



**Establishment and Operation of a Regional System of
Fisheries *Refugia* in the South China Sea and Gulf of Thailand**

REPORT

FISHERIES REFUGIA SITE MANAGEMENT COMMITTEE MEETING

**MASINLOC, ZAMBALES
24 MARCH 2022**

Prepared by
**NATIONAL FISHERIES RESEARCH AND DEVELOPMENT INSTITUTE (NFRDI)
PHILIPPINES**

**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT**



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MEMBERS

| | |
|--|---|
| Local Government Unit (LGU) | |
| Mayor | - Hon. Mayor Arsenia J. Lim (Chairperson) |
| Vice Mayor | - Hon. Pedro O. Enciso (Vice Chairperson) |
| SB Chair - Agriculture and Fisheries | - Hon. Arnel Aquino (Member) |
| SB Chair - Environment | - Hon. Norman Acierto (Member) |
| SB Chair – Women Sector | - Sorayda Sison (Member) |
| SB Chair – Women Sector | - Gigi E. Juarez (Member) |
| SB Chair –Association of Barangay, Chairman (ABC) | - Hon Christian Piere Nacin (Member) |
| Municipal Environment and Natural, Resources Officer (MENRO) | - Ms. Olivia Gregorio (Member) |
| Municipal Disaster Risk Reduction, Management (MDRRM) Focal Point | - Mr. Juliano Ebue, Jr. (Member) |
| MPA Network Representative | - Mr. Richard G. Pascual (Member) |
| Academe Representative | - Mr. Zaldy Elaugos (Member) |
| People’s Organization (PO) | - Mr. Joel Butulan (Member) |
| Absent: | |
| Sanggunian Kabataan (SK), Federation President (Youth Sector) | - Hon. Levi Eduvala (Member) |
| Municipal Agriculture Office | - Ms. Joanne N. Rosete (Member) |
| Community Environment and Natural, Resources Office (CENRO-DENR) | - Mr. Bernado Montalla (member) |
| BFAR Provincial Fisheries Office (PFO) | - Mr. Neil Encinares |
| Philippine Coast Guard (PCG) | - PO1 Jeffrey Doctor (Member) |
| Philippine National Police (Maritime) | - Chief PNP-Maritime |
| Municipal Fisheries and Aquatic, Resources Management Council (MFARMC) | - Mr. Oscar Fontillas (Member) |
| National Scientific and Technical Focal Person | - Mr. Valeriano M. Borja |
| Secretariat: Ms. Raziell Ares - Cayme Mr. John Eliezer Pendre | - Science Research Specialist 1 - Science Research Analyst |

1. The Meeting started with the usual preliminaries. After the acknowledgement and introduction of participants, the overview of the meeting was discussed briefly. The agenda of the meeting is attached as Annex A.

I. Meeting Overview

2. Ms. Olive Gregorio, Project site Focal Person, presided the meeting. She acknowledged the members of the Site Committee, who were present during the meeting. Agreed by majority of the members the agenda for the 1st quarter meeting was approved.

3. She reviewed the minutes of the previous meeting agreed and supported by the committee members.

II. Plenary Workshop: Fisheries Landing Survey Results (2018-2020)

4. As part of the plenary workshop, major results for the baseline data collection were discussed by the project team. The results of the baseline fisheries data collected by the project for years 2017-2020 was presented by Ms. Raziel Ares-Cayme, Science Research Specialist I and Project Assistant. Annual landed catch, percentage contribution of fishing gears, relative abundance of major species and CPUE of ring net fisheries were presented and briefly discussed. Based on the updated data, the Site Committee noted the top species caught in Masinloc as follows:

- *Decapterus macarellus* (Galunggong)
- *Katsuwonus pelamis* (Gulyasan)
- *Thunnus albacares* (Piyok)
- *Euthynnus affinis* (Tulingan)
- *Auxis thazard* (Bilogan)
- *Scomber australasicus* (
- *Sardinella gibbosa* (Tamban)
- *Kyphosus vaigiensis* (
- *Engraulidae* (); and
- *Trachinotus blonchii*

5. During the open forum, the following inputs and comments were gathered from the Site Committee on the Fisheries Landing Survey in Masinloc, Zambales:
 - a. *Pteroceasio tessellata* was not included in the revised list of major species caught.
 - b. The decline of the total catch in metric tons in 2020 can be attributed to the restriction of fishing activity due to the CoVid-19 pandemic; and
 - c. Data validation for the total number of boats in 2018 should be verified to assess the cause of decline in total catch in year 2018.

