



SEYCHELLES FISHERIES SECTOR POLICY AND STRATEGY 2019

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ABBREVIATIONS AND ACRONYMS

ADZs	Aquaculture Development Zones
AU-IBAR	African Union – Inter-African Bureau for Animal Resources
AU-NEPAD	African Union-Nouveau partenariat pour le développement de l'Afrique
BMPs	Best Management Practices
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COMESA	Common Market for Eastern and Southern Africa
IOR	Indian Ocean Rim Organisation
CPUE	Catch Per Unit of Effort
CSO	Civil Society Organisations
EBF	Ecosystem Based Approach to Fisheries
EEZ	Exclusive Economic Zone
EMS	Electronic Management System
FADs	Fishing Aggregating Devices
FAO	United Nations Food and Agriculture Organisation
FIQCU	Fish Inspection and Quality Control Unit
GDP	Gross Development Product
GoS	Government of Seychelles
ILO	International Labour Organisation
IOC	Indian Ocean Commission
IOTC	Indian Ocean Tuna Commission
IOTC – TAC	Indian Ocean Tuna Commission – Technical Allocation Criteria
IUU	Illegal, Unreported and Unregulated
JMA	Joint Management Authority
MCS	Monitoring Control and Surveillance
MFAg	Ministry of Fisheries and Agriculture
MSP	Marine Spatial Planning
MSY	Maximum Sustainable Yield
MT	Metric Tonnes
NBSAP	National Biodiversity Strategy and Action Plan
NDS	National Development Strategy
NGO	Non-Governmental Organisation
NPOA	FAO – National Plan of Action
PO	Policy Objectives
PPP	Public Private Partnership
PSMA	Port State Measures Agreement
RFMO	Regional Fisheries Management Organisation
SADC	Southern African Development Community
SCR	Seychelles Rupees
SDG	Sustainable Development Goals (2030)
SFA	Seychelles Fishing Authority
SFP	Seychelles Fisheries Policy
SFPA	Sustainable Fisheries Partnership Agreement
SIB	Seychelles Investment Bureau
SIOFA	Southern Indian Ocean Fisheries Agreement
SMA	Seychelles Maritime Academy
SMSA	Seychelles Maritime Safety Administration
SNAIP	Seychelles National Agricultural Investment Plan
SPA	Seychelles Ports Authority

SSDS	Seychelles Sustainable Development Strategy
SSF	Small Scale Fisheries
STCW-F	Standards of Training, Certification and Watchkeeping for Seafarers for Fisheries
SWIOFC	South West Indian Ocean Fisheries Commission
SWIOFish3	Third South West Indian Ocean Fisheries Governance and Shared Growth Project
TAC	Total Allowable Catch
UN	United Nations
UniSey	University of Seychelles
USD	United States Dollar
VMS	Vessel Monitoring System

GUIDING PRINCIPLES

The Government of Seychelles believes that all the natural marine resources found in its Exclusive Economic Zone (EEZ), Archipelagic Waters, Continental Shelf and Extended Continental Shelf¹ are the national assets and the heritage of all its people.

Underpinning this is Article 38 of the Constitution of Seychelles which states that it is “the right of every person to live in and enjoy a clean, healthy, and ecologically balanced environment,” and that the state undertakes the responsibility of instituting measures to protect, preserve, and improve the environment and to ensure the judicious and sustainable usage and management of Seychelles’ natural resources. Furthermore, Article 40 of the Constitution of Seychelles dictates that “it shall be the duty of every citizen of Seychelles to protect, preserve, and improve the environment.”

The Government of Seychelles has furthered this dedication by enacting several policies to ensure the long-term protection of the marine environment. The decision to protect and preserve, under the Marine Spatial Planning Initiative², up to 30 % of its maritime space under a mix of managed and closed areas is making sure Seychellois are able to catch and eat seafood— today and in the future. Our fisheries are an important resource that must be carefully and sustainably managed for future generations. We must base our decisions on the best available evidence and scientific data and on a precautionary approach where such data does not exist.

The Blue Economy Strategy emphasizes the economic potential of Seychelles’ vast Exclusive Economic Zone. In relation to fisheries it makes mention to development of aquaculture and sea ranching, IUU, food Security, value adding, surveillance and enforcement and exports. Fundamental to its approach, the blue economy propagates a principle of equity, which ensures that the people of the Seychelles optimize on the benefits received from the oceans that surround them while also protecting them. In conjunction, the SDGs will also shape national development plans over the next 5-10 years to responding to climate change, sustaining the marine resources for food security and economic prosperity.

The fisheries of Seychelles are owned by all Seychellois and shared between numerous stakeholders. Commercial and sports fishing contribute significantly to the economy. The industry must explore all opportunities to sustainably grow the economic return from the fisheries. It must ensure no overfishing occurs, eliminate IUU fishing and everyone is committed to sustainability. All must continue to drive innovation and adoption of new technologies, in the effort to maintain healthy fish stocks and look after the marine environment.

The aspirations for the Seychelles fishing and aquaculture sector is that it should support the right of every Seychellois to participate in the sector and take responsibility to ensure an effective legislative and regulatory framework so that the sector remains sustainable and profitable into the future.

¹ There are three extended areas of the continental Shelf but one fall under the Joint Management Authority (JMA).

² The MSP is being implemented in phases and Phase 1 has been completed.

CONTEXT

The future of the Seychelles fishing industry is now seen within the context of Vision 2033 and its response to the 17 SDGs, the Blue Economy and the Marine Spatial Planning Initiative. These ambitious programs focus on growing an ocean-based economy that is both environmentally and socially sustainable, with fisheries and aquaculture as important sectors.

Several strategies have been adopted: the SNAIP has been developed within the context of the National Food and Nutrition Security Policy; the Seychelles Sustainable Development Strategy (SSDS) 2012 – 2020; and the National Development Strategy (NDS) 2019 – 2023; as a central component of the Blue Economy, the National Biodiversity Strategy and Action Plan (NBSAP) 2015-2020; and the Ministry of Fisheries and Agriculture Strategic Plan 2018-2020. These strategies all focus on the need for socio-economic development in the country.

