



Republic of the Philippines
Department of Agriculture
Bureau of Fisheries and Aquatic Resources
FISHERIES MANAGEMENT AREA 12 MANAGEMENT BOARD
Purok 3 Brgy. Bambang, Los Baños, Laguna

AN EXCERPT FROM THE MINUTES OF THE 1st QUARTER REGULAR MEETING OF THE
FISHERIES MANAGEMENT AREA 12 MANAGEMENT BOARD HELD
ON March 23, 2023 AT TANZA, CAVITE

PRESENT:

MR. SAMMY A. MALVAS – MB Chairperson
HON. MATT ERWIN V. FLORIDO – Co-Chairperson
MR. RODRIGO A. DE JESUS – Member, Municipal Fishing Sector Representative
MS. MELANIE P. CATAPANG – Member, Commercial Fishing Sector Representative
DR. YASMIN H. PRIMAVERA-TIROL – Member, Academe Sector Representative
MR. PACIFICO D. BELDIA II – Member, NGO Sector (Alternate) Representative
MR. WILFREDO A. HERNANDEZ – Member, IFARMC (Balayan Bay)
MR. EDDY P. DE MESA – Member, IFARMC (Tayabas Bay)
PCPT EDWIN A. CABALAG – Member, NGA Sector Rep. (PNP-Maritime Unit)
MR. CUSTODIO L. BALAOING JR. – Member, NGA Sector Representative (PFDA)
ENGR. MICHAEL CASTO A. RAS, II – Member, NGA Sector Representative (DILG)
EMMANUEL H. ASIS, DFT, CESE – Member, Regional Director, BFAR MIMAROPA
RYAN O. DORONILA – Member, FMA Focal, BFAR 6

ABSENT:

ARIEL U. PIOQUINTO - Member, Regional Director, BFAR 5
CG CAPT VICTORINO RONALDO Y. ACOSTA, IV - Member, NGA Sector (PCG)
NILO B. TAMORIA, CESO III – Member, PAMB Representative
ATTY. IMMANUEL L. SODUSTA – Member, Aquaculture Sector Representative
MS. DYNA V. BONITES – Member, Marketing/Processor Sector Representative
MR. OLIVER S. TAMBOON – Member, Indigenous People Representative
MS. ROSALIE G. RECARO – Member, NGO Sector Representative

RESOLUTION NO. 2023-11
SERIES OF 2023

**“A RESOLUTION ADOPTING THE REFERENCE POINTS, HARVEST CONTROL RULES,
HARVEST CONTROL MEASURES AND SPECIFIC MANAGEMENT ACTIONS FOR *Sardinella
lemuru* (TAMBAN) IN TAYABAS BAY, QUEZON-SIDE PURSUANT TO THE NATIONAL
SARDINES MANAGEMENT PLAN, FISHERIES MANAGEMENT AREA 12 FRAMEWORK PLAN
AND FISHERIES ADMINISTRATIVE ORDER NO. 263, SERIES OF 2019”**

WHEREAS, the Amended Fisheries Code of the Philippines (Republic Act No. 8550, as amended by Republic Act No. 10654) declares as a state policy to adopt the precautionary principle, and to manage fishery and aquatic resources in a manner consistent with the concept of an ecosystem-based approach to fisheries management and integrated coastal area management in specific natural fishery management areas;

WHEREAS, the Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR) issued the Fisheries Administrative Order (FAO) No. 263 on January 28, 2019, which established the twelve (12) fisheries management areas (FMAs) covering all Philippine waters, enjoining national and local fisheries managers to take on shared responsibilities for the conservation and sustainable management of fishery resources;

WHEREAS, the Department of the Interior and Local Government issued Memorandum Circular No. 2020 -121 on September 17, 2020, directing all Local Government Units (LGUs) to participate and support the DA-BFAR roll-out on the establishment of the said Fisheries Management Areas;

WHEREAS, the FMA Management Board (MB) is mandated to develop the Fisheries Management Area plan as a framework to guide the actions of DA-BFAR, local government units, and other stakeholders within the established FMA; establish reference points, adopt harvest control rules as well as other conservation and management measures; and ensure that plans, programs, and ordinances are consistent with the FMA plan;

