

## **CEPF Final Completion and Impact Report**

|                                   |   |
|-----------------------------------|---|
| <b>Organization's Legal Name:</b> | Yayasan Konservasi Laut Indonesia   |
| <b>Project Title:</b>             | Community-Based Conservation Program for Octopus Fisheries in South Sulawesi, Indonesia |
| <b>Grant Number:</b>              | CEPF-112018   |
| <b>Hotspot:</b>                   | Wallacea II   |
| <b>Strategic Direction:</b>       | 4 Strengthen community-based action to protect marine species and sites                 |
| <b>Grant Amount:</b>              | \$63,499.00   |
| <b>Project Dates:</b>             | May 01, 2021 - October 31, 2022   |
| <b>Date of Report:</b>            | December 31, 2022   |

### **IMPLEMENTATION PARTNERS**

- Fishermen and the community of Langkai-Lanjukang Island  
Involved in compiling octopus fishery profiles. Promote local governance initiatives that protect ETP species. Participated in meetings consisting of monitoring training, training to improve sustainable fisheries management, participatory action research for protected species, study visits, to the signing of a joint agreement "Open-Close System".
- Marine Affairs and Fisheries Agency (DKP) of South Sulawesi Province & Fisheries and Agriculture Agency (DPP) Makassar City  
Officially support the program through letters of support to become partners and engage as webinar resource persons. Assist in facilitating community interests and support open-close system governance initiatives.
- South Sulawesi Province Maritime Service Branch (CDK Maminasata)  
As a resource person discussing the Marine Zoning Plan (RZWP3K) policy in South Sulawesi Province.
- BPSPL Makassar & BKIPM Makassar  
As a resource person for participatory action research on important protected biota and a webinar on the potential for the global octopus market.
- Directorate of Polairud Polda Sulsel & Makassar VI Lantamal  
Assist and provide input in the supervision of aquatic resources at the program location. Become a guest speaker for webinars.
- Village and District Government, Bhabinkamtibmas and Babinsa  
Involved in compiling profiles of small-scale fisheries. Involved in the process of initiating the open-close system. Help maintain public order during the program.
- Academics  
As a resource for training and webinars. Provide scientific input in stakeholder meetings and preparation of books.
- Fish Processing Units (Private Sector)  
Provide input regarding fish export standards and market access.

- Local CSOs & NGOs

Provide input and learning from smart practices that their organizations have successfully implemented.

- Mass Media (Mongabay, Pela Kita, Antara, etc)

Help disseminate program and campaign information.

## CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

| Impact Description  | Impact Summary  |
|---|---|
| <p>1. Reduce threats to at least three globally threatened species, including at least the Silky Shark (<i>Carcharhinus falciformis</i>) and the Hammerhead Shark (<i>Sphyrna lewini</i>)</p> | <ul style="list-style-type: none"> <li>• Communities have been able to identify and realize the importance of protecting habitats and biota of important endangered species. In the past year, they saw several types of sharks and turtles at their fishing grounds, such as whale shark (<i>Rhincodon typus</i>), thresher shark (<i>Alopias sp.</i>), shortfin mako (<i>Isurus oxyrinchus</i>), black tip (<i>Carcharhinus sp.</i>), Hawksbill sea turtle (<i>Eretmochelys imbricata</i>) and Green sea turtle (<i>Chelonia mydas</i>).</li> <li>• After the community has conserved turtles, the survival rate for hatched turtle eggs is higher because the eggs are no longer consumed.</li> <li>• The community has agreed to try out an "open-close system" for the octopus fishing area covering an area of 203.14 hectares in the first phase and 116.64 hectares in the second phase which limits activities and suppresses the burden on the aquatic environment and the ecosystems in it.</li> <li>• They agreed on several rules to support species protection, including the prohibition of the use of destructive fishing gear, as well as longline fishing gear. As a rule, the use of longlines is not prohibited in Indonesia. However, in practice, fishermen realize that longlines often accidentally catch important protected biota such as sharks (by-catch).</li> </ul> |
| <p>2. Increase fishing family household income by 100% within three years of project completion</p>   | <p>The governance of the open and closed system will have an impact on increasing fishermen's income after 3 years of program implementation if compliance with regulations is high. If it is carried out continuously, it will become a new habit for fishermen. This is consistent with the characteristics of fishermen studied through the octopus fishery profile, that fishermen tend to be adaptive to changes as long as these changes are aimed at a better livelihood for them.</p> <p>The implementation of an open and closed system of governance will provide an opportunity for small octopuses to grow into large ones. The principle is to add value, not from the large number of octopuses</p>   |

| Impact Description | Impact Summary  |
|--------------------|---|
|                    | <p>caught. The average octopus fish catch is grade C (weight 0.7 kilograms) with a price range of IDR 35,000 per head. After the open and close system is effective, the average fisherman's catch is expected to be 1-2 kilograms and above (grade A and/or B) with a price range of IDR 70,000- IDR 80,000 per fish. The implementation of this governance will also cause octopus stocks to exist in every season because closures are carried out in rotation every 3 months a year by mapping closure areas according to the season.</p> |