The Blue Economy Strategy underscores the economic potential of Seychelles' vast Exclusive Economic Zone of just under 1.4 million km². More specifically, the strategy integrates conservation and sustainable use of ocean resources, the development of aquaculture and sea ranching, oil and mineral wealth extraction, bio-prospecting, sustainable energy production and marine transport, as well as branding Seychelles as a 'Blue' tourism destination. The Marine Spatial Planning (MSP) provides the scope to ensure representative species and habitats have long-term protection, to improve resiliency of coastal ecosystems with a changing climate, and ensure economic opportunities for fisheries, tourism and other uses.

The fisheries sector, comprising of the industrial fishery, the small-scale and an aquaculture subsector, is one of the most important pillars of the country's economy. Fish plays a vital role in the nutrition of the people. Per capita consumption of fish is high, variably reported to be between 48 and 65 kg per annum and fish contributes 35-40% of protein consumed by Seychellois³. The locally consumed fish is obtained mainly from the small-scale fishery. The artisanal fishery, which is still an open access fishery, targets a diverse group of species ranging from hand-line caught demersal and semi-pelagic fish, small semi-pelagic fish caught in encircling nets, small and juvenile demersal fish caught in traps, and lobsters and octopus, and to a lesser extent, tuna. Total catches in the artisanal fishery from 2006 to 2016 have declined, on average, from over 4000 to below 3000 tons per annum. Declining trends in the CPUE for most demersal species in the last 10 years, high proportion of juveniles in catches, and changes in species composition of catches, are all indicators of unsustainable fishing⁴.

The tuna fisheries are relatively stable except for concerns on the sustainability of yellowfin tuna which is currently under a restricted Total Allowable Catch (TAC)⁵. The local tuna semi-industrial fleet catches around 300 – 900 MT per year.

³ Lallemand P. (2014). Economic study on major trends in the tuna industry and its impact on the Seychelles economy over the 5 year period, 2009-2013. SF/215/50. Smart Fish Programme, IOC.

⁴ Nicolás L. Gutiérrez 2015, Risk assessment to identify threats to demersal stocks and stock assessments for key demersal fish stocks. Final mission report

⁵ IOTC–SC21 2018. Report of the 21st Session of the IOTC Scientific Committee. Seychelles, 3 – 7 December 2018. IOTC–2018–SC21–R[E]: 250 pp.

Total domestic production of fish and fish products, including the production of fish meal and fish oil from the tuna fishery grew from 114,549 Mt in 2014 to reach 169,088 Mt in 2016, a growth of 48%⁶. This has been brought about by a rise in the production of canned tuna and an increase in the catch from industrial fishing vessels. The fisheries sector is estimated to have expanded by 1.0 per cent in 2017, which was lower than the previous year's growth rate of 1.8 per cent⁷.

The fisheries sector growth is limited in catch or production except through fisheries of the drop-off tuna fisheries, and aquaculture development⁸. But the possibilities for growth in value is enormous through increased services, maximising the landed catch, capturing more of the tuna being transhipped in Port Victoria through further value addition industries, better quality and marketing of demersal fish and tuna from small-scale fishing vessels, and high-value, niche products from the aquaculture sector.

LEGISLATIVE AND ADMINISTRATIVE FRAMEWORK

The Seychelles fisheries and aquaculture legal framework constitutes:

- Fisheries Act of 2014;
- Fisheries (Shark Finning) Regulations of 2006;
- Fisheries Regulations of 1987 as amended,
- SFA Establishment Act of 1984.

Other key legislations in Seychelles that affects fisheries constitutes of the following:

- The Maritime Zones Act (1999), which establishes the boundaries for Seychelles' maritime zones;
- National Park and Nature Conservancy Act of 2018 (Phase 1 MSP);
- Merchant Shipping Act (Amended) 2014;
- Export of Fishery Products Act 2012;
- The Environment Protection Act (1994), which serves to ensure that all development and activities, including fisheries, are subject to environmental controls; and
- The National Parks and Nature Conservancy Act (1969), which provides the legal instrument to establish and manage marine protected areas for fisheries conservation, as well as other purposes.

The Fisheries Act of 2014 provides the basic legal framework for the development and management of environmentally responsible and sustainable fisheries and aquaculture including sea-ranching in the exclusive economic zone of the Republic of Seychelles. The objective of this Act is "to provide for efficient and effective management and sustainable development of fisheries in accordance with international norms, standards and best practices and an ecosystem approach to fisheries; to provide for the licensing

⁶ Source SFA- 2015 and 2016 fisheries data

⁷ Central Bank of Seychelles Annual Report 2017.

⁸ Advance Africa Management Services (2018). Development of Seychelles' seafood sector value chains – Process 3: Capacity needs for the seafood processing and services. SWIOFish 3.

of fishing vessels, to regulate fishing activities including sport fishing, to provide for offences and penalties, and to repeal the Fisheries Act, 1986”.⁹

The sector should also be developed in accordance with relevant international and regional voluntary instruments or binding agreements to which Seychelles is party to and taking into account those under consideration such as the ongoing WTO negotiations on fisheries subsidies. Those having a bearing on fisheries and aquaculture operations include:

- AU-NEPAD - The Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS)
- Common Market for the Eastern and Southern Africa (COMESA)
- FAO Agreement on Port State Measures
- FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement) UN Agreement Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks
- FAO Code of Conduct for Responsible Fisheries
- FAO Voluntary Guidelines for Flag State Performance
- FAO Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries
- ILO Work in Fishing Convention, 2007 (No. 188)
- Indian Ocean Commission (COI) - Regional Fisheries and Aquaculture Strategy
- Indian Ocean Rim Organisation (IOR)
- SADC - SADC Fisheries Protocol 2011
- The Codex Alimentarius
- The Convention of Biological Diversity (CBD) including its subsidiary Nagoya Protocol on Access to Genetic resources and benefit sharing
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- The Nairobi Convention
- UN Sustainable Development Goals 2030
- United Nations Convention on the Law of the Sea
- World Trade Organisation

Moreover, the Seychelles is signatory to three regional fisheries bodies¹⁰ which are directly relevant to the implementation of the fisheries policy:

- Indian Ocean Tuna Commission (IOTC)

⁹ Fisheries Act of 2014

¹⁰ Note IOTC and SIOFA are regional fisheries management organisations that adopt legally binding management measures whilst SWIOFC is an advisory body.