WHEREAS, the National Sardines Management Plan, which was approved on May 15, 2020 by Department of Agriculture Secretary William Dar, is the product of the efforts and collaboration of the different sectors, and aims to improve science-based indicators for the sustainability of fish stocks and distribution of benefits among sardine fisherfolk communities and strengthen science-based management for sustainable sardine fisheries by the end of 2025;

WHEREAS, the Amended Fisheries Code provides that the BFAR-NFRDI shall determine the Target Reference Points (TRP) and the Limit Reference Points (LRP), and the Harvest Control Rules (HCR), which refers to actions or set of actions to be taken to achieve a medium- or long-term target reference point, while avoiding reaching or breaching a limit reference point in all fishing grounds or fishery management areas based on the results of national stock assessments and the precautionary principle;

WHEREAS, the FMA Management Board, in coordination with the BFAR and LGUs, must adopt and enforce harvest control rules along with comprehensive and complementary measures to return fish stocks to levels of sustainability;

WHEREAS, the ecological goals of the National Sardines Management Plan include the annual establishment and endorsement of at least 1 Reference Point by FMA as basis for setting up harvest control rules, as well as the improvement and scaling up of Reference Points;

WHEREAS, the governance goal of the National Sardines Management Plan and Fisheries Management Framework Plan enjoins the adoption and institutionalization of the sardine management framework at the FMA Level, where the corresponding harvest control rules formulated by the Scientific Advisory Group be adopted by the Management Board and applied to the Fisheries Management Areas, covering both municipal and commercial waters and fishers;

WHEREAS, the Scientific Advisory Group is mandated to present the results of scientific studies conducted by the National Stock Assessment Program (NSAP) based on best available data for the recommendation of harvest control rules to the Management Board as stated in Section 8 of the Fisheries Administrative Order No. 263;

WHEREAS, the Scientific Advisory Group has presented the status of fish stocks in Tayabas Bay in which is a major sardine fishing area that requires urgent harvest control rules to restore and

maintain sustainable level of sardine fisheries during the 2023 1st quarter management board meeting on March 23, 2023

WHEREAS, based on the analysis of NSAP data, results of performance indicators for *Sardinella lemuru* in FMA 12 have breached the Limit Reference Points (LRP) from 2014-2022: Percent Mature (50% and less), Percent Mega-spawners (20%), Percent within Length Optimum Range (80% and less); within Trigger Reference Points (TRP): Fishing Mortality (greater than 2M), Ratio of fishing mortality to natural mortality (more than 1), Mean Length (below 15.89 cm TL and decreasing), and Exploitation Rate (greater than 0.6) (See attached Annex 1);

WHEREAS, that the Scientific Advisory Group recommended to the Management Board the adoption of the following Reference Points (RPs) (See attached Annex 1), Harvest Control Rules (HCRs) and Harvest Control Measures (HCMs) and Specific Management Actions (See attached Annex 3) emanated in the Fisheries Management Area 12, Scientific Advisory Group Resolution No. 1 series of 2023; "A Resolution Recommending Harvest Control Rules, Harvest Control Measures and Specific Management Actions for *Sardinella lemuru* (Tamban) in Tayabas Bay, Quezon-Side Pursuant to the National Sardines Management Plan And Fisheries Administrative Order No. 263, Series of 2019"

WHEREAS, The FMA 12 Management Board deliberated the recommended the following Reference Points (RPs), Harvest Control Rules (HCRs) and Harvest Control Measures (HCMs) and Specific Management Actions and adopted the prioritized Harvest Control Measures (HCMs) and Specific Management Actions.

NOW, THEREFORE, pursuant to their respective powers of rulemaking under existing laws, the FMA 12 Management Board through this resolution hereby adopted of the following Reference Points (RPs) (See attached Annex 1), Harvest Control Rules (HCRs) and Harvest Control Measures (HCMs) and Specific Management Actions (See attached Annex 2):

FURTHER, let copies of this resolution be furnished to the national government agencies (Philippine Coast Guard, Department of the Interior and Local Government, Department of Environment and Natural Resources, Philippine National Police); institutional members of the FMA 12 (Management Body, Scientific Advisory Group, and Technical Working Group; Bureau of Fisheries and Aquatic Resources regional fisheries offices component of FMA 12; Provincial, city, or municipal government units for their information and favorable consideration.