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

| Impact Description  | Impact Summary  |
|---|---|
| <p>1. Improved community management of 200 hectares of marine area as recognized by Provincial Marine and Fisheries Agency of South Sulawesi in Marine Zoning Plan (RZWP3K)</p> | <p>Most of the waters of Lanjukang Island have been designated as a reserve for the Coastal and Small Islands Conservation Area (KKP3K) of South Sulawesi Province. The regulation is contained in the Zoning Plan for Coastal Areas and Small Islands (RZWP3K) which has been integrated into Regional Regulation Number 3 of 2022 concerning the South Sulawesi Provincial Spatial Planning (RTRW) for 2022-2041. The reserved area is 1654.38 Ha. Currently, the DKP of the Province of South Sulawesi is preparing a detailed plan for the zoning division as an initial document. Then, technical consultations and public consultations will be carried out as material for compiling the final document. Furthermore, it will be proposed and determined by the Ministry of Maritime Affairs and Fisheries (KKP).</p> <p>During the 1.5 years that the program has been running, the community has managed 320 hectares of marine areas through an open-close system that they agreed on with stakeholders, including the South Sulawesi DKP and other parties. Following up on this, the DKP of South Sulawesi has stated that the area with the Open Close System / LMMA by the people of Langkai and Lanjukang Islands was used as the main consideration in determining the zoning of conservation areas, especially the core zone in the prepar</p> |
| <p>2. 30 fishers from Langkai and Lanjukang Islands will have improved capacity to use sustainable fishing methods.</p>   | <ul style="list-style-type: none"> <li>• 113 community/fishermen were directly involved in capacity building, which consisted of a total of 17 meetings.</li> <li>• 31 identified champions capable of implementing sustainable fishing</li> <li>• Determination of champions based on several categories, namely:</li> </ul>   |

| Impact Description   | Impact Summary   |
|--|--|
|  | <ol style="list-style-type: none"> <li>1. At least 3x capacity building attendance (out of a total of 4x) following meetings 3.1.1. Training on small-scale octopus fishery management and 3.1.2. Training to handle the octopus caught by fishermen folks in an environmentally friendly manner.</li> <li>2. Understand the importance of protection for ecosystems and the important biota of ETP status in them</li> <li>3. Able to speak (convey issues at the site level) at the meeting of the parties</li> </ol>  |
| <p>3. 15 community members are trained as "champions" for monitoring and conservation of globally threatened marine species in the Langkai-Lanjukang area.</p>                         | <ul style="list-style-type: none"> <li>• 113 community/fishermen were directly involved in capacity building, which consisted of a total of 17 meetings.</li> <li>• 23 champions identified as capable of monitoring and conserving globally endangered marine species</li> <li>• Determination of champions based on several categories, namely:               <ol style="list-style-type: none"> <li>1. Attendance at the capacity building at least 3x (out of a total of 4x) following meetings 3.3.1. Training on participatory research for conservation of important priority species, and 3.3.2. Participatory action research for conservation of important priority species.</li> <li>2. Understand the importance of protection for ecosystems and the important biota of ETP status in them</li> <li>3. Able to speak (convey issues at the site level) at the meeting of the parties</li> </ol> </li> </ul> |
| <p>4. Sustainable octopus fishery established in Langkai and Lanjukang Islands as measured by improved catch per unit effort and monitoring of octopus catch data and reef health.</p> | <p>The management of the open and close system will affect the increase in catch value, from the previous average size of 0.6-0.9 kilograms to 1-2 kilograms. This certainly has an impact on fishermen's household income. Based on data from the first year the program has been running, fishermen's catch has fluctuated. Increased in October-February around 1-2 tons per month. Fishermen's catches decrease in March-September, ranging from 200-900 kilograms per month. In addition, the implementation of an open and closed system of governance has an impact on the health of coral reefs, because it provides an opportunity for coral reef ecosystems to experience recovery. The health condition of coral reefs is in the slightly damaged category (20-55 percent) at the baseline and the good category (65 percent on average) at the end line.</p>   |

**Unexpected impacts (positive or negative)?**

- Through this program, the community understands the importance of protecting endangered species. Unexpectedly, a youth group on Lanjukang Island took the initiative to conserve turtle species. In particular, they guard turtle eggs and make hatcheries for turtle

hatchlings that have hatched. Furthermore, they encourage tourists to release hatchlings into the waters as part of the campaign and also to increase the economy of the island community. This captive breeding activity is not the deliverable of this program. Pure community initiative after conducting discussions and implementing participatory action research activities which became one of the activities in the program funded by CEPF. Participatory action research activities invite stakeholders (BPSPL Makassar) as an agency that handles the conservation of important protected and endangered biota in Sulawesi.

- Through this program, the community takes the initiative to collect data on destructive fishing activities using bombs or explosives. They realize that this data can support various conservation programs carried out by various parties, such as the government, not limited to the conservation programs that are currently running and funded by CEPF.
- Governance of the open-close system that is driven by the community has a positive impact on the growth of another biota. Other fishermen who are not octopus catchers and are not included in the scope of this program, also realize and feel the impact of increasing their catches. The biota in question includes grouper and other demersal fish. In addition, they mentioned that the closure of one fishing area provides an opportunity for ecosystems such as coral reefs to grow and be maintained. It should be noted that when collecting data on coral reefs in areas that are temporarily closed, there are many new types of Acropora corals that live.
- Dissemination of important protected and endangered species to touch children on Lanjukang Island. This socialization is not an activity and deliverable of this program. But on the same occasion, when holding meetings with the community, the YKL team took the time to gather children to study together. Please note that access to education on Lanjukang Island is very minimal, there are no schools. They have to go to Lumu-Lumu Island, 10 miles away if they want to go to school. Even though the children there has a high enthusiasm for learning.

