NATIONAL TUNA MANAGEMENT PLAN

Department of Agriculture
BUREAU OF FISHERIES AND AQUATIC RESOURCES
Fisheries Building Complex, BPI Compound
Visayas Ave., Quezon City, Philippines 1128

NATIONAL TUNA MANAGEMENT PLAN 2025-2030

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Message from the SECRETARY

I extend my warmest congratulations to the Bureau of Fisheries and Aquatic Resources for the publication of the National Tuna Management Plan for 2025-2030.

This five-year plan represents the commitment of the government towards achieving a thriving tuna industry for our economy, food security, and the welfare and stability of our tuna fishers and coastal communities. It will provide guidance to industry players to effectively attain the three broad-based goals of a sustainable and science-based level of production, improved socio-economic conditions of fisherfolk and equitable access to tuna resources, and strengthened governance and management of tuna fisheries.

The tuna industry continues to prosper because of the collective efforts of our fisherfolk, tuna producers and processors, the Philippine government, the private sector, academe, maritime experts, and civil society organizations. However, it is not exempt from global shocks and challenges that surge across the oceans.

As such, the government's task as leaders and collaborators is critical, now more than ever. We have the responsibility to steer the industry towards a path that is sustainable, equitable, and globally competitive. I am confident that through the course of action laid out in this plan and the collective and purposeful synergies of stakeholders, our tuna fishery resources will be protected and well-managed.

Once again, thank you for your brilliant ideas and contributions to the development of this National Tuna Management Plan. Rest assured that the Department of Agriculture will be steadfast in supporting the BFAR as you propel the tuna industry forward in five years and beyond.

Mabuhay ang industriya ng tuna sa Pilipinas!

Secretary Francisco Tiu Laurel, Jr.
Department of Agriculture

Message from the DIRECTOR

I commend my fellow public servants from the Bureau of Fisheries and Aquatic Resources for leading the development and publication of the National Tuna Management Plan for 2025–2030 — a framework that reflects our drive to keep the country's tuna fisheries sustainable, competitive, and beneficial to the communities that depend on them. This plan sets out the steps we need to take together — protecting our resources, meeting market standards, and ensuring the long-term strength of the sector.

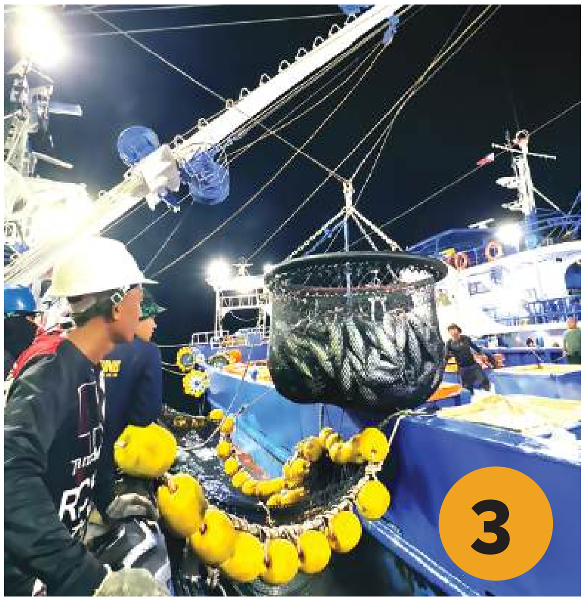
Its development brought together voices from across the spectrum: national and local government, industry, academe, civil society, and fishing communities. Their ideas and experience shaped a plan that is practical, science-based, and grounded in the realities of our fisheries.

I thank everyone who took the time to be part of this process. Your input has made the plan more responsive and more relevant to the people it is meant to serve.

The Bureau of Fisheries and Aquatic Resources will work closely with our partners to turn strategies into concrete results — from enhanced monitoring of our vessels to improved traceability, reduced post-harvest losses, and support for responsible fishing practices. Together, we can keep the Philippine tuna industry strong, sustainable, and respected here and abroad.

Sama-sama tayo tungo sa mas maunlad at masaganang Bagong Pilipinas!

ELIZER S. SALILIG, MFT
National Director
DA-BFAR



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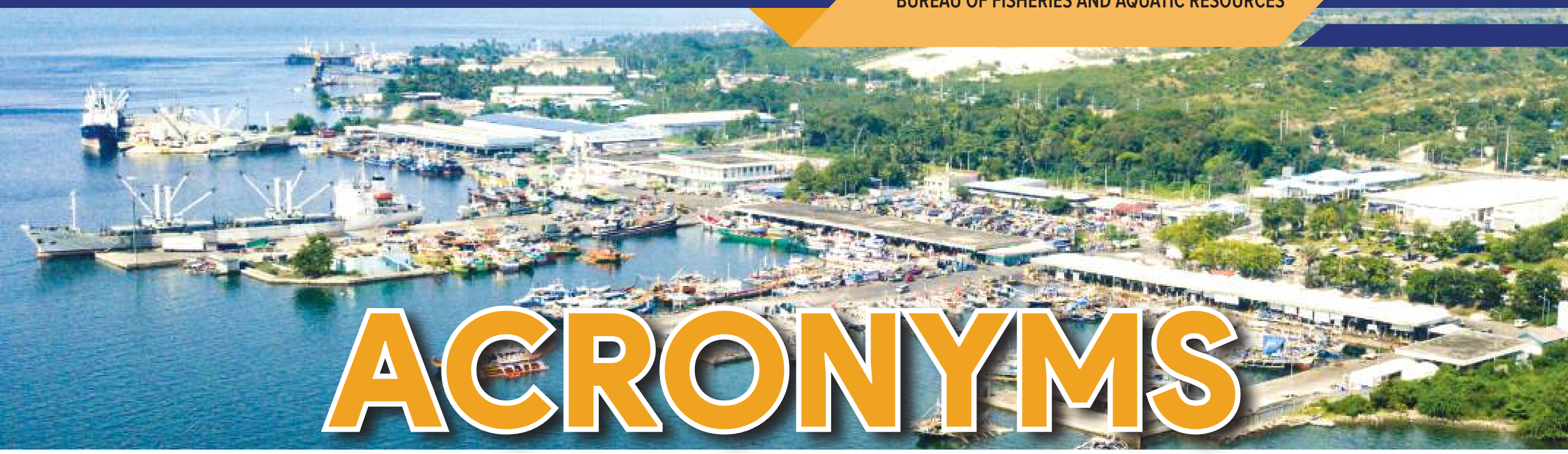


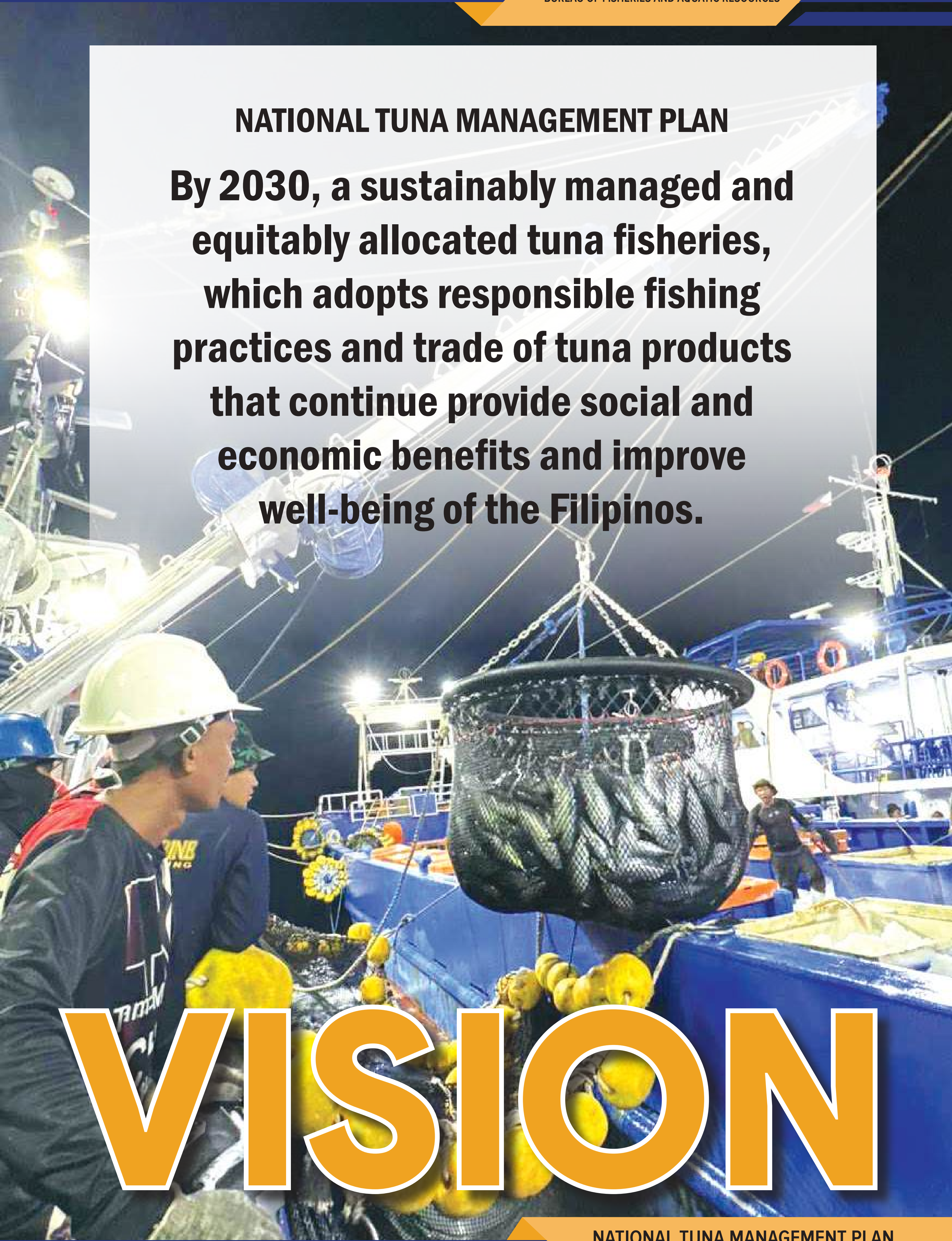
ACRONYMS

ACPC	Agriculture Credit Policy Council
BAS	Bureau of Agricultural Statistics
BFAR	Bureau of Fisheries and Aquatic Resources
BoatR	Boat Registration
BOI	Board of Investment
CAC	Codex Alimentarius Commission
CCSBT	Commission for the Conservation of Southern Bluefin Tuna (CCSBT)
CFGL	Commercial Fishing Gear License
CFVL	Commercial Fishing Vessel License
CITEM	Center for International Trade Expositions and Missions
CITES	Convention on Biological Diversity and Convention on International Trade in Endangered Species of Wild Flora and Fauna
CMM	Conservation and Management Measures
CMS	Convention on Migratory Species
CNFIDP	Comprehensive National Fisheries Industry Development Plan
CODEX	Codex Alimentarius or Food Code
DA-BFAR	Department of Agriculture-Bureau of Fisheries and Aquatic Resources
DBM	Department of Budget and Management
DENR	Department of Environment and Natural Resources
DFA	Department of Foreign Affairs
DOLE-DAO	Department of Labor and Employment-Department Administrative Order
DOST	Department of Science and Technology
DOST-ICTO	Department of Science and Technology – Information and Communications Technology Office
DTI	Department of Trade and Industry
DNA	Deoxyribonucleic Acid
DWFF	Distant Water Fishing Fleets
EAFM	Ecosystem Approach to Fisheries Management
EEZ	Exclusive Economic Zone
EU	European Union
FAD	Fish Aggregating Device
FARMCs	Fisheries and Aquatic Resource Management Councils
FAOs	Fisheries Administrative Orders
FeLIS	Fishing Vessel Electronic Licensing System
FB	Fishing Boat
FFA	Forum Fisheries Agency
FIQD/FIS	Fisheries Inspection and Quarantine Division/Fisheries Inspection Section
FL	Fork Length
FLE	Fisheries Law Enforcement
FLEMIS	Fisheries Law Enforcement Management Information
FOP	Fisheries Observer Program
FPTLS	Fisheries Product Testing Laboratory Section
FRLD	Fisheries Regulatory and Licensing Division
GFI	Government Financial Institutions
GMP	Good Manufacturing Practices
GSFPC	General Santos Fish Port Complex
HACCP	Hazard Analysis Critical Control Point
HCR	Harvest Control Rule
HR	Human Resources
HSP1	High Seas Pocket 1
IATTC	Inter-American Tropical Tuna Commission
ICCAT	International Commission for the Conservation of Atlantic Tunas
ICT	Information and Communication Technology
IDSFA	Inter-island Deep Sea Fishing Association
IEC	Information Education Campaign
IOTC	Indian Ocean Tuna Commission
IRR	Implementing Rules and Regulations

ISO	International Organization for Standardization
IUU	Illegal, Unreported and Unregulated
LGU	Local Government Unit
LSPSV	Large Scale Purse Seine Vessel
MARINA	Maritime Industry Authority
MCSCOCs	Monitoring Control and Surveillance Coordinating and Operations Centers
MENA	Middle East and North Africa
MHLC	Multilateral High-Level Conference
MSY	Maximum Sustainable Yield
MSME	Micro and Small Medium Enterprises
NAMRIA	National Mapping and Resource Information Authority
NCIE	National Committee on Illegal Entrants
NDRRMC	National Disaster and Risk Reduction Management Council
NEDA	National Economic Development Authority
NFRDI	National Fisheries Research and Development Institute
NGO	Non-Government Organization
NMFDC	National Marine Fisheries Development Center
NSAP	National Stock Assessment Program
NTIC	National Tuna Industry Council
NTMP	National Tuna Management Plan
OFP/SPC	Oceanic Fisheries Programme/ Secretariat of the Pacific Community
PCAARRD	Philippine Council for Agriculture and Aquatic Resources Research and Development
PCAF	Philippine Council for Agriculture and Fisheries
PFDA	Philippine Fisheries Development Authority
PHTD	Post-Harvest Technology Division
PIN	Pacific Island Nations
PNA	Parties to the Nauru Agreement
PNG	Papua New Guinea
PPA	Philippine Ports Authority
PSA	Philippine Statistics Authority
PSM	Port State Measures
PTDF	Pacific Tuna Development Foundation
RFMO	Regional Fisheries Management Organization
RFO	Regional Field Offices
RPs	Reference Points
SEAFDEC	Southeast Asian Fisheries Development Center
SFFAII	SOCKSARGEN Federation of Fishing and Allied Industries, Inc.
SMA	Special Management Area
SPC	Secretariat of the Pacific Community
SSI	Species of Special Interest
SUC	State Universities and Colleges
TBT/SPS	Technical Barriers to Trade and Sanitary and Phyto Sanitary Measures
tRMOs	tuna Regional Management Organizations
TURF	Territorial Use Rights for Fishing
UNCLOS	United Nations Convention on the Law of the Sea
UN/FAO CCRF	United Nations/Food and Agriculture Organization Code of Conduct for Responsible Fisheries
UNFSA	United Nations Fish Stock Agreement
UP-MSI	University of the Philippines- Marine Science Institute
USA	United States of America
USAID	United States Agency for International Development
VMS/VMM	Vessel Monitoring System/Vessel Monitoring Measure
WCPFC	Western and Central Pacific Fisheries Commission
WCPFC-CA	Western and Central Pacific Fisheries Commission Convention Area
WCPO	Western and Central Pacific Ocean
WPEA	West Pacific East Asia
WPS	West Philippine Sea
WTO/GATT	World Trade Organization/General Agreements on Tariff and Trade
WWF	World Wildlife Fund

NATIONAL TUNA MANAGEMENT PLAN

By 2030, a sustainably managed and equitably allocated tuna fisheries, which adopts responsible fishing practices and trade of tuna products that continue provide social and economic benefits and improve well-being of the Filipinos.



VISION

BACKGROUND

The adoption of a National Tuna Management Plan (NTMP) as a roadmap to a sustainable tuna industry is important considering the current developments, challenges and opportunities in tuna production and markets.

As one of the major tuna fishing nations, it is very important that the Philippines balance the need for growth and development and cooperate in sustainably managing the tuna and other highly migratory and transboundary fish stocks. Regional and global events have strengthened the implementation of joint management measures designed to protect the tuna and other tuna-like and migratory resources of more than one nation.

Regional and global events have strengthened the requirement to implement joint management measures that protect migratory resources for more than one nation. There is a high degree of inter-dependence in all tuna fisheries in the Philippines, since targeting fish stocks impacts greatly across all sectors in the tuna industry.

Regionally, increasing catch levels in the Western and Central Pacific Ocean (WCPO) have led to a growing number of Conservation and Management Measures (CMMs) adopted by the Western and Central Pacific Fisheries Commission (WCPFC) which require implementation at national level. The Philippines is required to adopt these measures and subsequently introduce them to its fisheries industry.

In addition, the R.A. 10654 which amended R.A. 8550 instituted the concept of Illegal, Unreported and Unregulated (IUU) fishing and sets increased penalties and sanctions as a deterrent. It prescribes that the number of licenses and permits for the conduct of fishery activities is subject to harvest control rules and reference points, adopts the precautionary principle and manages fishery and aquatic resources consistent with the concept of an ecosystem-based approach to fisheries management in specific fishery management areas. The application of the Ecosystem Approach to Fisheries Management (EAFM) is considered important to find a balance between ecological well-being and human well-being, so that development does not degrade the natural resource base but avoids overprotection of resources that prevents development, and this balance can be achieved through good governance.

Meanwhile, the NTMP is aligned with BFAR major plans with targets, strategies and actions to attain the objectives of sufficient contribution to food security for the growing Philippine population, inclusive growth; sustainable, science-based fisheries and aquatic resource management practices; compliance to international laws, policies, and standards, and enforcement of local laws and regulations; strengthened capacities in infrastructure, technologies, human resource and information sharing; and, resilience to environmental hazards.

