

## INSTITUTIONAL CAPACITY IN THE MANGROVE ECOTOURISM DEVELOPMENT OF LEMBAR AREA, WEST LOMBOK, INDONESIA

### KAPASITAS KELEMBAGAAN DALAM PENGEMBANGAN EKOWISATA MANGROVE KAWASAN LEMBAR, LOMBOK BARAT, INDONESIA

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#### ABSTRACT

Mangrove ecotourism development with an institutional approach aims to carry out management by uniting relevant institutions especially the community, government, and other stakeholders. Institutional capacity plays an important role in the development of potential-based areas. Therefore, this study aims to determine institutional capacity both organizational and individual capacity in the mangrove ecotourism development in the Lembar village of Lombok Barat Regency. The research method was carried out through a qualitative research approach with the determination of informants based on purposive sampling techniques. The results showed that the capacity of mangrove ecosystem management for the mangrove ecotourism development in the Lembar village area of West Lombok Regency at the level of community, individual resource managers and institutional was categorized as low. The dominant institutional capacity in the mangrove ecotourism development were the Marine and Fisheries Department of West Lombok Regency. This shows that good synergy has not yet been formed between institutions and communities so that the mangrove ecotourism development is unsustainable and temporal. Therefore, a joint commitment is needed in increasing the strengthening of institutional capacity sustainably so that there is good synergy between the government, the government and the private sector, the government and the community, and between other stakeholders.

Keywords: capacity, community, institutional, individual.

#### ABSTRAK

Pengembangan ekowisata mangrove dengan pendekatan kelembagaan bertujuan untuk melaksanakan pengelolaan dengan menyatukan lembaga-lembaga terkait terutama masyarakat dan pemerintah serta pemangku kepentingan lainnya dalam setiap proses pengelolaan. Kapasitas kelembagaan memegang peranan yang penting dalam pengembangan kawasan berbasis potensi. Oleh karena itu, penelitian ini bertujuan untuk menentukan kapasitas kelembagaan baik kapasitas organisasi maupun kapasitas individu dalam pengembangan ekowisata mangrove di Desa Lembar, Lombok Barat. Metode penelitian dilakukan melalui pendekatan penelitian kualitatif dengan teknik penentuan informan berdasarkan teknik purposive sampling. Hasil penelitian menunjukkan bahwa kapasitas pengelolaan ekosistem mangrove untuk pengembangan ekowisata mangrove di kawasan Desa Lembar Kabupaten Lombok Barat pada level masyarakat, level individu pengelola sumberdaya dan pada level kelembagaan dikategorikan rendah, kapasitas kelembagaan yang dominan dan berperan dalam pengembangan kawasan ekowisata mangrove adalah Dinas Kelautan dan Perikanan Kabupaten Lombok Barat. Hal ini menunjukkan bahwa belum terbentuk sinergisitas yang baik antar lembaga dan masyarakat sehingga pengembangan kawasan ekowisata mangrove tidak berkelanjutan dan bersifat temporal. Oleh karena itu, diperlukan komitmen bersama dalam meningkatkan penguatan kapasitas kelembagaan secara berkelanjutan sehingga terjalin sinergisitas yang baik antar pemerintah, pemerintah dan pihak swasta, pemerintah dan masyarakat serta antar stakeholder lainnya.

Kata kunci: kapasitas, masyarakat, kelembagaan, individual.

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## INTRODUCTION

The mangrove tourism development is directed at tourism activities that emphasize tourism activities that are responsible and have insight into the preservation of resources and the environment or better known as mangrove ecotourism. The concept of ecotourism is a form of travel activity in the natural environment that maintains the value of nature conservation, aspects of social empowerment, culture, education, and local economic empowerment (Sunarti & Srihartini, 2015). Sitomorang & Mirzanti (2012) added that ecotourism not only offers unspoiled and beautiful panoramas, but also provides a learning process to protect and care for nature, and to improve the welfare of local communities around or within the ecotourism destination. This concept involves all stakeholders who then set priorities while remaining guided by the main goal of achieving sustainable development with an environmental perspective.

The concept of utilizing mangrove ecosystems as an ecotourism object is in line with the shift in tourist interest from old tourism (classic standard) which only conducts tourism without education and conservation to new tourism (alternative tourism) which is to conduct tourism in which there are education and conservation (Sitohang *et al.*, 2014). Thus, ecotourism management in an integrated and sustainable manner with various destinations around it can improve tourism paths optimally (Razak & Suprihardjo, 2013) and simultaneously will have a positive impact on regional economic growth.

