



REPORT

COMMUNITY SURVEILLANCE GROUP EFFECTIVENESS IN MARINE PROTECTED AREA (MPA) OF PANTAR STRAIT ALOR REGENCY, EAST NUSA TENGGARA

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This Project is executed by the Mohamed bin Zayed Species Conservation Fund, with financing from the GEF, implementation support by UNEP and technical support from the CMS Dugong MoU Secretariat.



INTRODUCTION

Background

Regional Water Conservation Area, Marine Protected Area of Pantar Strait (Pantar Strait MPA), Alor Regency had been declared by Marine and Fishery Affairs Ministry on June 16th 2015, through Ministerial Decree of Marine and Fishery Affairs No. 35 year 2015. With an area of 276.693,38 hectares. Main focus for protection are coral reef, seagrass, mangrove ecosystem, turtle, whale, shark, and dugong. According to observation conducted by WWF, dugong's distribution at Alor Regency is at Kabola District and Pantar District.

Besides its huge potential, fishery and marine management at Alor Regency, it has several problems, they are: 1) More limited fish resource, 2) *Illegal Unregulated Unreported (IUU) Fishing*, 3) There are still many destructive fishing occurring, 4) How low is fishermen's welfare, 5) Lack of community's awareness about environment, 6) Threat from uncontrollable tourism on dugong tourism.

Most of the coral reef destructions at Alor Regency are caused by destructive and not environmental friendly fishing tool. Fishermen think that that way is an effective and cheap way to fish. Destructive fishing practice that happens by chemical usage, biological material, explosive material, coral reef taking (live or dead), using net of a very tiny mesh size, fishing before ripe of gonad, and gleaning at coral reef area. These activities are considered as crimes and breaking the law (illegal) because these have temporal effects, not only during the activities being done, but also in the future.

A high pressure because of human population growth has caused destruction on coral reefs. It is estimated that only less than 3% of coral reefs in Indonesia is considered good (with 75% coverage of living coral), in area that has become water conservation area and effectively managed (Fox and Dahuri, 2001). Fishing using explosive material has begun since 1940 and was known as a very easy and fast way to fish. This activity had made the lose of approximately 3.75 m² per 100 m² of coral reef in Indonesia per year. The usage of chemical material has begun since 1980 and was used to catch coral fishes that have high economical value. Besides its usage for targeted fishes, the chemical also has the ability to kill coral animals and another associated organism within (Bringgs, 2003).

Not environmental friendly fishing that use explosive and chemical material had not only caused ecological harm, but also caused huge socio-economy impacts. To minimize that kind of practice, there has to be contribution and participation from all sides to increase the effort to monitor and enforce law in marine area.

Since it's published, the Constitution No. 23 year 2014 about regional government, authority of water area management, particularly monitoring in provincial government, but in monitoring implementation and law enforcement, there are still limited human resource for law enforcement apparatus, infrastructure, and activity operational. Because of those, community's role in supporting water area monitoring is really necessary. Community's support on regional water area monitoring is regulated on mechanism of Community Surveillance System (SISMASWAS) that is included in Constitution No. 45 year 2009 about Constitutional Change No. 31 year 2004 Fishery, on Article 67, explicitly mentioned that Community could be involved in helping fishery monitoring. The Ministerial Decree of Marine and Fishery Affair No.: KEP.58/MEN/2001 about Procedures for Implementation of Community Monitoring System in Management and Utilization of Marine Resources and Fisheries, giving technical signs in forming Community Surveillance Group (POKMASWAS) as a part of monitoring system.

In dugong and seagrass conservation program (Dugong and Seagrass Conservation Project - DSCP) that is conducted in Alor Regency, coastal community is one of the utmost front aspect that should be pushed to keep their coastal regions. Therefore, there has been a study to evaluate about imbalance effectiveness POKMASWAS of Marine Protected Area of Pantar Strait (Pantar Strait MPA) and giving recommendation to the managers to manage coastal better.