SCOPE/COVERAGE

The objectives, principles, and management measures contained in this Plan apply to the catching, processing and marketing of skipjack tuna *(Katsuwonus pelamis)*, yellowfin tuna *(Thunnus albacares)*, bigeye tuna *(Thunnus obesus)*, albacore tuna *(Thunnus alalunga)* and Pacific bluefin tuna *(Thunnus orientalis)*.

It covers both municipal and commercial fishing including purse seine, ringnet, longline, handline, hook & line, and other fishing methods and gears that are operated in Philippine waters including the EEZ. Specific management measures also apply to the operations of Philippine-flagged vessels operating beyond national jurisdictions (high seas and/or jurisdiction of other coastal states)

The Plan also includes measures that apply to the trade of tuna products originating from the Philippines, which includes fish caught elsewhere but transshipped and/or processed in the country.

Species-specific tuna fisheries management plans may also be formulated consistently with the vision, goals and objectives of this Plan.

PROFILE OF PHILIPPINE TUNA FISHERIES

FLEET STRUCTURE AND FISHING GROUNDS

Tuna fishing in the Philippines involves both municipal (< 3GT) and commercial (>3GT) fishing vessels. The oceanic tunas are caught by municipal handline/hook & line, troll line and gillnet among others that are operating in municipal waters. Small-scale and medium-scale commercial (3.1-150 GT) are purse seine, ring net, and handline primary fishing boats that fish beyond municipal waters and the EEZ. A limited number of Philippine-flagged purse seine/ring net vessels (36 catchers) not more than 250 GT operate in the high seas pocket 1 (HSP1) under the WCPFC measure. Relatively larger vessels/large purse seine vessels (>500GT) operate in other Pacific Island countries. A small number of Philippine-flagged tuna longline vessels also operated in WCPO and Indian Ocean (IO) in previous years, but inactive since 2015 and delisted. The distant water fleet is currently composed of 60 tuna purse seine catchers, with an average of 662 GT (ave. 112 GT for Medium-scale; 821 GT for Large-scale)

The number of registered municipal fishing boats is 430,231 as of December 2024 (BoatR). However, the number of boats engaged by fishing category is unclear. Municipal tuna fishing boats fish both in municipal waters (within 15 km) and beyond. The fishing gears are mainly hook & line, drift gillnet and troll line. Municipal tuna fishing is carried out nationwide, with important fishing grounds in Sulu Sea, Moro Gulf/Celebes Sea, Pacific seaboard including archipelagic waters of Lagonoy Gulf, Albay Gulf, Davao Gulf, Davao Oriental, West Philippine Sea, Antique, Mindoro, Zambales, Ilocos Norte and Ilocos Sur.

Table 1. Registered commercial fishing boats for tuna by gear type, as of December 2024 (Source: BFAR-FRLD)

Gear Type	Number of vessels
Tuna Handline	635
Ring Net	367
Purse Seine	129
Tuna Drift Gillnet	21
Total	1,152

The Bureau of Fisheries and Aquatic Resources (BFAR) classification of registered Philippine vessels operating in the Western and Central Pacific Region is shown in Table 2 which are mainly vessels that are based in General Santos and in Navotas City.

Table 2. Philippine registered vessel in the WCPFC (Source: WCPFC-RFV, as of December 2024)

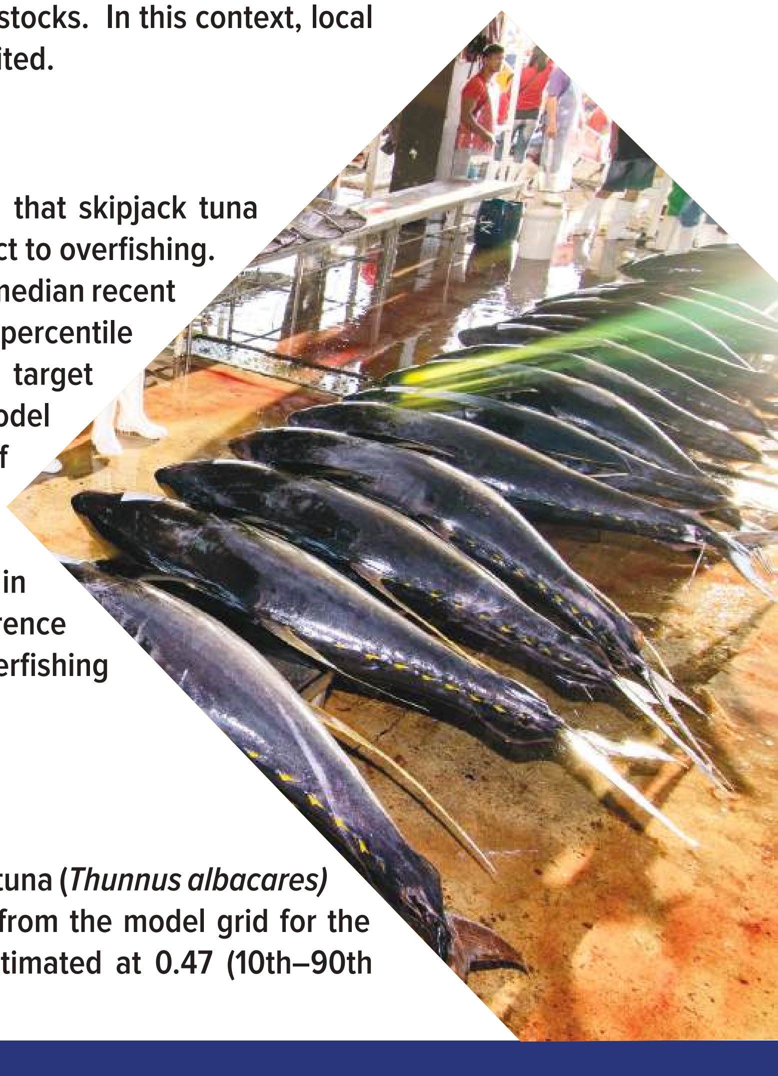
No. of registered vessels					
Type of Vessel	3.1-250 GT	>250-500 GT	>500-1,000 GT	>1,000 GT	Total
Fish carrier	52	4	2	7	65
Purse seine	24	-	8	28	60
Support vessel	116	3	-	-	119
Total	192	7	10	35	244

TUNA RESOURCES AND STOCK STATUS

A total of eleven (11) tuna species are reported in Philippine fisheries. The major oceanic tuna species include skipjack (*Katsuwonus pelamis*), yellowfin (*Thunnus albacares*), and bigeye tuna (*Thunnus obesus*). Albacore (*Thunnus alalunga)*, longtail (*Thunnus tonggol*), and striped bonito (*Sarda sarda)* are also caught in smaller quantities and have only recently been recorded in fisheries statistics. Occasional catches of Pacific bluefin tuna (*Thunnus orientalis)* are likewise reported.

For neritic tunas, the main species landed are frigate tuna (*Auxis thazard*), bullet tuna (*Auxis rochei*), and eastern little tuna or kawa-kawa (*Euthynnus affinis*), which together constitute the bulk of the catch in coastal fisheries.

The stock of oceanic tuna is generally considered part of the West Central Pacific stocks; thus, assessment covers the WCPO wide fish stocks. In this context, local research studies on these species have been very limited.



Skipjack Tuna

The most recent stock assessment (2022) indicated that skipjack tuna (*Katsuwonus pelamis*) is neither overfished nor subject to overfishing. The assessment grid of models estimated the overall median recent spawning depletion (SBrecent/SBF=0) at 0.51 (80th percentile range: 0.43–0.64), which is close to the interim target reference point (TRP) of 0.50 (CMM 2021-01). No model results were below the limit reference point (LRP) of 0.20 SBF=0. The median of Frecent/FMSY was 0.32 (80th percentile range: 0.18–0.45) (Table SKJ-02). Overall, the 2022 stock assessment for skipjack tuna in the WCPO concluded that, according to WCPFC reference points, the stock is not overfished nor undergoing overfishing (Castillo-Jordan, 2022).

Yellowfin Tuna

The latest assessment (2023) indicated that yellowfin tuna (*Thunnus albacares)* is not in an overfished state. The median depletion from the model grid for the recent period (2018–2021; SBrecent/SBF=0) was estimated at 0.47 (10th–90th percentile interval: 0.42–0.52), including estimation and structural uncertainty. For all models, SBrecent/SBF=0 was above the biomass limit reference point. The recent median fishing mortality (2017–2020; Frecent/FMSY) was 0.50 (10th–90th percentile interval: 0.41–0.62). In all models, Frecent/FMSY was less than one, indicating that overfishing is not occurring (Magnusson, 2023).

Bigeye Tuna

The 2023 assessment similarly concluded that bigeye tuna (*Thunnus obesus*) is not in an overfished state. The median depletion from the model grid for the recent period (2018–2021; SBrecent/SBF=0) was 0.35 (10th–90th percentile interval: 0.30–0.40), including estimation and structural uncertainty (Table BET-02). In all models, SBrecent/SBF=0 was above the biomass reference point. The recent median fishing mortality (2017–2020; Frecent/FMSY) was 0.59 (10th–90th percentile interval: 0.46–0.74). In all cases, Frecent/FMSY was less than one, confirming that overfishing is not occurring (Day, 2023).

Albacore Tuna

The most recent stock assessment (2023) estimated the ratio of current biomass to the unfished dynamic biomass (SSB2021/SSBcurrent,F=0) at 0.54 (95% CI: 0.40–0.68). This value exceeded both the biomass threshold and limit reference points across all models, despite uncertainty in recent recruitment. The average fishing intensity during 2018–2020 (F2018–2020) was estimated at F59%SPR (95% CI: F72%SPR – F46%SPR), which was lower than the target reference point (F45%SPR). These results indicate that the stock is neither overfished nor subject to overfishing (ISC, 2023).

Pacific Bluefin Tuna

The latest assessment (2024) estimated spawning stock biomass (SSB) in 2022 at 23.2% of SSBF=0. This level exceeded both the initial rebuilding target (6.3% SSBF=0, achieved in 2017) and the second rebuilding target (20% SSBF=0, achieved in 2021). The recent fishing mortality (2020–2022; F%SPR) was 23.6%, suggesting that the stock is not subject to overfishing relative to several F-based reference points, including F20%SPR. Overall, the stock is considered to be recovering from the historically low biomass recorded in 2010 (ISC, 2024).

Bycatch of tuna fisheries

Caught as bycatch in tuna fisheries are mackerel scad *(Decapterus macarellus)*, various species of billfish and other species such as dolphin fish *(Coryphaena hippurus)*, wahoo, opah, rainbow runner *(Elagatis bipinnulatus*), trigger fish, and shark species, among others.

Statistics and Production

Tuna production attributed to the Philippines is caught by the municipal fisheries sector using various fishing gears, mainly hook and line; commercial large-fish handlines, EEZ commercial Philippine-flagged fishing vessel operating in Philippine waters and the high seas pocket1 (HSP1), and distant waters through fishing access with other Pacific Island Countries (PNG), particularly Papua New Guinea (PNG), which are mainly purse seiners.

Philippine Statistics Authority

Since 1987, official fisheries statistics have been produced by the Bureau of Agricultural Statistics (BAS) and are based on probability (stratified random sampling by data collectors) and non-probability surveys (interviews by regular BAS staff), supplemented by secondary data from administrative sources e.g. landings sites and ports (Vallesteros, 2002). Annual Fisheries Statistics for commercial, municipal, inland and aquaculture sectors are published for 3-year time frames and include volume and value of production by province and by region, information on fish prices and foreign trade statistics. The BAS was transferred to the Philippine Statistics Authority (PSA) in 2013.

The official fisheries statistics are the records of the Philippine Statistics Authority However, the sampling techniques and estimates are intended for macroeconomic purposes and not for stock assessment.

PSA estimates for bigeye and yellowfin tuna were combined prior to 2005. The PSA tuna catch for the last five years is shown in Table 3.

Table 3. PSA tuna catch in MT by species, 2020-2024 (Source: PSA Annual Fisheries Statistics)

Year	Commercial			Municipal			TOTAL
	SKJ	YFT	BET	SKJ	YFT	BET	
2020	234,522	62,649	6,005	26,083	32,240	13,929	375,428
2021	218,840	40,243	5,501	24,439	33,814	12,124	334,961
2022	220,363	49,755	8,671	36,278	34,861	10,528	360,455
2023	171,548	62,658	5,589	36,996	27,708	8,668	313,166
2024	235,893	64,576	7,314	41,632	25,605	12,004	387,024
Average	216,233	55,976	6,616	33,085	30,846	11,451	354,207
	216,233	55,976	6,616	33,085	30,846	11,451	354,207

Considering the sampling methodology applied by the current PSA system, it is commonly recognized that there is a need to improve species identification and estimation for yellowfin and bigeye.

The PSA statistics on tuna catch estimates include all the tunas unloaded in Philippine ports, regardless of the flag of the vessel and area where the fish were caught. It also does not distinguish catches from within Philippine waters or beyond national waters (high seas or from EEZ of other coastal states), or whether it is caught by Philippine-flagged or foreign-flagged vessels.

PSA is also in the process of implementing the new statistical frames and methodologies to improve their figures.

Reconciliation of Tuna Catch Estimate

To provide an estimate for stock assessment and policy and program formulation, the National Fisheries Research and Development Institute (NFRDI) in support of BFAR – Regional Fisheries Offices through the National Stock Assessment Program (NSAP) has been conducting the Annual Tuna Fisheries Catch Estimates Review Workshop since 2008.

This is intended to review and validate the tuna catch estimates by species, gear type and fishing areas by Philippine-flagged vessels. Data from the NSAP, log sheets from purse seine and ring nets, cannery receipts, Fisheries Observer Program, PSA, PFDA and industry are presented and reviewed.

The output of the workshop was submitted to the WCPFC as part of the Philippine annual report and included in the Tuna Yearbook. The most recent was the 18th Tuna Fisheries Catch Estimates Review Workshop for 2024, held in June 2025 (Table 4). The estimated total catch for the three key tuna species, Yellowfin tuna (YFT), Bigeye tuna (BET), and Skipjack tuna (SKJ), was 200,201 MT.

The bulk of the catch from the domestic fleet came from purse seine and ring net operations (110,643 MT or 55%), followed by domestic handline/hook and line (79,858 MT or 40%), and other gears (10,543 MT or 5%). The operations of group seining in HSP1 contributed approximately 34,791 MT, representing about 17% of the total domestic landings.

Table 4. Reconciliated catch of skipjack, yellowfin and bigeye for Philippine flagged vessels, by gear type and fleet in MT (2024) Source: 18th Phillippine tuna catch review workshop report

Gear/Species	SKJ	YFT	BET	ALB	TOTAL
Purse seine	54,848	19,121	1,402	0	75,370
Ringnet	28,359	6,691	220	2	35,721
Handline	3,648	33,424	2,398	647	40,118
Hook-and-Line	21,679	17,262	711	89	39,741
Others	6,821	3,368	250	95	10,534
TOTAL	115,355	79,865	4,981	833	201,034

The average catch of Philippine-flagged vessels for the recent five years was about 172,057 MT (2019-2023). The catch contribution of the distant water fleet has declined in recent years.

There is no Philippine-flagged longline vessel operating in the WCPFC Convention Area since 2015. Previously two (2) longline vessels had fishing access (e.g. Kiribati) and operated in the WCPO, with their catch summarized as follows:

Table 6. Catch of Philippine-flagged in MT distant water longlines in the WCPO, 2011-2014.

Species	2011	2012	2013	2014
Yellowfin tuna	145.77	60.63	27.16	2.78
Bigeye tuna	777.06	247.83	166.56	52.90
Albacore tuna	36.39	23.96	30.47	1.16
Others	174.96	62.66	10.69	38.67
TOTAL	1,134.18	398.08	234.87	95.51

Transshipment at Port and Processing

Transshipment of tuna by foreign fishing vessels is also recorded as part of the Philippine tuna statistics. Under current regulations, transshipment by foreign vessels is permitted only at the PFDA Port in Toril, Davao City.

From 2021 to 2025, port call records show arrivals mainly from Taiwanese-flagged vessels, with occasional visits from Panamanian, Vanuatuan, and Federated States of Micronesia vessels. Most arrivals during this period were carrier or fishing vessels delivering mixed tuna species and other large pelagic such as marlin, sailfish, wahoo, barracuda, and dolphinfish.

Unloading volumes varied widely across the years. In 2022, the highest recorded offload reached 9.74 MT in a single trip, while in 2023, the recorded volume for a single unloading was around 5.54 MT. The largest single offload in the period occurred in 2024, with 19.08 MT of mixed tuna species landed in one call, followed by a mid-year unloading of 7.89 MT. These fluctuations reflect the differences in fishing operations, targeting patterns, and seasonal availability of target species.

Most of the municipal tuna catch is landed in more than 8,000 landing sites nationwide and sold in wet markets. There is no available data on the disposal of municipal tuna catch, however, it is assumed that these largely consumed fresh and less significant quantities are processed by traditional methods like smoking, drying and salting. Except for tunas caught by hook & line and handline that are landed in General Santos City, Mindoro and Albay, insignificant quantity of the municipal catch go into commercial processing.

In general, yellowfin tuna and the bigeye tuna are processed as fresh/ chilled/ loins, whole gilled and gutted frozen, mostly in the National Capital Region (Metro Manila) and Region 12 (General Santos City). Some of the processing facilities are also using yellowfin tuna as raw materials for canning.