- South West Indian Ocean Fisheries Commission (SWIOFC)
- Southern Indian Ocean Fisheries Agreement (SIOFA)

CHALLENGES

The main features and operating environment of the fisheries sector are best described as primarily related to: governance; enforcement and institutional capacity; implementing commitments and obligations; progress and growth in the domestic and industrial fisheries; biodiversity research; political will; resources; and resourcing.

There are also ongoing operational issues common in fisheries that relate to target and non-target species, incentives, Fish Aggregating Devices (FADs), land allocation, training, employment, fishing capacity and human well-being.

The Seychelles Government is committed to working with all stakeholders to improve the management and development of sustainable fisheries and aquaculture industry. The major challenges are summarised below:

a) Open access fisheries

Entry into most of the fisheries is not restricted. This, and poor implementation of management plans, have led to overcapitalization and overexploitation of the resources in the demersal fishery. The situation is further exacerbated by a lack of monitoring and evaluation of incentives intended to promote development, uncontrolled sports and recreational fishery, investment and food security in the sector.

b) Weak institutional setup and regulatory framework

Weak fisheries institutional setup, inadequate human resources and lack of organisation amongst service providers are the challenges faced in delivering services to fisher communities, and account for the unfavourable climate for growth. The current legal framework also presents inconsistencies and gaps with international instruments to which Seychelles is signatory.

c) Inadequate Infrastructure to support domestic fishing and value chain development

Inadequate Infrastructure support — including markets, ice making plants, repair and landing areas and aging fishing vessels — are the main hindrances to business growth, better fisheries practices, value chains development, and fish products. These often result in shortfall in fish supply and high prices, also compounding seasonal oversupply

d) Inadequately trained workforce

The fisheries sector has the potential to increase employment opportunities locally and offshore but lack a skilled workforce, an ageing workforce, adequate training programmes and service resources to support skill training and reskilling.

e) Resources and resourcing

A lack of financial resources and resourcing policies within the institutions (MFAg and SFA) limits the recruitment and management of essential positions not limited to fisheries scientists, fisheries resource managers, fisheries economists, communication strategists, fisheries development officers, observers and enforcement officers. The industry also suffers from manpower shortages such as fishers, skippers, processors and policy analyst. Most of the fishing businesses currently employ foreign workers.

f) Ineffective enforcement of regulation

Enforcement of regulatory measures is poor because of the lack of existing capacity and assets available to undertake onshore and offshore patrols. Moreover, the culture of compliance is weak in the domestic sector which is evidenced by a lack of capacity to enforce legislation and sanctions on small-scale, recreational and sport fishing.

g) Lack of infrastructure for industrial shore-based processing and services

Fisheries development is constrained by a lack of onshore infrastructure, such as quays small-scale fishing vessels, quay space for container loading, storage, transshipment, inadequate land use planning on Ile Du Port, and slipway/dry dock services, all of which are slowly diminishing the attractiveness of Seychelles to investors and users in the face of growing regional competition.

h) Inefficiencies in the sector due to the subsidies

The local fisheries have become dependent on in-appropriately administered subsidies that have compounded inadequacies in the control of fishing capacity in the small-scale fisheries.

i) Elimination of Illegal, unreported and unregulated (IUU) fishing

Inspection of the industrial fishing fleet and EU process for certification of catch for access to their markets are challenges that need to be addressed. Reporting, monitoring, control of transshipment and landing of tuna in Seychelles' ports and inadequate surveillance of local waters are issues to be urgently addressed due to the lack of human and financial resources.

j) Meeting Regional Fisheries Management Organisation (RFMO) commitments and obligations

Despite improvements in compliance by vessels, implementation of the relevant RFMO resolutions is a challenge. For example, there are currently 36 active IOTC and seven SIOFA Resolutions that require implementation and enforcement.

k) Limited access and poor management of financial resources

Due to the informal nature and the level of risk in the sector, it is extremely difficult for entrepreneurs and fishers to access credit from commercial banks. In the small-scale fishery sector 99% of loans are in arrears. As a result, there is a lack of confidence in the sector by the banking industry.

l) Participatory approach to management of fisheries

Despite a growth in the number of fishery-related associations, there is a lack of collective bargaining, coordination and cohesion to effect change that will directly benefit fishers, improve sustainability and business growth.

POLICY DEVELOPMENT PROCESS

The development of this Policy is a result of stakeholder consultations, literature review and internal departmental consultations. This Policy is also based on a thorough assessment of the achievements of the previous Fisheries Policy adopted in 2005 and of the lessons that were learnt.

The Policy was validated through a national stakeholder workshop which took place on the 4th and 5th March 2019 and submitted to the Cabinet of Ministers for Government approval.

VISION

The vision for the fisheries sector in the Seychelles is:

“Develop fisheries to its full potential whilst safeguarding the marine environment and resource base for sustainability”.

The strategy under Vision 2033 “A resilient, responsible and prosperous nation of healthy, educated and empowered Seychellois living together in harmony with nature and engaged with the wider world” for the sector is to ensure that fish is sustainably exploited using innovative technology, and that the benefits of the sector continue to be enjoyed by all.

The vision of the Ministry responsible for fisheries is “A resilient and sustainable fisheries, forestry and agricultural sector that enhances food and nutrition security, contributes to socio-economic development and respects the natural environment.”

GOALS AND OBJECTIVES

The overall goal of the policy is:

- To provide effective, efficient, transparent and accountable service delivery through a participatory approach to ensure long-term sustainable fisheries and aquaculture management and conservation so that the sector continues to play a key role in the sustainable development of the country and the socio-economic well-being of the Seychellois nation.