## **PROJECT RESULTS/DELIVERABLES**

### **Overall results of the project:**

- This program was able to run well from the start due to support from the local government, namely the Makassar City Fisheries and Agriculture Service (DPP) and the South Sulawesi Province Maritime Affairs and Fisheries Service (DKP). There have been 3 changes of service heads at the Provincial DKP at the start of the program so YKL Indonesia also held 3 direct hearings. This is done so that information and support from the government are not disturbed.
- Through this program, the characteristics of the community/fishermen and management of the octopus fishery before this program entered and had an impact, could be well documented through the Octopus Fishery Profile Book. This is the basis for YKL Indonesia to look for entry points so that the people of Langkai and Lanjukang Island want to be involved and feel they want improvements to their livelihoods through the programs being implemented.
- YKL Indonesia makes great efforts to involve the community/fishermen during program implementation, especially regarding decisions that may impact their livelihoods. This involvement included 5 people from the community becoming Community Organizers (CO) who collected data on octopus catches during the first year of the program. Another thing that becomes an important involvement of the community/fishermen is the existence of a joint agreement for community-based management of octopus fisheries which they call an "open and close system".
- Various capacity-building meetings have been conducted and provided them with the knowledge that influences their fishing activities. Some of the capacity building that impressed them included a study visit to Wakatobi and sharing of learning following the visit. In addition, learning about the biology of octopus fisheries from a Hasanuddin

University professor. Until participatory action research on ETP species by BPSPL Makassar. Without setting aside other capacity building, this memorable event has had a huge impact on the motivation of fishermen and the people of Langkai and Lanjukang Islands to encourage octopus fishery governance with an open-close system.

- This program was designed from the start to give impact not only fishermen and the people of Langkai and Lanjukang Islands but also the interests of all stakeholders. Important stakeholders such as local government, academics, private companies, civil servants (police and military), mass media, NGO's, and others pay special attention to this program. This community-based open-close system is a new governance model in South Sulawesi, and since the beginning, they (stakeholders) have been involved in various meetings. In the end, the intention to implement the open-close system was declared through the signing of a joint agreement by the people/fishermen of Langkai and Lanjukang Islands and which was supported/known by various stakeholders.

- YKL Indonesia summarized various records of activities and dynamics that took place during the 18 months of the program into a book entitled "Strategy from the Island - Conservation through Octopus Management on Langkai and Lanjukang Islands". This book is not only a success story but also about various dynamics that existed during the program. This book does not try to present complete and comprehensive information, there are no theories. Most of it is just an explanation of how this program was started, its processes, and the final results of the 1.5-year running of the program which of course is still far from expectations. At least this book can be a reference when some other parties or institutions will carry out the same initiative, both for octopus commodities or for other commodities in the future. This book can be downloaded via the following link:  
[https://yklindonesia.org/wp-content/uploads/2022/12/Buku-Siasat-Dari-Pulau\\_PROTEKSI-GAMA\\_YKL-Indonesia.pdf](https://yklindonesia.org/wp-content/uploads/2022/12/Buku-Siasat-Dari-Pulau_PROTEKSI-GAMA_YKL-Indonesia.pdf)

**Results for each deliverable:**

| Component |                                | Deliverable |   |  |
|-----------|--------------------------------|-------------|---|--|
| #         | Description                    | #           | Description   | Results for Deliverable  |
| 1.0       | Fisheries profile              | 1.1         | Langkai and Lanjukang fisheries profile, including number of fishers, details of gear and equipment, harvest, and reef condition  | <p>Deliverables 1.1 is described in the attached file of "1.1. Laporan Final_Profil Perikanan Gurita Pulau Langkai-Lanjukang Kota Makassar_CEPF112018_YKL Indonesia"</p> <p>The document is in the form of a book and has been disseminated through the official website of YKL Indonesia. Links can be accessed at: <a href="https://yklindonesia.org/wp-content/uploads/2022/12/Profil-Perikanan-Gurita-Pulau-Langkai-dan-Lanjukang-Kota-Makassar_ok.pdf">https://yklindonesia.org/wp-content/uploads/2022/12/Profil-Perikanan-Gurita-Pulau-Langkai-dan-Lanjukang-Kota-Makassar_ok.pdf</a></p> |
| 2.0       | Data collection and monitoring | 2.1         | Report on data collection, including 12-month data on octopus harvest and description of methodology (selection of monitors, training of monitors, gender and basic demographic details of monitors, and monitoring protocol) | Deliverables 2.1 is described in the attached file of "2.1. Recruitment, training For CO & Collecting Data"  |
| 3.0       | Capacity building              | 3.1         | Training report on sustainable small-scale octopus fishing and post-capture handling, including dates of training, agenda, materials, participant list (with gender and relevant demographic information),                    | Deliverables 3.1 is described in the attached file of "3.1. Training report on sustainable small-scale octopus fishing and post-capture handling_CEPF112018_YKL Indonesia"   |