Table 7. Number of tuna processors and canneries in the Philippines, including their capacities as of 2025

TUNA CANNERY	CAPACITY
General Tuna Corporation	210 MT/day
Celebes Canning Corporation	80 MT/day
Seatrade Canning Corporation	80 MT/day
Alliance Seafood Select International Inc.,	100 MT/day
PhilBest Canning Corporation	180 MT/day
Citramina Canning Corporation	35 MT/day
TOTAL	685 MT/day

In addition to the post-harvest sector, a significant component of the Philippine tuna fishing industry is its export market. Canned tuna constitutes the bulk of tuna products being exported. Tuna, mackerel and sardines are major import fish commodities in 2023 and 25.8% of imports are accounted for by tuna.

The domestic catch from commercial fishing is increasingly utilized by domestic canneries, with smaller quantities processed as smoked, boiled and frozen products for both domestic and export markets.

Fish ports and landing centers

There are 455 commercial fish landing centers in the Philippines, which include PFDA and LGU-controlled ports, as well as private wharves.

The General Santos Fish Port Complex (GSFPC) is the country's major tuna unloading port, with a total of 891,380.86 MT of tuna unloaded from 2020 to 2024 (Table 8). Continuous infrastructure upgrades, including deep wharves, cold storage, and processing facilities, have enabled the port to maintain compliance with international food safety standards while meeting the operational needs of domestic and international tuna markets.

Table 8. Total tuna unloadings in General Santos Fish Port Complex from 2020-2024

Year	Volume (MT)
2020	186,149.36
2021	167,738.62
2022	177,831.74
2023	163,564.90
2024	196,096.24
TOTAL	891,380.86

The Navotas Fish Port Complex (NFPC) in Metro Manila is the second largest tuna port. Six other major fish ports in the country are proposed. The landed catches in this major landing site share an annual average of only two and one percent for SKJ and YFT respective for the last five years. Currently, rehabilitation of the Navotas Fish Port Complex includes upgrading of port facilities (such as roads, electrical and power system, landing quay and west breakwater), construction of cold storage and processing plant, and wastewater treatment facilities.

Table 9. Percentage of Tuna to the Total Volume of Fish Unloaded at NFPC (2020-2024)

Year	Total Volume of ALL Fish Species Unloaded	Skipjack Tuna (MT)	% Share of Skipjack Tuna	Yellowfin Tuna (MT)	% Share of Yellowfin Tuna
2020	156,090	2,295	1.47%	937	0.60%
2021	145,090	2,684	1.85%	856	0.59%
2022	136,991	3,959	2.89%	945	0.69%
2023	153,000	3,167	2.07%	1,102	0.72%
2024	172,291	1,172	0.68%	5,117	2.97%
AVERAGE	152,692	3,054	2%	1,527	1%

As of 2025, four hundred thirty-eight (438) operational Community Fish Landing Centers (CFLCs) nationwide were established by BFAR. The intent in establishing the CFLCs is to improve the lives and livelihood of municipal fisherfolk by providing better post-harvest handling and processing systems, and faster access to markets, sharing of knowledge and information to improve the quality of the fisherfolk's fair share, ensuring clean, safe and legitimate fishing practices, including post-harvest handling and processing technologies.

Likewise, the CFLCs serve as a monitoring site for the NSAP, facilitating organizational development and strengthening fisherfolk including women's participation in decision-making and as a training venue for the fisherfolks. The establishment of CFLCs is envisioned to reduce post-harvest losses.

Tuna export and import

As part of the Philippine external trade, the Philippine Fisheries Profile (2023) indicated that from the total volume of exported fish and fishery/aquatic products, tuna registered the highest volume with 88,970 MT which indicates a 34.8% share to the total volume of 255,510 MT major exports.

In 2023, tuna ranked first in export value at 34.2% in terms of share in the commodities. It contributes to 21.80 billion Pesos (Table 10).

Table 10. Tuna exports in terms of value, by kind and country of destination, 2023 (Source: BFAR-FPED)

Kind	Volume (MT)	FOB Value ('000$)	FOB Value ('000 Php)
Fish and Other Aquatic Invertebrates, Prepared/ Preserved	68,076	319,265	17,760,723
Fish, Fresh (Live/Dead), Chilled/Frozen	20,895	72,541	4,035,436
TOTAL	88,970	391,806	21,796,159

Country of Destination	Volume (MT)	FOB Value ('000$)	FOB Value (000 Php)
Japan	10,287	65,644	3,651,791
Germany	11,360	51,683	2,875,115
Spain	10,466	49,359	2,745,861
USA	8,753	45,792	2,547,396
Netherlands	7,576	34,723	1,931,666
Vietnam	12,275	30,396	1,690,930
United Kingdom	5,650	24,961	1,388,597
Italy	4,421	21,213	1,180,100
Belgium	2,094	11,017	612,855
Poland	2,197	8,334	463,629
Other Countries	13,891	48,683	2,708,217

As shown in Table 11, based on the published data in the Philippine Fisheries Profile (2023), tuna had the highest imported volume with 141,273 MT wherein 33.0% of the imported tuna came from Papua New Guinea in terms of volume for total imported fish and fishery/aquatic products.

In terms of value, tuna remained the top imported commodity with Php15.94 billion or 30.5% share of the total value of imported fish and fishery/aquatic products. With the figures shown above, we are considered a net tuna importing country (Table 11).

Table 11. Tuna imports in terms of value, by kind and country of origin, 2023

Kind	Volume (MT)	FOB Value ('000$)	FOB Value ('000 Php)
Fish and Other Aquatic Invertebrates, Prepared/ Preserved	4,419	14,837	825,375
Fish, Dried, Salted/In Brine, Smoked Fish	9	58	3,222
Fish/Fresh (Live/Dead),Chilled/ Frozen	136,845	271,552	15,106,417
TOTAL	141,273	286,446	15,935,015

Country of Origin	Volume (MT)	FOB Value ('000$)	FOB Value ('000 Php)
Papua New Guinea	46,726	98,107	5,457,705
Marshall Islands	16,278	31,796	1,768,838
Indonesia	11,229	25,042	1,393,076
Micronesia	11,144	20,959	1,165,970
China	10,445	17,182	990,874
Nauru	9,490	17,179	955,681
Vietnam	5,826	14,406	801,402
Spain	6,813	14,143	786,758
Seychelles	4,992	10,656	592,781
Taiwan	4,232	7,246	403,100
Other Countries	14,097	29,100	1,618,830

SOCIO-ECONOMIC BENEFITS OF TUNA FISHERY

The tuna fishery in the Philippines directly supports the livelihoods of a significant number of fisherfolk across the country. As of December 2024, an estimated 19,775 registered commercial fisherfolk were directly involved in capture fishing (catcher vessels). This includes 1,547 crew members on large-scale vessels, 10,760 on medium-scale vessels, and 7,468 on small-scale vessels operating in various Fisheries Management Areas (FMAs) and other coastal states.

Beyond the fishing fleets, the tuna industry sustains substantial employment in the post-harvest sector. As of 2025, tuna canneries employed a total of 6,080 people, covering roles in cleaning, processing, packaging, quality control, administration, and support services. These facilities are concentrated in the "Tuna Capital of the Philippines" (General Santos City) but also operate in other key tuna processing hubs. The broader processing sector includes fresh and frozen tuna processors, cold storage facilities, and allied industries, ensuring that the economic benefits extend across multiple regions.

A USAID study in 2019 noted that the tuna industry specifically in the Tuna Capital of the Philippines has impacted the tuna value chain in the local economy by estimating net economic value addition and tax contribution per kilogram of tuna supply. The tuna chain comprises fishers, traders, brokers, cold storage enterprises, tuna canneries and fresh and frozen tuna processors. It resulted in economic gains to include the contribution of the tuna value chain which has an important role for the local economy. In the year 2019, the value chain generates 274 million PHP in net economic benefit and contributes 57 million in tax revenue annually. In addition, it creates employment opportunities and fetches more than 350 million USD in hard currency. (USAID, 2019).

STAKEHOLDERS

Key stakeholders in the effective management and conservation of tuna resources in the Philippines include actors from the municipal, commercial, and processing sectors.

For the municipal sector, people's organizations and fisherfolk associations from the provinces of Sarangani, Occidental Mindoro, Lagonoy Gulf, and other major handline fishing grounds are active partners in the management of tuna fisheries.

For the commercial sector, stakeholders include tuna fleet operators and industry groups such as the SOCSKSARGEN Federation of Fishing and Allied Industries, Inc. (SFFAII), Alliance of Philippine Fishing Federations, Inc. (APFFI), Inter-Island Deep Sea Fishing Association (IDSFA), Philippine Tuna Handline Partnership (PHTP), and the National Tuna Industry Council (NTIC).

National Government Agencies (NGAs) involved in tuna fisheries management include the National Fisheries Research and Development Institute (NFRDI), Philippine Coast Guard (PCG), Philippine Fisheries Development Authority (PFDA), Maritime Industry Authority (MARINA), and the National Telecommunications Commission (NTC).

Other important partners include Local Government Units (LGUs), the academe, various bodies in key tuna Fisheries Management Areas (FMAs), and Integrated Fisheries and Aquatic Resources Management Councils (IFARMCs).

The processing sector consists of associations of fresh and frozen tuna processors, processing plants, and canneries.

Various mechanisms, such as national and municipal Fisheries and Aquatic Resources Management Councils (FARMCs), are in place to ensure effective consultation, provide recommendations, and enable efficient dissemination of policies and other relevant information to key stakeholders.

HISTORY

HISTORY OF TUNA FISHING AND MANAGEMENT

Tuna fishing in the Philippines dates back to the late 19th and early 20th centuries, when simple fishing gears were used mainly for subsistence in coastal and nearshore fishing grounds.

Commercial tuna fishing is believed to have begun during the Japanese occupation, with several tuna longline fishing operations recorded in Davao in the 1940s, followed by American operations in the 1950s, although these were of insignificant volume (BFAR/NFRDI, 2012).

In the 1960s, American importers and local fishing corporations financed small fishers in southern Mindanao, equipping them with handline and troll gear to catch tuna. During the 1970s, an increase in tuna exports encouraged the establishment of tuna producers' and exporters' associations. The introduction of payaos (fish aggregating devices) in the mid-1970s resulted in a significant increase in tuna landings, with production surpassing 100,000 MT by the late 1970s (Figure 1).

The 1970s also marked the tuna boom in General Santos City, driven by the introduction of payaos and the start of tuna purse seining by companies such as Mar Fishing Corporation. This period coincided with the enactment of Presidential Decree 704, which established the policy framework for fisheries in line with increasing fish production.

In the 1980s, increasing fish production remained a primary goal. The Philippines became the top producer of tuna in Southeast Asia. Joint venture agreements, particularly on tuna longline operations with Taiwan were established. The growing demand for fish supply led to the expansion of ring net and purse seine fleets, which eventually caused a decline in catch rates in Philippine waters. The country emerged as one of the main distant-water fishing nations in the Pacific, alongside the US, Japan, Korea, Taiwan, and China. By 1990, tuna production had exceeded 200,000 MT (Figure 1).

By the 1990s, the focus shifted toward export development and market expansion, while paying closer attention to conservation and fisheries management. In 1998, Republic Act No. 8550, otherwise known as the Philippine Fisheries Code of 1998, was enacted. This legislation aligned fisheries management with UNCLOS, UN agreements,

and the FAO Code of Conduct for Responsible Fisheries (CCRF), introducing concepts such as Maximum Sustainable Yield (MSY), catch quotas, total allowable catch (TAC), the establishment of Fisheries and Aquatic Resources Management Councils (FARMCs), and the promotion of sustainable fisheries.

At the turn of the century, the Philippines actively participated in the establishment of the Western and Central Pacific Fisheries Commission (WCPFC), initiating the tuna management regime for the Western and Central Pacific Ocean (WCPO). Tuna production from Philippine vessels trended upward during this decade, reaching its highest recorded level in 2008 at 360,000 MT.

However, increasing fishing pressure led to declines in fish biomass, particularly impacting bigeye tuna stocks. As a result, the WCPFC implemented more stringent conservation and management measures. These included the closure of High Seas Pocket 1 (HSP1) in 2010–2011 and fishing restrictions on the use of fish aggregating devices (FADs). These measures, combined with reduced fishing opportunities, led to a sharp decline in national tuna production, with landings dropping to less than 200,000 MT in 2011.

The Philippines appealed for the reopening of HSP1 to accommodate its displaced fleet and to address juvenile tuna catches in Philippine waters. This advocacy led to the granting of access for 36 catcher vessels under group seine operations beginning in late 2012.

In 2014–2015, Republic Act No. 8550 was amended by Republic Act No. 10654, introducing higher penalties and sanctions primarily to deter illegal, unreported, and unregulated fishing (IUUF). The Comprehensive National Fisheries Industry Development Plan (CNFIDP) was also updated through collaboration between the government, industry, and stakeholders, aiming to address emerging challenges and ensure that fisheries resources are properly managed and sustained (BFAR, 2016).

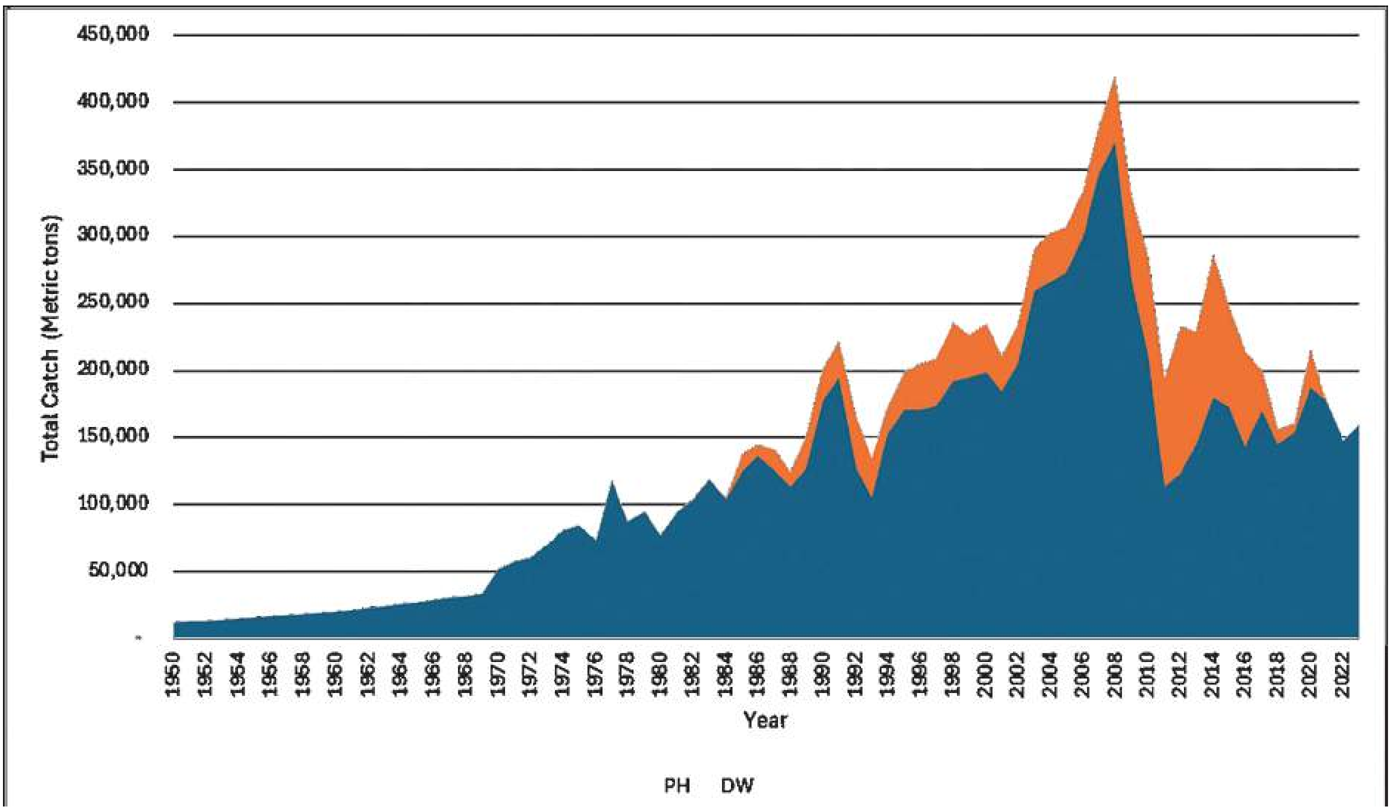


Figure 1. Tuna production of the Philippines, 1950-2023 (Source: WCPFC Tuna Yearbook; 18th Tuna catch workshop)


HEAD




MANAGEMENT AND INSTITUTIONAL FRAMEWORK

National and Local Legislation and Institutions

Fisheries policy/regulatory framework in the Philippines, is founded on 3 main legislations - the Philippine Fisheries Code (Republic Act 8550 as amended by R.A. 10654), the Local Government Code of 1991 (RA 7160) and the Agriculture and Fisheries Modernization Act of 1997 (RA 8435), RA 9379 or the Handline Fishing Law and its Implementing Rules and Regulation (2016), likewise provides the regulation for this traditional tuna fishing method.

The Fisheries Code sets out the general framework for managing the country's fisheries sector with the BFAR as the leading government agency responsible for conservation and management of fishery resources beyond municipal waters. R.A. 10654 which amended R.A. 8550, introduced the concept of IUU fishing that provides increased penalties and sanctions as a deterrent. The amended also provided concepts on port state and flag state vessels in high seas and distant water fishing. It also prescribes that the number of licenses and permits for fishery activities is subject to harvest control rules and reference points, adopts the precautionary principle and to manage fishery and aquatic resources consistent with the concept of an ecosystem-based approach to fisheries management in specific fishery management areas.

