the collaborative process between the Community, Village-Owned Enterprises, and the Government in a collaborative network towards sustainable marine ecotourism. This analytical descriptive study used case survey methods in the partnership networks. The data is obtained through a qualitative approach, observation, semi-structured interviews, and documentation. The findings reveal that stakeholders involved in the collaboration contribute to realizing a common purpose and providing mutual benefits, but the quality of collaboration is not optimal because it is still informal. Lessons learned from the application of collaboration principles on marine tourism in the Lusi Mud Island, Sidoarjo Regency, Indonesia are: the importance of trust and enabling environmental factors that collaboration to be realized; the importance of the characteristics of community leaders who have a deep concern as leaders, and ensure the participation of local communities in the development and management stages of marine tourism towards marine ecotourism.

Keywords: Implementation; Collaborative Principles; Marine Ecotourism; Mud Island

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INTRODUCTION

Tourism becomes famous destination for developing countries in recent years, and it is proceeded for infrastructure development in rural areas (García-Romero et al., 2016). Tourism supports economic development, jobs opportunities and poverty alleviation (Di Giovine, 2010). Furthermore, tourism is one of the important industries and continues to develop in providing jobs opportunities and regional income (Nouri Kouchi, Zarra Nezhad, & Kiani, 2018), particularly local government in tourism site (Kurniawan, Zauhar, & Hermawan, 2012). Therefore, tourism development should observe the aspects of natural, developmental and socio-cultural resources management (Briassoulis, 2002). According to the World Travel and Tourism Council (WTTC), Indonesia is the ninth highest tourism growth in the world (World Travel and Tourism Council, 2020). The form of tourism which is mostly developed in Indonesia is ecotourism, but the development requires support from community participation

because they responsible for managing the ecotourism (Kencana & Mertha, 2014) (Byczek, 2011).

Ecotourism is developed as one of the strategies to overcome economy and social problems in local community, and as the environmental conservation strategy (Dowell, Garrod, & Turner^a, 2019:498). However, it has deficient capacity to promote and provide ecotourism, especially in rural communities (Zhuang, Lassoie, & Wolf, 2011). For this reason, an active relationship between stakeholders is required in order to encourage the community to realize the sustainable tourism development. Furthermore, it is an effort to improve social condition in a wide perspective (Iorio & Corsale, 2014). The effective strategy for economic development can be implemented through partnerships and collaboration in recreation and tourism aspects in rural areas for decades (Stone, 2015), (Peroff, Deason, Seekamp, & Iyengar, 2017). The issue of ecotourism is part of recreational tourism in small islands of Indonesia that has received a lot of

attention (Meyer-Arendt & Lew, 2013); (Dickson, Milne, & Werner^a, 2017); (Hakim, Soemarno, & Hong, 2012); (Olearnik & Barwicka, 2019); (Santos, Ambrósio, Correia, & Peres, 2013); (D'Hautesserre & Funck, 2016). Whereas, the research on the development of ecotourism on small islands is in collaborative and partnership perspectives (Meyer-Arendt & Lew, 2013), (Lambooy & Foort, 2013), (Stipanović, Grgurić, & Jurina, 2018), (García-Romero et al., 2016) (Jose, Campos, & Hall, 2019).

In our literature review, we find studies of partnership or collaborative management on marine ecotourism in small islands in Atlantic countries of European Union, Indonesia and the South Pacific Island States is mentioned in the following review related of the literature (Garrod, 2003); (Graci, 2013); (Dickson et al., 2017). A research conducted Garrod (2003) has successfully created local community participation model (Garrod, 2003). The model is revising the previous model by Susan Drake in 1990s. The research conducted by (Graci, 2013) using a combination the theory of collaboration in Gray and the theory of tourism partnership model (Selin & Chavez, 1995). The finding indicates that innovative multi-stakeholder partnership model (*Gili Ecotrust*), has developed sustainable island ecotourism successfully (Graci, 2013). The research of Dickson, Milne, & Werner (2017), revealed that the level of collaboration between stakeholder increases, but it is constrained by the competition. However, the existence of conflict and competition, actually increases the effectiveness of collaboration (Cîrstea, 2014).