| Component |                   | Deliverable |   |  |
|-----------|-------------------|-------------|---|--|
| #         | Description       | #           | Description   | Results for Deliverable  |
|           |                   |             | pre- and post-test knowledge survey, and next steps   |  |
| 3.0       | Capacity building | 3.2         | Exchange visit report for sharing best practices in octopus fishery management, including location of visit, participant list (with gender and relevant demographic information), results of participant reviews, and activity documentation                    | Deliverables 3.2 is described in the attached file of "3.2. Study visit report and sharing of lesson learned report_CEPF112018_YKL Indonesia"                    |
| 3.0       | Capacity building | 3.3         | Report on training in monitoring-conservation of globally threatened species (Participatory Action Research), including dates, agenda, materials, participant list (with gender, relevant demographic info), pre- and post-test knowledge survey and next steps | Deliverables 3.3 is described in the attached file of "3.3 Participatory Action Research on Important Species in the Waters of the Langkai and Lanjukang Island" |
| 3.0       | Capacity building | 3.4         | Draft action plan on small scale octopus fishery management in Langkai and Lanjukang islands, including summaries of focal group discussion and community consultations, with   | Deliverables 3.4 is described in the attached file of "3.4. Drafting an action plan on small scale octopus fishery management in Langkai and Lanjukang islands"  |



| Component |  | Deliverable |  |  |
|-----------|--|-------------|--|--|
| #         | Description  | #           | Description  | Results for Deliverable  |
|           |  |             | attendance lists noting names, gender, and relevant individual details   |  |
| 4.0       | Fishery zone establishment and management, and associated CEPF Safeguard | 4.1         | Report on community consultations for of small scale sustainable octopus fishery management plan initiatives, including dates of events, summary of activities, and participants lists with gender and relevant individual details | Deliverables 4.1 has been described in the attached file of Laporan "4.1. Laporan konsultasi masyarakat untuk inisiatif rencana pengelolaan perikanan gurita berkelanjutan"  |
| 4.0       | Fishery zone establishment and management, and associated CEPF Safeguard | 4.2         | Formal declaration of the designation of the open-close system for small-scale octopus fisheries in Langkai and Lanjukang islands  | Deliverables 4.2 are described in the attached file of Report "Laporan 4.2. Penetapan Sistem Buka Tutup Penangkapan Gurita di Pulau Langkai dan Lanjukang"   |
| 4.0       | Fishery zone establishment and management, and associated CEPF Safeguard | 4.3         | A guidebook of sustainable small-scale octopus fisheries management in Langkai and Lanjukang islands   | <p>The book entitled "Strategies from the Island - Conservation Through Governance of Octopus on Langkai and Lanjukang Islands" is the result of lessons learned from the Gama Protection program which has been running for 1.5 years.</p> <p>This book has been disseminated through dissemination with stakeholders and YKL Indonesia's official website. The link can be accessed at <a href="https://yklindonesia.org/wp-content/uploads/2022/12/Buku-Siasat-Dari-Pulau_PROTEKSI-GAMA_YKL-Indonesia.pdf">https://yklindonesia.org/wp-content/uploads/2022/12/Buku-Siasat-Dari-Pulau_PROTEKSI-GAMA_YKL-Indonesia.pdf</a></p> |

| Component |  | Deliverable |  |  |
|-----------|--|-------------|--|--|
| #         | Description  | #           | Description  | Results for Deliverable  |
| 2.0       | Data collection and monitoring   | 2.2         | Report on data dissemination, including descriptions of community outreach via information boards, social media, and public events               | Deliverables 2.2 is described in the attached file of "2.2. Report on data dissemination via information boards and webinar_CEPF112018_YKL Indonesia"  |
| 4.0       | Fishery zone establishment and management, and associated CEPF Safeguard | 4.4         | Report on process framework  | Report on process framework described in the attachment file of "4.4. YKL Indonesia Process Framework 112018"  |
| 5.0       | YKL Indonesia capacity   | 5.1         | Civil society tracking tool  | Civil society tracking tool described in the attachment file "5.1. CSTT YKL Indonesia 2022"  |
| 5.0       | YKL Indonesia capacity   | 5.2         | Gender tracking tool   | Gender tracking tool is described in the attachment file "5.2. GTT YKL Indonesia 2022"   |
| 1.0       | Fisheries profile  | 1.2         | Letter of support from Fisheries and Agriculture Agency (DPP) Makassar City, and Marine Affairs and Fisheries Agency of South Sulawesi Province. | <p>1. Letter of support from the Office of Fisheries and Agriculture (DP2) Makassar City dated May 31st, 2021 with letter number: 523/6180/DPP/V/2021.</p> <p>2. DKP Sulsel has conveyed that the area with the Open Close System/LMMA by the people of Langkai and Lanjukang Island is used as the main consideration in determining the zoning of conservation areas, especially the core zone in the preparation of the initial document.</p> |

**Tools, products or methodologies that resulted from the project or contributed to the results:**

- Octopus monitoring form for Community Organizer (CO)
- Excel data input form and data analysis template used in data collection and analysis of fishermen's octopus catches