Ecotourism development is one of the development alternatives that can help overcome problems to produce tangible value and positive for environmental conservation activities and local culture to improve the welfare of the local community (Tuwo, 2011). Ecotourism activities are currently becoming an interesting trend undertaken by tourists to enjoy different forms of tourism from other forms of tourism. In this context tourism that is carried out has an inseparable part with conservation efforts, economic empowerment and encourages higher respect for differences in community culture.

The mangrove ecotourism development based on village potential is strongly influenced by institutional aspects, objects and tourist attractions, and tourism infrastructure (Sastrayuda, 2010). This shows that these three aspects have an important role in improving the service and quality of tourism products. According to Inskip (1991) that in terms of tourism development, institutions are an important component in supporting the success of tourism. Institutions play a role in regulating the resources and distribution of benefits to increase tourism potential (Triambodo & Damanik, 2015). The urgency of the existence of institutions in the tourism development is that institutions can play a role as a vehicle and an activator in facilitating and developing community participation in the tourism sector (Triambodo & Damanik, 2015). Institutions can develop well if there are institutional infrastructure, institutional arrangements, and institutional mechanisms. Institutions can be in the form of organizations as players of the game and rules of the game which regulates the continuity of the organization and cooperation between its members to achieve common goals (Taryono, 2009).

The mangrove ecosystem in the Lembar area has a high ecological role and is used as a pilot area for mangrove conservation and rehabilitation activities in the southern West Lombok Regency (Sukuryadi *et al.*, (2020). In 2015 the area was developed into a mangrove ecotourism area through a central government program through the collaboration of the Ministry of Marines and Fisheries Affairs with the Community Coastal Development - International Fund for Agricultural Development (CCDP-IFAD) fiscal year 2013 to 2016 as an appropriate form of management for ensuring the sustainability of conservation and rehabilitation while simultaneously boosting the economy of local communities. According to Tuwo (2011) that the development and utilization of mangrove ecosystems for ecotourism is one alternative development that can help overcome the problem of utilization that is destructive and threatens the preservation of resources. The management of the mangrove ecotourism area in the Lembar area was formalized in 2015 and its management model has been handed over from the central government to the regional government to the village government through the natural resource management group.

Based on data from the Marines and Fisheries Department of West Lombok regency, there are 10 community groups formed in 2013 through the CCDP-IFAD program in the Lembar village area. The community groups are; 1) Mangrove Lestari engaged in resource management, 2) Sinar Pagi is engaged in fishing, 3) Bajang Bahari is engaged in aquaculture ponds, 4) Pade Angen is engaged in fish processing, 5) Beriuk Angkat Kodong engaged in fishing, 6) Putri Pesisir Mandiri is engaged in fish processing, 7) Pantai Muara Biru is engaged in marketing, 8) Cahaya Teluk Cemare is engaged in marketing, 9) Mitra Usaha is engaged in processing, and 10) Bangun Bersama is engaged in infrastructure. The purpose of forming these community groups is one strategy to optimize the role and involvement of the community in managing village-based resource potential. The establishment of community-based institutions as a means to provide the community reinforcement in the management and development of mangrove ecosystem areas so that it can have an impact on environmental sustainability and improve the economy of local communities.

The mangrove ecotourism development with an institutional approach aims to carry out management by bringing together relevant institutions especially the community, government, and the other stakeholders in each management process starting from planning, implementation, utilization, monitoring, and evaluation. The institutional aspect is one of the important components in supporting the success of tourism development (Inskeep, 1991). In the collaborative institutional aspect, it is necessary to combine the capacity of the government and the community both in the form of organizations and individuals as the main actors in the development of ecotourism. Therefore, this study aims to determine institutional capacity both organizational and individual capacity in the mangrove ecotourism development in the Lembar village of Lombok Barat regency.

## RESEARCH METHODS

### Site Map

The mangrove ecosystem in the Lembar village is one of the areas in the Lembar Bay region which is administratively located in the Lembar sub-district of the West Lombok regency of West Nusa Tenggara Province (Figure 1).