The implementation of the Philippine Fisheries Code is implemented through its Implementing Rules and Regulations (IRR) and Fisheries Administrative Orders (FAO) issued by the Department of Agriculture. In addition to these basic fisheries-related laws, national policies are part of the general framework for sustainable fisheries management.

The Local Government Code of 1991 provides the local government units (municipal and city governments) the jurisdiction and responsibility to manage fisheries within their jurisdiction (municipal waters -15 km from the shoreline). It also grants preferential use of municipal waters to municipal fisherfolk.

The Agriculture and Fisheries Modernization Act of 1997, on the other hand, provides measures to modernize the fisheries sector particularly on credit and extension.

Fisheries management in the Philippines including tuna is primarily governed by the national government, through the Department of Agriculture Bureau of Fisheries and Aquatic Resources (DA-BFAR), and the local government units. The DA-BFAR is responsible for managing, conserve, developing, protecting, utilizing, and disposing of all fisheries and aquatic resources beyond municipal waters while municipal and city governments have jurisdiction over municipal waters up to 15 kilometers from the shoreline.

Aside from the DA-BFAR and local government units, other government agencies have also mandates relating to tuna fisheries management. These agencies include the Maritime Industry Authority (MARINA), Philippine Fisheries Development Authority (PFDA), Department of Environment and Natural Resources (DENR), Philippine Ports Authority (PPA), Department of Trade and Industry (DTI) and Department of Foreign Affairs (DFA). The functions of these agencies include the registration of fishing vessels, operations and management of fish ports, protection of fish habitat, regulation of fish trade, and fisheries negotiations. There are also several key research and policy support agencies, which include the National Fisheries Research and Development Institute (NFRDI), Academe and Philippine Statistics Authority (PSA). Aside from BFAR, other agencies with the responsibility to enforce fisheries laws are the Philippine Coast Guard, Philippine Navy, and Philippine National Police- Maritime Group.

Several coordinating bodies have been created to facilitate formulation and implementation of fisheries policies and regulations. These coordinating mechanisms include the Philippine Council for Agriculture and Fisheries (PCAF), Fisheries and Aquatic Resource Management Councils (FARMCs), Philippine Council for Agriculture and Aquatic Resources Research and Development (PCAARRD), National Committee on Illegal Entrants (NCIE), Monitoring Control and Surveillance Coordinating and Operations Centers (MCSCOCs), Bantay Dagat (Sea Watch) Program, and National Tuna Industry Council (NTIC).

International Agreements / Instruments

The international legal basis for the management of tuna fisheries in the Philippines are the various agreements/instruments that the Philippines has adopted, ratified, or acceded to. These include the UNCLOS (ratified on 08 May 1984) and the UN Fish Stocks Agreement. The Philippines is yet to accede to the FAO Compliance Agreement.

To support international efforts to eliminate IUU fishing, the Philippines in 2018, acceded to the UN FAO Agreement on the Port State Measure and issued FAO 267, series of 2021 on the Rules and Regulations Governing the Landing and Transshipment of Fish and Fishery Products that have not been previously landed, and other port services in the Philippines by foreign-flagged fishing vessels.

The Philippines is a party to several environmental treaties that impact on fisheries, such as the Convention on Biological Diversity and Convention on the International Trade in Endangered Species (CITES) of Wild Flora and Fauna. The country is also a party to the Convention on Migratory Species (CMS), World Trade Organization/General Agreements on Tariff and Trade (WTO/GATT), Technical Barriers to Trade and Sanitary and Phyto Sanitary Measures (TBT/SPSM) and Codex Alimentarius Commission (CAC), and currently in the final stage of ratification of the Agreement on the Conservation and Sustainable Use of Marine Biological diversity of areas Beyond National Jurisdiction (BBNJ).

The Philippines is also committed to implementing non-binding international instruments such as the FAO Code of Conduct for Responsible Fisheries and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU). In addition, the country has issued the management framework for the implementation of the National Plan of Action for fishing capacity.

The Philippines is a member and signatory to the Western and Central Pacific Fisheries Commission (WCPFC), Indian Ocean Tuna Commission (IOTC) and International Commission for the Conservation of Atlantic Tunas (ICCAT). In addition, the country is a cooperating non-member to Commission for the Conservation of Southern Bluefin Tuna (CCSBT). These tuna Regional Fisheries Management Organization (tRFMOs) are in various stages of implementing management strategies and measures for targeted oceanic tuna stocks.

As member and cooperating non-member to tRFMOs, the Philippines is obligated as a coastal, flag and port state to adopt and comply with the increasing number of Conservation and Management Measures (CMMs).

There is a high degree of inter-dependence for all the tuna fisheries in the Philippines; hence, there is a need for cooperation from all sectors to properly manage the tuna stocks. Regionally, these complexities have been compounded by a continuing increase in the exploitation of tuna stocks in the Western and Central Pacific Ocean (WCPO). The escalating catch levels in the WCPO have led to a growing number of WCPFC Conservation and Management Measures (CMMs) which require implementation at national level (WWF, 2015).

Tuna Regional Fisheries Management Organizations (tRFMOs)

The establishment of the Inter-American Tropical Tuna Commission (IATTC) in 1950 marked the beginning of a scientific approach to yellowfin tuna management. It was also the advent of puretic power block, a mechanized pulley enabling purse seiners to haul larger nets in less time.

In the 1960s, two canneries were established in American Samoa, servicing a fleet of 400 longliners from Japan, Korea, and Taiwan. Japan expanded purse seine fishing throughout the north-central Pacific.

Moving towards the 70's, the South Pacific Commission established the "Expert Committee on Skipjack Tuna" and, subsequently, the Skipjack Tagging Program. Results indicated that the maximum sustainable yield of skipjack resources in the WCPO exceeded one million MT, three times higher than the 1972 catch. This spurred interest from the US and Asian countries in accessing Pacific tuna resources.

In 1976, the US Government and private sector established the Pacific Tuna Development Foundation (PTDF) with the objective of expanding US purse seine operations to the western & central Pacific. PTDF funded development of the fast-sinking purse seine and exploratory fishing in the central Pacific.

In the late 1970s, the South Pacific Forum established the Forum Fisheries Agency (FFA) to help Pacific Island members benefit from the rich tuna resources in their waters.

In the 1980s, a small number of US purse seiners relocated to American Samoa. Japan, Korea, Taiwan, and the US rapidly developed purse seine capacity in the WCPO, increasing tuna landings to 1.2 million tons in 1985. Thailand began to establish tuna canneries and transformed canned tuna into a price-sensitive commodity.

UNCLOS was then ratified by most coastal states. It established the Exclusive Economic Zone, giving coastal states "ownership" of all marine resources within 200 miles of their coastlines. The Pacific Island countries became the "owners" of most of the "tuna belt" and began selling fishing rights to distant water fleets.

During the 90s, China adopted a policy to convert excess domestic fleets to tuna longlining, successfully deploying 2,000 vessels in the western Pacific by 1997.

In 1996, twenty-seven countries agreed to undertake the "Multilateral High-Level Conference (MHLC) on Conservation and Management of Western and Central Pacific Tuna Resources." The MHLC process required seven years of negotiations, culminating in the "Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean." The Convention entered into force in 2004.

In the mid and late 2000s, WCPFC held its inaugural meeting in December 2004. Fisheries Scientists warned that WCP bigeye and yellowfin tuna stocks were in trouble.

Conservation and management measures to protect yellowfin and bigeye stock were finally adopted in December 2008. The measure banning purse seine operations on payaos during closed seasons took effect in August 2009 and the high seas pocket 1 was closed in 2010-2011, mainly to address overfishing of bigeye. These measures significantly affected the operations of the purse seine and ring net fleet of the Philippines.

From 2012 to 2025, the tropical tuna in the WCPO was managed mainly by CMM-2012/2023-01, with effort and FADs management measures. These include FADs closures, purse seine effort limits, longline bigeye tuna catch limits and improved monitoring through VMS and observer coverage. The current measure (CMM 2023-01) is set to expire in 2027 and the process of preparation and negotiations for the succeeding measure is in progress..

STOCK STRUCTURE, STATUS AND BIOLOGY

The stock of oceanic tuna is mainly considered part of the West Central Pacific stocks. Thus, assessment covers the WCPO wide fish stocks. In this context, local research studies on these species have been very limited.

SKIPJACK TUNA (SKJ)

Skipjack tuna (*Katsuwonus pelamis*) is the main species among the four (4) tropical tuna species, occurring in large surface schools year-round in the equatorial zone (10°N-10°S). The horizontal distribution of skipjack is approximately limited by the 15°C isotherm, with the result that the distribution extends seasonally into temperate waters. Within these overall limits, oxygen concentration and the availability of forage are the key determinants of vertical and horizontal distribution (OFP-SPC, 1997). The fish have the highest metabolic requirements of all the tunas (Brill 1994) and are thus limited to oxygen-rich waters near the surface and to productive areas where baitfish, small crustaceans and other prey are available (OFP-SPC, 1997).

The spawning occurs year-round in the equatorial zone, with seasonal extensions to the north and south limited by the 25°C surface isotherm, with density larvae decreasing from west to east across the Pacific (OFP_SPC, 1997).

Tagging data indicates unrestricted zonal movement between 120°E and 160°W, as well as seasonal movements into and out of the higher latitudes. Significant amount of tagging carried out in the WCPO also indicated no recovery recorded from the eastern Pacific purse seine fishery. Similarly, few eastern-Pacific tagged skipjacks have been recaptured west of 150°W (OFP-SPC, 1997).

Skipjack in the WCPO are considered a single stock for assessment purposes (Wild and Hampton, 1994, OFP-SPC, 1997). Surface-schooling, adult skipjack tuna (greater than 40cm fork length; FL) are highly abundant in tropical and subtropical waters of the Pacific Ocean. In the western Pacific, warm, pole-ward-flowing currents near northern Japan and southern Australia seasonally extend their distribution to about 40° N and 40° S. These limits roughly correspond to the 20° C surface isotherm (McKechnie et al., 2016). Skipjack movement is highly variable (Sibert et al., 1999) and is thought to be influenced by large- scale oceanographic variability (Lehodey et al., 1997).

Skipjack growth is rapid compared to yellowfin and bigeye tuna (McKechnie et al, 2016). Commensurate with their fast growth and relatively short lifespan, skipjack also mature at an early age when they reach a length of around 40cm FL (Wild and Hampton, 1994).

Approximate age estimates may vary between areas of the Pacific with faster growth estimates close to the equator compared to the northern Pacific (Leroy 2000, Tanabe et al 2003). Estimates of natural mortality rate were also substantially larger for small skipjack (21-30 cm FL, M=0.8 mo-1) compared to larger skipjack (51-70 cm FL, M=0.12-0.15 mo-1) (Hampton 2000). The longest recorded lifespan for a tagged skipjack to date has been 4.5 years.

The most recent stock assessment (2022) indicated that skipjack tuna is neither overfished nor subject to overfishing. The assessment grid of models estimated the overall median recent spawning depletion (SBrecent/SBF=0) at 0.51 (80th percentile range: 0.43–0.64), which is close to the interim target reference point (TRP) of 0.50 (CMM 2021-01). No model results were below the limit reference point (LRP) of 0.20 SBF=0. The median of Frecent/FMSY was 0.32 (80th percentile range: 0.18–0.45) (Table SKJ-02). Overall, the 2022 stock assessment for skipjack tuna in the WCPO concluded that, according to WCPFC reference points, the stock is not overfished nor undergoing overfishing (Castillo-Jordan, 2022).

YELLOWFIN TUNA (YFT)

Yellowfin tuna has a similar distribution to skipjacks as small juveniles (<70cm FL) frequently occur in mixed schools with skipjack tuna of the same size and have less demanding metabolic requirements. Unlike skipjack, they develop a swim bladder and large pectoral fins at larger size, which affords them greater buoyancy and hydrodynamic lift. Slower basal swimming speeds are therefore possible. With somewhat lower oxygen requirements, yellowfin tunas can inhabit deeper waters, particularly as adults, where their large size and some ability to physiologically thermoregulate provide a buffer against the lower ambient temperatures. However, they appear to spend most of their time in the mixed layer above the thermocline and tend to increase in average size from west to east (OFP-SPC, 1997).

For stock assessment purposes, yellowfin stock in the WCPO (west of 150°W) has been considered as a discrete stock unit (Langley 2007, 2009, 2011). This area has been disaggregated into modelling regions to describe some spatial processes (such as recruitment and movement) and fishing mortality within regions.

Yellowfin tunas are distributed throughout the tropical and sub-tropical waters of the Pacific Ocean (Davies et al., 2014). There are some indications of restricted mixing between the western and eastern Pacific based on analysis of genetic samples (Ward et al., 1994) and tagging data. Adults (larger than about 100cm) spawn, probably opportunistically, in waters warmer than 26°C (Itano, 2000), while juvenile yellowfin is first encountered in commercial fisheries (mainly surface fisheries in Philippines and eastern Indonesia) at several months of age. Yellowfin tuna is relatively fast growing and has a maximum fork length (FL) of about 180 cm (Davies et al., 2014). It is also recognized there are possibly regional differences in growth rate for yellowfin tuna.

There are however indications (provided through analysis of DNA microsatellite data) provided an indication that the yellowfin tuna population in the Philippines' EEZ is separate from the Bismarck Sea (Papua New Guinea) population, suggesting 2 subpopulations that call for further studies or validation (Aguila et al., 2015). DNA profiling also has demonstrated heterogeneous population structure for yellowfin tuna across the Pacific basin (Grewe et al., 2016).

There is some indication that young yellowfin may grow more slowly in the waters of Indonesia and the Philippines than in the wider area of the WCPO (Yamanaka, 1990). This is further supported by the comparison between the growth rates derived from WCPO yellowfin stock assessment (Hampton et al., 2006) and the growth rates derived from a MFCL model that included only the single western, equatorial region (region 3) (Langley et al., 2007). The growth rates from the western equatorial region alone were considerably lower than from the WCPO, with the former growth rates more consistent with the growth of yellowfin in the southern Philippines waters (Yamanaka, 1990) and growth increments from tag release/recovery data. On the other hand, the growth rates from the WCPO MFCL model are more consistent with the growth rates determined from daily growth increments from a collection of otoliths collected from a broad area of the equatorial WCPO (Lehodey and Leroy, 1999).

The annual yellowfin tuna catches in the WCPO increased from 100,000t in 1970 to about 550,000t in recent years, with a record catch of 650,000t in 2008. Purse seiners harvest most of the yellowfin tuna catch (61% in 2012), while the longline fleet accounted for 16-20% of the catch in recent years. The remainder of the catch is dominated by the domestic fisheries of the Philippines and Indonesia (Davies et al., 2014).

The latest assessment of this species was also done in 2023. The stock is considered as not in an overfished state as recent spawning biomass in the absence of fishing is above the limit reference point ($SB_{2012\text{-}2015}/SB_{F=0}$) = 0.33 with 92% probability. The ratio F_{recent}/F_{MSY} (for the period 2011-2014) is estimated to be 0.74, indicating that overfishing is not occurring with 96% probability (WCPFC-SC13, 2017).

BIGEYE TUNA (BET)

Bigeye tunas are widely distributed throughout the tropical and subtropical Pacific Ocean, and evidence continues to support the existence of a single genetic stock across the Pacific. Genetic studies (e.g., Grewe et al., 2019; Moore et al., 2020) have not identified significant population differentiation within the region. Nevertheless, tagging studies conducted by SPC and IATTC have shown that while most tagged individuals are recaptured near their release locations, some exhibit long-distance movements exceeding 4,000 nautical miles, particularly in longitudinal directions across the equatorial Pacific. These movement patterns suggest a high degree of connectivity that may explain the lack of detectable genetic substructure. However, regional differences in growth rates and maturity, for instance, slower growth and smaller sizes at age in the WCPO compared to the Eastern Pacific, indicate the presence of ecological substructures (Farley et al., 2017; McKechnie et al., 2015).

Bigeye tuna in the WCPO is moderate in growth rate among tunas and can reach a maximum fork length of approximately 200cm, although average observed maximum length is about 157cm (Eveson et al., 2020; Farley et al., 2020). Recent radiocarbon validation has confirmed that bigeye tuna can live up to 15 years, with the oldest validated fish aged at 13 years (Andrews et al., 2022).

Reproductive maturity is reached at around 80 cm fork length, with nearly all individuals over 120cm being mature (Farley et al., 2017). Spawning activity is primarily associated with sea surface temperatures above 24°C, occurring year-round in tropical waters and seasonally in subtropical areas. Spawning is considered a daily event during peak reproductive periods (Sun et al., 2006).

Natural mortality (M) is size-dependent, with higher mortality rates among juveniles and lower rates among adults (>40cm FL). Female bigeye tuna is thought to experience increased mortality upon reaching sexual maturity due to reproductive stress, contributing to male-biased sex ratios at larger sizes (Farley et al., 2020; Day et al., 2023).

The assessment indicates that the spawning biomass of bigeye tuna has declined over several decades, becoming more depleted until around 2010, after which it appears to have stabilized (Day et al., 2023). The estimated median depletion ratio (SBrecent/SBF0) for the period 2018–2021 is 0.35, with an 80% probability range between 0.30 and 0.40. Importantly, none of the models included in the structural uncertainty grid suggest that the stock is below the Limit Reference Point (LRP) of 0.20 SBF_0.

The assessment also notes that fishing mortality has stabilized since the early 2000s, though juvenile bigeye experience significantly higher fishing mortality compared to adults. The recent fishing mortality (F_{recent}/F_{MSY}) is estimated at 0.59, which is below the threshold for overfishing (Day et al., 2023).

Overall, the stock is assessed to not be overfished and not undergoing overfishing. Furthermore, the current spawning biomass exceeds the reference level set by current Conservation and Management Measure (CMM) 2023-01, which aims to maintain biomass above the 2012–2015 average (0.34 SBF°). With a current estimate of 0.35, this management objective is being met.

