





American Samoa

Statement







What national climate change activities or initiatives are underway to manage and adapt to the impacts of climate change on fisheries and aquaculture?

- American Samoa is working with the WPFMC Council: 1. Implementation of fishery management measures to advance climate ready fisheries by improving climate resiliency and responsiveness to climate impacts; and 2. Development and advancement of climate related fisheries management planning and implementation efforts in support of underserved communities:
- Scenario Planning; Regulatory Review; Protected Species; Community Consultation; Equity and Environmental Justice





Other projects that indirectly support fisheries:

- Climate-Ready Coasts initiative (DOC). This project aims to strengthen coastal communities' resilience to climate change by mapping and monitoring wetlands. It will create jobs and improve economic and environmental outcomes for the region
- Leone Wetland and Mangrove Restoration Project: The Governor's Biodiversity Conservation Office is leading the Leone Wetland and Mangrove Restoration Project. This initiative aims to restore and protect critical coastal habitats, which play a vital role in climate resilience and support both wildlife and human communities
- GRID Resilience State and Tribal Formula Grants: American Samoa has received grants to enhance grid
 resilience. These funds contribute to strengthening energy infrastructure and ensuring reliable power
 supply during extreme weather events and disasters.





Other Activities:

- Corel reef mitigation and restoration (technologies and permitting)
- Watershed assessment, mitigation >> implementation of mitigation projects;
 nature-based solutions
- Support, conduct data collection on fisheries and climate variables; predictive models (e.g., albacore)
- Support to develop climate-informed fisheries policies (e.g. American Samoa tuna policy)
- Rapid reef disaster response plans, biosecurity, invasive species
- Development of regulations ~ coral reef as infrastructure
- Continue to implement creel survey programs, FAD program
- Continue coral reef monitoring (esp. coral bleaching)
- Education and Outreach





2. COVID-19 IMPACTS

What are your national fisheries and aquaculture current and planned activities to reduce the residual impacts of COVID-19 on food security, livelihoods, and economic growth?

Current activities (with USFWS, WPFMC):

- Subsidies for small-boat fisheries; gear modifications for longline fisheries
- Strengthening and developing fisheries infrastructures (boat ramps, ice machines, docks)
- Fishery development (DOC, SPC) vertical longlining, short longlining
- Small-scale mariculture (e.g. giant clams with Samoa MAF)
- Capacity building (e.g. boat handling, seafood handling)
- Strengthening American Samoa tuna economy
- FAD program
- Education and Outreach







Cook Islands

Statement





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

	current priorities	emerging priorities	key perceived gaps in information and support
coastal fisheries	 Improving data baselines and monitoring programmes, including implementing Ikasavea Development of a national coastal fisheries policy – fishery and species management of coastal species, focusing on species impacted from harvesting and for conservation. Includes domestic trade. Environmental monitoring e.g. water quality, algae and coral monitoring Island specific marine management plans, including integration with marine spatial planning Regulations for tourism related activities - turtles and cetaceans Bone fish fishery - tourism options for Penrhyn Ra'ui regulations - Puaikura model 	biological sampling programme 2. Climate change adaptation project –	 limited management and policy support Capacity development for data analysis and stock assessments of reef resources - statistics and modelling





	current priorities	emerging priorities	key perceived gaps in information and support
aquaculture	production	 ecosystem restoration - giant clams food security and livelihood initiatives for the outer islands 	 limited technical support - muri report, AMRC operational plans. need to spread access of support to all members. Information (where and when to deploy spat collectors) to help maximize recruitment of wild pearl spats in Manihiki lagoon Capacity development training for black pearl oyster hatchery spawning SPC assistance to plan, design and operate a commercial milkfish venture in Penrhyn.
tuna fisheries	-	2. Climate change advice relating to data, monitoring, predictions and impacts to tuna fisheries.	1. climate change impacts on tuna fisheries at the national and local level





What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

	access to data	utilisation of data	opportunities for regional integration
fisheries data	 Tuna - well defined systems in place, however, will need to focus on verification to support management initiatives e.g. quota or allocation monitoring. Tuna - Regional fisheries tools, national management systems via OFP in place, including catch effort and stock status reports. Challenges with data timeliness, quality, and fisher comprehension of reporting standards - ER to possible address this. coastal - No definitive baseline data for artisanal fisheries to determine coverage and strengthen estimates. Agriculture survey / census - possible baseline for coastal fisheries. coastal - requires tool to accommodate broader data needs, Ikasavea has more utility and functionality than TAILs. MMR switching to Ikasavea. marine environmental monitoring data - water quality, coral and algae coverage. historical reports / surveys 	international reporting obligations. e.g. national economic reporting, RFMO reports, regulatory reporting. 2. inform management measures and approaches 3. advice for government	 Joint Research Initiatives: collaborating on regional research projects to fill key information gaps (e.g. albacore), particularly on the impacts of climate change. capacity building - Regional workshops and training programs to build capacity in fisheries data analysis, management, and policy development. Note regional rules and procedures for tuna fisheries data in place, however assistance required to improve national implementation of data management SOPs. e.g. regional approach applied when developing national tuna data procedures manual - dedicated assistance to learn how to develop SOPs. coastal/aquaculture - discussion forum for adhoc advice, sharing of issues and lessons learned. e.g. OFP use of Slack for data team.
aquaculture data	 Pearls - some production data. Customs data for exports available and accessible. historical reports and surveys - prawn farming, milkfish, pearls 	1. inform management approaches	







Guam

Michael Denas, Department of Agriculture Division of Aquatic and Wildlife Resources





What are your current and emerging priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

- In the absence of a Commercial Tuna Fishery, we are actively seeking projects and funding that foster mid-level entry into a quasi-commercial fleet, i.e. Vertical Longline, Deep Set Bouy Gear, GreenStick.
 - Most of the local boats are 20 feet in length and only go out for single day primarily trolling trips. Looking at methods that reduce the rising costs of fuel and supplies. These types of fisheries development projects will show and demonstrate alternatives to local fisherman.
 - This will help reduce the reliance of imported, frozen, and gassed tuna that dominates the market.