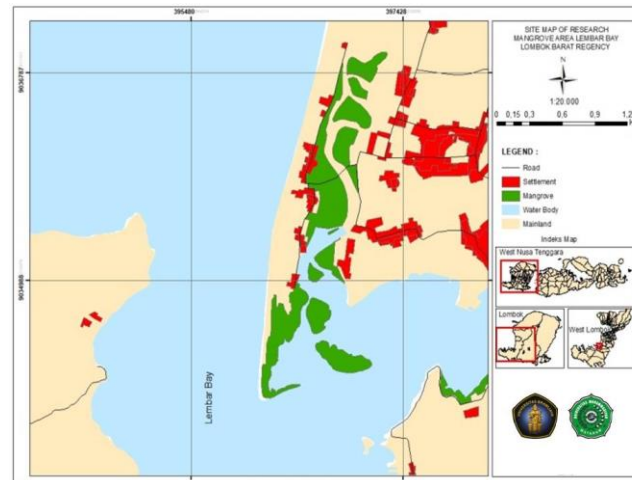


Figure 1. Site Map of Research (Sukuryadi *et al.*, 2020)

### Determination of Respondent Techniques

Respondents are people who are considered to know well about the problem under study and are willing to provide information. In qualitative research, the position of the respondents is very important, this is because the respondent is the foundation of data collection for researchers in revealing research problems (Arikunto, 2014). The technique used in determining respondents is a non-probability sampling technique, namely purposive sampling where the number of members of the population is deliberately chosen based on the objectives of a study with consideration of having a direct connection and involvement with the research area (Sugiyono, 2014). The number of respondents in this study was 100 respondents consisting of 56 people from community elements who are directly adjacent to the mangrove ecosystem and 2 people from elements of the village government, 18 people from elements of the relevant government agencies, 20 people from elements of the resource management group and 4 people from elements of the non-government organization (NGOs).

### Data collection technique

Institutional data consisting of organization and individual capacity levels were collected directly at the study site through structured interviews with respondents (guidelines with a questionnaire). In this study, a questionnaire was made to obtain data on institutional capacity aspects which included organization and individual community capacity levels in the management of mangrove ecosystems for ecotourism development. So, the type of questionnaire used in this study is a closed questionnaire type, which contains questions that are accompanied by several alternative answers. Respondents in answering are bound to the answers provided (Margono, 2010). This questionnaire uses a type of Likert Scale (summated rating scale) used to measure the attitudes

and perceptions of a person or group of people about social phenomena (Sugiyono, 2014). Another opinion also states that a Likert scale is some positive and negative questions about an attitude. The choice of answer items is always, sometimes, and not (Margono, 2010).

### Data analysis technique

The institutional capacity analysis conducted in this study uses descriptive qualitative analysis methods. The data used as the basis for the analysis were obtained by conducting direct interviews with the respondents using a questionnaire. The information that will be explored is how the institutional capacities included organization and individual community capacity levels in the management of mangrove ecosystems for ecotourism development as in table 1, in this case, it's base data in supporting the management of mangrove ecosystems for ecotourism development. Analysis of institutional capacities included organization and individual community capacity levels in the low, moderate, and high categories using a Likert scale approach (Margono, 2010; Sugiyono, 2014).

**Table 1. Indicators of Mangrove Ecosystem Management Capacity for Ecotourism Development**

No	Capacity Level	Indicators
1	Individual manager capacity	<ol style="list-style-type: none"> <li>1. Individual capacity to pioneer the development of ecotourism potential</li> <li>2. Individual capacity regarding knowledge and understanding of the concept of ecotourism</li> <li>3. Individual capacity in managing tourist attractions</li> <li>4. Individual capacity in processing souvenirs</li> </ol>
2	Community Level	<ol style="list-style-type: none"> <li>1. The level of community perception with the following parameters: the ability to identify the potentials of mangrove ecosystems, able to explain the understanding of concepts and principles of ecotourism, be able to understand and apply the concept of ecotourism-based management of mangrove ecosystems and understand the urgency of developing ecotourism as an alternative that can maintain sustainability nature and economy of society.</li> <li>2. The level of community participation with the following parameters: involvement in various forms of activities or programs to develop mangrove ecotourism, involvement in integrating local natural and cultural potentials, involvement in managing one of the tourist attractions and souvenirs in the mangrove ecosystem, and also committed together with other communities in managing mangrove ecosystems in planning, implementing, evaluating and monitoring.</li> </ol>
3	Institutional Capacity	<ol style="list-style-type: none"> <li>1. Leadership and coordination</li> <li>2. External partnership</li> <li>3. Capacity to develop tourist attractions</li> <li>4. Capacity to promote ecotourism</li> </ol>