Bigeye tunas are caught by both surface gears, mostly as juveniles, and longline gear, as valuable adult fish. They are a principal target species of both the large, distant-water longline fleets of Japan, Korea, China and Chinese Taipei and the smaller, fresh sashimi- quality specialized longline fleets based in several Pacific Island countries and Hawaii. Bigeye in purse seine catches are taken almost exclusively from sets on natural and artificial floating objects (FADs) (Harley et al, 2014).

PACIFIC BLUEFIN TUNA (PBF)

Pacific bluefin tuna *(Thunnus orientalis)*, once considered a subspecies of Atlantic bluefin tuna, are now recognized as a distinct species based on genetic and morphometric studies. This taxonomic distinction is adopted by relevant tuna Regional Fisheries Management Organizations (RFMOs), the Food and Agriculture Organization of the United Nations (FAO), and the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC).

PBF are predominantly distributed in subtropical and temperate latitudes between 20°N and 50°N, though they are occasionally found in tropical waters and the Southern Hemisphere. The primary spawning grounds for PBF are in the western North Pacific Ocean (WPO), specifically in the waters between the Ryukyu Islands (Japan) and eastern Taiwan, and in the southern Sea of Japan. While there have been observations suggesting a third spawning ground in the Kuroshio-Oyashio transition area, there is no evidence of PBF reproduction in the eastern Pacific Ocean (EPO), even with the presence of older PBF.

Studies on the natal origins of adult PBF caught in both the Ryukyu Islands and the Sea of Japan indicate they originate from both spawning areas. Similarly, age-1 PBF caught in the EPO have been traced back to known WPO spawning grounds. These findings, along with genetic and tagging studies, support the conclusion of a single, highly migratory PBF stock, a view acknowledged by the ISC and RFMOs (WCPFC and IATTC).

The movements of PBF are well-documented, despite significant inter-annual variations in migrant numbers, timing, and routes. After spawning, mature adults in the WPO typically migrate northward to feeding grounds, with a small portion moving southward or eastward. Age 0-1 fish from the Ryukyu Islands and eastern Taiwan migrate northward with the Kuroshio Current, while age-0 fish from the Sea of Japan migrate along the coasts of Japan and Korea.

Spawning generally occurs from April to July in the waters around the Ryukyu Islands and off the east coast of Taiwan, and from July to August in the Sea of Japan (Yonemori, 1989; Ashida et al., 2015) (Figure 2). A recent histological study showed that approximately 80% of fish around 30kg in weight (corresponding to age 3) caught in the Sea of Japan between June and August were mature (Tanaka, 2006; Okochi et al., 2016). In contrast, almost all fish caught off the Ryukyu Islands and east of Taiwan weighed more than 60kg (>150 cm fork length, FL). These individuals were at least five years old and fully mature.

PBF are mainly distributed in subtropical and temperate latitudes between 20°N and 50°N. Mature adults in the WPO typically migrate northward to feeding grounds after spawning. Age 0-1 fish hatched near the Ryukyu Islands and eastern Taiwan migrate northward with the Kuroshio Current, while those hatched in the Sea of Japan migrate along the coastlines of Japan and Korea. Immature fish (ages 1-3) in the WPO may undertake a seasonal clockwise eastward migration across the North Pacific, spending several years in the EPO before returning to the WPO. In the EPO, juveniles make seasonal north-south migrations along the west coast of North America. Westward migration, presumably for spawning, typically occurs from December to March after spending 3-4 years in the EPO (Fig 2).

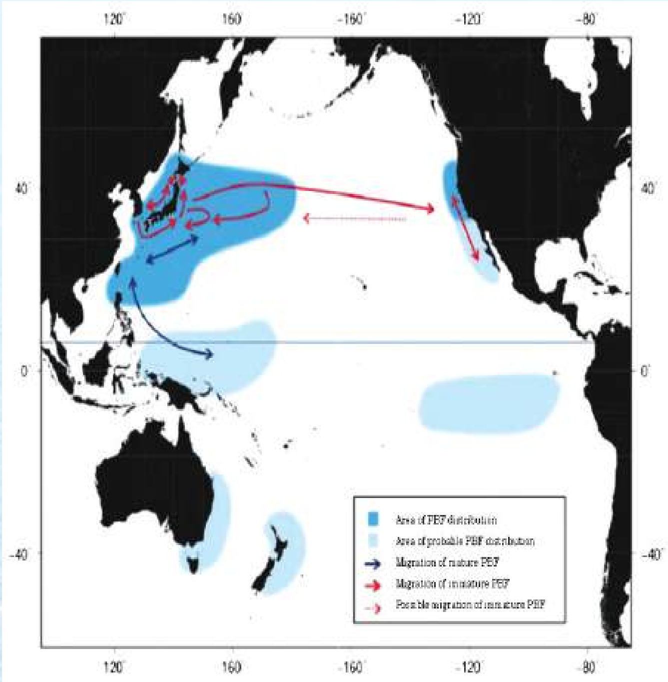


Figure 2. Generalized distribution of PBF (ISC-PBTWG) Note: Darker areas = core habitat

Age determination of PBF is established through various methods, including otolith observations and post-bomb radiocarbon dating. The von Bertalanffy growth curve indicates rapid growth up to age 5 (approximately 160cm FL), with growth slowing thereafter. Fish can live for at least 20 years, with some exceeding 250 cm FL. The assessment model uses a sex-combined length-at-age relationship and a time-invariant sex-combined weight-length relationship.

The stock status of PBF reveals a notable recovery over the past decade. The spawning stock biomass (SSB) has shown a substantial increase in the last 12 years, a trend that coincides with a decline in fishing mortality, particularly for fish aged 0 to 3.

In 2022, the estimated SSB reached 23.2% of SSB F=0. This marks a significant improvement, as the PBF stock achieved its initial rebuilding target (the median SSB estimated for the period from 1952 through 2014, or 6.3%SSB F=0) in 2017, seven years ahead of schedule. Furthermore, it met its second rebuilding target (20%SSBF=0) in 2021. Given these figures, the PBF stock is considered not overfished relative to the 20%SSBF=0 benchmark, which is a biomass-based reference point adopted for other tuna species by the IATTC and WCPFC.

Historically, PBF experienced very high fishing mortality rates, with Spawning Potential Ratio (SPR) values consistently below 20% from 1983 to 2014. The SPR averaged about 1% during the late 2000s (2005-2009), a result of high fishing mortality for ages 0-2. However, after 2010, the SPR gradually increased, aligning with the implementation of the first catch upper limits in the WCPFC (2011) and IATTC (2012) areas. The fishing mortality for ages 0-2 during 2012-2014 declined compared to 2002-2004. Since 2015, SPR has risen above 20%, indicating the effectiveness of strengthened management measures combined with moderately strong recruitments from 2015-2017. The recent (2020-2022) F %SPR is estimated at 23.6%, meaning the stock is not subject to overfishing relative to some proposed F-based reference points for tuna species, including uF20%SPR.

The estimated total stock biomass in 2022 was approximately 186,632 MT, and the SSB was 144,483 MT. This 2022 SSB is more than 10 times its historical low in 2010. While recruitment estimates (age-0 fish on July 1st) have fluctuated widely without a clear trend, recent strong cohorts were observed in 2007 (23.6 million fish) and 2008 (21.0 million fish). Conversely, recruitments in 2009, 2012, 2014, 2019, and 2020 were relatively low. Historically, PBF catches predominantly consist of juveniles (ages 0-2). Since the early 1990s, the WPO purse seine fishery group targeting small fish (ages 0-1) has had the greatest impact on the PBF stock.

NORTH PACIFIC ALBACORE (NPALB)

The North Pacific albacore tuna *(Thunnus alalunga)* is a distinct and reproductively isolated stock within the Pacific Ocean, inhabiting waters north of the equator to 55°N. This stock is considered well-mixed, with limited intermingling with the South Pacific albacore stock, a conclusion supported by fishery data, tagging studies, ecological observations, and recent genetic analysis.

From a biological perspective, North Pacific albacore are batch spawners, releasing millions of eggs in multiple events into the sea for fertilization. Spawning activity is estimated to occur every 1.7 days in the western Pacific, with a peak in March-April. Females typically mature at lengths ranging from 83 cm to 93 cm fork length (FL). Primary spawning grounds are in tropical and subtropical waters between Hawaii and the Philippines, at latitudes between 10°N and 25°N and depths exceeding 90 meters.

Albacore tuna exhibits rapid growth when immature, which slows as they reach maturity. Sex-specific growth patterns are observed, with males attaining larger sizes and older ages (114 cm FL and 14 years) than females (103.5 cm FL and 10 years). While young fish (age-0) are rarely caught, intensive surface fisheries targeting juveniles from age-2 provide abundant data for growth analysis. The species is highly migratory, with movements influenced by oceanic conditions. Juvenile fish, typically under 5 years old and 85 cm FL, generally reside in surface temperate waters (north of 25-30°N) and undertake trans-Pacific movements. Older, mature fish tend to move into subtropical spawning waters (south of 25-30°N). Natural mortality (M) varies by age and sex; it is consistent for both sexes up to age 2 and then becomes higher for females (0.48 {-1}) than males(0.39{-1}) from age 3 onward, possibly reflecting the costs of reproduction.

Regarding stock status, the estimated female spawning stock biomass (SSB) has fluctuated between 1994 and 2021, peaking in 1999 at approximately 96,031 MT and reaching a low of

61,770 MT in 2007. While there was an initial decline until 2007, the SSB has since fluctuated without a clear trend through 2021, with an estimated 70,229 t in the terminal year. The estimated female SSB has remained above the threshold (30%SSBcurrent, F=0) and limit (14%SSBcurrent, F=0) reference points since 1994, although there is considerable uncertainty in the 2021 estimates. Total biomass (age-1+) showed a similar trend, declining until 2004, then fluctuating before rapidly increasing to historically high but uncertain levels from 2018 to 2021, driven by historically high (and uncertain) recruitment estimates in 2017.

Fishing intensity, based on the Spawning Potential Ratio (SPR), has fluctuated between F72%SPR and F35%SPR from 1994 to 2021. The average fishing intensity during 2018-2020 was estimated as F59%SPR, considered relatively moderate. Fishing mortality at age is higher for juveniles, reflecting the greater impact of surface fisheries, which primarily target younger fish. While fishing intensity exceeded the target reference point (F45%SPR) in five years (1999, 2002, 2003, 2004, and 2007), the most recent average fishing intensity (2018-2020) was lower than this target and below the 2002-2004 reference levels used by management organizations.

Based on these findings, the North Pacific Albacore tuna stock is not overfished relative to established biomass-based reference points and not experiencing overfishing relative to the adopted target fishing intensity. Future projections indicate that if fishing intensity is maintained at 2018-2020 levels, female SSB is expected to increase, with a high probability of remaining above the limit reference point for the next decade. Similarly, if future fishing intensity mirrors the 2005-2019 period, female SSB is also projected to increase, with a high probability of meeting conservation objectives.

Despite these positive indications, key uncertainties remain, including the lack of sex-specific size data, uncertainties in growth and natural mortality estimates, the impacts of COVID-19 safety protocols on data collection, and the simplified approach to spatial structure in the population dynamics model. These areas are recommended for further research to improve future stock assessments (ISC, 2023).

Albacore tuna in the Pacific Ocean consists of the north Pacific stock and the south Pacific stock. The discreteness of these stocks is supported by fishery data (lower catch rates in equatorial regions; Suzuki et al., 1977), tagging data (fish tagged in the north Pacific have not been recovered in the south Pacific Ocean; Ramon and Bailey, 1996), ecological data (albacore larvae are rare in samples from equatorial waters; Ueyanagi, 1969), and genetic data (showing differentiation between north and south Pacific albacore; Takagi et al., 2001). Thus, north Pacific albacore is assumed to be a discrete, reproductively isolated stock, with no internal sub-group structure within the stock.

The north Pacific albacore tuna *(Thunnus alalunga)* stock area consists of all waters in the Pacific Ocean north of the equator, and it is assumed that there is instantaneous mixing of albacore throughout the stock area on a quarterly basis, i.e., a single well-mixed stock (AWG, 2014).

Albacore tuna are batch spawners, shedding hydrated oocytes, in separate spawning events, directly into the sea where fertilization occurs. Spawning frequency is estimated to be 1.7 d in the western Pacific (Chen et al., 2010), and batch fecundity ranges between 0.17 and 2.6 million eggs (Ueyanagi, 1957; Otsu and Uchida, 1959; Chen et al., 2010). Female albacores mature at lengths ranging from 83 cm FL in the western Pacific (Chen et al., 2010) to 90 cm FL in the central Pacific (Ueyanagi, 1957), and 93 cm FL north of Hawaii (Otsu and Uchida, 1959). The north albacore presents intra-stock geographical differences on the age of maturity (or rather, on the size at which 50% maturity is reached).

Spawning occurs in tropical and sub-tropical waters between Hawaii (155°W) and the east coast of Taiwan and the Philippines (120°E) and between 10 and 25°N latitudes at depths exceeding 90m

(Ueyanagi, 1957, 1969; Otsu and Uchida, 1959; Yoshida, 1968; Chen et al., 2010). Although spawning probably occurs over an extended period from March through September in the western and central Pacific Oceans, recent evidence based on a histological assessment of gonadal status and maturity (Chen et al., 2010) shows that spawning peaks between March-April in the western Pacific Ocean, which is consistent with evidence from larval sampling surveys in the same region (Nishikawa et al., 1985). In contrast, studies of albacore reproductive biology in the central Pacific have concluded that there was a probable peak spawning period between June and August (Ueyanagi, 1957; Otsu and Uchida, 1959), but these studies are based on indirect observation methods, are more than 50 years old, and have not been updated using modern histological techniques (Chen et al., 2010).

STOCK STATUS IN THE INDIAN OCEAN (IO)

In the Indian Ocean, based on the weight-of-evidence available in FAO Executive Summary of Report (2023), the skipjack tuna stock is determined to be not overfished and not subject to overfishing with median MSY value of 584 774t and the average catch of about 630,120 MT for 2019-2023. The catch of skipjack in 2023 was 688,680t.

Similarly, based on the weight-of-evidence in FAO 2024 Executive Summary of Report, the yellowfin tuna stock is determined to be not-overfished and not-subject to overfishing with median MSY value of 421,000 t and the average catch of about 423,142 t for 2019-2023. The catch of yellowfin tuna in 2023 was 400,950 t. Overall stock biomass declined substantially during the 1980s and 1990s. The stock is estimated to have been in an overfished state from 2007 to 2019. Spawning biomass increased considerably after 2021 following recent strong recruitment (informed by the recent increase in LL CPUE). Correspondingly, overfishing was occurring from 2003 until 2020. Fishing mortality was estimated to be below the FMSY level in 2021-2023.

In the same way, albacore tuna stock status in relation to the Commission's interim BMSY and FMSY target reference points indicates that the stock is not overfished and is not subject to overfishing with median MSY value of 45,000 t and the average catch of about 40,747 t for 2019-2023. The catch of albacore tuna in 2023 was 41,678 t (FAO, 2024).

Unlike the skipjack, albacore and yellowfin tuna stocks, the bigeye tuna stock in the Indian Ocean is determined to be overfished and subject to overfishing based on the weight-of-evidence 2024 report. The catch for 2023 is estimated at 105,369 t and the average catch in 2019-2023 was 94,691 t. The TAC recommended from the application of the MP specified in Resolution 22/03 and Resolution 23/04 is 80,583t / year for the period 2024-2025.