III. Fish Eggs and Larvae Results (2018-2019)

6. Results for the Fish Eggs and Larvae from 2018 to 2019 was presented by Mr. Valeriano M. Borja, the National Scientific and Technical Focal Point of the project. He discussed the proposed area where high numbers of eggs and larvae are present. Mr. Borja highlighted in his presentation that highest density of fish eggs in Masinloc Bay were observed in station number 4 near the offshore portion of San Salvador Island.
7. On the other hand, highest density of fish larvae were seen in station 2, which is also near the San Salvador Island and in the coastal portion of Barangay

Bamban. Based on the data presented, the Site Committee noted the top species observed in Masinloc Bay as follows:

- Siganidae
- Acanthuridae
- Carangidae
- Scombridae
- Clupeidae; and
- Caesionidae.

8. Mr. Borja added that the high density of fish eggs was observed during summer months (May 2018 and May 2019). Low density of fish eggs observed in station 6 in Oyon Bay during the 2 years survey period. Fish eggs concentration was recorded in station 4 (NE of San Salvador Island) followed by station 2. Station 4 followed by station 2 can be considered as the nursery grounds.
9. High fish larval concentration was observed in station 2 fronting San Salvador Island. High density of fish larvae was observed in May 2019 (97 ind./m³) during second quarter survey. Low larval concentration was observed in station 3 throughout the 2 years survey. According to Mr. Borja, based on the data collected, station 2 can possibly be sited as a nursery ground.

IV. Revised Refugia Site Boundary Delineation

10. The revised boundary delineation for the proposed refugia site in Masinloc was presented by Mr. Valeriano Borja. Based on the initial results of the fish eggs and larvae survey as supported by the fisheries landing survey, stations 2 and 4 with a total area of 72 hectares is proposed as the total fisheries refugia site.

V. Initial Results for the Reproductive Biology Data Collection

11. Mr. John Eliezer Pendre, Science Research Analyst and project Staff, presented the initial results for the reproductive biology of priority species in the site. Overall, a total of 870 samples were collected from the site. Ninety samples were *Auxis thazard*, 50 samples for *Pterocaesio tessellata*, and highest number of samples comprising 730 pieces of fish was *Sardinella fimbriata*. He mentioned that the data were collected from March 2021 to January 2022. He also added that no data were encoded for the months of November and December in 2021 due to bad weather condition hence no fish was caught.

12. Highlighted in the presentation of Mr. Pendre, *Sardinella fimbriata* caught using bagnet and beach seine was recorder during the month of March 2021 to January 2022. The highest number of mature female gonad was observed from months March and April. The most number of mature gonads were recorded between the first week and second week of March and April, respectively.

VI. Other Matters/Next Steps

13. After the plenary session, the forthcoming activities and other matters were discussed.

14. The list of suggested IEC materials were noted as follows:

- Buoys – suggested by Ms. Olive Gregorio
- Life Vests – suggested by Mr. Zaldy Elaugos
- Rash Guard for Bantay Dagat – suggested by Olive Gregorio

15. For the next steps, the Site Com recommended for the project to have a Memorandum of Agreement with the LGU of Masinloc to facilitate the implementation of future project activities. As per the focal person, Ms. Gregorio, the MOA was yet to be signed and currently for review by the Sangguniang Bayan Members. Update on the document will be presented on the next meeting.

16. Mr. Sam B. Eclarinal gave his closing remarks on behalf of Vice Mayor and Vice Chairperson of the Refugia Site Management Committee, Hon. Pedro O. Enciso. He thanked the project staff for presenting valuable inputs that would help manage the fishery resources in the municipality. Mr. Eclarinal also mentioned that the local government unit looks forward to the establishment of fisheries refugia in the near future to help increase the fishes in the municipality and help the fishing community.

17. Lastly, Mr. Borja gave his closing remarks and thanked the members of the committee for their continued support of the project as part of the adjournment of the meeting.



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ANNEX A

FISHERIES REFUGIA MANAGEMENT COMMITTEE MEETING – Masinloc Site

Lake View Hotel

March 24, 2022

Program of Activities

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| 8:30 AM | Registration |
| 9:00 AM | Preliminaries |
| | Approval of the Minutes of the Previous Meeting |
| | Matters Arising from the Previous Meeting |
| | Presentation of Fisheries Landing Survey Data (2017-2020) |
| | Presentation of Fish Eggs and Larvae Results (2018-2019) |
| | Presentation of revised Refugia Site Boundary Delineation |
| | Presentation of Initial Results for the Reproductive Biology Data Collection |
| | Other Matters and Way Forward |
| | Synthesis |
| 12:00 NN | - LUNCH - |
| 1:00 PM | Adjournment |

PHOTO DOCUMENTATION