Objectives

Study activity about imbalance effectiveness of POKMASWAS of Marine Protected Area of Pantar Strait (SAP Selat Pantar) has objectives to collect data about internal and external aspect condition that influences POKMASWAS effectiveness. The goals that want to be obtained are data and information arrangement about the effectiveness of POKMASWAS of Pantar Strait MPA as a fundamental for studying imbalance effectiveness of POKMASWAS condition, and the availability of recommendation referrals about the effort to increase POKMASWAS has effectiveness, adjusted with current condition and local government consideration.

The scope of this activity is collecting data, along with primary and secondary information about Community Surveillance Group's organization condition (member's characteristics, perception, and participation), general community's perception about the presence of the group, role and support from government towards the group, and the strategy to increase work effectiveness from the group.

RESULT

Number and Distribution of Community Surveillance Group

There are 28 groups that are listed in Marine and Fishery Agency of Alor Regency. At the year of 2017, there was an addition of new group in Alor Barat District which was initiated directly by Marine and Fishery Agency of East Nusa Tenggara Province, so the total number of groups in Alor Regency on 2017 were 29 groups (Figure 1).

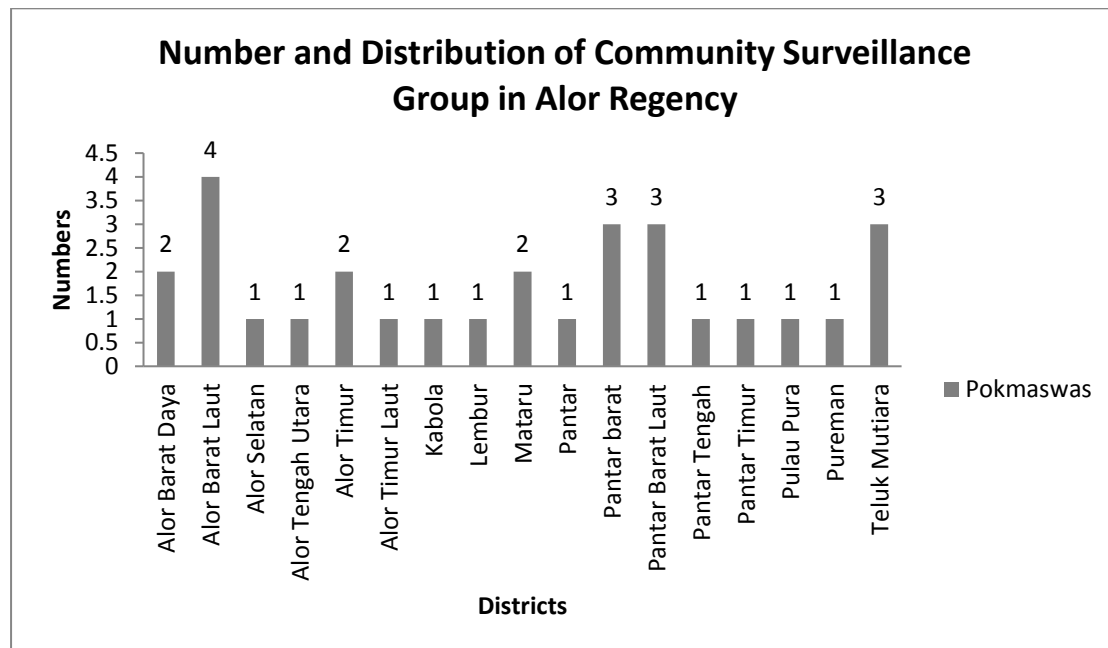


Fig 1. Number and Distribution of POKMASWAS in Alor Regency

According to the graph of Number and Distribution of POKMASWAS in Alor Regency, number of groups is the most abundant in Alor Barat District with 4 (four) groups that are located in 4 (four) coastal villages, they are POKMASWAS of Pulau Terapung Desa Ternate, Bahari Jaya Desa Pulau Buaya Group, Adang Bang Desa Adang Group, and Bunga Bali Desa Alor Besar Group. Group of Bunga Bali is a new group formed by Marine and Fishery Agency of East Nusa Tenggara Province. Another district that has the most abundant group number is Pantar Barat District, Pantar Barat Laut District, and Teluk Mutiara District. Each of those district has 3 (three) Community Surveillance Groups. Meanwhile, the district who has the least number is Alor Barat Daya District and Mataru District which has only 2 (two) groups, along with Alor Selatan District, Alor Tengah Utara, Alor Timur Laut, Kabola Village, Lembur, Pantar, Pantar Tengah, Pantar Timur, Pulau Pura and Pureman District with just only one Community Surveillance Group. The number of POKMASWAS in each district is different, it is because of several factors, they are: water region area in that district and the distance of that district.