The difference in this study, focus on the principles implemented in the collaborative process between the community: tourism awareness community group/*Pokdarwis* in *Wisata Bahari Tlocor (WBT)*. It is also called as local tourism partnership organization (Zapata, Hall, Lindo, & Vanderschaeghe, 2011) in collaboration with *Mitra Abadi Village Owned Enterprises (BumDes)* and the Ministry of Marine Affairs and Fisheries (KKP) which is also called as Center for Coastal and Marine Resources Management (BPSPL-KKP) in Denpasar as the manager of Mud Island *Lusi*. The Mud Island is currently being used as a marine tourism destination to be developed towards marine ecotourism based on sustainable ecology, in Tlocor rural area, Kedungpandan, Jabon sub-district, Sidoarjo Regency.

The finding indicates that the study of ecotourism management in small islands has been debated and it is unique. Marine tourism which is located in Sidoarjo, is unnatural Small Island. Mud Island is the silt sediment that settles gradually for more than fourteen years in Porong River Estuary, Sidoarjo. It is marine tourism in one of the islands without inhabitants and it is awarded as the second most popular tourism destination in Indonesia at *Anugerah Pesona Indonesia (API)* 2019. BPSPL-KKP Denpasar responsible for the Mud Island, because it belongs to KKP in order to be developed into sustainable marine ecotourism. The island has potential land area and natural diversity of marine tourism destinations, such as conservation of mangrove forests, fishponds, various types of seabirds, insects, snakes, long-tailed monkeys, nature-based tourism trips by using boat, coastal trails, mangrove track, and *Wanamina* fishpond.

The study discusses the collaborative process network between *Pokdarwis*, *BUMDes* and BPSPL-KKP in developing marine tourism towards marine ecotourism on the Mud Island *Lusi*, using the theory of collaboration process principles from (Roberts, Van Wyk, & Dhanpat, 2016). This study aims to describe and investigate two related processes: first, the form of collaboration between stakeholders; second, the application of the principles of the collaboration process between stakeholders in developing marine tourism towards sustainable marine ecotourism.

The concept of ecotourism has developed in the last few decades in which the idea of combining nature and conservation were originally stated by Budowski according to Weaver in (Garrod, 2003) ecotourism provides learning experiences, appreciation of the natural environment, and some components in cultural context. Hctor suggests marine ecotourism activities in coastal areas and in marine environment are parts of nature-based tourism and the sustainability. According to the international ecotourism society, ecotourism is a trip to the natural areas that preserves environment, supports the welfare of local communities, involve environmental interpretation and education. This concept synergizes the elements of nature conservation, empowers local communities and increases environmental awareness life for both visitors and local people (Fenton-Keane, 2015).

The principles of ecotourism are nature-based activities, such as conservation, continuity, ethical management, local orientation in terms of control, benefits and scale, and environmental education (Kontogeorgopoulos & Chulikavit, 2010). An important aspect in ecotourism development is the level of implementation in local area or government because it is suitable with the interests in providing ecotourism services and tourism demand at the local level. Ecotourism service business may face obstacles like other business; therefore, ecotourism services should be seriously managed in order to produce real and positive values for environmental conservation and local culture (Nugroho & Dahuri, 2012). Several key aspects in ecotourism are: (1) the limited number of visitors that meet the standard of environmental and socio-cultural capacity of the community; (2) environmental tourism pattern (conservation value); (3) tourism pattern which is sociable for the local culture and customs (educational and tourism value); (4) it supports the local community economy (economic value); (5) the compatibility of initial capital is required for infrastructure (the value of community and economic participation).

Rural areas are recently not identified on the agricultural or plantation activities, in fact, socio-economic development requires rural communities to make innovation through natural resources utilization, human, and socio-cultural resources in the collaboration between local stakeholders (Chin, Thian, & Lo, 2017). The collaboration process was initiated since planning, management and development of sustainable tourism, as well as collaboration and synergy among stakeholders, government, private sector and local communities (Pjerotic, Radenovic, & Tripković-marković, 2016). Stakeholder collaboration is important for effective tourism development because it has potential in achieving common goals among the stakeholders, even though it indicates various challenges in tourism management (Towner & Milne, 2017).