The policy has the following objectives:

- Manage fisheries resources through ecosystem-based approaches and ensure that policies, legislations and infrastructure development are aligned towards achieving sustainability, taking into account climate change, international commitments and global developments;
- Stimulate economic growth and transformation of the economy to create decent work, and vibrant, equitable and sustainable livelihoods contributing towards food security for all;
- Foster optimum utilisation of fisheries and aquaculture resources to ensure ecological and socioeconomic sustainability in resource-use and domestic developments, while recognising traditional norms;
- Maximise net economic benefits from resource use in all waters under national jurisdiction and across all value chains and reinvest the benefits nationally, including among other things, in the modernisation of the local fisheries and development of the aquaculture sector;
- Promote the use of rights-based management approaches supported by best available scientific research and industry practices across fisheries and aquaculture;
- Promote the principles of visibility, transparency, participation and inclusivity in decision-making processes which will enable the industry to develop to its full potential within a supportive regulatory framework;
- Safeguard the welfare of current and future generations, recognising gender equity and vulnerable groups, and protecting the country’s sovereignty and jurisdiction;
- Reinforce the development of human resources through effective capacity programmes and training certification for marine fisheries education for the future growth of the fisheries and aquaculture sectors;
- Develop an enabling institutional environment that facilitates investment in fisheries and aquaculture and promotes Seychellois ownership and stakeholding in the sector;

- Improve public awareness of the benefits and potential of fisheries and aquaculture for the country.

RESPONSIBLE AUTHORITIES

The Government of Seychelles has the overall responsibility for policy development and oversight. The policy provides a framework for Development Plans by the Ministry of Fisheries and Agriculture (MFAg). Development Plans can serve to guide the implementation of the policy by the Seychelles Fishing Authority (SFA). The SFA as Government’s lead technical executive arm for fisheries and aquaculture will continue to discharge its responsibility and functions as defined by its Act.

The Ministry responsible for Fisheries and SFA will work in close collaboration with other Ministries, government departments and agencies, to support the decision-making and policy implementation processes as well as support efficient service delivery.

THE POLICY STATEMENTS

This sector policy is structured around 10 policy objectives (PO), each of which is underpinned by more specific strategic actions and policy directives.

Policy 1: Good governance and institutional strengthening

The Government will sustain resources and resourcing that strengthen the fisheries institution in promoting and ensuring transparency, good governance, clear and effective, legislative framework and efficient service delivery. The management, development and regulation of the Fisheries and Aquaculture sector should be applied in a fair, equitable efficient and culturally-sensitive manner that embodies the values of sustainability, economic opportunity, transparency, accountability, ethics, collaboration, stakeholder participation and animal welfare. The beneficial outcomes from the sector shall be equitably shared to the good of all Seychellois and sustainably delivered within a culture of best practice and continuous improvement.

This Policy calls on the appointed Ministry and responsible Authority to manage fisheries and develop aquaculture as legislated by the Seychelles Fisheries Act (2014) and its subsequent revisions, and in accordance with the Fisheries and Aquaculture Sector Development Plans and consequent approved development and action plans established within the period of its duration. To achieve the objectives of this policy and to ensure good governance the Government, through the Ministry and Authority, will:

- Promote fisheries management and aquaculture development based on the Ecosystems Approach to Fisheries, the Ecosystems Approach to Aquaculture, the FAO Code of Conduct on Responsible Fishing, the FAO voluntary instrument for Securing Sustainable Small-Scale Fisheries and the guidelines laid down therein, as well as the FAO Technical Guidelines for Aquaculture Development, as well as the relevant provisions of the SADC/IOC Protocol on Fisheries;
- Improve institutional infrastructure, build core competencies and strengthen the internal procedures of SFA to build and inspire human capacity for better service delivery;
- Project SFA as the legal authority among various stakeholders through acceptance of responsibility for its decision and actions and reinforcing mechanisms for accountability and good governance;

- Promote transparency in the negotiations of fisheries access agreements and in sharing information relating to these agreements;
- Support the refinement of the fisheries and aquaculture legal framework to address key issues in the sector such as the lack of regulation of recreational and sports fisheries and the need to comply with international agreements;
- Develop co-management strategies for fisheries and aquaculture in the Seychelles;
- Remain abreast of global Best Management Practices (BMPs) and to inform stakeholders of new developments;
- Encourage the development and adoption of voluntary codes of conduct;
- Promote and support the adoption of global BMPs so that the industry is ecologically sustainable and becomes internationally competitive;
- Engage with formal and informal resource groups at the government and community level to foster stakeholder engagement in the policy making and implementation;
- Develop memoranda of understanding to govern critical interagency relationships and integrate the fisheries and aquaculture sector in the broader context of Blue Economy and MSP;
- Consult with non-governmental organisations and the fishing industry on new management measures and developments and support the development of associations, cooperatives and federations;
- Ensure that relevant and focused gender disaggregated information across the range of activities in the sector/value chain (production to marketing) is collected and reported;
- Addressing gender equity and equality in fisheries work places, by raising the technical and management levels of women's contribution in fisheries;
- Establish a high level non-statutory committee to oversee the monitoring, evaluation and implementation of the Policy and delivery of the policy goals;
- Undertake an annual and end-term review of policy implementation.

Policy 2: Sustainable management of fisheries and climate resilience

Recognising the importance of the fisheries sector to the Seychelles economy, the Government will make a more concerted effort to properly manage its fisheries, including rights-based management in its artisanal and semi-industrial subsectors, and pursue a proactive and collaborative participation to advance the regional management of the main tuna species, including, inter alia, through an equitable quota and allocation system. Fisheries will be made more resilient to climate change by the incorporation of adaptation and mitigation measures within fisheries management.

The fisheries resources of the Seychelles, though considerable, are finite. Whilst considerable progress has been made in consulting fishers and preparing management plans, these have yet to be implemented. Signs of stress are evident on several demersal fish stocks, there has been a significant increase in fishing capacity. However, at least half of the semi-demersal fleet was not fishing for operational and other reasons. These negative developments in the fishery will get worse unless firmly addressed. If strong measures are not undertaken to regulate these fisheries, cap the fishing effort, and address some of the spatial and biological issues that exist, the stocks will continue to decline at a faster rate and to a greater extent in the next ten years compared to the last decade, and severely threaten the stable prices of fish, the viability of fishing operations, and the livelihoods of fishers.