## PORTFOLIO INDICATORS

| Portfolio Indicator Number | Portfolio Indicator Description  | Expected Numerical Contribution | Expected Contribution Description          | Actual Numerical Contribution | Actual Contribution Description   |
|----------------------------|--|---------------------------------|--|-------------------------------|---|
| 1                          | At least 20 KBAs are better managed or protected by the end of the program   | 1                               | 1 KBA Kapoposang-Pangkep-Bulurokeng/IDN136 | 1                             | 1 KBA Kapoposang-Pangkep-Bulurokeng /IDN136   |
| 2                          | At least 10,000 ha of production landscape (marine and coastal ecosystems) under improved/sustainable management practices | 200                             | 200 hectare                                | 320                           | The management of the octopus fishing area is called the "open-close system" covering an area of 320 hectares   |
| 1.1                        | The main threats to at least three priority marine species have been reduced at one key site for each species              | 3                               | 3 Species                                  | 6                             | Whale shark ( <i>Rhincodon typus</i> ), thresher shark ( <i>Alopias</i> sp.), shortfin mako ( <i>Isurus oxyrinchus</i> ), black tip ( <i>Carcharhinus</i> sp.), Hawksbill sea turtle ( <i>Eretmochelys imbricata</i> ) dan Green sea turtle ( <i>Chelonia mydas</i> ) |
| 3.1                        | Community management institutions strengthened, and plans for management of coastal and marine resources adopted,          | 2                               | 2 Islands (Langkai and Lanjukang)          | 2                             | 2 Islands (Langkai and Lanjukang)   |

| <b>Portfolio Indicator Number</b> | <b>Portfolio Indicator Description</b>  | <b>Expected Numerical Contribution</b> | <b>Expected Contribution Description</b>                      | <b>Actual Numerical Contribution</b> | <b>Actual Contribution Description</b>  |
|-----------------------------------|---|--|---|--------------------------------------|---|
|                                   | by communities in at least 15 sites   |  |   |                                      |   |
| 3.2                               | At least five communities apply limits to promote the sustainability of supply of marine resources (e.g. gear limits, quotas, zoning) | 2                                      | 2 octopus fishery communities (318 household)                 | 2                                    | 2 octopus fishing communities   |
| 3.3                               | At least three private sector companies agreed to support conservation actions for MPA management and species protection              | 3                                      | 3 companies: support capacity building of octopus fishers     | 3                                    | PT. Prima Bahari Inti Lestari; PT Sukses Hasil Alam Nusaindo; PT. Kendo Fisheries Indonesia |
| 7.2                               | Key government and donor stakeholders recognize and adopt good practice lessons from CEPF-funded projects                             | 1                                      | 1 sustainable community based management of octopus fisheries | 2                                    | 2 community-based sustainable management of octopus fisheries                               |
| 4.2                               | At least 15 communities create new MPAs/no-take zones to protect key marine resources   | 2                                      | 2 Communities di Langkai and Lanjukang (318 household)        | 2                                    | 2 Communities in Langkai and Lanjukang Islands  |
| 6.3                               | There is active networking between grantees on at least one key theme in at least three of the priority corridors (GI8)               | 1                                      | 1 network   | 4                                    | Jaring nusa, Jala Nusa, Mitra Wallacea PKW II, Jejaring NGO Sulsel                          |

## GLOBAL INDICATORS

### Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

| <b>Name of Protected Area</b> | <b>WDPA ID*</b> | <b>Latitude</b> | <b>Longitude</b> | <b>Country</b> | <b>Original Total Size (Hectares)<br/>**</b> | <b>New Protected Hectares<br/>***</b> | <b>Year of Legal Declaration or Expansion</b> |
|-------------------------------|-----------------|-----------------|------------------|----------------|--|---------------------------------------|---|
|-------------------------------|-----------------|-----------------|------------------|----------------|--|---------------------------------------|---|

\*World Database of Protected Areas

\*\*If this is a new protected area, 0 should appear in this column

\*\*\* This column excludes the original total size of the protected area.

## Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

| KBA Name                      | KBA Code | Size of KBA | Number of Hectares with Improved Management |
|-------------------------------|----------|-------------|---|
| Kapoposang-Pangkep-Bulurokeng | IDN136   |             | 320   |

## Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

| Name of Production Landscape | Latitude | Longitude | Hectares Strengthened | Intervention |
|------------------------------|----------|-----------|-----------------------|--------------|
|------------------------------|----------|-----------|-----------------------|--------------|

## Benefits to Individuals

- **Structured Training:**

| Number of Men Trained | Number of Women Trained | Topics of Training   |
|-----------------------|-------------------------|--|
| 86                    | 27                      | 2.1.1. Pelatihan CO (Community Organizer)<br>3.1.1. Training on Environmentally Friend Handling of Octopus Catch<br>3.1.2. Training on Environmentally friendly handling of Octopus Catches<br>3.2.1. Study visits to a learning site related to best practices in octopus fishery management<br>3.2.2. Meeting for sharing lesson learns from study visit<br>3.3.1. Training on participatory research for conservation of important priority species in the waters of the Langkai and Lanjukang islands<br>3.3.2. Participatory action research for conservation of important priority species in the waters of the Langkai and Lanjukang islands<br>3.4.1. Series of FGD for strengthening the institutional of octopus fishery management in Langkai Island and Lanjukang Island |

| <b>Number of Men Trained</b> | <b>Number of Women Trained</b> | <b>Topics of Training</b>                          |
|------------------------------|--------------------------------|--|
|                              |                                | 3.4.2. Meeting to prepare a management action plan |