Collaboration is important to support sustainable tourism industry. In various literatures, cross-sectoral partnerships are recommended to achieve sustainable development outcomes (Bramwell & Alletorp, 2001). The central role for sustainable tourism management is implemented through the involvement of

various organizations in order to set the common goal and create a framework as common activity (Olsen et al., 2020) that cannot be achieved by individual partnership according Selin, Fadeeva (Graci, 2013). Policy products, implementation, plans, and regulation resulting from collaboration are easily accepted by the stakeholders involved. It is also argued that collaborative practice is part of moral obligation that involves in the affected parties throughout decision-making process, Medeiros de Araujo and Bramwell (Graci, 2013).

Collaboration is the concept of cooperation and conflict resolution between stakeholders according Gray (Sunitiyoso, Wicaksono, Utomo, Putro, & Mangkusburoto, 2012) that accommodates various aspirations or desires of various parties to share roles, benefits and responsibilities. In addition, collaborative process creates the relation between scientific knowledge and practical application for sustainable natural resources management (Isely, Steinman, Isely, & Parsell, 2014). Thus, conservation collaboration becomes the method of ecotourism development by involving stakeholders according to their respective interests and roles. The awareness of conservation collaboration is the appropriate policy to be implemented by all parties (Garsetiasih & Alikodra, 2015).

Roberts et al. (2016) suggest the results of their research: *Exploring Practices for Effective Collaboration*. There are five principles in the collaboration process: First, the common goal (common purpose) and vision will encourage all the stakeholders to implement the goals; Second, mutuality occurs when all stakeholders contribute to the resources, so that other parties will get benefit. Common mission, culture, and commitment facilitate the exchange of resources; Third, the collaborative environment consists of work situation and leadership style of the collaborative leader. The environment and leadership style have strong influences on the performance of stakeholders in collaboration. Leadership has an important role in creating and maintaining collaborative environment by relating the skills and knowledge of stakeholders; Fourth, trust is one of the factors that underlie a successful collaboration. Trust is based on the belief that all stakeholders will be honest according to the agreement and commitment, and shouldn't exploit other parties. Moreover, excessive formal control can reduce the trust

among the stakeholders because it is considered as a symbol of distrust in ability and character; Fifth, specific personal characteristics are able to understand the motive and interest of other parties. Understanding the characteristics of other parties can foster compromise as the consequence of common decision because there are some interests which can not be accommodated in the decision. In this context, studies on the use of mud islands are still limited, especially for ecotourism, considering the existence of mud islands in Indonesia and other countries is rare. Therefore, this study aims to examine the application of the principles of collaboration in ecotourism development related to the involvement of local communities and institutions.

METHODS

This is a holistic case study design in investigating collaborative capacity in the management of tourism towards marine ecotourism of the Mud Island. It provides rational description in a case approach according Sharpe, 2006; Yin, 1994 (Dickson et al., 2017). The study uses qualitative descriptive approach which is analyzed in critical reality, constructed locally and specifically (Denzin & Lincoln, 2010). The research has been held from 2019 to 2020. In addition, it also uses the combination of survey research techniques through observation and in-depth interviews by focusing on collaborative studies between local communities. The collaboration is among tourism awareness community group in *Wisata Bahari Tlocor (WBT)* and *Mitra Abadi Village Owned Enterprises (BumDes)*, as well as the government, such as BPSPL-KKP who manages the Mud Island to be marine ecotourism. This study has chosen Mud Island as the research site because it is formed by silt sediments and equipped with adequate facilities, such as the island and boat tours. The sustainable potential is managed collaboratively. Furthermore, it investigates two related processes, namely the Mud Island as unique marine ecotourism which is characterized as artificial island in Indonesia; the participation of tourism awareness community group in *Pokdarwis WBT* and *Mitra Abadi BUMDes*, as well as BPSPL-KKP. They manage the Mud Island to be marine ecotourism in Tlocor rural area, Kedungpandan, Jabon sub-district, Sidoarjo Regency.