Fisheries are extremely sensitive to climate variability and change. Strong climate oscillations can have a profound effect on the location, distribution and catchability of tuna aggregations and consequently the industrial fishery sector. Warm water events have previously led to coral bleaching and significant impacts on the small-scale catches. Climate change is now widely accepted within scientific circles and as assurance towards its food security and economic survival, Seychelles must monitor and seek to understand these events so that its second major pillar of the economy can adapt to and mitigate the changes.

Therefore, the Government will:

- Pursue the implementation of existing management plans, and the development and implementation of new ones such as for the small-scale pelagic fisheries, and outlying island areas of the MSP designated for sustainable fishing activity;
- Adhere to principles of co-management, the ecosystem approach to fisheries, the precautionary approach and international best practice within management plans;
- Ensure that the fisheries sector's interests are well represented and protected within the MSP process;
- Encourage fisheries sector stakeholders to better represent themselves and participate meaningfully in co-management through stronger associations, cooperatives and federation into an apex national organization;
- Undertake a phased adoption of rights-based management and harvest control rules, underpinned by a broad awareness campaign, advocating respect of the Seychellois fishing culture balanced against the need for contemporary adaptation to limited or diminishing resources;
- Mainstream effective fisheries licensing and limited-entry within management plans in a progressive manner with close consultation and agreement of the relevant stakeholders;
- Establish mechanisms that encourage fisheries statisticians, researchers, and managers to publicly engage with fishers and other stakeholders to explain their findings and advice;

- Develop the Catch Assessment System so as to include the sports and recreational fishery, and allow the compilation of total catches, and catches by species, areas, gear and boat types to be more directly usable for stock assessment;
- Encourage fishers within management plans to provide geo-referenced data in a manner and at a resolution that allows confidentiality of their fisheries catches and locations, so as to better assess stocks and improve the impact of management;
- Undertake a structural economic review of the small-scale pelagic fisheries as a precursor to establishing a management plan for the subsector;
- Gather and analyse social and economic information on the entire fisheries sector value chain to better design and implement management strategies;
- Continue to proactively encourage collaboration and cooperation with international and regional organisations in the management of highly migratory, shared and common stocks;
- Maintain annual quotas in the industrial tuna fishery such as established by the IOTC to help the yellowfin tuna stock to recover, and extend to the other major tuna stocks at the earliest overfished and overfishing signs, as measures to ensure sustainability;
- FAD management;
- Manage all fisheries subsectors with a view to incorporate eco-labelling and certification so as to ensure stock sustainability and subsector economic viability;
- Consider national and international climate-change research findings within resource assessments and incorporate appropriate adaptation measures within fisheries and aquaculture regulation to increase resilience to climate change;
- Undertake an assessment of the vulnerability of the fisheries sector to climate change and adaptation measures that may be possible;
- Encourage the development of a select set of long-term indicators that would monitor the climate change impacts within the fisheries sector;
- Support the further mainstreaming of the fisheries sector within the next review of the National Climate Change Strategy (2019).

Policy 3: Infrastructure support and value chain development

The Government will facilitate, including through Public Private Partnership (PPP), the development of onshore infrastructure connecting fishers, businesses and markets with those that support value-adding and product-development in order to increase in-country processing, improve net gain in the sector, capture more landings of the catch taken within national waters, and to increase exports consistent with international standards. Government must endeavour to promote processing and value addition (manufacturing) in order to propel growth in the sector.

Infrastructure support has been, until 2015, largely based on Government direct funding or through bilateral grants. The State has invested heavily in quays and supporting services such roads, electricity and water for both the domestic and industrial fisheries. However, with growth in the sector, the Government has been unable to meet requirements such that shore-based industrial tuna fisheries development is constrained by a lack of onshore infrastructure, in particular quays. There has been limited interest for slipways, docks and large-scale processing facilities. Recently, private sector has entered into partnership

with the Government including private-citizen stakeholding to invest in quays and processing facilities furthering the growth of the sector.

Infrastructure investments will continue to be a high priority for the Government to ensure that onshore supporting facilities, developed in partnership with the private sector, meet the needs of the domestic and industrial fisheries sector (subject to governments priority), in particular to maintain Port Victoria as main tuna landing and transshipment facility for purse seiners and longliners. The Government will:

- Facilitate infrastructure support, where feasible, affordable and in the interest of the industry, but only where included in a formal partnership agreement that clarifies roles and responsibilities, and identifies sources of funding necessary from private sector investments;
- Promote equity in the value chain;
- Increase growth, income and sustainable job opportunities in the value chain;
- Promote private sector investment for onshore processing and value-adding activities that would capture a significant part of the catch that is landed and retained in-country for further processing and export;
- Review the bycatch policy and action plan to promote further onshore processing;
- Develop a 5 – 10-year infrastructure development plan for the domestic fisheries sector that will prioritise development in the immediate, medium and long-term;
- Conduct consultations with the private sector on a strategy to promote Port Victoria as a longliner base and to periodically review the tariffs for port services in an attempt to be more flexible and encourage use of the Victoria port facilities;
- Review the development of Ile Du Port, including a re-assessment of allocation, intended use, production output and growth based on raw material availability;
- Review and develop a progressive plan to transfer ice-plants and fuel stations to the private sector and/or fisher cooperatives but only where the capacity exists to do so;
- Work with the Seychelles Investment Bureau (SIB) to attract foreign and local investors to develop a fisheries economic cluster on Ile Du Port to capture the full value-chain of the sector including aquaculture;
- Undertake a review of the fisheries concessional loan scheme;
- explore and establish strategic fisheries support centres (covering ice plants, supply of fishing gear and equipment, fuel and vessel-repair facilities);
- Working towards establishing domestic food safety regulatory systems, including food inspection/assurance and certification systems that harmonize with international standards (such as Codex) and that are consistent with the importing country obligations under the Sanitary and Phytosanitary Measures (SPS) and the Technical Barriers to Trade (TBT) Agreements of the World Trade Organization;
- Evaluate the need for one single institution to control foods safety standards;
- Development training programmes for fishers and fish receivers/fishmongers on proper handling, preservation and processing methods;

- Strengthen the capacity of the relevant authorities (e.g. SBS & FIQCU) to allow the institution to deal effectively with the needs of the fisheries and aquaculture sector and in particular traceability systems, monitoring, food testing and issuance of certificates.