- **Cash Benefits:**

| <b>Number of Men – Cash Benefits</b> | <b>Number of Women – Cash Benefits</b> | <b>Description of Benefits</b>   |
|--------------------------------------|--|--|
| 8                                    | 1                                      | As many as 4 Community Organizers (3 men and 1 woman) who collected octopus data are staff or employees of island collectors, so working as Community Organizers is an added value to their income. In addition, 5 people who carry out captive conservation practices, and/or release turtles have additional income from the activities of tourists visiting Lanjukang Island who wish to release turtles. |

## Benefits to Communities

|  |   |
|--|---|
| View the <b>characteristics</b> column below with the following corresponding codes: | View the <b>benefits</b> column below with the following corresponding codes: |
| 1- Small Landowners  | a. Increased Access to Clean Water  |
| 2- Subsistence Economy   | b. Increased Food Security  |
| 3- Indigenous/ Ethnic Peoples  | c. Increased Access to Energy   |
| 4- Pastoralists / Nomadic Peoples  | d. Increased Access to Public Services  |
| 5- Recent Migrants   | e. Increased Resilience to Climate Change                                     |
| 6- Urban Communities   | f. Improved Land Tenure   |
| 7- Other   | g. Improved Use of Traditional Knowledge                                      |
|  | h. Improved Decision-Making   |
|  | i. Improved Access to Ecosystem Services                                      |

| Community Name                                    | Community Characteristics |                          |                          |                          |                          |                          |                                     | Type of Benefit          |                          |                          |                          |                          |                          |                          |                                     |                                     | Country                             | Number of Males Benefitting | Number of Females Benefitting |      |
|---|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------|-------------------------------|------|
|   | 1                         | 2                        | 3                        | 4                        | 5                        | 6                        | 7                                   | a                        | b                        | c                        | d                        | e                        | f                        | g                        | h                                   | i                                   |                                     |                             |                               |      |
| Fisher Communities of Langkai & Lanjukang Islands | <input type="checkbox"/>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Indonesia                   | 2242                          | 2280 |

### Characteristics of "Other" Communities:

- Fisher Communities of Langkai & Lanjukang Islands: Fisher Communities

## Policies, Laws and Regulations

|   |                         |                       |                   |
|---|-------------------------|-----------------------|-------------------|
| View the <b>topics</b> column below with the following corresponding codes: |                         |                       |                   |
| A- Agriculture  | E- Energy               | I- Planning/Zoning    | M- Tourism        |
| B- Climate  | F- Fisheries            | J- Pollution          | N- Transportation |
| C- Ecosystem Management   | G- Forestry             | K- Protected Areas    | O- Wildlife Trade |
| D- Education  | H- Mining and Quarrying | L- Species Protection | P- Other          |



| No. | Name of Law | Scope | Topics |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|-------------|-------|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|     |             |       | A      | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|     |             |       |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

**“Other” Topics Addressed by the Policy, Law or Regulation:**

| No. | Country/ Countries | Date Enacted/ Amended | Expected impact | Action Performed to Achieve the Enactment/ Amendment |
|-----|--------------------|-----------------------|-----------------|--|
|     |                    |                       |                 |  |

### Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

| Name of Company | Description of Biodiversity-Friendly Practice | Country/Countries where Practice was Adopted |
|-----------------|---|--|
|                 |   |  |

### Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

| Name of Network/Partnership | Year Established | Country/ Countries | Established by Project? | Purpose   |
|-----------------------------|------------------|--------------------|-------------------------|---|
| JARING NUSA – KTI           | 2021             | Indonesia          | No                      | The Archipelago Network - Eastern Indonesia (JARING NUSA - KTI) is a learning network node between NGOs in eastern Indonesia that |

| Name of Network/Partnership                                       | Year Established | Country/Countries | Established by Project? | Purpose  |
|---|------------------|-------------------|-------------------------|--|
|   |                  |                   |                         | focuses on issues of the scope of the coast, sea, and small islands in the context of climate change. This network was declared on August 19, 2021, in Makassar by 14 NGOs working in the Eastern Indonesia region.  |
| JALA NUSA   | 2021             | Indonesia         | No                      | The Nusantara Laut Network (JALANUSA) is a learning network for NGOs working on Indonesian marine and fisheries issues and is a safe space for sharing learning and growing together as NGOs. Launched on the 26th of June 2021, Jalanusa decided to start its institution through jointly planned and implemented activities, and let the relationships between institutions grow organically through these activities.   |
| South Sulawesi Maritime and Fishery NGO Network                   | 2022             | Indonesia         | No                      | The South Sulawesi Maritime and Fisheries NGO Network aims to encourage shared intentions in managing small-scale fisheries in South Sulawesi. The shared priority that is encouraged is to build synergies and collaborations; (1) Market and value chains, (2) Empowerment of the fishery economy and business, (3) Governance, protection, and areas, (4) Strengthening data and administration of fisheries. One of its short-term goals is to encourage the formation of a sustainable fisheries committee in South Sulawesi. |
| Network of the Program Kemitraan Wallacea (PKW) II South Sulawesi | 2022             | Indonesia         | No                      | This non-formal network was built as a shared learning space and program synchronization carried out with PKW 2 partners in South Sulawesi.  |

## Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

| Name of Mechanism | Purpose | Date Established | Description | Country/Countries | Project Intervention | Delivery of Funds? |
|-------------------|---------|------------------|-------------|-------------------|----------------------|--------------------|
|-------------------|---------|------------------|-------------|-------------------|----------------------|--------------------|

### Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

| Genus        | Species     | Common Name (English) | Status | Intervention  | Population Trend at Site |
|--------------|-------------|-----------------------|--------|---|--------------------------|
| Rhincodon    | typus       | Whale Shark           | EN     | Species habitat protection and Species monitoring                   | Stable                   |
| Alopias      | pelagicus   | Fox Shark             | EN     | Species habitat protection and Species monitoring                   | Stable                   |
| Isurus       | oxyrinchus  | Shortfin Mako         | EN     | Species habitat protection and Species monitoring                   | Stable                   |
| Carcharhinus | falciformis | Silky Shark           | VU     | Species habitat protection and Species monitoring                   | Stable                   |
| Eretmochelys | imbricata   | Hawksbill Turtle      | CR     | Species habitat protection, Species monitoring, and Turtle hatchery | Increasing               |
| Chelonia     | mydas       | Green Turtle          | EN     | Species habitat protection, Species monitoring, and Turtle hatchery | Increasing               |

## LESSONS LEARNED

The system of opening and closing the octopus fishing area is an "entrance" for the protection of ecosystems and important biota that are protected and endangered. Special interventions for octopus fishermen were carried out because this commodity is one of the main catches for most fishermen on Langkai and Lanjukang Islands. In addition, the fishing gear used is very environmentally friendly. The lessons learned and can be adopted through this program are priority commodities for most fishermen in an area which can be an alternative approach to intervening in a conservation program. In general, island communities/fishermen in Indonesia tend to be "opportunistic" by utilizing natural resources as much as possible for the benefit of their livelihoods. Thus, this is closely related to improving their economy and livelihood. After going through various activities that increase the capacity of fishermen, they realize that the intervention in the conservation program will have an impact on increasing their economy. This is the mainstream of the Community-based Octopus Conservation and Economic Improvement Program (Proteksi Gama) implemented on Langkai and Lanjukang Island, Makassar City.

In adopting governance, then, program approach and implementation will differ in each region. This is what happened to this program. The people of Langkai Island and Lanjukang have increased their capacity, including through learning activities on community-based octopus fishing area governance by practitioners from Japesda (Banggai Regency, Central Sulawesi) and study visits to Wakatobi Regency, Southeast Sulawesi, which has successfully implemented octopus management in their area. Their approach is supported by their administrative status as a village. Wakatobi adds to the strength of regulation through customs that have been running for a long time. The strengthening of community-based governance regulations in Indonesia is generally through this approach. If community-based governance in Langkai and Lanjukang Islands is "considered successful", then this system is a small part or maybe even the only one in Indonesia that has shared initiatives for community-based fisheries management that fall under kelurahan administrative status. Please note, that in Indonesia, the village government can make a regulation at the village level through Village Regulations (Perdes). Meanwhile, areas under the kelurahan government cannot directly make kelurahan level regulations, unless they are pushed to a higher level, namely Mayor Regulations (Perwali). So community-based governance carried out in Wakatobi will have very different regulations and cannot be carried out on Langkai and Lanjukang Islands, whose administrative status is under the kelurahan government. However, in terms of methods and principles, the management of the octopus fishing area by the Wakatobi people can also be carried out by the people on Langkai and Lanjukang Islands. Anticipating this, the role of the provincial government through the DKP of the Province of South Sulawesi is an option.

In addition, to adopt a successful governance practice, it is important to look at the social and economic conditions of the people in each region. Each island certainly has different community characteristics and fishery management. So, this program first conducted research by compiling octopus fisheries profiles to see in general the characteristics of the community and existing and factual fisheries management. It is known that the people of Langkai and Lanjukang Islands have quite adaptive characteristics and can accept changes. Starting from the history of fishing activities, fishing areas, and the seasons that are always changing. Not to mention priority commodities, fishing fleets, fishing gear, and supply chains that change very dynamically. So, it is with this conclusion that a program that provides an opportunity to increase the community's economy as well as carry out conservation in the waters of Langkai and Lanjukang can run optimally. They can accept change, even in management systems that involve them directly.

## SUSTAINABILITY/REPLICATION

Results and challenges of this program:

- This program has created turtle conservation initiatives;
- Communities can identify several ETP species and take action if they are caught;
- Communities can make local agreements regarding octopus-catching locations and times;
- Communities feel the impact of the open-close system which makes octopuses and snapper and grouper fish more and more, as well as providing a recovery process for the ecosystem;
- The community has understood that there is a connection between the fishing season and the closed locations, including the egg-laying and development of octopuses;
- The open and close system suppresses the level of exploitation from a large number of fishermen and destructive fishing activities that use bombs and anesthetics;
- One of the champions took the initiative to record/collect data related to destructive fishing activities using bombs in the area around its waters;
- Formed a total of 9 fishermen groups;
- This program encourages mothers/women to also join groups in the octopus fishing business;
- The challenge in this program is the location of the fishing ground which is a priority area for many fishers from other islands, causing a very high level of resource utilization;
- Some fishermen from other islands catch in areas with an open-close system that has been agreed to be closed temporarily. Even so, the people of Langkai and Lanjukang Island overcame this with a persuasive approach and socialized local regulations that they mutually agreed upon;
- It is difficult to supervise the area of the open and close system. This resulted in several violations being committed by various fishermen;
- Community agreement is not yet strong in terms of regulation. This is quite different from the base practice from other places which uses village and/or custom as a way to strengthen regulations at the local level.