Ideally, POKMASWAS is formed on each coastal village so the effectiveness of participative monitoring activity could be increased. Condition nowadays is the groups are distributed on 22 (twenty two) coastal villages located in 17 (seventeen) districts of Alor Regency. According to observation, it is also found that in one village, there is more than 1 (one) group, it is Lakatuli Village where there are two groups (Maringkang and Neppining) and Blang Merang Village which has three groups (Lapang Batang, Jaya bahari and Cinta Bahari).

Internal Condition of Community Surveillance Group Target

Study target of observation activity about Community Surveillance Group's effectiveness in Pantar Strait MPA would be conducted towards 7 (seven) groups, they are Sinar Kabola Kelurahan Kabola Group, Bunga bali Desa Alor Besar Group, Tanjung Muna Desa Munaseli Group, Lapang Batang Desa Blangmerang Group, Lintas Batas Desa Marisa Group, Bahari Jaya Desa Pulau Buaya Group, and Pulau Terapung Desa Ternate Group. Choosing the groups are based on monitoring water area consideration, in which those group are in the area where dugong and seagrass are located. To know the internal condition of the groups, there is a measurement of three main variables, they are (i) group member's characteristics, (ii) group member's perception, and (iii) member's level of participation.

Community Surveillance Group Member's Characteristics

Characteristics of the group's member shows the internal condition of the group's member which influences effectiveness and continuity of group. According to age range of the members, education level, social level, experience becoming the community surveillance group's member, and the motivation to be a member.

Generally, the seven groups observed have a medium range of age, part of them are less ideal (dominated by late adult by age more than 51 years old), meanwhile the ideal condition is between middle adult age, and most of them are early adult and the least are late adult. Based on their education level, the group's members are dominated by the lowest education level (elementary school graduated). Based on social level, all of the groups are consisted of public figures. Meanwhile, according to volunteer's experience as part of the group's member, the condition is varied, from high experience (more than 5 years), medium experience, and low experience (less than 1 year). The group's members also have enough

motivation (not so high and not so low), because membership is conducted to help the government.

Community Surveillance Group Member's Perception

Generally, 5 (five) from 7 (seven) of POKMASWAS think that the group's members are enough to support and conduct an assignment as coastal's monitoring community. The existing members also understand the objective of creating POKMASWAS itself, in order to preserve fishery resources on its regions. The groups who has high participation level are Sinar Kabola Kelurahan Kabola, Lintas Batas Desa Marisa and Lapang Batang Desa Blangmerang; meanwhile four other groups are still classified as medium and low in participation of monitoring and reporting.

Member's Participation Level

POKMASWAS in a village region scope or district level has important role on keeping and monitoring the utilization of fishery resources on its regions. Besides monitoring, the group has also become the extension hand from Marine and Fishery Agency also *PSDKP* (Marine and Fishery Resources Supervisor) on giving socialization regarding fishery regulations and conservation activities of fishery resource. The group's activeness could be measured from community's perception who live on the same area. The more active the group is, the community's awareness of the group must be high, too. The groups who are well known on their regions by the community are Pulau Terapung, Sinar Kabola and Lintas Batas, meanwhile the least known groups are Bahari Jaya and Bunga Bali.

Parameter Analysis for Community Surveillance Group's Effectiveness Condition

Assesment

Based on study about imbalance effectiveness on seven groups of community surveillance in Marine Protected Area Pantar Strait (SAP Selat Pantar), it has obtained that imbalance level on Pulau Terapung Group and Sinar Kabola is classified as low imbalance level, and imbalance level on Lintas Batas Group and Tanjung Muna is classified as medium imbalance level, meanwhile imbalance level on Lapang Batang Group, Bunga Bali, and Bahari Jaya is classified as high imbalance level.