Policy 4: Building efficiency in the industry

The Government will intensify its effort to better regulate the small-scale fisheries to ensure that they remain an important economic activity that will continue to contribute to food security, livelihoods and conservation of fishing resources. The local tuna fisheries will be developed to its fullest potential through a well-structured administrative and financing mechanisms that match sustainability of the tuna resources.

The Seychelles domestic fisheries is operating under open access arrangements and without any controls over catch or effort. In the case of the small-scale fishery it is understood that fishing capacity has to be reduced, fishing effort curtailed, and all subsidies re-assessed since actual catches and catch per vessel have been reducing and, the Catch per Unit of Effort (CPUE) is showing a declining trend. All indications are that, as a resource, the artisanal fishery offers no capacity for expansion.

Of all the Seychelles fisheries, the small-scale pelagic fishery offers the greatest opportunity for expansion. The lack of quota limits on the fishery, combined with reduced industrial activities and the relatively low base that the small-scale pelagic fishery starts from, offers solid capacity for expansion. The 2015 initiative to increase capacity in the small-scale pelagic fleet has achieved that purpose but is considered as economically fragile.

To address overcapacity and subsidy dependency of this sector, the Government will pursue the following strategies:

- Undertake a structural adjustment programme for the small-scale fishery subsector to remove the latent capacity in the sector;
- Re-assess the need for fuel incentives in the domestic sector based on clear objectives and targets with a view to better manage such subsidies;
- Introduce incentive adjusting and incentive blocking management approaches that will create business growth and modernisation of the fleet that will attract young and women entrepreneurs and fishers into the industry;
- Promote growth and competitiveness through providing support to small operators (such as small-scale fishers) to enable them to improve their productivity (reducing post-harvest loss) and incomes, while ensuring the larger commercial sector continues to grow;
- Collaborate with the Seychelles Maritime Safety Administration (SMSA) to register and regulate safety on fishing vessels and implement relevant certification such as STCW-F certification through the Seychelles Maritime Academy (SMA);
- Prepare a fishery development plan for the further expansion of the semi-Industrial;
- Ensure adequate critical safety nets for vulnerable small-scale fisher households (including those not previously poor) when they face a sudden decline in their income;
- Develop a framework to ensure that available credit facilities and Government supported soft-loan schemes are in line with the capture sector limits and the potential of secondary-sector growth.

Policy 5: Investment and economic growth

The Government will facilitate a strong fisheries sector to generate maximum economic growth, increase the value of goods and services, promote trade, competitiveness, capabilities of domestic firms, increase employment and develop livelihoods while ensuring sustainability of fish stocks, healthy ecosystems and environmentally sound practices.

The importance of the fisheries sector in the economic development of the country cannot be under-rated. It has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of nutritious food besides being a foreign exchange earner. It is estimated that the direct and indirect impact of fishing alone accounts for more than 8 per cent of the Gross Development Product (GDP) and employs about 1/6 of its working population. The fishing sector could well become the country's largest foreign exchange earning sector. Seychellois consume so much fish and its derivatives per capita that they are among the highest in the world with 48% of animal protein equivalent consumed. There is a case for arguing that the contribution of fisheries sector to the national economy is not adequately reflected in the official GDP statistics.

The main challenges facing fisheries development in the country have been in the assessment of fishery resources and their potential in terms of fish production, development of sustainable technologies for fin and shell fish culture, yield optimization, harvest and post-harvest operations, landing and berthing facilities for fishing vessels, value adding, augmenting export of marine products, hygiene and health standards, generating employment and improving welfare of fishermen and their socio-economic status.

To stimulate investment and further economic growth in the sector, the Government will pursue the following strategies:

- Create a conducive environment for investment in the fishing industry by promoting an integrated approach and promoting additional services within the value chain;
- Develop a management framework to facilitate access to fish resources in the outer lying islands;
- Strengthen the role of the SIB to facilitate investments in the sector, creating specific portfolio of targeted investments for the sector;
- Review foreign licensing system to balance investment and revenue increase;
- Encourage entrepreneurship development, private investment, public private partnership within the marine fisheries sector;
- Create a fisheries business advisory centre to provide access to advice, market information, credit support, networks and other forms of support which will help the industry develop and implement high quality projects along the value chain;
- Promote transparency on land allocation and assess the development capacity for all fisheries investment;
- Improve trade procedures and support efficient international trade for the fisheries and aquaculture products;
- Improve institutional support for investment to encourage the private sector to better participate in the decision-making process, monitoring and research;
- Reduce barriers to investment and costs of doing business;
- Continue to maintain the national stance to discourage harmful subsidies in the fisheries sector;

- Encourage and support foreign investment in a large-scale, onshore tuna processing and value-added activities through local joint ventures. Priority for investment will be favoured where there is transfer of technical know-how and facilitated through local stakeholding;
- Support new business start-ups to invest in the identified value chain gaps;
- Create a free and transparent trade and market policy to ensure that the benefits from international trade are enjoyed by all segments of society;
- Promote a diversified approach to generating electricity by the use of renewable energy in the sector.
- Support businesses in marketing and product development based on the priority value chain development;
- Ensure that the promotion of international trade in fish products is coupled with effective fisheries management.

Policy 6: Seychellois stakeholding in the industrial fisheries sector

The Government will promote Seychellois investment and mechanisms to protect national, legal and beneficial interests in the fishing industry.

The small-scale demersal fisheries sector has traditionally been reserved for Seychellois and in view of its small size, cultural context, current level of exploitation, and strategic importance to food security, this previous policy should continue. Opportunities exist in the semi-industrial sector for greater regulated involvement of foreign investment, and in the industrial sector for greater regulated involvement of local, Seychellois investment. Across all subsectors, including in the aquaculture sector, there are opportunities for partnerships in servicing, value-addition and marketing.