What are your current and emerging priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

- Developing our Fisheries Management Plan for Reef fish, and Bottom fish
 - Aligning terrestrial, nearshore territorial waters, and Federal waters while ensuring that the public and all stakeholders are included in the process.
- Newly established Aquaculture Division within the Department of Agriculture Created on April 4,2024 by Governor Lou Leon Guerrero through Executive Order 2024-01.
 - Governor's Executive Order States "Guam must take measures to ensure seafood security while implementing aggressive measures to preserve the health of the oceans, given the growing technical aquaculture advancements and practices, and the ever-increasing global demand for seafood".





What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- The Division of Aquatic and Wildlife Resources conducts:
 - Offshore boat-based creel and Inshore creel and participation Surveys
 - Collect information on catch; including location, time, CPUE, species.
 - The data is available to WPRFMC, NMFS, PIFSC, PIRO, to produce the annual Stock Assessment and Fishery Evaluation Report(SAFE).
- The Bureau of Statistics and Plans handles the Commercial Landings Data Collection (CLDC) (vendor receipt program).
 - Primary purpose of the project is to provide data to support Pacific Island fisheries monitoring, assessment and management needs.
 - Data is collected from vendors who purchase fish from local fishermen.





What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- Strengthen partnerships and programs involving Cooperative research with scientists and fishermen to incorporate fisheries independent data with fisheries dependant data. This fosters the often perceived disconnect with scientists and fishers and enhances the comprehensiveness and accuracy of our fisheries data collection process.
- Guam's Telemetry Network, an acoustic receiver array dispersed around Guam to paint a picture of movement of tagged marine organisms.
- BMUS Bottom fish Cooperative Research. MOUSS camera and fisherman validation project.







Kiribati

Statement





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

- Quota Management System for coastal fisheries
- Aquaculture support for freshwater shrimp
- Electronic monitoring for coastal fisheries enforcement activities





Cont.

- Expansion of Aquaculture program to Kiritimati Island
 - Petfish
 - Clam
 - Artemia
- Refresher training on petfish handling in Kiritimati Islands
- Institutionalization of CBFM
- Sustainable blue economy practices-Eco-friendly Marina- Survey on potential areas for small boat marinas in South Tarawa.





What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- IKASAVEA
- Creel Survey
- Market survey





Cont.

- Online licensing system for fisheries harvest and export
- Aquaculture Database development
- Economic assessment and dashboard development for socioeconomic data
- Artisanal tuna survey







Republic of the Marshall Islands

statement





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

- Explore alternative feed options for aquaculture (nursery/hatchery)
- Climate change impacts/adaptive management
- Infrastructure support to increase alternative livelihoods in the marine space





Cont.

- Utilization of bycatch species to increase value adding opportunities for local communities.
- Diversifying aquaculture species & production to address food security & livelihood
- Roll out of RMI PROPER activities





What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- Collaborating with SPC on utilization of the updated database (aquarium exports)
- Marine Data Monitoring Tool Kit
- FAD Data collection & monitoring





Cont.

- Utilise export data to develop TAC recommendations for local jurisdictions
- Use of Achievelt for strategic/corporate planning reporting
- Assist with trainings of Local Resource Officers







Nauru

Statement





- Collect data and information on important coastal reef fish species to allow assessment of status and to support their management (biological sampling, Ikasavea, artisanal landing data, SE surveys, fisheries independent surveys).
- Explore existing and new fisheries for opportunities to address food security and alternative livelihoods (diamond-back squid, small pelagics, aFADs, marine ornamentals, mariculture).
- Support the implementation and upscaling of a CBFM approach for Nauru Coastal Fisheries (MMAs, MPAs, Community MCS, Community Sustainable Finance Projects, Nature-based solutions).
- Understanding local impact of climate change on coastal fisheries and marine resources.





1. Current and emerging priorities (Cont.)

Planned activities:

- Increase milkfish production for local consumption (promote best practice standards for milkfish farming, set up milkfish hatchery, fish feed development using local materials).
- Develop other aquaculture/mariculture commodities (GIFT Tilapia, giant clam farming, coral farming, reef fish farming, aquaponics).

Gaps and areas of need:

- Upgrade/setup of database to support storage and analysis of coastal fisheries and aquaculture data.
- Technical assistance and support to build local technician capacity in aquaculture and mariculture.
- Development of a national Aquatic Biosecurity Strategy.





- TUFMAN is operational and is allowing the storage and access of local artisanal landing data that are being collected regularly – more user-friendly visual outputs (graphics) would be very useful.
- Old server installed by SPC has been down. Need total reset to upgrade access to regional cloud-based data system for storage and analysis of coastal and aquaculture data.
- Support/advice for E-monitoring tools e.g., most appropriate tablets or android devices that will work effectively with data system/tools including list of suppliers.
- Updated/simplified Socio-Economic Survey method.





2. Access and utilisation of data (Cont.)

- Training on the use of all the tools developed by SPC is needed including the availability of user manuals/guides if the tools are to be fully utilised.
- A regional training on the new data system, how it works and how to use it especially in association with the data collection tools developed by SPC.
- Use of GIS utilising drones for coastal area mapping and monitoring including training on this is needed.