MANAGEMENT FRAMEWORK FOR SUSTAINABLE TUNA FISHERIES IN THE PHILIPPINES

Current conservation and management measures/regulations on tuna fisheries

The agenda for the continuing improvement of fisheries management in the country has been manifested by instituting policy reforms as demonstrated by the Philippine Fisheries Code (Republic Act 8550 as amended by R.A. 10654) and adopting the National Comprehensive Fisheries Industry Development Plan (CNFIDP). Among the specific conservation and management measures, programs and projects are the following:

a) Registration and licensing policy (conditions and limits on licenses/capacity)

i. FAO 198-1, series of 2018. Amended Rules and Regulations on Commercial Fishing in Philippine waters and Distant Fishing

ii. BAC No. 253, series of 2018 - Moratorium on the issuance of Commercial Fishing Vessel and Gear License and Other Clearances FAO Moratorium on the issuance of new commercial fishing vessel licenses (lifted in 2021; under review)

iii. FAO 254, series of 2014 & 2018 - Regulation and implementing guidelines on group handline fishing operation in the high seas of the WCPFC Convention area

iv. FAO 245, series of 2012-2018 - Regulations and Implementing Guidelines on Group Tuna Purse Seine Operations in High Seas Pocket Number 1 as a Special Management Area

v. FAO 269, series of 2023 - Rules and Regulations on Tuna Purse Seine/Ringnet Operations in the Pacific Seaboard of the Philippine Exclusive Economic Zone (EEZ)

vi. FAO 270, series of 2023 - Rules and Regulations on the Operations of the Philippine Flagged Vessels Operating in Distant Waters (Beyond National Jurisdiction

b) Limitations on fishing operations (closed/restricted areas/seasons, prohibited fishing gears)

i. FAO 226, series of 2008 - Regulation on the Mesh Size of Tuna Purse Seine Nets and Trading of Small Tuna

ii. FAO 245-4, series of 2018- Regulations and Implementing Guidelines on Group Tuna Purse Seine Operations in High Seas Pocket Number 1 as a Special Management Area (including VMS & Observer requirement, FADs closure for 3 months in the high seas)

iii. FAO 236-6, series of 2024 - Rules and Regulations on the Operations of Purse Seine and Ring Net Vessels Using Fish Aggregating Devices (FADs) locally known as Payaos during the FAD Closure Period as Compatible Measures to WCPFC CMM

iv. FAO 244, series of 2012 - National Tuna Fish Aggregating Device (FAD) Management Policy (updated/revised FAO will be issued by Q4 in 2025).

v. FAO 254-2, series of 2024 - Rules and Regulations for Group Tuna Handline Fishing

vi. FAO 269, series of 2023 - Rules and Regulations on Tuna Purse Seine Operations in the Philippine the Pacific Seaboard of the Philippine Exclusive Economic Zone (EEZ)

vii. FAO 270, series of 2023 - Rule and Regulations on the Operations of Philippine Flagged Vessels Operating in Distant Waters (Beyond National Jurisdiction)

c) Data collection policy (log sheets, landing declarations, port sampling, observers...)

i. NSAP expanded data collection for tuna in collaboration with WPEA project

ii. Catch logsheet requirements for all vessels

iii. Stowage plan for carrier vessel

iv. PFDA landing monitoring/reporting

v. 100% Observer coverage for PH vessels in the high seas (FAO 236) and other coastal states; (693) 752 trained Observers as of June 2025; 90 Debriefers trained

vi. (Trial) Initial Deployment of Observer coverage to Philippine Handline Vessels

d) Total allowable catches for commercial fishing vessels etc.

i. BAC No. 253, series of 2014 - Moratorium on the issuance of Commercial Fishing Vessel and Gear License and Other Clearances FAO Moratorium on the issuance of new commercial fishing vessel licenses (lifted in 2021, under review)

ii. FAO 263, series of 2018 - ongoing process re: Establishment of Fisheries Management Areas (FMA) and respective Reference Points and Harvest Control Rules

e) MCS and IUUF

a. Traceability

   i. BAC 251, series 2014 - Traceability system for fish and fishery products

   ii. BAC 251-1, series 2019 - Amended Traceability System for Fish and Fishery Products

b. VMS & Observer coverage

   i. FAO 241 Series 2012- Regulations and Implementation of the Vessel Monitoring System (VMS) in the High Seas

ii. FAO 240 Series 2012 - Rules and Regulations in the Implementation of Fisheries Observer Program in the High Seas

iii. FAO 241 Series 2012 - Rules and Regulations in the Implementation of the Vessel Monitoring System (VMS) in the High Seas

iv. FAO 260 Series 2018-Rules and Regulations on the Implementation of Vessel Monitoring Measures (VMM) and Electronic Reporting System(ERS) for Commercial Philippine Flagged Fishing Vessels Targeting Straddling and Highly Migratory Fish Stocks

v. FAO 261 Series 2018 Rules and Regulations on Fisheries Observer Program(FOP) in the Philippines and Distant Water Targeting Straddling and Highly Migratory Fish Stocks.

c. Inspections

i. FAO 227 s 2008 – Rule and regulations governing the export of fish and aquatic products to European union member countries

ii. FAO 228 S 2008 - Rules governing the organization and implementation of official controls on fishery and aquatic products intended for export to the EU market for human consumption

d. Enforcement

i. Special Order No. 1135, series of 2016, Constitution of the Inter-Agency Anti-Illegal Fishing Task Force to Intensify the Campaign Against Illegal, Unreported and Unregulated Fishing issued on October 17, 2016.

ii. Acquired multi-mission vessels (14 units MCS vessels; 2 units 50m-MMOVs; 70 units 30-footers multi-purpose vessels.

iii. Regularized 192 Fishery Regulatory Officers (FRO); hired 171 Contract of Service as Support Staff

iv. Trained 363 Fishery Law Enforcement Officers

v. Fisheries Office Order No. 184, series of 2021, “Adaption of Fishery Law Enforcement Manual of Operation (FLEMO) as the Official Standard Operating Procedure in the Implementation of Fishery Laws, Rules, and Regulations”

e. Adjudication

i. Established Adjudication Committee Secretariat at the National and Regional levels - 15 Adjudication Committee Secretariats.

ii. Hired Hearing Officers (National and Regional Levels) -18

iii. Hired Administrative Assistants (National and Regional Levels)- 19

iv. Hired Sheriffs (Cluster: NCR, Northern Luzon, Luzon, Visayas Mindanao- 5

v. Conducted Capacity Building for Hearing Officers

vi. Number of Cases Resolved (2017 - 2025) - 7,138 cases

vii. Fines and Penalties Collected (2017-2025) - Php 325,656,660.94

f. Training and awareness-raising measures

i. National capability building program for Fishery Law Enforcers

ii. Fish Examiners

iii. Seafood safety

iv. Fisheries Observers Training

v. Bantay Dagat

vi. Operation and maintenance of MCS vessels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CAPACITY AND CATCH LIMITS

As the oceanic tunas in the Philippines is considered as part of the WCPO-wide stock, measures to manage these stocks are guided by the Conservation and Management Measures (CMMs) that are adopted by the WCPFC. CMM 2023-01 provides the guidelines that cooperating member and non-member countries and territories (CCM) member countries should take in managing their respective tuna fisheries.

As an active member of good standing of the Commission, the Philippines should be guided by the the said measure, following conditions in managing its tuna fisheries as follows:

1) **High seas purse seine effort control.** The level of purse seine effort on the high seas, particularly in the HSP1 is in accordance with Attachment 2 of the CMM. The measure applies to Philippine traditional fresh/ice chilled fishing vessels operating as a group, with a maximum of 36 purse seine/ringnet catcher vessels not more than 250 GT. As the vessels are dependent on FADs for their operation, their operation is limited to months annually, being July to mid-August each year is a close season for the use of FAD for purse seine. These measures are subject for review and amendment every three (3) years by the Commission.

   A Fisheries Administrative Order (currently being renewed as FAO 245-4), sets the total fishing days to 4,659, with 2,564 FAD-fishing days used by the PH fleet in 2024.

2) **Zone-based management for purse seine.** Coastal CCMs within the Convention Area shall restrict purse seine effort and/or catch of skipjack, yellowfin and bigeye tuna within their EEZs in accordance with the effort limits established and notified to the Commission. The Philippines is one of the five countries that have yet to notify their limits to the Commission by 31 December 2018.

3) **Longline.** WCPFC members shall restrict the level of bigeye catch to the levels. The Philippines having caught less than 2,000 tons in 2004 shall ensure that its bigeye catch does not exceed 2,000 tonnes annually. Currently, there is no tuna longline vessel operation in the WCPO.

4) **Freezing Capacity Purse Seine and Longline Vessel Limits.** The country shall also keep the number of purse seine vessels flying its flag larger than 24m with freezing capacity (LSPSV-Large Scale Purse Seine Vessels) operating between 20oN and 20oS to the applicable level (under CMM 2023-01)

   The country shall also not increase the number of their longline vessels with freezing capacity targeting bigeye tuna above the applicable level under CMM 2013-01.

5) **Other commercial fisheries.** This refers to fisheries that catch more than 2,000 tons of SKJ, YFT and BET. For the Philippines, this includes mainly ringnet, handline and hook & line. The

limit does not exceed either the average level for the period 2001-2004 or the level of 2004. (Table below).

Table 12. Tuna production of the Philippines for 2001-2004 and 2004 (Source: WCPFC tuna yearbook)

Gear	Ave 2001-2004 (MT)				2004 (MT)			
	BET	YFT	SKJ	TOTAL	BET	YFT	SKJ	TOTAL
PH	7,188	80,548	125,134	212,870	7,870	89,873	138,598	236,341
Handline	355	11,124	-	11,479	263	13,099	-	13,362
Hook & line	3,825	40,647	25,420	69,892	3,870	41,137	24,993	70,000
Longline	59	484	-	543	59	484	-	543
Others	155	1,576	612	2,343	174	1,849	704	2,727
Ringnet	255	3,287	12,154	15,696	311	4,560	13,399	18,270
Purse seine	2,539	23,430	86,948	112,917	3,193	28,744	99,502	131,439
DW				-				-
Purse seine	2,342	11,094	17,074	30,509	2,288	10,106	23,025	35,419
Grand Total	9,529	91,642	142,208	243,379	10,158	99,979	161,623	271,760

MAJOR ISSUES

The following key issues and concerns identified through extensive consultations with the tuna industry and relevant agencies in 2024-2025 were incorporated, and summarized herein:

1) Resource Sustainability: Catching of small tunas

   The continued harvest of small tunas, particularly around Fish Aggregating Devices (FADs), reduces the future spawning potential of tuna stocks. This early catch undermines recruitment and may compromise the ecological balance necessary for a productive fishery.

   The plan intends to maintain the catch level of Philippine-flagged vessels through science- and rules-based management as guided by the conservation and management measures of RFMOs and to equitably distribute fishing access to various resource users. The plan also seeks to establish management measures to protect spawning and breeding grounds.

2) Resource Use conflict: Equitable Utilization of the Fisheries Resources

   Competition between the various fisheries and sectors has caused issues on equitable distribution or use of fisheries resources. For instance, the use of payao by commercial purse seine and ring net vessels resulted in handliners moving farther away and eventually losing fishing ground for the municipal sector.

3) Limited post-harvest facilities / High post-harvest losses

   It is well recognized that economic benefits from fish produced are significantly reduced due to high post-harvest losses. To optimize the value and benefits, there is a need to establish such post-harvest facilities and/or infrastructures including post-harvest machinery and equipment.

   As a continuing program, the BFAR through the Fisheries Postharvest Technology Division has initiated to provide small post-harvest equipment such as but not limited to chilling tanks, stainless fish stalls, freezers, HDPE containers, and top loading weighing scales in strategic areas. These are intended to help reduce fish post-harvest losses and minimize wastage, ensure fish safety supplies, contribute to food security and provide livelihood opportunities and help in poverty alleviation of the fisherfolk.

4) Limited socio-economic benefits and alternative livelihood opportunities to tuna fishers

   Continuous capacity building/technical assistance and IEC are vital in improving the socio-economic status of tuna stakeholders to include proper handling of tuna products for an improved market price. In addition, livelihood assistance by provision of appropriate fishing gears/paraphernalia are necessary to improve income of tuna fisherfolks/fish workers.

5) Limited market & Stringent trade/market/credit requirements (including EU and US market standards)

   A stringent set of food safety requirements are being imposed to tuna canneries/local manufacturers while apparently the same rules are not implemented or yet to be implemented on imported products.

   There is minimal market information and in other cases lack of data access specifically for trade and marketing. This information is necessary for the expansion of trade partnerships among other non-traditional areas for the tuna market.

   The local industry necessitates the minimization of tedious processing for credits and loans. The purpose of which is to provide credit as mode of expansion for the tuna players in improving their current market state.

6) Need to strengthen Governance on tuna fisheries management

The issue on proper management by the national and local authorities is manifested by fragmented mandates and weak institutional mechanisms to address illegal, unreported and unregulated fishing and sustained science-based management due to limited human resources and capacity to support a science-based tuna fishery management.

Another priority concern is the need to improve the Integrated Marine Environment Monitoring System (IMEMs) and/or replace the non-operational and defective units of Vessel Monitoring Systems (VMS).

Science-based management requires adequate human resources and financial support for continuous research and monitoring. An increased industry support especially on funding and human resources requirements should be provided to further enhance such management in tuna fishing. Additional funding to mitigate the lack and inadequacy of government interventions is required.

7) Illegal Unreported Unregulated (IUU) Fishing

There are issues on IUU fishing that the country is dealing with which include poaching by foreign vessels, poaching by Philippine vessels in neighbouring countries, unauthorized commercial fishing in municipal waters, unregistered/ unlicensed/ undocumented fishing boats, inadequate implementation and surveillance capacities and non-compliance to management measures.

Addressing IUU fishing is key to reducing fishing effort, first and foremost as it levels the playing field.

Addressing IUU fishing is key to reducing fishing effort, first and foremost as it levels the playing field.

GOALS AND OBJECTIVES

Specific goals and objectives were formulated in accordance with the Ecosystem Approach to Fisheries Management (EAFM) that takes into consideration the three (3) components, namely: Ecosystem Well Being, Human Well Being and Good Governance.

The specific measures, actions, timelines and responsibilities for each of the following objectives are indicated in the Implementation and Monitoring Plan of the NTMP and attached as Annex 1.

GOAL 1: SUSTAINABLE LEVEL OF PRODUCTION

1) By 2029, science-based Reference Points, Harvest Control Rules, and management measures are formulated and adopted;
2) By 2027, available data are accessible, consolidated, and analyzed;
3) By 2026, validated purse seine catch and effort data from 2012 onwards are established.

GOAL 2: IMPROVED CONDITION OF FISHERFOLK AND EQUITABLY ACCESSED TUNA RESOURCES

1) By 2027, FADs fishing areas are re-established in TCMZ and expansion through the National Payao project (of 50 FADs per year) for tuna handline fishers;
2) By 2026, 45 BFAR post-harvest personnel for tuna producing regions are trained on fish grading and 180 tuna handliners composed of men and women fisherfolk are trained on tuna grading ,proper fish handling ,post harvest technologies and trade annually thereafter;
3) By 2030, reduce postharvest losses by 15%.

GOAL 3: STRENGTHENED GOVERNANCE/ MANAGEMENT OF TUNA FISHERIES

1) By 2027, 100% of active catcher vessels will be equipped with fully functional VMS;
2) By 2027, operators are equipped with skills on troubleshooting and maintenance;
3) By 2025, operators have full direct access to their own VMS through web portal;
4) By 2027, all undocumented and unlicensed tuna handliner boats are registered and licensed;

5) By 2030, 100% traceability for imported and exported tuna products;
6) By 2027, BFAR Patrol vessels with trained enforcement team are sustainably deployed in major tuna fishing grounds in EEZ and High-Seas by 2028;
7) Annually, 180 tuna handline fishers are trained on responsible fishing operation;
8) By 2028, standardized and harmonized the process on boat registration and licensing are established;
9) By 2026, taxation policy on Philippine Flagged vessels catches transhiped by foreign vessels between BOC and BFAR is harmonized;
10) By 2027, feasibility study and cost analysis on the use of potential alternative materials for biodegradable FADs and instrumental buoys for FADs are conducted;
11) By 2027, 100% compliance with the implementation of FAD Closure in EEZ (subject to Rule 65.2);
12) By 2025, Amendment of FAD regulations to improve reporting compliance (to include limits);
13) By 2030, 100% of fisheries observers deployed in purse seine and ring net vessels in the Pacific - through phase-approach;
14) By 2026, cost analysis on the deployment of observers in EEZ is conducted (for fund sourcing);
15) By 2026, 100% compliance on distant water fishing vessels and HSP1 to IMO requirement
16) By 2026, adjudication process reviewed and expedited within standard timeframe.
17) By 2027, feasibility study and cost analysis on the implementation of crew labor standards for tuna vessels are conducted.

The adoption of the National Tuna Management Plan involved the following process:

DRAFTING AND PREPARATION

Stakeholder Review and Updating of NTMP
(October 26, 2024)

Consultative Meeting with Stakeholders to Address New Key Issues and Concerns

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Tuna Technical Working Group (Tuna-TWG) Writeshop
(March 5-6, 2025)

CONSULTATIVE PROCESS

Stakeholders' Focus Group Discussion with Key Tuna Players and Industry
(March 18-20, 2025)

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National Consultation
(April 23-24,2025)

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Small-Group Meeting for the finalization of the contents
(June 11, 2025)

Final Lay-out and Printing
(July-August 2025)

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Presentation for review and approval of BFAR Management Committee
(August 26-27, 2025)

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Presentation to National Tuna Congress
(September 2025)

IMPLEMENTATION AND MONITORING PLAN

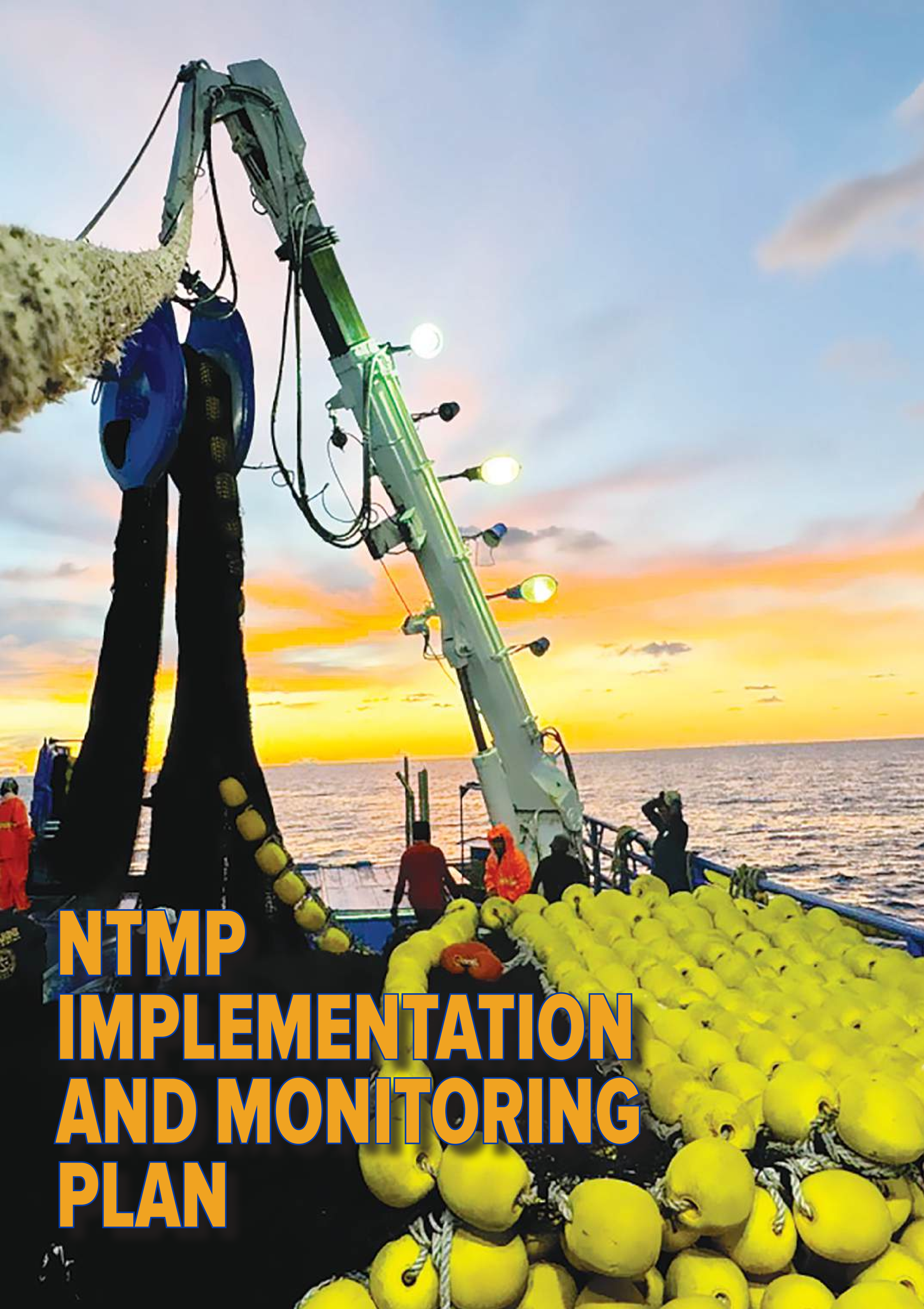
BFAR, is mainly responsible for commercial fishing in national waters and the EEZ and, as the representative and recognized (flag-state) fisheries authority for the Philippines is also in charge of managing the high seas/ distant water tuna fishing fleet. The LGUs have the authority to manage fishing and fishing activities in municipal waters with authority to adopt regulations for the conservation, management and exploitation of tuna in municipal waters.