Based on the experience, role, and influence in managing marine tourism since

February 2019, there are twelve people selected as the key informants from the government, such as BPSPL-KKP in East Java working area; The chairperson and treasurer of *Mitra Abadi BumDes*; from The community includes the chairperson and public relations division in tourism awareness community group in *Tlocor Marine Tourism (WBT)*, as well as the local people as the informants and The visitors. The data collection methods are obtained through unstructured interview and observation for six months from November 2019 to May 2020. Observation and in-depth interview are conducted through snowball sampling in order to understand the management of marine tourism in Mud Island. The data collections are obtained using multi-stakeholder partnerships and supported by field notes, archives, websites, and the findings from writer's interpretation and analysis based on four ideas according to Miles, M.B., and Huberman, A.M. (Miles, Huberman, & Saldana, 2014). The approach for evaluation uses collaborative principles of Robert et al. (Fish, Church, & Winter, 2016). Furthermore, we use an analytical framework with two interrelated main questions. The interviews were analyzed by focusing on two main research questions. The first question is addressed by evaluating the collaboration process between stakeholders; the second question, answered by analyzing the application of the principles of the collaborative process between stakeholders in developing marine tourism towards sustainable marine ecotourism: common goals, mutuality, enabling environment, trust and certain personal characteristics as the basic theory. The results confirmed the findings from other studies (Garrod, 2003), (Graci, 2013), (Dickson et al., 2017).

RESULTS AND DISCUSSION

Brief description on the Mud Island *Lusi*

Sidoarjo is a fertile area because the location is between large rivers, namely Mas River and Porong River as the subsidiary of Brantas River. Sidoarjo has several islands according to the result of statistics survey by BPS in Sidoarjo. The islands are *Dem* Island and *Lusi* Island. *Dem* Island covers an area of 500 hectares (ha) that is located between Brantas River and Madura Strait, whereas, *Lusi* Island covers an area of 94 ha. The Mud Island's geographical location, in the middle of the Porong River bordering Pasuruan and Sidoarjo, is ± 25 kilometers from the Tlocor pier (7° 34'24.1"SL) 112° 52'49.7"EL) there

is one family as the guardian of the island. The island is administratively in Tlocor rural area (Figure 1).



Figure 1: *Lusi* Mud Island, Sidoarjo District (Source: <https://ihategreenjello.com/pesona-keindahan-wisata-tlocor-dan/>)

Lusi Island is an artificial small island from silt sediment of the mudflow that occurred since May 29, 2006, formed by silt sediment deposits in Porong River Estuary, Sidoarjo. This was the result of thermal mudflows that streamed in Porong River. The mudflow came from the water well in Banjarpanji 1 as part of drilling activity in Brantas gas exploration. The thermal mudflow was accompanied by gas for several months, submerged residential, agricultural and industrial areas in three sub-districts. There were approximately 400 ha in four areas that affected by the mudflow, such as three rural areas in Tanggulangin sub-district: Siring, Renokenongo, Kedung Bendo, and Jatirejo in Porong sub-district, Jabon sub-district and dozens of other villages were also inundated in the area of 300 ha. The development can be seen in Table 1.

Table 1. The formation of Mud Island in Sidoarjo

Year	Condition	Impact
2006	There was thermal mudflow accompanied by gas in Banjarpanji water well, Porong, Sidoarjo, East Java Province (the area was part of drilling activity in Brantas gas exploration), in Renokenongo rural area, Porong.	The mud had streamed for several months and caused settlements, agriculture, and industry in Jabon sub-district were submerged. There were four villages in the area of 400 ha, affected by the thermal mudflow.
2011	The countermeasures organization of the Mud Island (BPLS) dredged the sediment in Porong estuary in order to maintain its function.	The dredging results were stockpiled in disposal areas, next to the natural land area approximately 4.47 ha. The purpose was to keep the silt heap that has 94 ha area (including 4.9 ha of <i>Wanamina</i> area), so that it remained stable and did not expand or merge with the water. Furthermore, it was built jetty construction in 3.96 km.
2016	More or less than eleven years later, the silt sediment had become artificial island.	The artificial island is called <i>Wanamina</i> Island or <i>Lusi</i> Island.
2019	The mud had been thrown away into Porong River for years, now it becomes the dense mud.	<i>Lusi</i> Island is in 80 ha area, located in Porong River Estuary, on the east coast of Sidoarjo. Currently, the island is under the Center for Coastal and Marine Resources Management (BPSPL-KKP).