The industrial fisheries sector is to be developed in a gradual, cooperative and collaborative manner to increase local partnership for the increasing good of all Seychellois, and partners. Opportunities throughout the industrial fishing sector value-chain shall be equitably accessed and provisions made to encourage more local participation and greater local stakeholding. The Government will promote an enabling environment to increase stakeholding and pave the way for interventions that will achieve fully inclusive Seychellois participation. To address Seychellois stakeholding in the sector, the Government will undertake the following strategies:

- Prioritize the issue of tuna industrial fishing licences to those operations incorporating joint venture approaches;
- Evaluate the possibility to allocate industrial fisheries rights to Seychellois nationals in a bid to promote resource ownership and participation in the industry;
- Fix minimum levels of local participation for different segments of the fisheries value-chain;
- Establish funding sources to support local entrepreneurs within the industrial sector;
- Review the responsibilities of Seychelles-flagged vessels and encourage flagging with greater national benefits;
- Encourage shore-based facilities by Seychellois;
- Establish an appropriate legal framework for joint venture partnership with local companies;

- Undertake a review of the access of foreign fishing vessels to Seychelles waters in collaboration with operating partners so as to increase both the national and operating partners' benefits;
- Engage PPP to and other financing mechanisms respond to demands for better services across all sectors of the industry.

Policy 7: Employment, training, resourcing and human resource development

The Government will intensify its effort to provide for the upliftment of young people and woman as entrepreneurs across the value chain by using appropriate support mechanisms, education, training and institutional strengthening to encourage them to join and develop a career in the sector. Re-skilling and high-level training will be promoted in order to stimulate innovation and adapt to new technology and scientific advances.

Employment in the sector is of grave concern. The average age of fishers is increasing as few young people are choosing to enter the sector. For many years fishing has been regarded as an occupation of last resort and this is now reflected in the quality of employees. Many are, at best, disengaged and, at worst, unreliable. The drug addiction problem amongst young men and women appears to be particularly serious within fishing communities. The semi industrial sector and the sea cucumber fisheries now employ foreign fishers who are regarded as much more dependable. Some schooner owners are also demanding access to foreign crew as they cannot find reliable local fishers. While the Seychelles Maritime Academy may be playing its role, out of 60 enrolments for the fishing apprenticeship scheme only around 30 finished the course in most years. Of these, only a very small number (from five to ten) actually work directly in the fisheries sector. The poor uptake is also a reflection on the negative image of the industry - poor pay for working on ill-equipped with poor living conditions.

From an institutional point of view, the MFAG and SFA also lack qualified personnel to fully deliver on their mandates.

To generate employment opportunities for the maximum Seychellois, the Government will promote the following strategies:

- Identify the skills gap and capacity building needs to match the demand of the fisheries industry;
- Prepare in consultation with the industry, the Ministry of Education and the Department of Employment, a human resource training and development plan for career path (vocational/technical/academic) development in the sector;
- Promote ocean, marine, fisheries and aquaculture related matters in primary and secondary curricula;
- Enact and implement a commercial fishing boat crewing policy and/or regulation;
- Train existing, new fishers, fish handlers and processors and skilled labour to take up employment opportunities in the sector;
- Collaborate with industry operators on crew training and employment through SFA and SMA;
- Promote job creation through the implementation of a Working for Fisheries Programme and mechanisms to raise the profile and welfare of fishery industry workers;
- Promote relevant certification of fishers including through the STCW-F training;

- Review and enhance the fisheries apprenticeship programme to cater for long-term career development and specialised training (e.g. master fisherman), including extensive sea-going training;
- Promote arrangements that will support collaboration with the industry, e.g. industrial vessels for the training at sea;
- Monitor and develop services to promote accessibility to employment in the sector;
- Promote and implement good practices relating to labour (i.e. ILO Work in Fishing Convention and Work in Fishing Recommendation, 2007 (No. 199)) and working conditions on vessels registered and flying the Seychelles flag, on the entire Seychelles fleet, including industrial longliners in particular;
- Promote through the SFA high level training in fisheries science and resource management at the UniSey.

Policy 8: Strengthening Monitoring, Control and Surveillance

The Government will intensify its effort to ensure that the marine resources within its Exclusive Economic Zone are exploited in accordance with the national legislation and to guarantee that all national fishing vessels always comply with fisheries legislation and international laws.

While Seychelles has established over the past 15 years a very developed MCS system, some aspects still require improvement. The focus of MCS activities remains on industrial fishing vessels and the activities of small scale fishing vessels are not properly monitored. Enforcement of laws and regulations is still weak and require further improvements and capacity strengthening.

To strengthen the MCS system and improve law enforcement and compliance, the Government of Seychelles will:

- Provide to SFA the necessary human and financial capacity and means to undertake the required surveillance and control activities at sea and at port to ensure compliance with international and regional obligations and enforce national legislation; NISCC, SPDF and Coast Guard, Marine Police;
- Adopt and implement a Monitoring, Control and Surveillance cost recovery strategy;
- Develop and adopt fisheries Regulations in order to guarantee a strong MCS system;
- Improve surveillance and control operations to cover all fleet segments including small-scale fishery;
- Ensure that sanctions are imposed on all fleet segments in cases of offences and that they are proportionate and deterrent;
- Promote a culture of compliance and develop the necessary educational and communication tools to support this behavioural change in the fisheries sector;
- Promote the use of new technologies and administrative mechanisms such as Catch Documentation Scheme (CDS), electronic monitoring systems (EMS), drones, satellite imagery and AIS to better control fishing activities at sea, transshipment, trade and improve compliance and accuracy of catch data;
- Adopt a national Monitoring, Control and Surveillance strategy and National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated (IUU) Fishing. Develop a risk assessment approach for patrol at sea as part of the MCS strategy;

- Support the reinforcement of SFA capacity in the field of MCS through trainings in the fields of international laws and law enforcement and procedures;
- Improve compliance with international agreements and with RFMO resolutions for the organisations Seychelles is member of;
- Address the issue of parallel registration and apply the FAO Voluntary Guidelines for Flag State Performance;
- Pursue Seychelles active involvement at the regional and international level in the fight against IUU fishing and strengthening of MCS measures;
- Improve transparency, collaboration and information sharing between national agencies, the RFMOs, the FAO and the countries in the region;
- Ensure coherency with other relevant strategies such as the National Maritime Security Strategy;
- Promote the collaboration between fishers and MCS authorities in providing information to deter IUU fishing activities and develop with the industry a framework for self or joint enforcement activities.