Continuation or replication of this program:

- One of the "champions" from Langkai Island had the opportunity to socialize the open-close system governance during a stakeholder meeting to formulate policies regarding the Snapper-Grouper Fishery Harvest Strategy in South Sulawesi which was carried out by the South Sulawesi DKP together with the Ministry of Maritime Affairs and Fisheries (KKP) in Makassar City. On this occasion, it was finally agreed by stakeholders to make this program a recommendation for a local governance prototype that will be encouraged in the Republic of Indonesia State Fisheries Management Area (WPPNRI) 713. This policy will greatly impact the work plans of each agency, research for academics, market chains and value chains for private companies, and other stakeholders working in WPPNRI 713.
- In addition, YKL Indonesia has several partnership networks between NGOs that make this program with an open-close system a management prototype, which ultimately encourages joint initiatives related to sustainable small-scale fisheries management. Of course, this joint initiative is expected to have an impact on the community/fishermen's economy, governance and policy, and ecosystem sustainability including biodiversity and protection of ETP species.
- As a follow-up to the program's success, DKP Sulsel has also conveyed that the area with the Open Close System/LMMA by the people of Langkai and Lanjukang Island is used as the main consideration in determining the zoning of conservation areas, especially the core zone in the territorial waters of Lanjukang Island, Makassar City.

## ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

This project has tested an open and close system with a total area of 320 hectares, as a local management system that is run by the people of Langkai and Lanjukang Island. Each closure of the fishing area is carried out for approximately three months in one of the 23 octopus fishing areas. So, 22 other fishing areas can be freely accessed by fishermen when the temporary closure is carried out. Even though there are many fishing areas, there are still fishermen who are not aware of the areas that are temporarily closed, especially fishermen from other districts. So to prevent social conflict, the mechanism used is a persuasive approach. The sanction if someone violates or enters the area that is temporarily closed is only in the form of a warning and an order to make arrests in another area temporarily. There are no serious sanctions. More than ten people violated it and one of them was a Langkai fisherman. To prevent conflict between residents of Langkai Island, the action taken is to involve authorized stakeholders, namely Bhabimkamtibmas (police working at the Barrang Caddi Village level). The coordination model that was carried out started to fishermen reporting incidents to the YKL Indonesia team, then the YKL team forwarded the report to Bhabimkamtibmas. Furthermore, Bhabimkamtibmas contacted and socialized directly to fishermen who had previously violated not to make temporary arrests in areas that had been agreed to be closed. The involvement of these stakeholders is very influential on community compliance. The next mechanism expected is to improve direct coordination between fishermen and other stakeholders without going through YKL Indonesia. So that after the project funded by CEPF ends, the open and close system and the security mechanism can continue.

## ADDITIONAL COMMENTS/RECOMMENDATIONS

1. It is hoped that CEPF will continue programs in Indonesia in a more integrated and comprehensive manner at the next stage. That is, integrating all CEPF-funded programs as part of supporting local and national government sustainable fisheries management policies, as well as supporting global efforts on FIP and SDG's. CEPF and the Government of Indonesia need to formally synergize and develop long-term plans. Programs funded by CEPF are very beneficial for maintaining the potential of biodiversity resources in Indonesia, including the ETP species in it.
2. The governance program implemented by local NGOs and carried out at the local community level, indirectly reduces access to destructive fishing behavior, as well as minimizes violations of other policies that commonly occur in Indonesia. Governance like this needs to be reproduced.
3. Community-initiated governance in areas under kelurahan administrative status has not been strongly accommodated by regulations. In contrast to the administrative status of villages or customary land/territories which have specific regulations to make local rules/policies regarding community-based governance. CEPF and all partners in Indonesia need to work together to encourage the central government to discuss this issue. With the availability of strong funding, expanding the governance area with various local partners in the entire territory of the Unitary State of Indonesia will be the best option for program sustainability with long-term goals. Especially in the Wallacea biogeographical area.
4. It should be noted that Indonesia currently has a policy regarding the division of management areas called the Republic of Indonesia Fisheries Management Areas (WPPNRI). The division of this management area is very important as a reference for CEPF to link it with the Key Biodiversity Area's - Marine Corridors, which is the basis for the division of areas carried out by CEPF. Thus, there is a synchronization of the management of waters

and marine areas in Indonesia. Octopus fishery management as an "entry gate" for the protection of ETP species can be carried out in WPPNRI 713 (including South Sulawesi) because this is an area that is indeed one of the priorities for octopus management. While in other WPPNRI, of course, it has its management priorities;

5. The management carried out by CEPF partners in Indonesia should be in sync with one another, they need to sit together, discuss, build mutual intentions, and push for a grand design which is of course for the same purpose.

## **ADDITIONAL FUNDING**

|  |  |
|--|--|
| <b>Total Amount of Additional Funding Actually Secured (USD)</b> |  |
| <b>Breakdown of Additional Funding</b>                           |  |

## **INFORMATION SHARING AND CEPF POLICY**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

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