Déclaration de

Nouvelle-Calédonie





- 1. Quelles sont vos priorités actuelles et émergentes, ainsi que les principales lacunes perçues en matière d'information et de soutien au niveau national pour la pêche au thon, la pêche côtière et l'aquaculture ? Activités en cours :
 - <u>Pêche thonière</u>: mise en oeuvre du schéma directeur des pêches élaboré en 2023 en concertation avec les professionnels et les administrations concernées
 - <u>Pêche thonière</u>: Mise en place d'une étude sur l'impact de la déprédation des lignes par les mammifères marins et sur les stratégies d'atténuation
 - <u>Pêche côtière</u>: Etablir des indicateurs simples sur l'état de santé et/ou l'abondance pour les stocks qui n'ont pas fait l'objet d'étude, afin de définir des modalités de gestion et des indicateurs de suivi
 - Aquaculture : Biosécurité et suivi sanitaire des filières aquacoles





Suite

Activités planifiées :

- <u>Pêche thonière</u>: procéder à la révision et la modernisation de la politique des pêches de la Nouvelle-Calédonie
- <u>Pêche côtière</u>: favoriser la mise en place de circuits de distribution, notamment les circuits courts garantissant un revenu correct pour les pêcheurs
- Aquaculture: Accompagnement au développement de la diversification aquacole, notamment en aquaculture multitrophique intégrée
- Aquaculture: Formulation d'un aliment aquacole produit et sourcé localement
- <u>Pêche et aquaculture</u>: Anticiper les effets du changement climatique sur la pêche et l'aquaculture





- 2. Quel est aujourd'hui votre accès et votre utilisation des données sur la pêche et l'aquaculture au niveau national et quelles opportunités voyez-vous pour l'intégration au niveau régional des systèmes/outils/etc. de données ?
 - <u>Pêche thonière</u>: fiches de pêche collectées et saisies dans Tufman. Généralisation de Onboard sur toute la flotte et de OLLO par tous les observateurs.
 - <u>Pêche thonière</u>: mise en oeuvre depuis 2003 d'un observatoire économique de la filière
 - <u>Pêche côtière</u>: Développement de base de données standardisées dans les 3 provinces.
 Hébergement des données dans un outil commun (MétaInfoCentre) avec production d'indicateurs pour chaque province et à l'échelle du pays
 - Pêche côtière: utilisation de l'outil IKASAVEA au marché de Nouméa
 - <u>Aquaculture</u>: mise en oeuvre d'un observatoire de la filière qui traite des données des production et des données économiques de la filière crevettes





Suite

Activités planifiées :

- <u>Pêche thonière</u>: actualisation de la méthodologie de l'observatoire économique, qui tient compte de l'évolution des pratiques commerciales
- <u>Pêche côtière:</u> poursuivre les développements du méta infocentre afin d'élargir ses capacités d'analyse par territoire ou par espèce/groupe d'espèce
- <u>Aquaculture</u>: Favoriser l'interaction entre l'observatoire et les professionnels afin d'assurer la complétude des données recueillies dans les délais fixés







Republic of Palau

Aquaculture- Current and emerging priorities:





- Institutional capacity (seek capacity training to ensure well-trained staff; maintain and improve existing hatchery)
- Research and development (promote research and development of key aquaculture species; Improve seed production technology; Seed distribution; Siting guideline; protection of endangered species (restocking PAN sites)
- Strengthen data collection and management: creating a more accessible, real-time database of current aquaculture resources.
- To promote better aquaculture management practices.
- Extension services (Support farmers cooperatives; State gov't & Association to ensure the efficient delivery of aquaculture service)







Coastal Fisheries -current and emerging priorities:

Strengthening Coastal Fisheries Monitoring and Data Collection





- Coastal fisheries data and information (including traditional knowledge) needs for evidence-based management.
- Establish the life history of identified target fish species
- Develop a data sharing agreement between MAFE, partners, and state governments
- Capacity and training needs for data management

Improvement of fisheries market

- Need to understand and identify market gaps to establish effective marketing strategy
- Inconsistent supply to meet demand
- High market fee for pelagic fish than reef fish







Key perceived gaps in information & support at the National Level for Aquaculture:





- Limited support to farmers (technical and funding)
- Lack of formal policy, legislation, planning documents etc. specific to aquaculture policy and management.
- Market and permitting: Palau's environmental restrictions pose a difficulty for aquaculture management, especially in terms of permitting and identifying suitable locations. Farmers have often said that this is the most significant challenge.







Oceanic Fisheries - Current and emerging priorities:





1) Electronic reporting (ER): All long line vessels fishing in Palau EEZ should be ER this year (2024).

In Palau PNMS regulation, vessels are required to subscribe to iFIMS for ER.

2) Electronic Monitoring (EM)

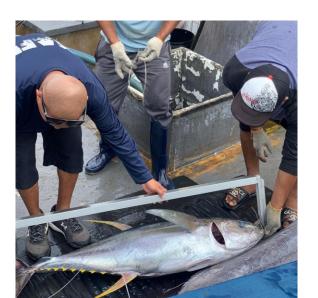
All long line fishing in Palau EEZ are required by PNMS regulations to have EM systems installed and be in operation in 2025.

3) Climate Change effects for the movement of tuna in the PIPs water.

Due to climate change, Stocks are moving further east and away from many PIPs EEZ by 2050.