Source: Processed from various sources data

The artificial mud is known as *Lusi* Island, surrounded by mangroves and it is located in Kedungpandan, Jabon sub-district, Sidoarjo. It is marine tourism object/*WBT* in Kedungpandan. Tlocor rural

area is the closest area to *Lusi* Island, so that the local community acquires the benefit from the tourism object (Table 2).

Table 2. The development of Mud Island as *Pokdarwis WBT*

Year	Condition	Activity
2016	Activities in Mud Island have been carried out by the community and research from universities.	The road to Mud Island can be reached using a boat owned by PT. Lapindo Brantas. It is also accompanied by officers from the countermeasures organization (BPLS).
2019	Mud Island becomes mangrove conservation area.	Mud Island is under the management of BPSPL-KKP and it is used as a research location for mangrove ecosystem and <i>Pokdarwis</i> .

2019	Mud Island is marine tourism destination in Tlocor, Kedungpandan, Jabon sub-district.	Mud Island is used as the research by several universities and environmental activists by planting mangroves and marine tourism visitation.
2019	The establishment of tourism awareness community in <i>Pokdarwis</i> .	Local communities participate actively by facilitating the visitors and researchers through tourism awareness community and <i>BUMDes</i> .
2019	The tourism awareness community collaborates with <i>BUMDes</i> and <i>BPSPL-KKP</i> .	Managing boats and water bus/ transportation for the tour in the river and to the island. It takes around 1 to 1.5 hours from Tlocor Pier.

Source: The tourism awareness community in *WBT*

The visitors can visit Porong River and the estuary that is formed by silt sediment. The island is developed into mangrove ecosystem area. Visitors can take advantages of this place by enjoying the sunset and sunrise, *Wanamina* fishpond, various types of seabirds, and beach plants, such as cypress, long-tailed monkeys and lizards. The destination has the facilities provided by *BPSPL-KKP* including: pedestrian track, floating pier, toilet, gazebo, meeting hall, water treatment installation, tower, mangrove track, management office, generator room. The Mud Island is one of the few places to be discovered, can only accessed by sea. *WBT* destination utilize the Mud Island *Lusi*, which is managed by *Pokdarwis*, tourism activities using boats/boats sail the Porong River around several islands and visit the Mud Island *Lusi*. The initial funding for *WBT* management was supported by *BUMDes*, while the revenue came from the cost of boat tickets/tourist boats. *BPSPL-KKP* Denpasar developed the Mud Island *Lusi* into a marine ecotourism destination, by developing mangrove conservation to increase the benefits of sustainable mud island.

Collaboration in the development of marine tourism towards marine ecotourism

Common purpose

The inauguration of Mud Island was conducted by the Minister of KKP on July 17th, 2019. It had received a lot of attention from KKP as the owner of the island and *BPSPL-KKP*. It has also empowered local community to facilitate the visitors of Mud Island, and the local government through the Youth, Sports and Tourism Service (*DISPORAPAR*) in Sidoarjo who fostered the involvement in Tlocor community. The local people are the member of tourism awareness community in Tlocor marine destination that was also inaugurated by the Minister of KKP in 2019. The government of Kedungpandan through *BUMDes* develops marine tourism business unit in order to

provide benefit for the community. The participation of local community is part of the involvement as the administrator and member of tourism awareness community in *WBT*.

At the beginning of the establishment, tourism awareness community in Tlocor marine destination had 63 members. Because of limited development in this tourism, the number of active members were approximately 50 people and some of them have several activities. The Mud Island has great potential which still requires the support of other parties in order to produce added value, especially for the local community. Based on the tourism potential of Mud Island, *BPSPL-KKP* empowers the local community to take advantage of the island by visiting the destination. The local community established the association known as *Pokdarwis* or tourism awareness community in Tlocor. The management and member are the local people of Tlocor rural area in Kedungpandan. Furthermore, *BUMDes* in Kedungpandan develops marine tourism business unit in order to support *Pokdarwis* activities by providing business capital loans for the provision of facilities and infrastructure in Tlocor pier: directions, stage, permanent pier, monument, boat counter, boat and water bus (6 unit), culinary terrain (8 unit), parking area which is managed by *Pokdarwis*.