The Implementation, Monitoring and Evaluation Plan. For the proposed, specific implementation, monitoring and evaluation plan will be prepared and agreed upon in a national workshop involving relevant agencies, industry and stakeholders.

Regular annual reviews of the national tuna fisheries management plan will be undertaken by the concerned BFAR Tuna Technical Working Group in coordination with Major Tuna Organizations/ Associations and will feed into the preparation of Annual Report and updating on the National Tuna Fisheries Management Plan. The application of the Plan will be subject to external review. Findings at municipal and at national level will record actions that were taken during the year in compliance with the Plan.

AMENDMENT AND MODIFICATION

Any need to modify the Plan will be determined by BFAR in consultation with the stakeholders and, if necessary, with the FARMCs, based on significant changes in the focus of its work resulting from, for example, changes in the laws and Fisheries Administrative Orders governing the management and organizations' activities. In any such case, BFAR and the LGUs may utilize existing mechanism to consult with stakeholders before modifying the Plan. Any modification of the Plan will be reflected in parallel modification of the regulations enacted to give it legal effect.



NTMP IMPLEMENTATION AND MONITORING PLAN

GOAL 1: SUSTAINABLE LEVEL OF PRODUCTION

Key Issues and Concerns	Objectives	Management Actions/ Measures What is to be done?	(Programs, Projects, Activities What are the specific tasks?	(Person, Agency or Stakeholder, Contact Details) Who is responsible?	(Person, Group, Organization, Agency, Contact Details) Who Should Support implementation and how?	(Timetable, Date of Realization) By what time should the measures be completed?	(Staff, Budget) Which personnel and financial resources are assigned?
Catching of small tunas	1. By 2029, science-based Reference Points, Harvest Control Rules, and management measures are formulated and adopted.	1. Conduct scientific studies and develop technical papers to support the Philippines' position in the WCPFC (EEZ and HS limits, optimum utilization, small tunas, etc.,).	1.1. Assess and Establish Fishing Capacity to specific FMAs. (FMAs 1&2 and archipelagic waters as basis for the formulation of appropriate measures. 1.2 Conduct of Boat and Gear Inventory (BGI) in key tuna producing areas including municipal fishing fleets; 1.2. Collaborate with the Local Government Units (LGUs) to provide list of fishing fleet operating within municipal waters (ie., ensure that those who are enrolled are already registered in the BoatR); 1.3. Records of fishing vessel licenses issued atleast for the last five (5) years as basis for the assessment of fishing capacity; 1.4. Utilize the data presented in the WPEA-NSAP Annual Tuna Catch Estimates to identify the tuna catch from fishing grounds per FMA based on fishing gears	BFAR-FRMD, FRLD, CFD, NFRDI, LGU	NFRDI, BFAR CO and Stakeholders	1.1. 2029 1.2. 2026 1.3. 2026 1.4. 2026	BFAR BFAR /PhP 90, 000, 000
Limited access to available data that will be used for the development of science-based management measures	2. By 2027, available data are accessible, consolidated, and analyzed.	1. Develop a database and information system and set up arrangements of data access for concerned agencies	1.1 Institutionalize data collection, consolidation, and analysis among multi-agency andevelop working mechanism on data and information access 1.2. Conduct of annual tuna data catch estimates/assessment workshops	BFAR, NFRDI, PSA, Industry	NFRDI, BFAR CO and Stakeholders	2027 Annualy	NFRDI NFRDI/PhP 3, 000, 000
		2. Develop and institutionalize data collection utilizing catch logsheets and related records (ERS, traceability documents, etc.,)	2. Conduct re-orientation, enforcement, and validation of documentation compliance (CFVL catch logsheets/logbook)				BFAR/PhP 3, 000, 000
Implication on the implementation of the current WCPFC harvest strategy on effort limits	3. By 2026, validated purse seine catch and effort data from 2012 onwards are established. **This will also be covered by Objective 1 and its actions	1. Conduct a harmonization workshop to establish catch and effort relative to current baselines provided in CMMs (BFAR-CFD)	1.1 Provide annual list of active fishing vessels by FMA; 1.2. Provide annual catch estimates including CPUE for all tuna targeting fishing vessels by FMA; 1.3. Access the tuna fisheries data management system (TUFMAN 2) to corroborate	1.1.FRLD 1.2. NFRDI-NSAP, PSA 1.3. CFD, FOP		2026	BFAR/PhP 3, 000, 000

GOAL 2: Improved Socio-Economic Condition of Fisherfolk and Equitably Accessed Tuna Resources

Key Issues and Concerns	Objectives	Management Actions/ Measures What is to be done?	(Programs, Projects, Activities What are the specific tasks?	(Person, Agency or Stakeholder, Contact Details) Who is responsible?	(Person, Group, Organization, Agency, Contact Details) Who Should Support implementation and how?	(Timetable, Date of Realization) By what time should the measures be completed?	(Staff, Budget) Which personnel and financial resources are assigned?
Lack of equitable access of municipal fishers to FADs	1. By 2027, FADs fishing areas are re-established in TCMZ and expansion through the National Payao project (of 50 FADs per year) for tuna handline fishers	1. Assessment and evaluation of existing TCMZ areas 2. Review and update FAO 258, series of 2018	1.1 Implement National Payao Project in key tuna areas 1.2. Identification of potential FAD fishing zones 1.3. Review and improve project implementing guidelines 2.1. Conduct review and consultation workshops	CFD, BFAR RFOs	BFAR Stakeholders	2027	BFAR-GAA/ PhP 80, 000,000 BFAR-GAA/ PhP 1, 200,000
Limited knowledge and skills of tuna handliners on proper fish handling	2. By 2026, 45 BFAR post-harvest personnel for tuna producing regions are trained on fish grading and 180 tuna handliners composed of men and women fisherfolk are trained on tuna grading, proper fish handling, post-harvest technologies and trade annually thereafter.	1. Quality assessment for tuna (grading, classifying) 2. Onboard fish handling ,post harvest technologies and trade training .	1. Capacity building on quality assessment for post-harvest central and regional technical staff 2. Conduct trainings for men and women fisherfolk on proper fish handling, and post-harvest technology and trade (incorporated in responsible fishing training in NMFDC)	PHTD	BFAR Stakeholders	2026	BFAR-GAA/ PhP 2, 800,000 BFAR-GAA/ PhP 18, 400,000
	3. By 2030, reduce postharvest losses by 15%	1.Establish baseline data on post-harvest losses 2.Provision of post-harvest facilities, machineries, and equipment 3. Increase access to post-harvest facilities, machineries, and equipment.	1. Provision of small post-harvest equipment to prolong shelf-life of tuna.	PHTD	BFAR Stakeholders	2027 2030 2030	BFAR-GAA PhP 5, 000,000 per facility PhP 50,000, 000 for machineries and equipment (all regions and CO)

GOAL 3: Strengthened Governance/Management of Tuna Fisheries

Key Issues and Concerns	Objectives	Management Actions/ Measures What is to be done?	(Programs, Projects, Activities What are the specific tasks?	(Person, Agency or Stakeholder, Contact Details) Who is responsible?	(Person, Group, Organization, Agency, Contact Details) Who Should Support implementation and how?	(Timetable, Date of Realization) By what time should the measures be completed?	(Staff, Budget) Which personnel and financial resources are assigned?
Not fully functional VMS Manual Reporting due to defective Units and non-detection of units and Non-reporting of VMS when at sea. Operators/Officers have limited skills in troubleshooting and maintenance of VMS. No access for operators to their vessel location	1. By 2027, 100% of active catcher vessels will be equipped with fully functional VMS 2. By 2027, operators are equipped with skills on troubleshooting and maintenance. 3. By 2025, operators have full direct access to their own VMS through web portal. -By 2025, in-depth assessment of BFAR VMS transponders (SRT-VMS100/ VMS100Si) will be conducted	1. Reassessment of the existing VMS (system and hardware)	1. Replacement of non-operational and defective VMS with appropriate/reliable units. 2. Recommend or provide alternative accredited/type-approved/compatible VMS units. 3. Upgrade ALCs to VMS100Si 4. Establish technical working group to provide technical support at regional level (transponder) 5. Provide standby units (at least 40) for replacement at the VMS center. 6. Replace the VMS units with other approved types of VMS using the sustainability plan starting in 2026 7. Regional/Cluster Workshop of VMS basic troubleshooting and maintenance for the fishing company technicians starting in 2026. 8. Fast-tracking the Stakeholder VMS web-based portal	FIIMC, BFAR National and Regional Monitoring Centers	BFAR CO	2027 2028	BFAR-GAA / PhP119,000,000 Subscription Cost: PhP 147,000,000 for five (5) years
Unlicensed tuna handliner boats (new or renewal)	1.By 2027, all undocumented and unlicensed tuna handliner boats are registered and licensed	1. Adopt and implement the amended IRR of the Tuna Handline Law 2. Enhance boat registration for municipal tuna handliners	1.1. Convene the reconstituted tuna handline TWG 1.2. Conduct consultations and finalized the revised IRR 1.3. Re-establish one-stop shop for licensing of tuna handline fishing vessels 2.1 Conduct of Boat and Gear Inventory 2.2 Integrate BGI and LGU BoatR records	FRLD and CFD	BFAR CO	2027	BFAR-GAA / PhP 3,000,000
Insufficient traceability documentation of tuna from other regions Insufficient traceability documentation of tuna imported from other countries Weak local border control (municipal/ provincial/regional) for fishery products coming from outside the area	1. By 2030, 100% traceability for imported and exported tuna products	1. Full implementation of FAO 251, series of 251 on the traceability and enhance implementation of catch documentation in municipal fisheries 2. Establishment of strategic quarantine border stations 3. Establishment of Rules and Regulations on the registration of transport vehicles of fresh, chilled and frozen fishery and aquatic products.	Establish online application and issuance of LTP Conduct capacity building on traceability for fishers from BFAR and LGU (both for 1&2) Communicate and coordinate with the regions on the issuance of auxilliary invoice/ Local Transport Permit (LTP) for local and export trades. Establish Electronic Catch Documentation System (eCDTS) for imported and exported tuna products Implement catch logsheet requirements for all fishing vessels catching for export. Establish an internal monitoring and documentation system for imported fish, fishery/aquatic products. Hire data encoders for the implementation Operationalization of the Cold Examination Facility for Agriculture (CEFA) in strategic ports in the Philippines. Establish strategic quarantine border stations	FIQD, FRLD, BFAR RFOs	BFAR CO (FIMC), BFAR-RFIQU, BFAR-FMRED, BFAR-PFO, LGU, Fish consolidators, and fishers DA Intercommerce, BFAR-RFIQU's (1st Border Inspector), BFAR-DO-SBI, BFAR-RFIQUs, BFAR-HR, BFAR-FMD	2027	BFAR-GAA / PhP 4, 800, 000

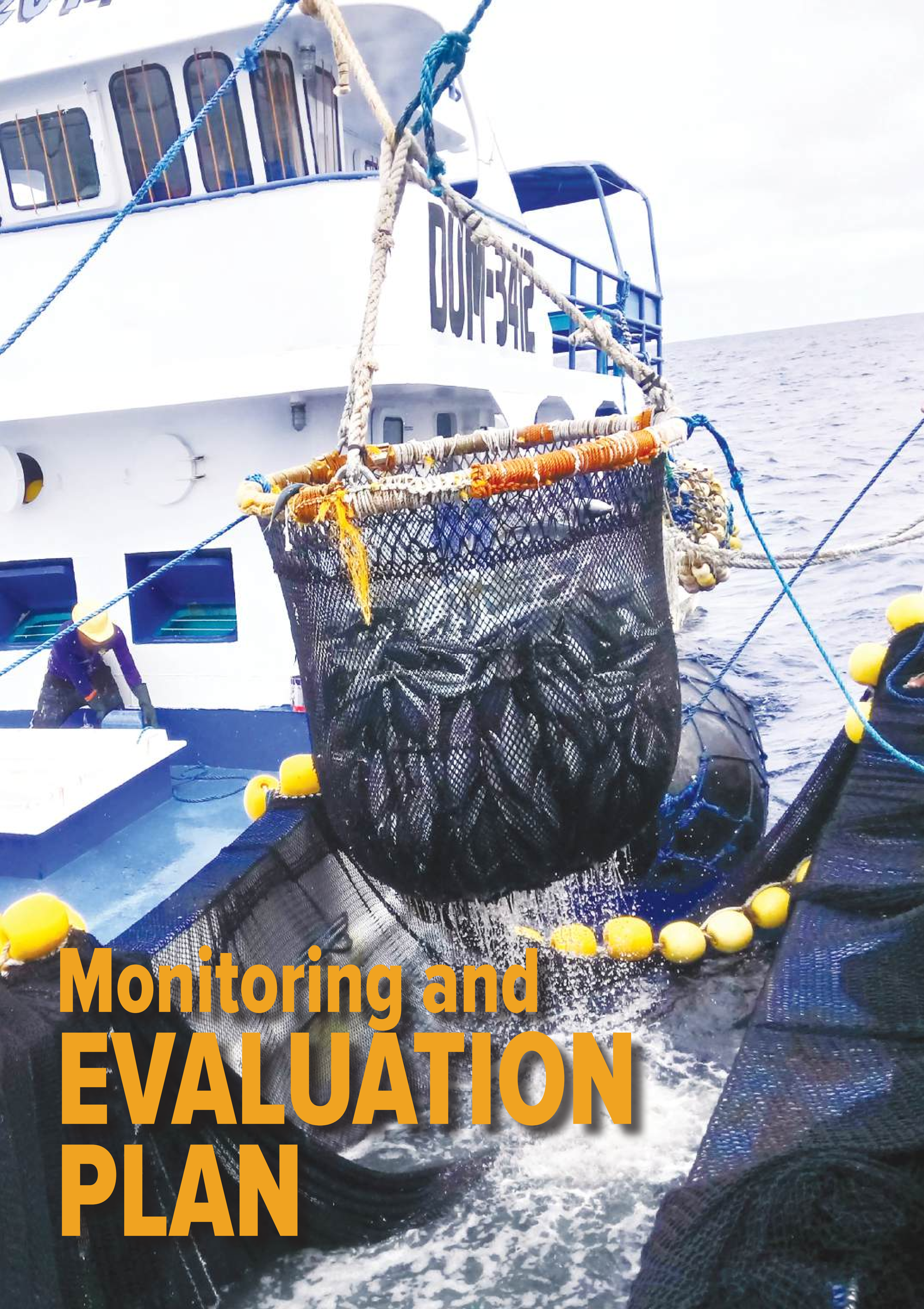
GOAL 3: Strengthened Governance/Management of Tuna Fisheries