2. Access and utilization of data





- As the national fisheries entity we have the authority to impose restrictions and govern access to fisheries resources. We also collect and have access to fisheries data that are utilized to make management decisions and promote fisheries development.
- The sharing of tools, knowledge and skills can be adopted, modified and utilized to benefit our countries.
 - O Advance Warning System (AWS)- This system will provide data on the reduction of tuna captured in Pacific Island Countries in the Western Central Pacific Ocean due to climate change. It will allow us to negotiate with developed countries that have a greater contribution to climate change. Parties can utilize the data during commission.
 - *Ikasavea app* that was developed in another pacific island country and now is being adopted by Palau to collect fisheries data.
 - Tech attaching echosounders to anchored fads help track and locate fish at the fads
 - For oceanic fisheries, SPC developed Onboard, Onshore, etc.. to help Electronic reporting on tuna catches but not to eliminate log sheets for data collection.
- Aquaculture continues to be of great importance to our food and economic security, the development of innovative aquaculture and sharing of skills, knowledge, and information will also be key to strengthening aquaculture sector.







FSM

statement





2. Current and emerging priorities

What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Current activities:

Implementation of Strategic Development Plan





3. Current and emerging priorities

Cont.

Planned activities:

Developing a coastal fisheries policy for FSM





4. Access and utilisation of data

Current activities:

- Access and utilization of data is an issue
- States have their own system of fisheries data collection
- Non-uniformity of a systematic data collection
- Quantity, species of catch and location is unknown





5. Access and utilisation of data

Cont.

Planned activities:

- Setting up universal data collection and analysis
- Establishment of protocols and methods for data collection
- Undertake comprehensive ecological assessments availability of data in usable/comparable form







Fiji

Statement

Fiji Emerging Fisheries Issues





Research/Aquaculture

- Capacity building & research on culture of high valued species with emphasis on Grouper and Coral trout Species and expand and develop sandfish hatchery and grow out.
- Use of climate smart techniques for pond culture such as pond liners, solar pumps, etc for new and dormant farms
- Broodstock improvement program for Macrobrachium and Tilapia and related capacity building needs for technical staff

Coastal Fisheries

- Establishment and Centralised Database for Coastal Fisheries and Aquaculture and Capacity Building to manage Database.
- Use of latest technology in surveillance and monitoring of inshore fishing vessels, like VMS and drones capacity building on drone and VMS operations
- FAD program (GCF) and Deepwater Fishing Training and procurement of fishing gears. Support capacity building for fishers for FAD fishing, post-harvest and gear technology

Climate Change:

- Donor and development partner support for implementation of priorities for adaptation, mitigation and resilience
- DRM and DRR plans







Papua New Guinea

Statement

1. Current and emerging priorities





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Current activities:

1. TUNA

- Review of tuna fisheries management plan (to include the development aspect of the fishery)
- Improvements in electronic reporting: Improvements on existing FIMS module on catch e-logs, e-observer reporting and debriefing, e-Catch Documentations Scheme (e-CDS) etc
- Strengthening MCS certification of all tuna fisheries
- Development of National Plan of Action for sharks and rays

2. **COASTAL FISHERIES**

- Modernising management plans under coastal fisheries (divisional KPIs) with commercialisation agenda in focus
- Development of new fisheries and management plans (through research & data collection tools like IKASAVEA) to add to volume -based production and four new fisheries operational
- Development plans for coastal fisheries livelihoods programs (e.g., IFAD, Trap net) to improve livelihood, income and increase resource sustainability
- MSC accreditation certificate for lobster awarded, work on mud crab is progressing

3. AQUACULTURE & INLAND FISHEREIES

- Development of National Aquaculture Development Plan focused on elevating the industry to commercial levels:
 - ✓ Facilitate the establishment of satellite hatcheries (tilapia) throughout out 22 provinces & resolve quality fingerling shortage.
 - ✓ Sea cucumber hatchery increase sea cucumber hatchery production of juveniles (1 facility operational, 4 EOIs to be considered)
 - ✓ Develop/Commercializing inland fisheries.
- Rehabilitation and improvement of existing NFA's hatcheries (marine & freshwater) and research facilities
- National aquaculture baseline survey (85% complete) to provide cue for NFA to progress its commercialisation agenda & building data warehouse under our ICT transformation agenda

1. Current and emerging priorities





Planned activities:

1. TUNA FISHERIES

- Electronic Reporting & Electronic Monitoring Initiatives
- Development of National Climate Change Strategy on the impacts on fisheries resources
- Implementation PSMA and roll out of provincial command control centres

2. COASTAL FISHERIES

- Centralised database system under NFA's ICT reform agenda
- Development and commercialisation of emerging fisheries (Fisheries Hubs)
- Development of coastal fisheries policy
- Roll out of small craft safety device (NEMO- New Era Monitoring and Observation)

3. AQUACULTURE & INLAND FISHERIES

- Commercialisation of aquaculture & inland fishery (Mandatory upgrading of 10 commercial farms)
- Facilitate the establishment of domestic commercial fish feed mill (Mandatory establishment of a commercial feed mill)
- Development of inland fisheries with management interventions
- Research to operationalise commercially viable mariculture species
- Facilitate Aquaculture Nucleus Hubs

GAPS:

- Centralised database system underway through service provider
- Capacity building for scientific research & publication
- Development of Monitoring and Evaluation Framework (PNG Fisheries Strategic Plan 2021-2030)
- Diversification of high value target species for aquaculture domestication of indigenous species for farming

2. Access and utilization of data





What is your access to and utilization of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Current activities:

TUNA FISHERIES

- FIMs data- There is already mechanisms in place for data/information sharing between FIMS & TUFMAN 2
- FIMS, ASYCUDA, Licencing Access Registry (LAR 13) are used to verify export
- Fish accounting system (FAS) captures landing and processing data for tuna conversion from landing to canned tuna
- Use of TUFFMAN 2

COASTAL FISHERIES

- Use of IKASAVEA to capture coastal fisheries landing and market data
- Use of LAR 13 for export declaration (export data)

AQUACULTURE & INLAND FISHERIES

Use of ARC GIS to capture the baseline data (e.g. farm details, production, volume etc)





2. Access and utilization of data

Cont.