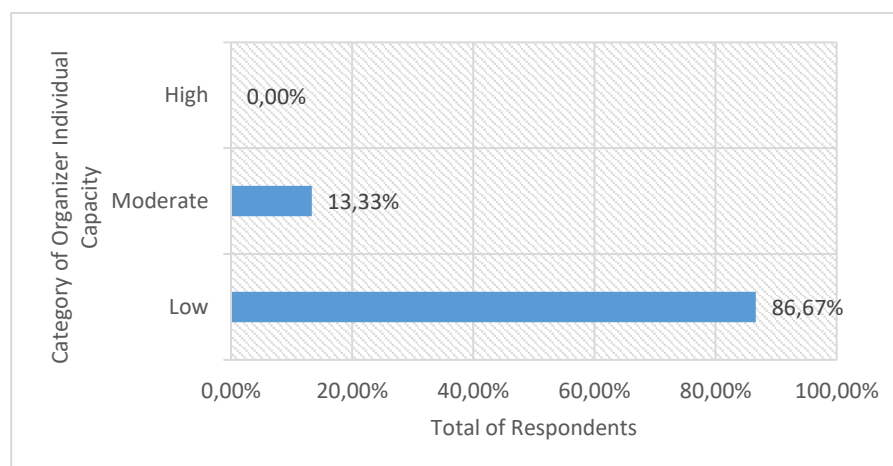
## RESULT AND DISCUSSION

### Individual Level Capacity of Resource Managers

The capacity of individual managers is the ability of individuals to manage mangrove ecotourism areas. Based on the results of the study showed that the capacity of individuals in the group of natural resource managers is still low so that it has not been able to do sustainable

management. Therefore, due to the capacity of the resource management group that has not been supported, the Marine and Fisheries Department has handed over its management process to a community group outside the resource management group called the Pemuda Mandiri Baros Group. The management process carried out by the Pemuda Mandiri Baros Group also has not shown indicators of success. This is due to the absence of regulations in the form of Village Regulations that can strengthen matters related to the area management process, the Pemuda Mandiri Baros Group is still limited in scope in managing the area and is still constrained in regulating everything related to the operational standards of the area management process mangrove ecotourism. The existence of regulations can reinforce community groups in regulating the process of area management and can guarantee these groups avoid various forms of extortion that can harm the community groups themselves.

In general, the level of individual capacity of natural resource managers in the development of mangrove ecotourism is still relatively low based on the indicators used as in Figure 2. Based on the figure shows that around 86.67% of the total respondents have a category of individual resource manager capacity that is categorized as low in management mangrove ecosystem areas, 13.33% of the total respondents have a category of individual manager capacity that is moderate, and overall of the total respondents do not have a high capacity category in the management of mangrove ecosystem areas (0.00% of the total respondents). Based on interviews with the head of the natural resource management group that members of the resource management group do not yet have a joint commitment to the development of mangrove ecotourism areas. The capacity of human resources in the natural resource management group is still lacking so that it has not been able to carry out sustainable management. Therefore, the involvement of management elements with various parties in all forms of activities that can increase capacity is a guarantee of the maturity of individual and organizational capacity in the development of mangrove ecotourism.



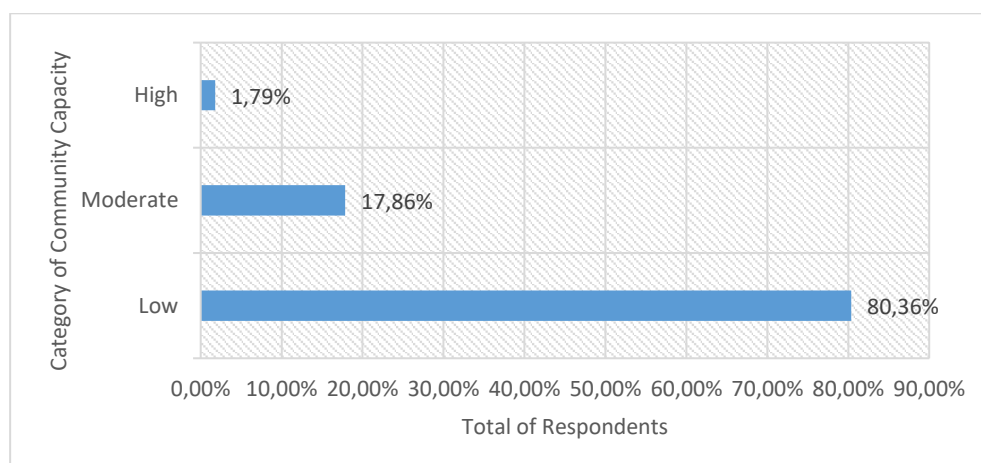
**Figure 2. Category of Organizer Individual Capacity**