-BFAR-W
(NFBmmc)

FINALLY, this is effective immediately.

CARRIED UNANIMOUSLY.

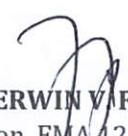
We hereby certify to the correctness of the foregoing resolution, an excerpt of the minutes of the FMA 12 MB meeting held on Villa Excellance Beach and Wave Pool Resort, Conference Hall, Tanza, Cavite Province at March 23, 2023.

CERTIFIED CORRECT:

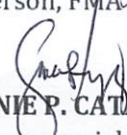


ALLAN U. CASTILLO
Head Secretariat, FMA 12


ATTESTED:



HON. MATT ERWIN V. FLORIDO
Co-Chairperson, FMA 12




MS. MELANIE P. CATAPANG
Member, Commercial Fishing Sector Rep.



MR. PACIFICO D. BELDIA II
Member, NGO Sector (Alternate) Representative



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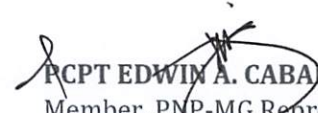
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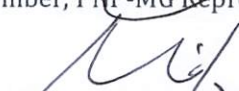
DR. YASMIN H. PRIMAVERA-TIROL
Member, Academic Sector Representative



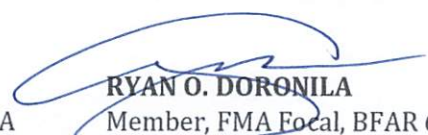
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Member, DILG Representative (NGAs)



RYAN O. DORONILA
Member, FMA Focal, BFAR 6

APPROVED:

SAMMY A. MALVAS
Chairperson, FMA 12

Annex I. Summary of results of analyses for *Sardinella lemuru* (tamban) in Tayabas Bay-Quezon Side from 2014-2022.

Performance Indicators	Target Reference Point	Trigger Reference Point	Limit Reference Point	RESULTS									Assessment Method	Interpretation
				2014	2015	2016	2017	2018	2019	2020	2021	2022		
Percent mature	90-100 % mature	51-90 %	≤50 % and less	0.63	1.00	0.41	2.28	0.98	0.19	0.00	2.23	0.35	FROESE Sustainability Indicators	Breaching LRP
Percent ±10% Lopt	100 % catch-optimal	81-90 %	≤80 % and less	22.36	15.61	5.71	16.06	12.03	5.44	7.67	9.53	19.66		Breaching LRP
Percent mega-spawners	30-40% mega-spawners (fast-growing species)		< 20 % mega-spawners	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.39	0.00		Breaching LRP
Average length (cm) where Lm=15.89 cm	Above Lm and increasing	Above Lm and increasing/ decreasing/ stable	Below Lm and increasing/ decreasing/ stable	16.34	16.16	15.22	16.84	15.99	15.76	15.58	15.16	15.94	LBAR	Within TRP
Fishing Mortality (F)	F/M <1	F/M > 1 and <2	F/M ≥ 2	1.08	1.68	1.68	1.29	2.13	2.63	2.07	1.65	1.34	FISAT	Within TRP
Exploitation value (E)	≤ 0.5	> 0.5 and < 0.6	≥ 0.6	0.52	0.63	0.63	0.56	0.68	0.72	0.67	0.65	0.57		Within TRP

Annex 2. Adopted Harvest Control Rules, Harvest Control Measures and Specific Management Actions for *Sardinella lemuru* (tamban) in Tayabas Bay-Quezon Side