Planned activities:

- Data sharing with relevant state Agencies (Central Bank, Internal Revenue Commission, National Statistic office etc) though MOAs
- CPA with regional agencies might be ideal for future collaboration in data sharing
- Development of a centralized database system for NFA







Déclaration de

Polynésie française





1. Quelles sont vos priorités actuelles et émergentes, ainsi que les principales lacunes perçues en matière d'information et de soutien au niveau national pour la pêche au thon, la pêche côtière et l'aquaculture ?

• Pêche:

- Réalisation d'études structurantes technico-économiques pour la pêche hauturière et côtière (zonage côtier, étude de rentabilité des unités côtières, risques de surexploitation au bord de la ZEE)
- Lacunes d'infos :
 - Cadrage port sampling en pêche hauturière

- Accompagner le développement de la zone à vocation aquacole Aruhotu-Biomarine
- Mettre en place le cadre juridique au développement durable des activités aquacoles
- Lacunes d'infos :
 - Evaluer le potentiel des filières sur les marchés internationaux (rori, bénitiers, crevettes, macroalgues)
 - Bulletin sanitaire sur les maladies aquacoles émergentes dans le Pacifique et le cadre juridique en terme de biosécurité des différents ETIO.





Activités planifiées :

Pêche :

- Augmenter la capacité de production en pêche hauturière : développer le port de pêche actuel, la filière de transformation et construire un port de pêche aux Marquises
- Amorcer les études avec la SPC préfigurant d'un FAD watch en PF (analyse du cout financier et faisabilité technique)
- Engager l'étude sur l'abondance et la répartition de la bonite en PF

- Développement de l'outil Ikasavea pour un meilleur suivi des nouvelles filières
- Zonage aquacole sur l'ensemble du territoire polynésien prenant en compte les impacts du réchauffement climatique





2. Quel est aujourd'hui votre accès et votre utilisation des données sur la pêche et l'aquaculture au niveau national et quelles opportunités voyez-vous pour l'intégration au niveau régional des systèmes/outils/etc. de données ?

• Pêche:

- Programmes habituels suivent leurs cours : Observateurs, DCP dérivants, e-monitoring.
- Utilisation efficace des outils de la SPC de suivi de la pêche des longliners (TUFMAN 2, OnBoard, OnShore, Ollo, CES 2) pour les déclarations à la WCPFC et IATTC
- Utilisation de TUFMAN 2 de suivi de la pêche artisanale thonière (pêche côtière) pour les déclarations à la WCPFC et IATTC: besoin régional d'une application e-reporting des fiches de pêche destinée aux pêcheurs côtiers (Tails ou Ikasavea)
- Collecte partielle des fiches de pêche lagonaire et absence d'outil de suivi (saisie et analyse) : besoin régional d'une application e-reporting des fiches de pêche destinée aux pêcheurs lagonaires (Ikasavea).

- Utilisation efficace de l'outil de la SPC de suivi de la traçabilité des holothuries : utilisation possible au niveau régional
- Utilisation partielle de l'outil de la SPC de suivi de la traçabilité bénitiers : besoin d'intégrer le suivi CITES
- Retour annuel des statistiques de production pour les détenteurs d'un titre profesionnel
- Suivi de la qualité des productions en écloserie à élargir aux nouvelles activités : bénitiers, holothuries, huîtres





Activités planifiées :

• Pêche:

- Au niveau lagonaire, création d'un observatoire technique et socio-économique des pêches
- Accompagner le développement des activités liées à l'aquariophilie en lien avec les obligations de la CITES
- Création d'une application e-reporting des fiches de pêche déstinée aux pêcheurs lagonaires et côtiers (pêche artisanale thonière)
- Pour le EM monitoring : conforter le partenariat et l'intégration des données PF dans la base régionale

- Mettre en place une procedure commune régionale de suivi des productions aquacoles si des transferts entre pays sont envisagés
- Mettre au point un système de traçabilité des espèces CITES exploitées en Aquaculture à l'échelle du pays









SAMOA – COUNTRY REPORT Fisheries and Aquaculture



1. Current and emerging priorities







- Review and finalise fisheries management plans, strategies, legislations.
- Improve fisheries sector **infrastructure and facilities** (e.g. FADs, ice-making machines, hatchery facilities, ramps).
- Increase aquaculture production (e.g. tilapia, giant clams, seagrapes).
- Improve small-scale fisheries **production**, **value adding and marketing** (e.g. trochus shell crafting and jewellery making, seagrape new recipes, post-harvesting –tuna & tilapia).
- Strengthen sustainable **fisheries resource management practices in place** (e.g. CBFMP, aquaculture, inshore and offshore fisheries
- Improve **statistical information and scientific data** through market landings, research and technical observations
- Increase level of compliance through surveillance and enforcement operations (coastal and offshore fisheries)
- Increase **stakeholders/public awareness** on fisheries issues and topics on various mediums and schools.