### Community-level Capacity

Community development and assistance through empowerment programs are very much needed as a medium to awaken the spirit of awareness and mindset towards the surrounding

environment. The community is the driving force and key to the success of an ecotourism development program (Puspitasari *et al.*, 2015), community involvement in planning, implementing, evaluating and monitoring plays an important role that can influence the successful development of a mangrove ecosystem area for sustainable ecotourism activities (Hanafiah *et al.*, 2013; Amin & Yahaya, 2015). Village-based information gathering is a form of mangrove ecosystem management that prioritizes community involvement. The program's socialization activities become a major step in shaping community perceptions and mindsets, this is done to shape the mentality of the community that is aware of participating and thinking about the sustainability of the ecosystem as a place for sustaining their livelihoods (Jalani, 2012).

Based on the results of the study showed that the capacity of the community in the development of mangrove ecotourism in the Lembar area of West Lombok as a whole has not shown a high category when viewed from programs that have been implemented. This can be seen from the government and private programs are still temporal and do not provide added value to the concern and public awareness of the environment. One of the government programs through the collaboration of the Ministry of Marines and Fisheries Affairs with the Coastal Community Development Project - International Fund for Agricultural Development (CCDP-IFAD) for the 2013-2016 fiscal year and private programs through Indonesia Marine and Climate Support - United States Agency for International Development (IMACS- USAID) in 2013 has not shown significant changes to the perception and awareness of the community in supporting the sustainability of activities. Assistance and coaching activities through the empowerment program have not demonstrated the independence of coastal communities in continuing the management program that has been initiated with the government and the private sector, each activity is only able to run at the beginning of the program at the planning and implementation stages, while the evaluation, monitoring and sustainability stages of the program cannot be managed independently by the community. This is because the ability of the local community has not been independent in the management of mangrove ecosystems for the development of ecotourism. Thus, the majority of the community of Lembar village of Lombok Barat has a low capacity category in the development of mangrove ecotourism areas as shown in Figure 3.



**Figure 3. Category of Community Capacity**

Based on Figure 3 shows that community capacity in managing mangrove ecosystem areas for ecotourism development is categorized as low. Based on the figure shows that 80.36% of total respondents have low capacity, 17.86% of total respondents have a moderate capacity, and 1.79% of total respondents have a high community capacity category in the management of mangrove ecosystem areas. Thus, most communities have a low capacity category in the development of mangrove ecotourism areas, this is caused by the perception and involvement of the community is still low, the synergy between the community and the government is not going well, community involvement in management is still limited so it does not have an impact on increasing local economy.

### **Institutional Level Capacity**

Institutional capacity is the ability of institutions to manage mangrove ecosystems for ecotourism development. Indicators of institutional capacity can be seen in leadership and coordination, external partnerships, capacity to develop tourist attractions, and capacity to promote ecotourism. The community groups that are still active in the management of mangrove ecosystems for ecotourism development consist of the Pemuda Mandiri Baros group and the Mangrove Lestari group, while the tourism awareness group is currently inactive so it does not play a role in the development of mangrove ecotourism areas. Pemuda Mandiri Baros organization is a village youth organization outside the resource management group that has aspirations to conserve mangrove forests, while the Mangrove Lestari group is one of the community groups formed to manage natural resources. The institutional capacity in managing mangrove ecosystems for ecotourism development is as follows:

#### **1. Leadership and coordination in mangrove ecosystem management**

Based on the results of the study showed that the management activities carried out by the government and the private sector are carried out based on the potential of the village so that every activity to be carried out must be preceded by the phases of the village-based resource inventory, this activity is a socialization activity and gathering of potentials and problems based on aspirations and input from the local community. Exploring village-based potentials and problems is the first step taken to start a community-based management program. Decision making in the management program with a democratic system has a weakness that is if a leader is not able to make the right decisions and disagreements occur among members so when decision-making has not found common ground and is still arguing with each other which results in a lack of support from other different communities opinion so that management activities carried out are only temporal and not sustainable. Besides, democratic decision-making systems have weaknesses that can interfere with the management and development program because there is an element of dependence on the leaders' decisions.