According to data and information obtained from survey, overall it could be concluded that:

1. POKMASWAS who has low imbalance effectiveness level (the most effective) are Pulau Terapung Group (Desa Pulau Ternate) and Sinar Kabola Group (Kabola Village).
2. POKMASWAS which its monitoring area involved with dugong's presence are Sinar Kabola Group and Tanjung Muna Group.
3. Level of community's comprehension towards the importance of conservation is relatively high on regions of Sinar Kabola Group, Tanjung Muna Group, Pulau Terapung Group, Lapang Batang Group, and Lintas Batas Group.
4. Independent funding support towards monitoring activity of POKMASWAS have done well in Lapang Batang Group with source of funding from village funds of Blangmerang Village.
5. Regions of Pulau Lapang Batang Group as dugong's habitat region support its region by two mechanisms, they are zonation mechanism: core zone of Pantar Strait MPA and conservation location by local wisdom mechanism from culture community of Kerajaan Baranusa.
6. The potential of dugong's presence is relatively high on Lembata Regency which is close to Lintas Batas Desa Marisa Group.
7. The main problem on group's effectiveness is there has not been standard operational procedure (SOP) from participative monitoring activity, monitoring result reporting mechanism, monitoring activity operational, also the follow up from involved parties on giving feedback from activity report of monitoring result from community surveillance group.
8. Community's involvement on managing and monitoring is strengthened by agreement/ regulation from the village.

According to that consideration, along with time and funding efficiency, the priority to increase group's effectiveness in Marine Protected Area Pantar Strait (SAP Selat Pantar) would be focusing on group's location of Sinar Kabola Kelurahan Kabola Group, Tanjung Muna Desa Munaseli Group, Lapang Batang Desa Blangmerang Group, and Lintas Batas Desa Marisa Group.

Priority effort that could be done to increase these groups' effectiveness are:

Step I:

1. Revitalize organization structure of community surveillance group.
2. Complete documents and bookkeeping of community surveillance group.

3. Building community surveillance group's secretariat along with its equipments.

Step II :

1. Conducting workplan arrangement for community surveillance group
2. Conducting Standard Operational Procedure (SOP) Training for Participative Monitoring
3. Conducting Standard Operational Procedure (SOP) Training for reporting monitoring result
4. Conducting organization management training
5. Conducting financial management training
6. Conducting another training according to the needs

Step III :

1. Forming **enterprise unit of sustainable funding source for community surveillance group's** operational activity (incentive source)
2. Promoting the formation of **village regulations** which is synced with community surveillance group's workplan.
3. Conducting assesment for establishing foundation/ association/ others that are needed as a manager (govern council) of marine conservation for the sustainability of community surveillance group's activity on community level.
4. Establish **local marine conservation council** (could be a foundation, association, and others) for the sustainability of community surveillance group's activity.
5. Estabilsh **association of area's users** on community surveillance group's work area
6. Initiate **collaboration** between **local marine conservation council** with **association of area's users**.
7. Establish **mechanism of intergrated monitoring and law enforcement**.
8. **Initiate partnership program** between local marine conservation council with **Managers of Pantar Strait MPA**.

CLOSURE

According to analysis result about imbalance effectiveness of community surveillance group, it shows that to increase group's effectiveness, it's better to focus on groups who have low to medium imbalance level towards ideal condition, they are Pulau Terapung Group, Sinar Kabola Group, Tanjung Muna Group, Lapang Batang Group, and Lintas Batas Group. Besides, there needs to pay attention to protection priority guide from Ministry of Marine and Fishery Affairs on 2017 about protection of dugong and its habitat.

Increasing process for effectiveness of community surveillance groups in Pantar Strait MPA hopefully could be a lesson for developing and rising of community surveillance group's effectiveness on the other regions, as well as inside East Nusa Tenggara Province, and in other provinces.