Priorities



Fisheries Management and Development

laboratories, MCS, ice-making machines),
Value-adding activities (trochus shell jewellery making, post-harvesting, seagrape new recipes)

ramps, aquaculture training centre,

Construction of infrastructures (hatchery,

• Effective MCS fishing efforts







Data collection, analysis & interpretation

- Moving to e-data collection (IKASAVEA, TUFMAN2, etc),
- Market landing, socio-economic, creel survey, stock-assessment, habitat observation.
- Squid new fishing trials







Capacity Building

- Fisheries management, research.
 Development and legislation
- Aquaculture development & best practices
- CBFM scaling up
- Cross-cutting issues GESI, leadership



2. Access and utilization of data Current activities: Access and utilization of data at national level;





- Market landing survey monitoring and managing fishing efforts and determining exploitation rate across a diverse fisheries sector using the IKASAVEA app.
- Fish reserve assessments and habitat observations monitoring and assessing changes overtime of fish and invertebrate biomass and abundances, seagrass and seaweed (macro-algae) density, coral species growth and diversity.
- Stock assessment monitoring and assessing the current status of specific fishery (e.g. sea cucumber, trochus, giant clams, etc)
- Quarterly sampling monitoring status and growth of aquaculture farms and commodities (tilapia and giant clams).
- **Bi-annual algae sampling** investigating the presence of cigua-toxin (Gambierdiscus.toxicus) in the algae samples for fish poisoning (Ciguatera).
- **Sixth monthly review (6MR)** reviewing village fisheries management plans to update status of their fisheries and marine environment, village bylaws, management undertakings.
- Socio-Economic Survey & creel census updating fisheries socio-economic data and information periodically to provide science-based information for decision-making.

2. Access and utilization of data







- **E-data collection -** Strengthen the use of the IKASAVEA app for e-data collection of market landing data, socio-economic and creel census.
- Fish reserve assessment and habitat observation standardization of databases and data analysis and interpretations.
- Quarterly sampling monitoring status and growth of aquaculture farms and commodities (tilapia and giant clams).
- **Bi-annual algae sampling** improve existing methods of detecting ciguatoxin.
- Sixth monthly review (6MR) scaling-up of CBFMP













FA'AFETAI TELE LAVA!!









Solomon Islands

Statement

1. Current and emerging priorities: Coastal Fisheries



What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

- Establishment of a central Database System for Coastal Fisheries
- Community Based Resource Management (CBRM) Program
- Near shore FAD Program
- Market Survey and data Collection-Ikasavea
- Implementation of the National Information Strategy
- Data Analysis and Reporting
- Coral Monitoring and Restoration Program-Commercial Sites
- Marine Export data-SOLLIC
- Economics Analysis
- Cites
- Stock Assesment





1. Current and emerging priorities

Cont.

- Science and Research
- Provincial Rollout of the Solwata Blo Iumi campaign (Information Dissemination)
- Rollout of Marine Spatial Planning into priority province
- Integration of CC adaptation programs in active CBRM communities

1. Key Perceived Gaps in information & Support National Level: Coastal Fisheries



- Luck of a central database for coastal Fisheries
- Annual FAO Fish & Aquaculture statistic survey
- Aging and out of date database system-Difficulties in extracting information from the Sollic Database (Microsoft Access)
- Market survey and Data -Ikasavea-limit tablets with current work in Honiara/ Gizo and Auki
- Luck in capacity to collect information on Impacts of Climate Change on coastal fisheries (science, Research, etc)
- CITES obligation

1. Current and emerging priorities: Aquacultures



- Seaweed Program
- Tilapia Program
- Sea Cucumber-Hatchery
- OIE-Pathogen and pathogen listing
- Biosecurity-
- Market Intelligence
- Innovation technology
- Aquarium-Cites Listing, GACC registration (alternative market)

1. Key Perceived Gaps in information & Support National Level: Aquaculture



- Luck of a National Aquaculture Database
- OIE-Pathogen and Diseases listing-luck of capacity
- Limited capacity to do Local research and collection of scientific information
- Aquarium-Cites Listing and requirements





1. Current and emerging priorities: Offshore Fisheries

- Electronic Monitoring for Longlines and Purse Seine
- Observer Program
- Improve on the MFMR E-Port system-Integration of Regional FFA ePSM with MFMR E-Port system: with E-Port-Risk Analysis and Port Entry Request
- Establishing Early Warming System-Impacts of Climate Change on Tuna fisheries
- Integration of FIMS and Tufman2-observer
- Electronic-Debriefing-observer
- Gen-3-compliance & infringement-observer
- Data Quality

1. Key Perceived Gaps in information & Support National Level: Offshore Fisheries



- EM-Expensive (equipment) and cannot expand beyond current coverage of 8 vessels
- E-Port-Risk Analysis and Port Entry request (integration of MFMR Eport system with FFA regional ePSM)
- Impacts of Climate Change on possible shift of Tuna fisheries
- Integration of FIMS and Tufman2-Observer
- Fisheries Observer APP-TAB 2 to TAB 4 –improve data quality and submission
- E-Debriefing-not available
- OLLO APP-ER longline trials-5 trips
- Gen-3-compliance & infringement





2. Access and utilization of data: Coastal and Aquaculture

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- Lack of access to a central data base (no central data base system)
- Access to data done on ad hoc basis (on request basis) as data kept by different Sections and partner NGOs – ongoing challenge





2. Access and utilization of data: Offshore Fisheries

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

- FIMS
- Electronic Monitoring and reporting
- MFMR E-Port system
- Tufman 2
- SOLLIC
- Working towards all storage of data are to be centralized within SIG ICT Unit.





2. Opportunities towards Integration with Regional System

- Should be made with Existing Regional Database system for coastal fisheries. Offshore Fisheries and aquaculture
- 1. Climate Change
- 2. Market and landing data
- 3. Research data
- 4. Early Warning System
- 5. Science (biological, Genetics etc)
- 6. Electronic monitoring and Reporting





Tagio Tumas







Tokelau

Solomua & Lesley G

Statement





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Current activities:

- Oceanic TUFMAN2 data entry & generating report for SC report.
- Artisanal Tuna data collection.
- Anchored FADs deployment and Training (amalgamated training with Samoa Fisheries).