#### **2. External Partnerships.**

Understanding and awareness of the local community supported by the collaboration of many parties can support the management of mangrove ecosystems for the development of mangrove ecotourism in the Lembar village of West Lombok. Based on the results of the study showed that



the formation of the Pemuda Mandiri Baros group as a group outside the resource manager and the Mangrove Lestari group as a resource management group as a form of synergic cooperation between the community and the village government which is a village youth organization that has aspirations to preserve the mangrove forest area. The two community organizations have successfully cooperated with various government agencies involved in the West Lombok Regency government such as the Forestry Department, the marines and Fisheries department, universities, Indonesian Red Cross, Elementary Schools, and various private companies. The form of conservation carried out by the Lembar community through the two groups in December 2014 was to carry out planting activities covering an area of approximately 5 hectares, with 12,000 seedlings, in 2015 planting approximately 23 hectares, with 60,000 seedlings and in 2016 the planting of an area of 10 Ha, with 20,000 seeds. Besides, in 2018 the community together with the Alumni Corps of the Fisheries Business Academy - Fisheries High School of West Nusa Tenggara Regional Corridor in collaboration with the Indonesia Fishermen Association of West Nusa Tenggara participated in mangrove planting activities in the north coast region Lembar bay of West Lombok regency through the Social Service for Mangrove Planting together with several related institutions and the community, including the Marine and Fisheries Agency of West Nusa Tenggara, the Fish Quarantine and Quality Control Agency, the Natural Resources Conservation Center of West Nusa Tenggara, Regional Police Headquarters, Indonesian Red Cross of West Lombok, Wildlife Conservation Society, School Students in Lembar, University of New England - Australia students, and Representatives of the Denpasar Coastal and Marine Resources Management Center. This shows that the cooperation of youth organizations with other institutions in terms of conservation and rehabilitation shows a high level of participation. However, the form of community collaboration with outside parties in the management of mangrove ecosystems is not only on planting and maintenance but also managing for the development of mangrove ecotourism. The development of ecotourism is now one alternative in promoting unique and natural ecosystem services that are still maintained its authenticity. According to Tuwo (2011) that the development and use of mangrove ecosystems for ecotourism is one of the development alternatives that can help overcome the problem of utilization which is destructive and threatens the preservation of resources. The involvement of youth organizations with outsiders at the planning and implementation stages of mangrove ecotourism development is categorized as high, this can be seen from the forms of participation at the time of socialization activities and community-based resource inventory and program implementation stages, but at the evaluation and monitoring stages are categorized as low, this can be seen from the inadequate process of developing sustainable eco-tourism areas in the mangrove ecosystem area of Lembar village.

### 3. Capacity to develop tourist attractions

Based on the results of the study showed that several facilities were built as a means to develop the mangrove ecotourism attractions such as bridge track, gazebo, and floating houses. The

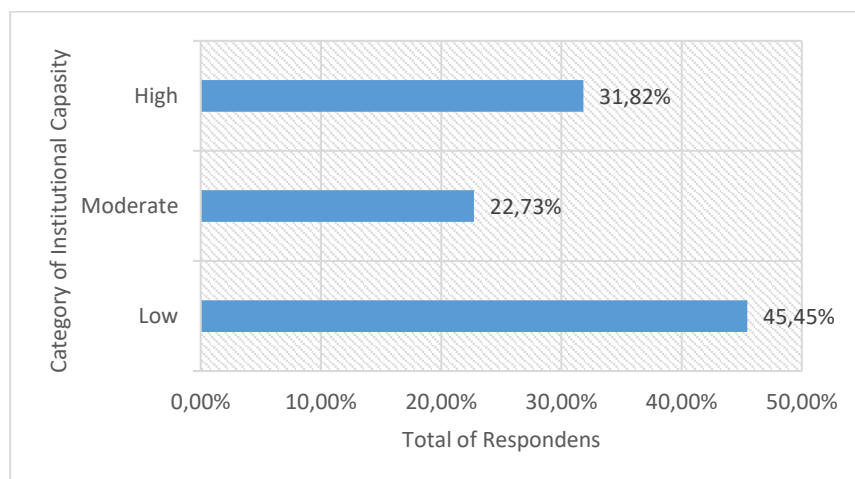
institutional capacity of the government, private sector, and other related parties in developing tourism attractions are still categorized as low. This can be seen in some tourist attractions that cannot be carried out by the community due to the limited condition of the area used, which is not yet fully supported by infrastructure in each tourist attraction, especially in mangrove tracking areas that do not meet conformity standards, besides that it is also caused by the still weak capacity of the community so that its management is temporal and unsustainable. Institutional tourism attractions development by the government and community groups is needed to increase the attractiveness of tourists to various tourist attractions so as not to cause boredom. Management of mangrove ecotourism by area managers must realize that ecotourism must show the diversity of tourist attractions that are supported by other additional facilities so that tourist attractions in the area provide educational value that can make tourists aware of the environment. Merging various tourist attractions in an area can be done by combining the potential of nature tourism with the potential of cultural tourism. The institutional capacity of the community in combining natural and cultural tourism attractions is still low.