Mutuality occurs

There are some reasons in the development of the Mud Island to be sustainable marine ecotourism. First, the destination is quite unique and interesting existences, which is located on a small island resulting from silt sediment that had streamed into Porong River for decades. Second, the location is in the island without inhabitants and there is a mangrove forest, so this area is prospective to be developed into marine ecotourism (table 2). The local community has supported the benefits since 2016 through the youth association which

was inaugurated in 2019 as *Pokdarwis* in Tlocor tourism destination (Table 3). *Pokdarwis* provides supporting facilities for tourism activities to the island. This activity is implemented because the organization collaborates with *BUMDes* which has marine tourism business unit including: boat, tours to *Dem* Island, and tours to *Lusi* Island. In addition, Coastal and Marine Resources Management Center (BPSPL-KKP) makes

an informal agreement as the form of empowerment for the local community through marine tourism activities which are managed by (BPSPL-KKP). The island is a leading marine tourism because it was named on the 2nd most popular tourism destination in Indonesia in 2019 and Indonesian Charm Award. Furthermore, the benefits have significant values for many parties (Table 3).

Table 3. Collaborative contributions benefits between *BUMDes*, *Pokdarwis* and BPSPL-KKP

Year	Activity and Benefits	Mitra Abadi BUMDes	Pokdarwis WBT	BPSPL-KKP Denpasar
2016-2018	The community and the researchers were facilitated by PT. Lapindo Brantas for visiting or doing research in <i>Lusi</i> Island.	-	The youth association in Tlocor rural area also helped to manage the island.	Marine tourism development process
2019	The community, visitors and researchers visited <i>Lusi</i> Island	The development of marine tourism business unit; providing 100 million as capital loan for <i>Pokdarwis</i> .	Asset procurement: six boats and water buses; A permanent pier at <i>WBT</i>	The inauguration of <i>Lusi</i> Island as marine tourism destination by KKP; Tourism facilities on the island
2019-2020	Job opportunities are available	Potential job opportunities and development of marine tourism business unit	There are eight types of jobs available in the tourism destination, including the administrator and continuity of <i>Pokdarwis</i>	<i>Lusi</i> Island is the responsibility of BPSPL-KKP
2019-2020	Local labors are employed and have regular income	The island caretakers share the profit with <i>Pokdarwis</i>	Ninety people, boat tickets and water bus; shop for lease; street vendors retribution and income of the surrounding community	Mangrove conservation and the establishment in East Java Province working area unit in Sidoarjo Regency are planned to be developed into marine ecotourism

Source: Processed from the author's data, 2020

The collaboration between tourism awareness *Pokdarwis*, *BUMDes* and BPSPL-KKP has increased the benefits of the Mud Island *Lusi*. Although the collaboration has been relatively new for about one year, it has developed recreational and economic activities for the local community (table 3), and facilitated

visitors and researchers from various institutions. Economic activities and new employment opportunities motivate the community to support the development of *WBT* to be a leading ecotourism destination. The collaboration is carried out according to the perspective of collaboration principles that can be seen in Table 4.

Table 4. Dimension in collaboration of *BUMDes*, *Pokdarwis* and BPSPL-KKP Denpasar

Aspect	Form	<i>BUMDes</i> Mitra Abadi	<i>Pokdarwis</i> WBT	BPSPL-KKP
Common purpose	Activity sector	Marine tourism business	Tourism awareness community	Utilization of marine environment, coastal areas and small islands
	Contribution of resources	Providing business capital loans for <i>Pokdarwis</i>	The administrator of marine tourism areas and the facilitation.	The provision of tourism facilities and mangrove conservation; tours on the island are free.

Mutuality	Collaborative benefits	The increase in marine tourism business unit; income from business capital loans; revenue sharing from tourism activities with <i>Pokdarwis</i>	<i>Pokdarwis</i> sustainability; The fund loans to build the boat; providing job opportunities in marine ecotourism.	Social functions and environmental education for mangrove conservation can be carried out for the tourism and local communities
Enabling environment	Leadership collaboration among the stakeholders	The chief of village as supervisor	The chief of village as the supervisor; <i>Pokdarwis</i> is led by local community leaders; Administrators and members are local communities	Authorized institution for the management of marine environment and small islands
Trust	Agreements and commitments	Supporting the development of <i>Pokdarwis</i> in Tlocor tourism	The sustainability of marine tourism by <i>Pokdarwis</i> according to informal agreements	Providing opportunities for <i>Pokdarwis</i> in facilitating the visitors and researchers to visit the island.
Specific personal characteristics	Compromise	The chief of village as supervisor of <i>BUMDes</i>	The chief of village as the supervisor of <i>Pokdarwis</i> .	Informal agreement between BPSPL-KKP and <i>Pokdarwis</i> : utilization of the island for tourism and research destinations.