Key Issues and Concerns	Objectives	Management Actions/ Measures What is to be done?	(Programs, Projects, Activities What are the specific tasks?	(Person, Agency or Stakeholder, Contact Details) Who is responsible?	(Person, Group, Organization, Agency, Contact Details) Who Should Support implementation and how?	(Timetable, Date of Realization) By what time should the measures be completed?	(Staff, Budget) Which personnel and financial resources are assigned?
Lack of floating asset Limited capacity of enforcement team Insufficient budget for sustainability operations (ie. fuel, logistical)	1. By 2027, BFAR Patrol vessels with trained enforcement team are sustainably deployed in major tuna fishing grounds in EEZ and High-Seas by 2028.	1. Enhance the operational capacity of BFAR patrol vessels in major tuna fishing areas	1. Aquisation and deployment of two (2) units of multi-mission offshore vessels in High seas 2. Conduct Enforcement Capacity Building for High-seas boarding and inspection including Air surveillance capacity. 3. Deployment of atleast 2 offshore vessels (37 meters or 50 meters) in major tuna fishing grounds in Philippine Waters	VOC, FRMD-FPLEG, BFAR RFOs	BFAR Stakeholders	2027	BFAR Fuel cost for deployment of two 50 meters multi-mission vessels PhP 483, 000, 000 Deployment of one 37meters offshore vessel: Php 220, 500, 000 one (1) 50 meters offshore vessel: PhP 241, 500, 000
Limited capacity of fishers on responsible tuna handline fishing operation	1. Annually, 180 tuna handline fishers are trained on responsible fishing operation.	1. Conduct of training programs to capacitate tuna handline fishers in responsible fishing operations	1. Conduct of trainings with MARINA and NTC 2. Conduct training activities in support to Fishery improvement Projects and Certifications	MFDC	BFAR Stakeholders	2026-2030	BFAR-GAA / PhP 17, 000, 000
Short validity period and lack of standard process across LGUs for boat registration and licensing	1. By 2028, standardized and harmonized process on boat registration and licensing are established.	1. Encourage the other regions to have standard fisheries ordinance on boat registration and licensing		FRLD, RFOs, FIQD	BFAR and DILG	2028	BFAR
BOC treating catch of Philippine flagged fishing vessels transhiped by foreign vessels as imported fish and therefore subjected to tax	1. By 2026, taxation policy on Philippine Flagged vessels catches transhiped by foreign vessels between BOC and BFAR is harmonized.	1. Established and harmonized BFAR and BOC taxation policy on Philippine Flagged vessels catches transhiped by foreign vessels	1. Solicit legal opinion from OSG 2. Dialogue with BOC top management 3. Establish a registry of accredited chartered vessels for tax exemption 4. Coordinate and conduct dialogue with the BOC top management to harmonized taxation (CMT vs RA 8850) specifically for transhipped fish caught by Philippine flag vessel.	Legal Division, FIQD	BFAR (DO, ADO Tech, FIQD), BOC, Importers	2026	BFAR-GAA
Potential implication of using biodegradable FADs and e-monitoring	1. By 2027, conduct feasibility study and cost analysis on the use of potential alternative materials for biodegradable FADs and instrumental buoys for FADs are conducted	1. Conduct Research and Development Program on biodegradable FADs	1. Collaborate with DOST and other institutions	NFRDI	NFRDI, BFAR CO and stakeholders	2027	NFRDI
Continuing non-compliance for implementation of FAD Closure in EEZ for ten (10) years	1. By 2027, 100% compliance to the implementation of FAD Closure in EEZ (subject to Rule 65.2) 2. By 2025 Amendment of FAD regulations to improve reporting compliance (to include limits).	1. Review of FAO 263 to come up with other compatible measures in Philippine waters	1. Conduct stakeholders consultations to craft other appropriate measures in Ph waters (eg. selectivity measures, capacity limits, spatial and temporal closures, etc.,)	CFD	BFAR CO	2027 2025	BFAR-GAA

GOAL 3: Strengthened Governance/Management of Tuna Fisheries

Key Issues and Concerns	Objectives	Management Actions/ Measures What is to be done?	(Programs, Projects, Activities What are the specific tasks?	(Person, Agency or Stakeholder, Contact Details) Who is responsible?	(Person, Group, Organization, Agency, Contact Details) Who Should Support implementation and how?	(Timetable, Date of Realization) By what time should the measures be completed?	(Staff, Budget) Which personnel and financial resources are assigned?
Continuing non-compliance for implementation of FAD Closure in EEZ for ten (10) years	1. By 2027, 100% compliance to the implementation of FAD Closure in EEZ (subject to Rule 65.2) 2. By 2025 Amendment of FAD regulations to improve reporting compliance (to include limits).	1. Review of FAO 263 to come up with other compatible measures in Philippine waters	1. Conduct stakeholders consultations to craft other appropriate measures in Ph waters (eg. selectivity measures, capacity limits, spatial and temporal closures, etc.,)	CFD	BFAR CO	2027 2025	BFAR - GAA
Cost implication of observer deployment resulting to non-compliance (capacity-assistance as per WCPFC) to FAO 261	1. By 2030, 100% fisheries observers deployed in purse seine and ring net vessels in the Pacific - through phace-approach. 2. By 2026, cost analysis on the deployment of observers in EEZ is conducted (for funding need)	1. Implement collaborative observer program between BFAR and Industry	1. Conduct forum with stakeholders regarding 50% subsidy of fisheries observer's fee. 2. Hire additional Fisheries Observers to be deploy in Domestic Waters for PS/RN and Handline to extend the coverage. 3. Deploy Fisheries Observers on PS/RN in EEZ on a phase basis 4. Deploy of Fisheries Observer for Tuna Handline in FMAs 2 and FMA 3.	PFOPMO, NMFDC, CFD	Fishing Industry	2026	BFAR - GAA / PhP 1,000,000 PhP 138,000,000
Non-compliant of distant water fishing vessels in HSP1 to IMO number requirement	1. By 2026, 100% compliance on distant water fishing vessels and HSP1 to IMO requirement	1. Full implementation of the said provision of FAO 245	1. Monitor the compliance of HSP1 vessels in IMO 2. Check applicability to vessels and report to WCPFC 3. Regular monitoring of RFO12 and as requirement of DWFP	FRLD	BFAR Stakeholders	2026	BFAR - GAA
Slow resolution of administrative cases	1. By 2026, adjudication process reviewed and expedited within standard timeframe.	1. Review and revise the adjudication guidelines as appropriate to fastrack resolution of cases	1. Conduct consultation on the review and revision of adjudication guidelines	Legal & Adjudication	BFAR	2026	BFAR - GAA / PhP 1,500,000
Implication of implementation of crew labor standards	1. By 2027, feasibility study and cost analysis on the implementation of crew labor standards for tuna vessels are conducted.	1. Implement the relevant provisions of CMM 2024-04	1. Coordinate and collaborate with the DOLE and DMW on the implementation of the said provisions	CFD, DMW, DOLE	BFAR, DMW, DOLE	2027	BFAR- GAA

***Indicative costs are subject to updating or revision**



Monitoring and EVALUATION PLAN

GOAL 1: SUSTAINABLE LEVEL OF PRODUCTION

Objectives	Benchmarks		Indicators (Quality/ Quantity/Relative)	Monitoring methods or source of data	Monitoring Frequency
	Baseline	Target			
1. By 2029, science-based Reference Points, Harvest Control Rules, and management measures are formulated and adopted.		Key tuna species	Science-based Reference Points, Harvest Control Rules, and management measures formulated and adopted	Resolutions and FAO Adopted	Annually
2. By 2027, available data are accessible, consolidated, and analyzed.	Annual tuna catch estimates	All consolidated and validated tuna data	"Data from the following sources: PSA NFRDI/WPEA-NSAP PFDA Tuna Industry"	Centralized tuna database	Annually
3. By 2026, validated purse seine catch and effort data from 2012 onwards are established. **This will also be covered by Objective 1 and its actions		Validated PS catch and effort data (2012-present)	Best available data are validated	Centralized tuna database	Annually

GOAL 2: IMPROVED SOCIO-ECONOMIC CONDITION OF FISHERFOLK AND EQUITABLY ACCESSED TUNA RESOURCES

Objectives	Benchmarks		Indicators (Quality/ Quantity/Relative)	Monitoring methods or source of data	Monitoring Frequency
	Baseline	Target			
1. By 2027, FADs fishing areas are re-established in TCMZ and expansion through the National Payao project (of 50 FADs per year) for tuna handline fishers	7 FAD Fishing areas in TCMZ	7 Re-established FAD fishing areas	Number of FADs fishing areas re-established in TCMZ and expansion through the National Payao project	FAD Registration and Monitoring Forms	Annually
2. By 2026, 45 BFAR post-harvest personnel for tuna producing regions are trained on fish grading and 180 tuna handliners comprised of men and women fisherfolk are trained on tuna grading ,.proper fish handling , post harvest technologies and trade annually thereafter.	Concerned PHTD, NMFDC, and CFD technical personnel/ trainors	45 BFAR post-harvest personnel 180 tuna handliners (men and women fisherfolk)	BFAR post-harvest personnel for tuna producing regions are trained on fish grading 180 tuna handliners comprised of men and women fisherfolk are trained on tuna grading, proper fish handling, and post-harvest technology and trade	Number of capacity building activities conducted	Annually
3. By 2030, By 2030, reduce postharvest losses by 15%	25% PHL (FAO)	15% reduction	"% reduction of PHL (Quality and Value)	Surveys and assessments in top tuna producing regions along the supply chain Classification on the quality of fish	Annually

GOAL 3: STRENGTHENED GOVERNANCE/MANAGEMENT OF TUNA FISHERIES

Objectives	Benchmarks		Indicators (Quality/ Quantity/Relative)	Monitoring methods or source of data	Monitoring Frequency
	Baseline	Target			
1. By 2027, 100% of active catcher vessels will be equipped with fully functional VMS 2. By 2027, operators are equipped with skills on troubleshooting and maintenance. 3. By 2025, operators have full direct access to their own VMS through web portal. -By 2025, a third party assessment of BFAR VMS transponders (SRT-VMS100/ VMS100Si) will be conducted	Number of existing catcher vessels 1,200 operators in National and Regional Monitoring Centers No access yet	100% of active catcher vessels 50% of the total number of operators Full access to VMS web portal	Active authorized vessels equipped with fully functional VMS 600 operators are equipped with skills on troubleshooting and maintenance nationwide Accessible VMS webportal	VMS National and Regional Monitoring Centers Capacity buildings on troubleshooting and maintenance conducted VMS Webportal	Annually
4. By 2027, all undocumented and unlicensed tuna handliner boats are registered and licensed	Undocumented and unlicensed tuna handliner boats	100% of tuna handliner boats are registered and licensed	Tuna handliner boats registered and licensed	Boat and Gear Inventory	Annually
5. By 2030, 100% traceability for imported and exported tuna products	Insufficient traceability	100% tuna imported and exported products are traceable	Full implementation of FAO 251, series of 251 on the traceability and enhance implementation of catch documentation in municipal fisheries Establishment of strategic quarantine border stations Establishment of Rules and Regulations on the registration of transport vehicles of fresh, chilled and frozen fishery and aquatic products.	Conduct of capacity building on traceability Establish ECDTS Internal monitoring and documentation system for imported fish, fishery/aquatic products	Annually
6. By 2027, BFAR Patrol vessels with trained enforcement team are sustainably deployed in major tuna fishing grounds in EEZ and High-Seas by 2028.		two (2) units of multi-mission offshore vessels in high seas are aquired and and deployed	Two (2) units of multi-mission offshore vessels in High seas Enforcement capacity building for high seas boarding and inspection including Air Surveillance capacity	Aquisation and deployment of two (2) units of multi-mission offshore vessels in High seas Conduct of enforcement capacity building for high seas boarding and inspection including Air Surveillance capacity	Progress Completion Report/ VOC Annualy
7. Annually, 180 tuna handline fishers are trained on responsible fishing operation.	90 tuna handline fishers per year	180 tuna handline fishers per year	Number of tuna handliners trained	Conduct of capacity building on responsible tuna fishing	Annually

GOAL 3: STRENGTHENED GOVERNANCE/MANAGEMENT OF TUNA FISHERIES

Objectives	Benchmarks		Indicators (Quality/ Quantity/Relative)	Monitoring methods or source of data	Monitoring Frequency
	Baseline	Target			
8. By 2028, standardized and harmonized process on boat registration and licensing are established.	Existing process on boat registration and licensing	Standardized/ harmonized boat registration and licensing of CFV and MFV	Number of consultations conducted Finalized boat registration validity period for implementation	Conduct of enforcement capacity building for high seas boarding and inspection including Air Surveillance capacity	Annually
9. By 2026, taxation policy on Philippine Flagged vessels catches transhiped by foreign vessels between BOC and BFAR is harmonized.	Existing taxation policy on transhipment	Established and harmonized BFAR and BOC taxation policy on Philippine Flagged vessels catches transhiped by foreign vessels	Established registry of accredited chartered vessels for tax exemption	Legal Division	Annually
10. By 2027, conduct feasibility study and cost analysis on the use of potential alternative materials for biodegradable FADs and instrumental buoys for FADs are conducted	No feasibility study or cost analysis currently conducted on alternative biodegradable FAD materials and buoys	Feasibility study and cost analysis completed	Completion of technical report on alternative materials Number of viable alternative materials identified	NFRDI and BFAR	Annually
11. By 2027, 100% compliance to the implementation of FAD Closure in EEZ (subject to Rule 65.2) 12. By 2025 Amendment of FAD regulations to improve reporting compliance (to include limits).	Partial compliance to FAD Closure regulations Existing regulations	100% compliance to FAD Closure in EEZ Amended regulations formally adopted and implemented	Percentage of fishing trips adhering to closure period Number of violations detected	Observer trip reports / PFOP-MO Official gazette or regulatory issuance records	Annually
13. By 2030, 100% fisheries observers deployed in purse seine and ring net vessels in the Pacific - through phace-approach. 14. By 2026, cost analysis on the deployment of observers in EEZ is conducted (for funding need)	Partial coverage of observers in purse seine and ring net vessels No cost analysis currently available for observer deployment in EEZ	100% observer coverage in target vessels Cost analysis completed	Percentage of trips with observer onboard Number of vessels with assigned observers	Observer deployment Trip reports Annual compliance reports Review of completed cost analysis document Budget submission records	Annually
15. By 2030, 100% compliance on distant water fishing vessels and HSP1 to IMO requirement	Not all distant water fishing vessels and HSP-1 vessels are compliant with IMO requirement	100% compliance	Percentage of vessels with valid IMO numbers Compliance verification reports	Vessel registry audits Port State inspection reports Compliance monitoring checklists	Annually
16. By 2026, adjudication process reviewed and expedited within standard timeframe.	Current adjudication process	Process review completed and procedures streamlined	Reduced average case resolution time	Legal Division	
17. By 2027, feasibility study and cost analysis on the implementation of crew labor standards for tuna vessels are conducted	No feasibility study or cost analysis on crew labor standards currently in place	Feasibility study and cost analysis completed	Recommendations for crew labor standard implementation	BFAR, DMW, and DOLE	Annually

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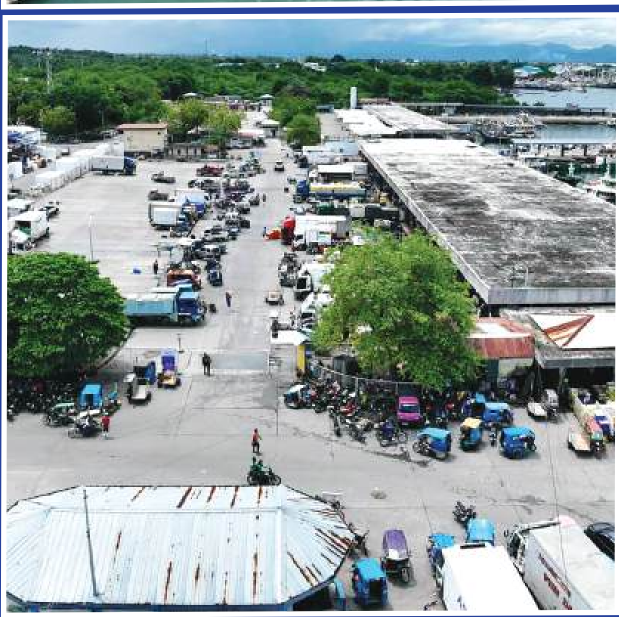

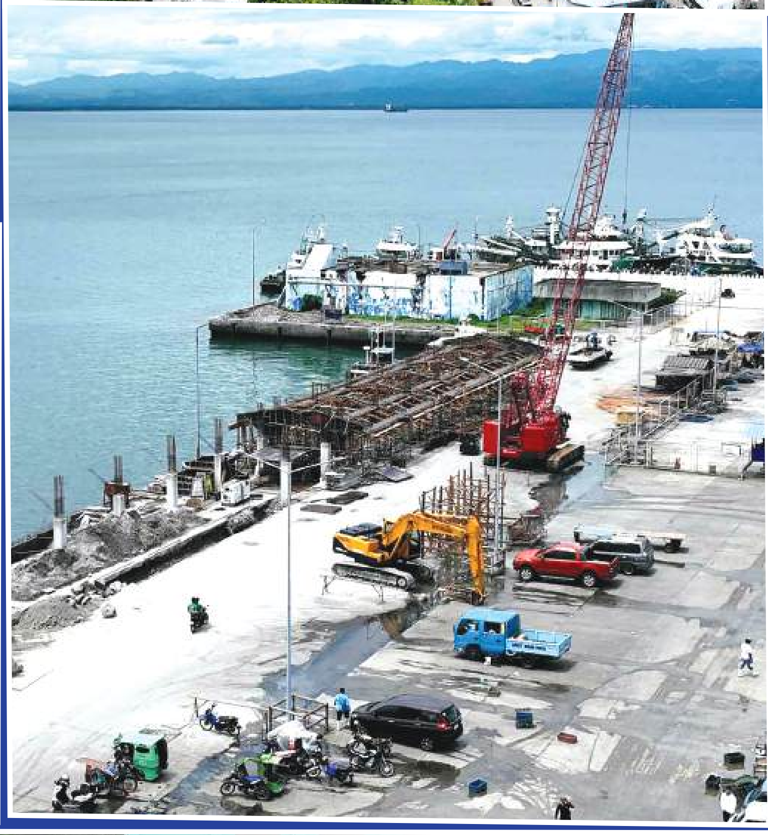


NATIONAL TUNA MANAGEMENT PLAN


STAKEHOLDERS' REVIEW OF
NTMP 2025
2030


WELCOME
Tuna Stakeholders


WELCOME
Consultative Meeting with
Tuna Stakeholders


NATIONAL CONSULTATION ON UPDATING THE
NATIONAL TUNA MANAGEMENT PLAN
2025 - 2030


2025 - 2030

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