#### 4. Capacity to Promote Mangrove Ecotourism.

Based on the results of the study showed that the development of mangrove ecotourism in the Lembar village area was not followed by the collaborative institutional role of the government, private sector and other parties in promoting tourist destinations that were developed so as not to have a significant impact on the sustainability of the ecotourism development program in the mangrove ecosystem area of the Lembar village of West Lombok. Besides that, there are some deficiencies in the development of mangrove ecotourism in the Lembar village are 1) unavailability of banners or billboards showing the direction to the mangrove ecotourism object, 2) unavailability of cleaning facilities in tourist areas such as garbage bins, 3) damage to roads leading to tourism and 4) not supported by promotional media from the government and other related parties to introduce mangrove ecotourism. Tourism promotion activities are needed to provide information to people outside the region about the development of mangrove ecotourism, this can be done through social media such as Instagram, Facebook, and blogs and other media by related agencies such as the Tourism Department of West Lombok Regency, besides, tourism promotion activities can be done by carrying mangrove ecotourism brochures when conducting comparative studies and at tourist festival activities.

Based on Figure 4 shows that in general the institutional capacity is categorized moderate as developing mangrove ecotourism based on the indicators used. Based on the figure shows that 45.45% of the total respondents had a low institutional capacity category in the management of mangrove ecosystem areas, 22.73% of the total respondents had a moderate institutional capacity category and 31.82% of the total respondents had a high category of institutional capacity. Based on respondent data, the high role and institutional capacity are dominated by the Marines and Fisheries Department of West Lombok regency. This shows that the dominant institutional capacity and role in developing the mangrove ecotourism area is the Marines and Fisheries Department of

West Lombok regency. The Marines and Fisheries Department of West Lombok regency is the main pioneer who developed the mangrove ecosystem into an ecotourism area through a central government collaboration program through the Ministry of Marines and Fisheries Affairs with Community Coastal Development - International Fund For Agricultural Development (CCDP-IFAD). The mangrove ecotourism development program for the Lembar village area is one of the programs that emphasize the concept of nature-based conservation tourism, in general, the implementation of the development of the West Lombok coastal area based on integrated coastal management, the Marines and Fisheries Department of West Lombok regency in carrying out the program both at the planning stage, implementation, evaluation, and monitoring still involve relevant parties such as the Department of Tourism, the Department of industry, the Regional Development Planning Agency, the Department of Environment and Forestry, NGOs and Universities. The involvement of related parties by the Marines and Fisheries Department is expected to provide roles and involvement following their duties and functions in the development of mangrove ecotourism areas. Based on the results of interviews with the head of the sector of coastal community empowerment of marine and fisheries department showed that the role and institutional capacity of related institutions have not shown a significant influence in supporting the development of collaborative mangrove ecotourism areas.



**Figure 4. Category of Institutional Capacity**

Institutional capacity in ecotourism development is urgently needed. It is hoped that the involvement of related institutions will be able to contribute institutionally to achieve successful management of sustainable areas to have an impact on the conservation and community economic aspects. According to Febryano *et al.*, (2014) that local institutions together with community participation are important indicators of sustainable development. Strengthening local institutions through collaboration between government agencies, local, national, and international NGOs, universities, research institutes, and other institutions can increase their capacity in promoting government policies in the sustainable management of mangroves ecosystem. Collaborative institutional strengthening can be carried out by increasing the commitment of villages and community to uphold the local wisdom value, and increasing the participation and capacity of

individual community in managing the mangrove ecosystem area for ecotourism development (Sukuryadi *et al.*, 2020). Kamoto *et al.*, (2013) argue that weak government policies are not able to consider the complexity of local institutions, and the limited involvement of communities and local institutions in the formulation and implementation of policies can create and strengthen the practice of resource utilization that is destructive and causes social conflict. However, Tole (2010) shows that weak state and community capacity can be strengthened through external support from non-government agencies, including NGOs, donor agencies, and charitable organizations, although most support has relatively limited coverage and only persists in a short period.