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Planned activities:

- Improving data flow into TUFMAN2 from FIMS.
- Improve artisanal tuna data collection on the 3 islands:
 - In-country training.
 - Sourcing & procuring new technological equipment such as tablets.
- FAD in-country training & maintenance of anchored FADs.
- Determining the cause and rectifying the algal bloom in Fakaofo.
- Aquaculture giant clam hatchery for reseeding, no commercial aquaculture and no feasibility studies have been undertaken to date.
- Climate Change monitoring impacts on coastal and offshore fisheries.





2. Access and utilisation of data

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Current activities:

- Inshore Officers access TUFART database as needed.
- FMA ad hoc requests to FAME for assistance with extracting fisheries data e.g., catch rates, to inform management decisions.
- Ongoing support to village councils.
- Data used in WCPFC Part 1 report.







Tonga

Statement

Tuna Fisheries





1. Current and emerging priorities:

- Development & review of Fisheries Policy and Management Plans.
- Increase production (catches, value add product).
- Developing new fisheries to encourage economic diversification in communities heavily reliant on fishing e.g. Fisheries Aggregative Device (FAD), pelagic fisheries.
- Onshore infrastructure export processing facility & cold storage.
- Assessments of climate change impacts on Fisheries & Aquaculture.
- Better management of South Pacific Albacore fishery & SPG.
- Review legislation to facilitate fisheries development and management.
- Market research and access.
- Assessment of the fisheries performance.
- Tonga National Observer Program Enhance data collection and reporting
 - E-reporting of data collected by observers (OLLO 75% coverage).
- Training:
 - E-debriefing training needs to be conducted.
 - E-reporting biological sampling data, CKMR data.
 - New recruited observer on OLLO apps.

Gaps

- > Technical expertise.
- Data collection.
- Observer Training.





Coastal Fisheries

1. Current and emerging priorities:

- Develop, review, implement and monitor fisheries policy and management plans, coastal fisheries, (aquaculture, aquarium, sea cucumber, Biosecurity Management Plan i.e. SPC).
- Implement SMA strategy under the CBFM scaling program i.e. information strategies and SPC, climate change, etc.
- Developed Ciguatera sampling methodology i.e. FAO, French Polynesian.
- Sea cucumber stock assessment and NDF (CITES) i.e. SPC, PEUMP.
- Community data collection (Ikasavea platform) i.e. SPC, Wollongong University.

Gaps

- ➤ Data collection & Analysis
- > Training





Aquaculture

1. Current and emerging priorities:

- Review, implementation and monitoring of Aquaculture Management Plans.
- Developed small-scale farming i.e. sea cucumbers, giant clams, trail fish cage culture system (SPC).

Gaps

- Data Collection & Analysis.
- > Training.





2. Access and utilisation of data

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Current activities:

- Database development
- Data collection
- Data storage
- Data retrieval
- Data management
- Data analysis
- Data reporting
- Data dissemination
- Data protection





2. Access and utilisation of data

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Planned activities:

- Migration from a locally hosted to the online system
- Possibilities for integration with regional systems
- Development of an electronic application
- Data visualization dashboard







Tuvalu Fisheries Updates









What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Current activities:

- Strengthening Community-Based Fisheries Management (CBFM) Finalisation and implementation of Coastal Fisheries Management Plans and LMMA National Strategy, FRFSP2;
- Improvement to the data collection programme (including transition of creel survey to Ikasavea);
- Development of the mariculture hatchery construction of hatchey is underway (giant clams). Scoping work commenced to the determine feasibility of aquaculture in the outer islands;
- Strengthening MCS and Compliance follow-up training scheduled for June 2024 with SPC and NZ MPI;
- Monitoring and assessment of microplastics in the Funafuti lagoon (USP);
- Establishment of ocean data monitoring stations e.g. current, temperature, pH, salinity;
- Expansion of the observer programme;
- Introduction of school internship program





Planned activities:

- Strengthen data collection to include periodic socio-economic surveys to improve decision-making and management measures (e.g. GESI, economic factors)
- Development of Competent Authority to gain EU-market access for our local flagged vessels;
- Development of our small scale fisheries, including training on fishing techniques, effective FAD fishing, and post-harvesting;
- Legislative review harmonisation of the 3 main Acts (Falekaupule Act, MRA, Conservation Area Act) related to coastal fisheries;
- Implementation plan of the transition to a Fisheries Authority;





2. Access and utilisation of data

What is your access to and utilisation of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Current access & utilisation:

- Coastal fisheries
 - *Regular*: Boat and canoe surveys, creel (landing surveys), ciguatera fish poisoning surveys, size at maturity and spawning seasonality;
 - Ad hoc: Funafuti fisher surveys, socioeconomic survey;
 - FADs data;
 - Results shared in annual reports, creel report cards, website, FMP, social media;





2. Access and utilization of data

Cont.