Harvest Control Rules	Harvest Control Measures	Specific Management Actions
Implement maximum catch limit	<p>Catch Limit, gear type and size restriction</p> <p>Strengthen law enforcement efforts and strict monitoring of existing fishery laws and regulations within Tayabas Bay</p>	<ul style="list-style-type: none">• A resolution requesting the Department of Interior and Local Government (DILG) to urge the Local Government Units (LGUs) for the immediate conduct of inventory in municipal level (3 GT and below) and the Bureau of Fisheries and Aquatic Resources (BFAR) for commercial level (3.1 GT and above).<ul style="list-style-type: none">○ Strict implementation of Section 86 “Unauthorized Fishing” and Section 16 “Jurisdiction of Municipal/City Governments” of RA 10654○ Require the commercial fishing operators to submit catch reports for monitoring;○ Review and validate the list and admeasurement of municipal fishing vessels in compliance with Executive Order 305 “Devolving to Municipal and City Governments the Registration of Fishing Vessels Three (3) Gross Tonnage and below”;○ Review of the existing regulation of fine mesh nets;○ Conduct catch documentation and value chain analysis;• Intensify enforcement on the regulation of active fishing gears in line with the provision Section 95 “Use of Active Gear in Municipal Waters, Bays, and other Fishery Management Areas” of RA 10654 and Fisheries Administrative Order (FAO) No. 201 “Ban of Fishing with Active Gear”;• Strict implementation of appropriate mesh size in line with Section 93 “Use of Fine Mesh Net” of RA 10654 and FAO 155-1; “Amending Section 2 of FAO No. 155, regulating the use of fine meshed nets in fishing”.
Implement spatio-temporal fishing limits	Spatio-temporal restriction	<ul style="list-style-type: none">• Establishment and implementation of the seasonal closure for all commercial fishing gears for the months of November 1 to January 1 of each year;• Banning of the use beach seine in municipal water from January 1 to March 1 of each year;

Annex 3. Recommended Harvest Control Rules, Harvest Control Measures and Specific Management Actions for *Sardinella lemuru (tamban)* in Tayabas Bay-Quezon Side by Science Advisory Group; FMA 12 Science Advisory Group Resolution NO. 263, SERIES OF 2019”

Harvest Control Rules	Harvest Control Measures	Specific Management Actions
Implement maximum catch limit	Catch Limit	Creation of multi-agency task force to evaluate the following recommended actions: <div>1. Update the boat and gear inventory of municipal and commercial fishing vessels;<ul style="list-style-type: none">Require the commercial fishing operators to submit catch reports for monitoring;Reduce the number of fishing trips;Reduce the current fishing effort by 25.11 % based on the computed E rates;Review of the existing regulation of fine mesh nets;</div> <div>2. Review and validate the list and admeasurement of municipal fishing vessels in compliance with Executive Order 305 “Devolving to Municipal and City. Governments the Registration of Fishing Vessels Three (3) Gross Tonnage and below”;</div> <div>3. Review existing municipal fishing ordinances to come up with a unified fisheries ordinance on size limits;</div> <div>4. Strengthen law enforcement efforts and strict monitoring of existing fishery laws and regulations within Tayabas Bay;<ul style="list-style-type: none">Intensify enforcement on the regulation of active fishing gears such as, but not limited to motorized push nets, Beach seine, Danish seine, within municipal waters;</div>
Consider gear type restriction and regulation on mesh sizes	Gear type and size restrictions	
Consider implementing a minimum size limit	Size Limit	
Reduce and regulate the catches of juvenile sardines		

Consider market restrictions for juvenile sardines	Market Restriction	<ul style="list-style-type: none">• Strict implementation of “No commercial fishing gear operation” (Purse seine, Bag net, and Ring net) within municipal waters subject to the exceptions provided by the code;• Determine and implement a minimum size limit for catching sardines;• Strict implementation of appropriate mesh size;
Implement spatio-temporal fishing limits	Spatio-temporal restriction	<p>5. Implement the technology-based system such as a Vessel monitoring system (VMS).</p> <p>6. Conduct catch documentation and value chain analysis;</p> <p>7. Determine appropriate/sustainable sizes for processed sardines such as smoked, dried, fish paste and fish sauce</p> <p>8. Conduct studies on reproductive biology, spatio-temporal distribution of plankton, chlorophyll concentration, and larval distribution to determine the spawning season and spawning ground of <i>S. lemuru</i> within Tayabas Bay;</p> <ul style="list-style-type: none">• Establishment of the closed season once the spawning season has been determined taking into consideration the alternative livelihood or assistance for the affected fisherfolk;• Establish fishing season based on average length to determine the period where optimum sizes of sardines are caught;