Based on the results of the overall descriptive analysis shows that the capacity of developing mangrove ecotourism areas at the community level, the level of individual resource managers, and at the institutional level is categorized low. The capacity of developing mangrove ecotourism areas in multi-levels, both in the community and government and private institutions has not shown good synergy so that the management of mangrove ecosystems for ecotourism development is not sustainable and is temporal. Based on the results of research Wildan *et al.*, (2016), it shows that in general tourism in the West Lombok Regency of the southern coastal region is not well developed due to unclear government programs, lack of synergy between the government and the local community, besides that there has not been a positive response from tourists regarding the atmosphere of tourism in the region is related to safety, the environment, and attitudes and behavior of some people towards tourists. Based on this, the economic impact of tourism on local communities is still limited because the community is not fully involved in tourism development. Therefore, according to Wildan *et al.*, (2016), it is important to consider the principles of sustainable development, such as social capital based development by involving local communities, besides, according to Hakim *et al.*, (2017) that community involvement in local wisdom can increase sustainability development of mangrove ecosystems. Bhuiyan *et al.*, (2011) asserted that the success of ecotourism development is highly dependent on the participation and involvement of local communities because it will directly provide social, economic, and cultural impacts on the local community. According to Weslund & Gawell (2012) that in various countries also showed that strong social capital can encourage development in different economic sectors because of strong trust and close relations in a wider network among economic actors.

The utilization of mangrove ecosystems for the ecotourism development in several coastal areas in Indonesia has been carried out, for example, the Clungup Mangrove Conservation (CMC) ecotourism object is located in Tambakrejo Village, Sumbermanjing Wetan District, Malang Regency, and Sustainable Development of BJBR (Bee Jay Bakau Resort) Ecotourism in Mayangan District, Probolinggo City, both of which are in East Java Province. Based on the results of research Husamah and Hudha (2018), shows that the principles of community-based Clungup Mangrove Conservation ecotourism have been attempted to be implemented in CMC management even though existing conditions show that many are not yet optimal. Some of the criteria for each principle have not been implemented (still low), are being planned, are being pursued, and are being optimized. The principle

of nature conservation has been considered or taken into consideration by CMC management, although in terms of visitor management it is still (not optimal). The principle of cultural conservation is still lacking because managers still have limited knowledge regarding this matter. The principle of community participation has not been maximized even though the establishment of CMC was entirely a community initiative. The aspect of building relationships with the community, showing an open attitude and providing accurate information, maximizing dialogue, and cooperation with all levels of the local community is still in the moderate category. Economic principles in the management of CMC are still not optimal because they have not provided the widest possible opportunity for the community to be involved as economic actors in ecotourism activities so that their welfare has not increased significantly. The principle of education is still weak even though the manager has tried to implement it. Regional uniqueness and local wisdom have not been highlighted. Information about various things (advantages and potentials) in CMC has not been packaged in a form and delivery technique that is communicative and innovative. The application of tourism principles is still not optimal, supporting facilities are still very limited, services are still weak, and standard operating procedures for services have not been made. According to Salim (2019), the management of ecotourism that has been carried out by the BJBR management is good, which includes planning such as making a vision and mission, managing organizations, tickets, cleaning tourism areas, the security of tourist areas, managing infrastructure, tourism facilities and management of marketing media, organizing, mobilizing, and supervising workers. The strategy used for the development of BJBR ecotourism is to maintain the preservation of mangrove forests and all the ecosystems therein, to organize exhibitions/traditional art performances typical of Probolinggo, and to make rides suitable for age levels.

## **CONCLUSION AND SUGGESTION**

### **Conclusion**

The capacity of mangrove ecosystem management for the development of mangrove ecotourism in the Lembar village area of West Lombok Regency at the community level. The level of individual resource managers and the institutional level is categorized as low. The dominant institutional capacity and role in developing the mangrove ecotourism area is the marine and fisheries department of West Lombok. This shows that good synergy has not yet been formed between institutions and communities so that the development of mangrove ecotourism areas is not sustainable and is temporal.

### **Suggestion**

The central, regional, and village government levels should have a shared commitment to the success of the village-based empowerment and development program so that there is good synergy between government, government and private sector, government and society as well as between other stakeholders. Besides that, further studies are needed to be related to the effectiveness of collaborative institutions in supporting the sustainability of mangrove ecotourism development.

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