Source: From documentation and interview with the administrator of *Pokdarwis*, 2020

Based on table 4, the collaboration between *BUMDes*, *Pokdarwis* and BPSPL-KKP has been conducted well, but the success of the collaboration has not been optimal. The findings indicate that common purpose of stakeholder collaboration have been successfully realized, but the quality of collaboration is not optimal because the form of collaboration is informal. In fact, BPSPL-KKP has not made a formal cooperation agreement with *Pokdarwis* and *BUMDes*. Thus, tourism activities to *Lusi* Island are facilitated by *Pokdarwis* as follows:

"We want to develop the potential of Lusi Island, but Pokdarwis cannot be directly involved in the development and management, it only responsible for the visitors and conservation places to visit. Moreover, there is no agreement letter or Memorandum of Understanding (MoU) with BPSPL-KKP, so the activities only facilitate the visitors to visit the island".

The management of *Pokdarwis* by partnering parties is still limited to carrying out their respective activities, such as: *BUMDes* as a provider of tourism business capital, while BPSPL-KKP Denpasar as the

manager of the island, empowers local communities (*Pokdarwis*) to use the island as a tourist spot, but have not been involved in social management and supervision. The reason is marine tourism activities have only been developed for about one year.

Enabling environment and Trust

The Mud Island is managed directly by BPSPL-KKP and enjoying this tourism destination is free of charge. In term of the management, the local community is involved to facilitate the visitors to go to the island by using boat or water bus managed by tourism awareness community in Tlocor. The role of the community is important in supporting and managing the island to be developed towards sustainable marine ecotourism. The role of local community in tourism awareness community in Tlocor was formed in 2019. Whereas, KKP was inaugurated in the same year with the purpose as social control. The economic benefits through the involvement in tourism activities and the funding from *BUMDes* in Kedungpandan are the empowerment of local community in table 5 and 6.

Table 5. The management of *Pokdarwis* in Tlocor, Kedungpandan

Position	Institution	Explanation
The supervisor	The supervisor and Secretary	Kedungpandan

Advisor	Head of district, Military commander, and police chief	Jabon sub-district
Chairman and deputy	<i>Pokdarwis</i>	Tlocor
Secretary and vice secretary	<i>Pokdarwis</i>	Tlocor
Treasurer	<i>Pokdarwis</i>	Tlocor
Head of public relation		
Public relation representative		
Head of transportation		
Head of development		
Head of cross-society section		
Head of general department		
Head of sanitation department		

Source: Public relation of *Pokdarwis WBT*, 2020

Table 6 The management of *Mitra Abadi BUMDes* in Kedungpandan, Jabon

Name	Position
Imam Gozali, SE	Supervisor
Kusen	Supervisor
Kasiono	Chairman
Ike Paulina R.	Secretary
Suci Hartatik	Treasurer

Source: Secretary of village-owned enterprises, 2020

Based on table 5 and table 6, it shows that there is synergy between *Pokdarwis* and *BUMDes*. The success of the two organizations is due to the dual role of the village head as a supervisor at *BUMDes* and protector at *Pokdarwis*, so that it has an impact on the success of *BUMDes* business activities.

Trust and Specific Personal Characteristic

The development of marine tourism destinations towards marine ecotourism is an effort made by BPSPL-KKP. The current condition, *Pokdarwis* makes the potential of

the Mud Island *Lusi* as a work opportunity for marine tourism destinations. The formation and sustainability of the *WBT Pokdarwis* get the support of commitment from community leaders involved as administrators and village heads as supervisors (table 5 and table 6), so that they are able to guarantee marine tourism towards sustainable marine ecotourism. The development of marine tourism towards marine ecotourism requires synergy between stakeholders is needed in order to realize *Lusi* Island becomes ecotourism destination by preparing as shown in Table 7.