Opportunities:

- Marine biological surveys
 - Conduct underwater visual censuses (national)
 - Regional platform to access and share data
- Repository for regional indicators e.g., for life history parameters for coastal fish
- Regional understanding of other data collected in other countries e.g., ciguatera monitoring, coral reef bleaching;
- Development of mariculture centre





Thank you











VANUATU

COUNTRY STATEMENT





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Current activities:

- Tuna Fisheries
- Monitoring of fishing vessels through installation of vessel tracking devices on artisanal and/or small-scale fishing vessels.
- Strengthen data collection in 72 Area Councils through establishment of Community Tails Monitoring Network to collect catch records using TAILS App.
- Ongoing data collection through cold chain systems
- Ongoing FAD related activities deployment of Vatu-ika FADs and fishing technology trainings
- Ongoing monitoring and surveillance operations national coastal MCS and regional sea patrols and aerial surveillance operations





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Cont.. Current activities:

- Coastal Fisheries
- Ecological Monitoring (Coral Reefs, Sea Grass, Mangroves)
- Management of COTs outbreak using lime juice and vinegar utilizing scuba diving operators in Vanuatu.
- Research and fishing trials for Spider Crab, Deep Bottom shrimp and Diamond Back Squid.
- Ongoing catch and market data collection (SPC to integrate Tails and Ikasavea)
- Ongoing stock assessments (Coconut Crab, Sea Cucumber, Fish Stock, Mangrove Oyster, Green snail
 & Trochus)
- Habitat rehabilitation (Coral reefs and Mangroves)
- Community-Based Coastal Resource management / Community-Based Fisheries Management (CBCRM / CBFM)
- Ongoing coastal MCS activities Network of Community Based Authorised Officers in all Provinces and Area Councils.
- Cold chain systems Establishment of seafood storage and transfer standards





What are your current and emerging Priorities, and key perceived gaps in information and support at the National Level for tuna fisheries, coastal fisheries, and aquaculture?

Cont.. Current activities:

- Aquaculture
- Infrastructure support establishment of provincial hatchery in all six provinces
- Farm and Husbandry support (Backyard, Semi-commercial, Commercial) –
 equipment supply, seed supply, training, monitoring)
- Work towards increase mass production of provincial hatchery for both aquaculture and mari-culture (Tilapia, Freswater prawns and Clams and Trochus)
- Support private hatcheries to breed sandfish (Holothuria scabra)





Cont.

Planned activities:

- Strengthen catch and market data collection through utilization of TAILS App.
- Carry out stock assessments and promote quota management system for all designated fisheries.
- Strengthen coastal MCS on artisanal boats and small-scale fishing vessels.
- Improve management and licensing regime of each designated fishery
- Promote CBCRM/CBFM for food security and livelihood of communities in all Area Councils.
- Work with communities, Area Council and Provincial Governments to establish a well coordinated Fishers product group.
- Support to Aquaculture farmers through practice of Integrated Farming systems and research to formulate feed mixes through sourcing local ingredients.

2. Access and utilization of data





What is your access to and utilization of fisheries and aquaculture data at national level today and what opportunities do you see for regional level integration of data systems / tools / etc.?

Current activities:

Regional systems

- SPC regional systems TUFMAN 2 stores most of our catch and effort data from both offshore and coastal fisheries.
- TAILS App is utilized to collect coastal fisheries catch and effort data that stores in TUFMAN 2.
- Other regional systems includes the FFA RIMF system which is used to issue licenses mostly for offshore Tuna fishery.

National systems

- National Sea Cucumber Fishery Database stores scientific sea cucumber data
- Crown-of Thorns national database that stores scientific information on COTs
- National e-Log system

2. Access and utilization of data





Cont.

Planned activities:

- Integration of regional systems to allow systems to:
- Link and allow verification
- Avoid duplication of entry
- Encourage centralization of systems for countries to share information
- Request SPC to assist to push our e-log data from our e-log system into TUFMAN 2 into a daily basis
- RIMF system to integrate our transhipment data with the TUFMAN 2 data to better monitor our transhipment activities.
- SPC to include AI support into TAILS App to allow easier data collection
- Incorporate VMS, data from NEMO system into TUFMAN 2 to allow effective monitoring of catch for vessels.







Priorités et besoins des

lles Wallis et Futuna





- 1. Quelles sont vos priorités actuelles et émergentes, ainsi que les principales lacunes perçues en matière d'information et de soutien au niveau national pour la pêche au thon, la pêche côtière et l'aquaculture ? Activités en cours :
 - campagne test de pêche thonière (affrètement)
 - pérennisation de l'Observatoire des Pêches
 - constitution et mise en route du comité local des pêches de Wallis
 - projet pilote d'aire marine protégée coutumière : appui méthodologique en phase préparatoire, communication pour adhésion maximale, cadre juridique, évaluation initiale et protocole de suivi
 - évaluation du potentiel d'exploitation des holothuries : protocole minimum
 - DCP : renforcer l'implication des pêcheurs = formation





Suite

Activités planifiées :

- Évaluation/actualisation de la réglementation (2025)
- projet d'élevage d'huitre de roche et d'écloserie multispécifique (bénitiers, H.

Scabra) : appui technique

- Diversification : prospection pour la pêche au calamar
- campagne de sensibilisation : déploiement de la mallette pédagogique





2. Quel est aujourd'hui votre accès et votre utilisation des données sur la pêche et l'aquaculture au niveau national et quelles opportunités voyez-vous pour l'intégration au niveau régional des systèmes/outils/etc. de données ?

L'Observatoire des Pêches :

- focus récent sur l'évaluation des poissons récifaux et lagonaires (LBSPR)
- des méthodes de collecte et d'analyse d'information, et des outils de diffusion
- des résultats qui transforment la vision des ressources côtières

Faiblesse : mesure de la production de pêche non commerciale

Risque : discontinuité suite à la perte des ressources liées au programme fondateur





Suite

Activités planifiées :

- création d'une entité spécifique pour l'Observatoire
- consolider les évaluations de poissons récifaux
- préparer un plan de collecte pour la campagne test de pêche thonière

Opportunités d'intégration

Projet d'Observatoire Régional (PTOM, autres ?) : pilotage scientifique centralisé, conception et déploiement de protocoles, transfert et appui aux "satellites" au niveau national