Policy 9: Research and innovation in the fisheries sector and aquaculture

The Government will respond to the needs of the fisheries sector by promoting tactical research driven by the needs of fisheries management and aquaculture development. It will also seek to encourage innovative longer-term research aimed at an understanding of possible climate change impacts on the fisheries sector and of the adaptation that may be required of the sector.

Seychelles has a good record of collaborative research with partners in support of the fisheries research, and of developing its capacities at SFA. However, in preparation for a second surge in benefits from the development of the fisheries sector it needs to seriously assess research manpower needs and provide the base for growth of the sector and resilience to external shocks. Fisheries and aquaculture are knowledge-based industries and increasingly innovation will drive the sector. With its small population size, Seychelles needs to actively continue to leverage its research and development capabilities by undertaking high quality, state of the art initiatives with collaborative partners and projects.

The Government will pursue the following strategies to encourage research and innovation in the sector:

- Continue successful cooperation and collaboration with previous long-term partners;
- Leverage ability to undertake research by encouraging new external research partners to set up research facilities in Seychelles;
- Make greater use of institutions of learning such as UniSey and affiliated Universities;
- Produce and implement through the SFA a research plan based on fisheries management plans and priorities;
- Identify, through the SFA, research priorities and prepare and implement action plans for collaboration with international research partners;
- Develop a collaboration between the Ministry of Fisheries and the Ministry of Environment and Energy to closely collaborate within the MSP and to encourage ecosystem-based and climate-change related research and monitoring;

- Address imbalance of socio-economic research in fisheries and aquaculture by prioritising and encouraging collaboration with research organisations and institutions into those areas;
- Continue, through the relevant fisheries related institutions, to support the further training of its research staff to postgraduate level;
- Facilitate the mobilization of resources for the development of advanced aquaculture research and development facilities;
- Identify skill gaps and capacity needs in the fisheries and aquaculture sector and coordinate with UniSey, vocational and maritime schools to address the needs;
- Encourage the Fisheries Economic Intelligence Unit to collaborate with national and international partners in undertaking social and economic research;
- Link up with Unisey and secondary schools and to encourage more social scientists into the sector;
- Strengthen arrangements for the delivery of fisheries and aquaculture research and development findings.

Policy 10: Sustainable development of aquaculture

The Government of Seychelles should promote an environmentally responsible aquaculture industry that contributes towards food security and the creation of wealth in the Seychelles.

The Government of Seychelles is fully aware of the potential environmental impacts of aquaculture and for this reason supports the development of the sector within the context of the “Ecosystem Approach to Aquaculture”. This approach responds to three principles:

1. Aquaculture should be developed in the context of ecosystem functions and services (including biodiversity) with no degradation of these beyond their resilience capacity;
2. Aquaculture should improve human well-being and equity for all relevant stakeholders; and
3. Aquaculture should be developed in the context of (and integrated with) other relevant sectors.

To that end the Government has adopted the Seychelles National Aquaculture Policy which provides eight Policies statement and accompanied strategies in the following fields:

- Good governance in the aquaculture sector
- Sustainable environment for aquaculture
- Coordinated support for the development of aquaculture
- Investment for the aquaculture sector
- Inclusive participation in the aquaculture sector
- Aquaculture products and markets
- Research and development
- Development of aquaculture on the outer islands

To achieve the objectives stated for each of these policy areas, the Government will notably:

- Promote aquaculture development based on the Ecosystems Approach to Aquaculture, the FAO Code of Conduct on Responsible Fisheries and the guidelines laid down therein, as well as the FAO

Technical Guidelines for Aquaculture Development, as well as the relevant provisions of the SADC Protocol on Fisheries;

- Support the refinement of the Regulations and develop co-management strategies for aquaculture in the Seychelles;
- Remain abreast of global Best Management Practices in marine aquaculture and to inform aquaculturists of new developments;
- Encourage the development and adoption of voluntary codes of conduct;
- Ensure that the sector is developed within conservative capacity limits from the outset;
- Limit sector expansion under a phased approach that adapts limits based on data records from existing operations;
- Promote ecologically sustainable practices and technologies that minimise waste and environmental damage;
- Ensure that all sea-based aquaculture or ranching activities will be restricted to Aquaculture Development Zones (ADZs) or to inshore areas that have been identified as being suitable for the activity by the Authority and which constitute areas where there will be no user conflict;
- Support the training of veterinarians in fish health management. COLLABORATION WITH OTHER SECTOR STRATEGIES

The effectiveness of this Policy relies on collaboration with other Ministries and Agencies. The development of the Blue Economy Road Map and the Marine Spatial Planning initiative bring in new dimensions to the development and management of the fisheries including sectors such as tourism and Environment. These overarching policies fall beyond the mandate of the MFA and the SFA, and as such the Ministry in charge of fisheries will actively participate in the implementation of those strategies to ensure synergies and that the interest of the fishing industry is optimised and protected.

POLICY REVIEW

Effective implementation of this Policy hinges on an effective monitoring and evaluation strategy with appropriate performance indicators and an efficient feedback mechanism. This entails carrying out information gathering at national, community, and sectoral levels. The monitoring and evaluation framework will focus on measuring the outputs of each strategic action and will provide the information needed to continually determine, assess and recommend the way forward toward the successful implementation of this Policy in achieving its long-term vision. The Ministry responsible for fisheries will have the overall responsibility of the monitoring and evaluation of the Policy.

Further, to remain relevant, the Policy will be reviewed from time to time and revised to take into account changing circumstances and new/emerging economic opportunities and the status of the natural resource base to ensure the future sustainability of the sector.