Table 7. The innovation of development collaboration in Tlocor tourism towards marine ecotourism.

No.	Ecotourism Principle requirements	<i>Pokdarwis WBT</i>	<i>Lusi</i> Ecotourism Island	Explanation
1	A natural basis	v	v	<i>Lusi</i> Island develops mangrove conservation and wanamina fishponds
2	Conservation	v	v	<i>Mangrove Plants</i>
3	Sustainability	-	v	There is no MoU between <i>Pokdarwis</i> , <i>BUMDes</i> and BPSPL-KKP in the conservation management of <i>Lusi</i> Island
4	Ethical Management	-	v	There is no regulation (educational institutionalization & environmental conservation)
5	Local Control	v	v	Local community involvement
6	Benefits and Scale	-	v	No regulation
7	Environmental Education	-	v	Alternative environmental education tourism
8	Local area/ Local Government	v	v	To facilitate multi-stakeholder partnerships from local government

Source: The perspective of Kontogeorgopoulos & Chulikavit (2010); Nugroho & Dahuri (2012)

The findings show that stakeholders involved in the collaboration process, consist of three organizations: BPSPL-KKP; *Pokdarwis*, *BUMDes*. The collaboration aims to achieve the common purpose. The study indicates that stakeholders from the local community, such as *Pokdarwis*. This organization is able to build synergies with *BUMDes* and BPSPL-KKP, as well as to achieve common goals. The findings are different from prior study by (Dickson et al., 2017), that the success of collaboration is precisely due to conflict and competition.

The research findings also indicate that quality of collaboration is not optimal. However, it is sustainable because of enabling environmental factors (Roberts et al., 2016), namely the leadership of stakeholder collaboration in which the chief of village becomes the supervisor of *BUMDes* and *Pokdarwis*. Moreover, both parties can synergize as the existence of the chief of the village in the organizational structure, even though the collaboration is still informal. In addition, from the aspect of collaboration leadership, it is supported by the local community leaders who serve as the chairman of *Pokdarwis*. The leaders are able to maintain the sustainability of collaboration, as in the first phase of collaboration from the research findings in (Graci, 2013). It is stated that in order to achieve sustainable tourism development, the first phase of collaboration is built through leadership by creating trust (*Gili Ecotrust*).

An interesting finding indicates that local community (*Pokdarwis*) has not been involved in the management of *Lusi* Island. They responsible for facilitating the visitors and researchers. In the development of *Lusi* Island towards sustainable marine ecotourism, the participation of *Pokdarwis* needs to be expanded from the aspects of planning to the administrator aspect in order to ensure the success of sustainable marine ecotourism (Garrod, 2003). The local communities should involve in the decision-making process in planning and ecotourism management, for moral reasons, use of local resources and long-term economic benefits.

CONCLUSIONS AND RECOMMENDATION

By using five principles in the collaboration process, the study found that *Tlocor* Marine Tourism (*WBT*) is managed through the collaboration between *Mitra Abadi* Village Owned Enterprises (*BumDes*)

and tourism awareness community/*Pokdarwis* as well as BPSPL-KKP Denpasar. The collaboration has succeeded in implementing the common purpose, but the quality aspect of the collaboration has not been optimal. This study indicates prohibitive factors in term of the quality of collaboration in which it is still informal. For this reason, the form of collaboration needs to be institutionalized to ensure the implementation of sustainable marine ecotourism.

Important lessons from collaboration between *Mitra Abadi BUMDes* and *Pokdarwis WBT* continues to this day, because it is supported by enabling environmental factors, namely the presence of the Village Head in the organizational structure of *BUMDes* and *Pokdarwis*, as well as the role of local community leaders as *Pokdarwis* leaders, being the dominant factor in the *WBT* sustainability towards sustainable *Lusi* Marine Ecotourism.

We suggest that the *WBT* is possible as sustainable marine ecotourism need to consider several aspects: sustainability which means that local communities are involved in the planning and managing, so that the social control function is implemented; ethical management which means that the purpose of regulation is to regulate the role of marine ecotourism stakeholders; benefits and scale are necessary to determine the form and scope of marine ecotourism environment utilization; collaboration is needed in order to prioritize environmental education and conservation, especially for local community in order to maintain the sustainability of marine tourism towards marine ecotourism.

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